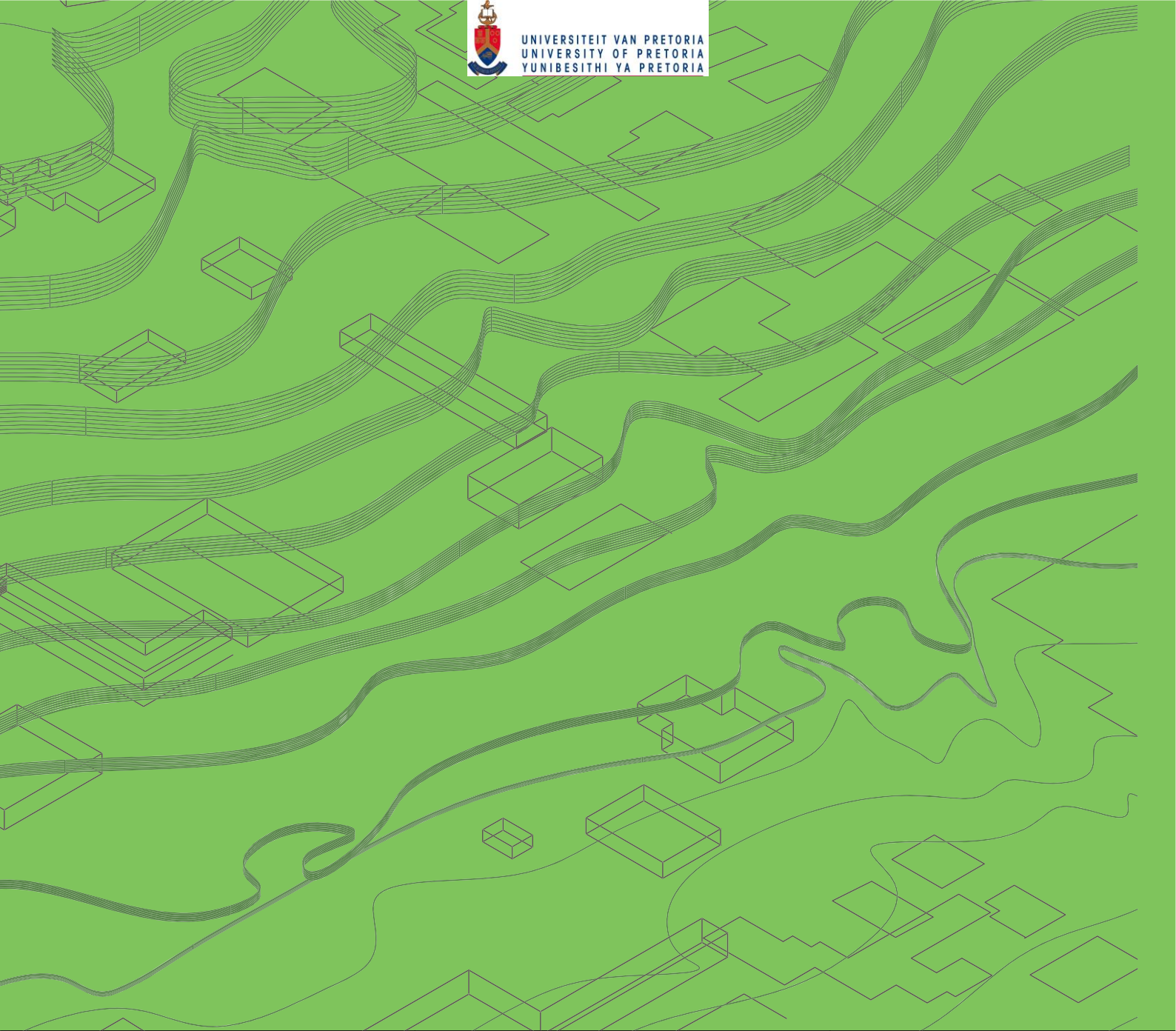




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WASTE ART STUDIO of PLASTIC

W A S O P

Dissersive Architecture*
**[giving value to disposed able excess]*

Ilze Mari Wessels
2016



Disclaimer: The content contained within this publication does not necessarily reflect the views and opinions of the University of Pretoria. The content published here is part of ongoing research at the School of Architecture, housed within the greater Department of the Built Environment and the EBIT Faculty. For more information please contact adialidal@gmail.com for more information.

FIGURE 4a : Perspective view of the Eastern edge of the building.



W A S o P

*Plastic Arts Institute and Residency
521 Pretoria Street, Silverton, Pretoria*

25°43'59.8"S 28°17'53.1"E

Architecture

The Social Life of Waste

Poesies of Plastic waste in Architecture

*Waste, Art, Recycling, Aggregate, Granular, Residency,
Shed, Silverton*



THANK YOU + CONCLUSIONS

A special thank you to my family for continuous support and love and believing in my potential to conquer a small mountain that leads to the best of places - to my friends for their humour and their madness and their dedication to help realise every idea and concept into finality - my study leader for her presence and encouragement - and finally Dr. Arthur Barker for his guidance and persistence to bring about brilliant architecture through dialogue.

This dissertation served to explore architecture as language of visions - the architectural project is always but a vision which the architect constructs into being through language itself and all its forms.

This dissertation sought to explore these languages rather than an architecture - however what has been discovered is that the building is not the terminus of the architectural dialogue instead only one platform for its departure into dialogue.

The architectural program of an artist residency in conjunction with a waste information centre culminated into three architectural typologies developed from concepts of perceptions of value relating to waste - which is recognised in this thesis as broader term that defines physical disposed matter - but also served as a description for the social and spatial conditions in terms of waste.

The beacon which is the architectural residency is a typology of attachment, extraction and precise representation as a means to express value of accepting waste - and so the architectural language of the beacon becomes that of physical waste matter and seeks to facilitate dialogue through its matter

and thus generate social value that might be wasted relating to the object of matter waste.

The role theatre and frequency gallery refer to the planes. They serve as spatial activation and insertions for the reuse of an existing portal frame shed located in Silverton, secretly and invisible to most people. This industrial typology which is a ubiquitous and universal spatial reference to production is then used as the container of programs of small architectures of art making.

Although the architecture is small and seemingly formless - the agenda of this dissertation was aimed at confronting architectures luxurious grandeurs and aimed to make serenade an architecture of smallness - but also of a realness and buildability -

FIGURE 6 : Poster by IMW showing the 3d printed frequency gallery floor structure



INVISIBLE DESTINATION

SILVER SILVER IS NO MORE
GOLDEN PEOPLE TROLL THE FLOOR

THIS HERE CITY OF CARS AND ROCKY BARS
YARDS LIKE DUSTBINS, TO THEIR BEAMS

LICK UP A LONG TANK
AND THEN ADD YOUR BRAND
GOLDEN PEOPLE STILL TROLL THE FLOOR



WASTE ART STUDIO OF PLASTIC

AN ARCHITECTURE WHICH AIMS TO
INTRODUCE THE PUBLIC TO POTENTIALS OF
WASTE PLASTICS IN
FORM, STRUCTURE AND ART



NOTES ON THE CODIFICATION OF THIS BOOK / LANGUAGE / ABBREVIATIONS

The research topic of this dissertation is focused on waste art and architecture. Through various investigations, three concepts were developed in relation to attitudes towards waste. These attitudes have been used as a mechanism of structuring this book as a means to emphasize the duality of meanings and the potential of interpretation of conceptual foundations and therefore function as an academic exploration of language and design in architecture.

Therefore, each chapter will begin with its designated number, conceptual marker, but also its explored attitude. These attitudes are clearly defined in the conceptual chapter, but for summary purposes a short and basic definition will be provided here for quick reference.

- Accepting; a general attitude of embracing, absorbing, immersion towards the value of waste
- Rejecting; an attitude of disposal, separation or non-acceptance of the value of waste
- Reflecting; an attitude of questioning, debate and discussion relating to the value of waste

This book is also a tool for creative expression and serves to stand as final artwork of this dissertation, therefore, the use of poetic language will be utilised in the introduction of some chapters and works of art by the author are included in the visual language.

- SLOW : the Social life of waste
- IMW: Ilze Mari Wessels
- PET:
- AG : Element of Silver
- AU : Element of gold

The Green Markers [Figure 6] are inspired by the series of books from OMA called *Elements*. The colour green will be used to mark out importance related to waste and its attitudes of value, as well as other important aspects in text.

Figures are also listed according to their pages

numbers for less time wasting.

The precedents are located throughout the book as each chapter is inspired by an element of either art, architecture or waste.

The cover page image is a set of differently exposed film photographs taken by the author of an existing recycling building in Jet Park, 2015.

- Δ : beacon
- ~ : frequency
- _|- : role theatre
- ◇ : **Invisible destination**
- ✓: accept
- ∞: reflect
- : reject

Internet references will make use of QR codes instead of typed out web pages for space and time wasting to be avoided.

And for the reference, North is always up.

FIGURE 8: Photocopy of doodles that eventually became translated into symbols for program. IMW, 2016



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[reflection]



FIGURE 12a; 'The angry drawing' by IMW 2016



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00. INTO

IMMERSION INTO ISSUE

So let us get into a little bit of something that is this, a little bit of nothing and a little bit of something.

Into this mess that is but mass, transfigured into a smell I cannot yet, but could and might stand for, a taste I never and sight I shall. This is the dustbin – have you met her ?

Now climb inside.

THE SEARCH FOR AN ISSUE

Issues are not hard to come by. Generally speaking, the world is full of issues, those we read about in the newspapers, those we encounter and experience firsthand, ranging from economic to the environmental crisis, such as the current student protests at all South Africa institutions of higher learning.

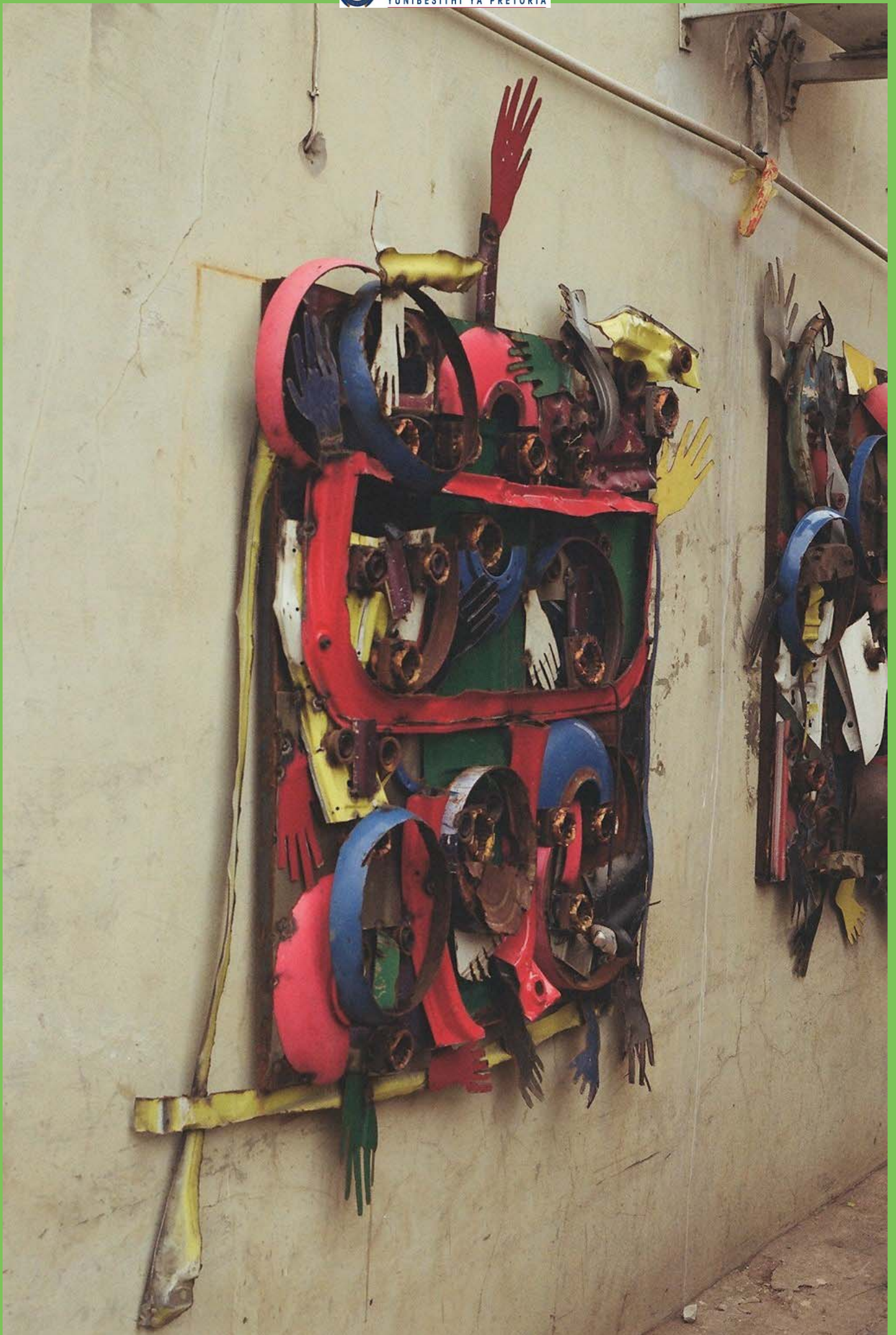
Issues are defined as aspects of important topics for debate or in another dictionary based sense of the world it literally means to distribute and in a sense that is what issues in architecture deal with, not topics of relevance but also topics in need of distribution. This dissertation does not seek to delve into the psychological meaning of this relation to the author of a dissertation and the issues which are selected – rather recognise how design and the designer are intrinsically related and that even through the process of abstraction, interpretation, and critique, a designer is always interpreting through the lenses of the self. For this reason, the author would like to surmise how the selection of the issues relating to waste have been selected, because of associations with organisations and people that have inspired her to explore these associations in the premise of architecture through the medium of the arts. The image on the right is of an G. Mabundo artwork made from scrap steel taken by Pierre Reyneke on a visit to Maputo as part of the SLOW workshop in 2016.

The general issue is that of waste. The issue of waste can be vaguely interpreted through readings of definitions from the Internet to be that which has yet to be cultivated or that which has been disposed of or that which has been failed to make good use of. The dissertation tries to unpack waste along these definitions but also realises that the notion of waste is so current in current societies thinking, that perhaps it will one day no longer even exist.

Jeremy Till [2009:45] refers to a presentation by Peter Guthrie in his book *Architecture Depends* and quotes him on saying that ‘architecture is waste in transit’. His statement encompasses the challenge that faces the built environment as a whole and to a great extent also confronts architecture in its actual matter to be held accountable for its enormous carbon footprint [Van Wyk 2006:15] and contributions to harming the resources of the planet which are clearly more vulnerable than ever before [Frampton 2009:56]. Currently, the position which architecture has taken in response to situations related to climate and resource concern has been to become more conscious of the building, its materials and construction methods, thereby actively conserving resources, but also considering how the building functions as an entity during its post-construction phase. It has however been debated that the energy outputs generated in order to conserve energy do in fact use more energy in its totality, much like the Cobra Effect, where a solution to a problem results in an amplification of the problem.

This dissertation accepts this approach towards a conservation of resources, however, would like to explore the means in which architecture can extend beyond its physical parameters of being a responsible entity and explore strategies and methods of making a didactic architecture that communicates and extends the conservation ethic, through to its immediate context.

FIGURE 14A: Photograph by Pierre Reyneke of the artwork of Goncalo Mabundo, Mozambique, 2016.



This dissertation rejects the current waste/green aesthetic but seeks to reflect on the architectures that can become realised on a one to one scale for the effect of immediate change, architecture as an artwork, a sculpture, an object in space that is to be considered, witnessed and critiqued by its viewers and users. This desire for immediacy exists because of the state of planetary affairs and a hope that even on a theoretical level this architecture can become realised consciously for any reader.

METHOD OF DEALING

The author utilises the method of drawing, symbolic language and digital imagery to create her architecture. Architecture is to the author an art of language that can make use of almost any medium to communicate spatial potential on every scale possible as well as every social context. It is this language which the author seeks to explore in this dissertation through production, but also through the eventual refinement, because despite abundance of imagery there is a vocabulary that needs to be layered onto the abstract and conceptual character of drawings and visuals for the fluency in language to exist and it is essentially this practice which the author sought to explore throughout this dissertation and finally concludes that architecture is a process of revealing that which already exists within the mind of each architect through the process of language both visual, virtual and verbal.

MEASUREMENT OF PROGRESS

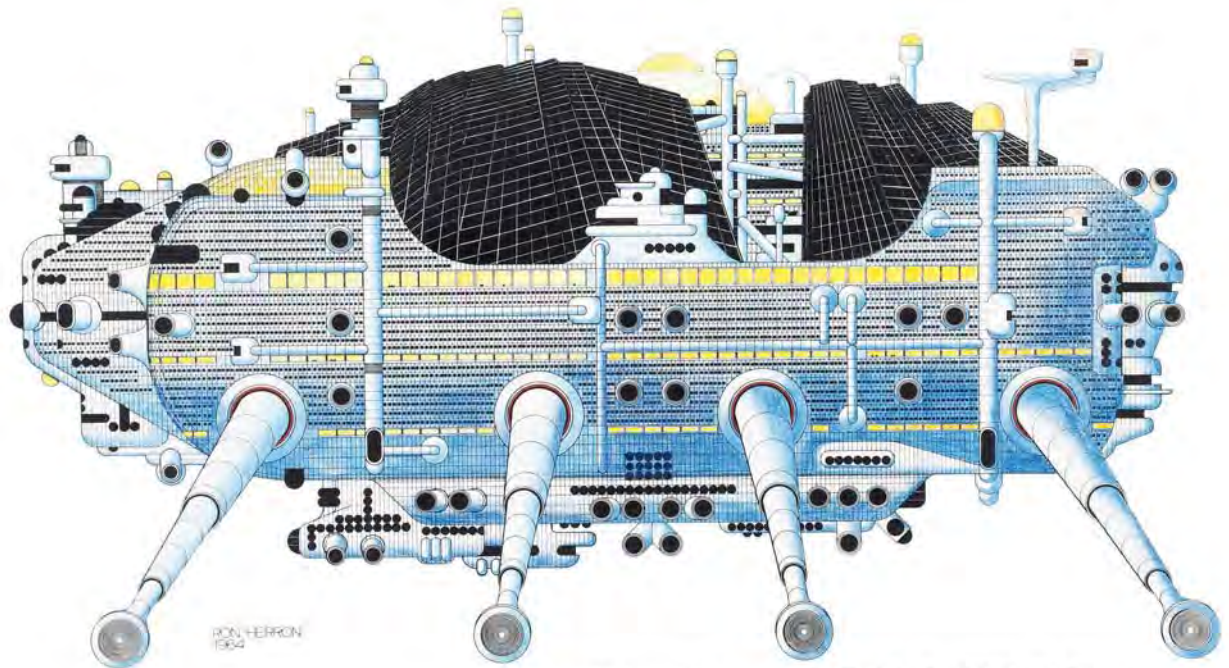
Codification has been utilised to a great extent to justify thinking in relation to place, see the conditioning chapter of the urban vision and mapping process. However, coding place and waste attitudes and eventually concepts lead to a level

of complexity which resembled a mathematical formula that the author feels she may not be able to fully unpack in a single year of work, however, it has been an exploration of how rigour of method can be applied to an intuitive way of creating architecture. Codification also allows for process to become more accessible and therefore further researched and tested as a methodology for making architecture. Coding has also been a way to layer language into the visual aspect of architecture in an attempt to become better equipped in a vocabulary of describing design thinking and process to others.

VISION OF ARCHITECTURE

What this dissertation hopes to state through the topic of waste is that as of late, current society still functions along a flawed and flustering value system, especially in the context of South Africa which is not only dealing with its apartheid legacies, but is also in the process of defining its identity, but also in the global context of a world of capitalism and therefore it is the hope of the author that the dreamlike science fiction architectural nature, like the work of Archigram, can become imagined here in response to the desire to want to change the way in which architecture is made. An architecture of smallness and an architecture that recognises its temporality and finally an architecture that recognises its potential as art.

FIGURE 24: Image of Archigrams 'Walking City' scan the QR CODE on the right to visit Arch Daily, the source of the image.



RON HERRON
1964

CITIES: MOVING

RON HERRON



[accepting waste]



FIGURE 26a : Photograph of leftovers by IMW 20b: QR code to a gif of a visiting to soshonguve on youth day [June 16] 20c; view of abandoned building in Pretoria, IMW 2015.



_|- of ~

01. WASTESCAPES

TYOLOGIES OF WASTE



WASTES

Pollution is a necessary result of the inability of man to reform and transform waste.

The transformation of waste

The transformation of waste

The transformation of waste

The transformation of waste is perhaps the oldest preoccupation of man. Man being the chosen alloy.

He must be reconnected via shit, at all cost.

PATTI SMITH,

[lyrics from 25th floor.]

WASTESCAPES

Residential buildings, a recent Birkhauser publication [2015], introduces the book by defining the current global issues defining architectural challenges Pfeiffer [2015:10-25] goes on to write about the current architectural context and the five main challenges facing architecture today, which will be elaborated on and responded to below and correspond to the images on the right.

1. The new social and demographic context that relates to the elderly bubble and the migration conflicts experienced as part of the thirsty planet syndrome.

2..Another seemingly unending condition that is sprawl and the unsustainable land consumption rates – creating strange and non-resilient pockets of sealed off the land, somewhat like suburbs, that see islands of function irrespective of the global context.

3. The continuing complexity of legislation with its rapid rate of accepting new laws, but because of a bureaucratic tendency not being able to apply them fast enough.

4.The well-publicized climate context and finally the newly popularized LCA analysis of materials, an awareness of the embodied aspects of material use.

WASTE EXPRESSIONS

That waste is the expression of mankind's inability to transform in the words of Patti Smith song 'The 25th floor' might be assumed true if one has to reflect on the existing social conditions proliferating globally through environmental toxification, social uprisings and protest, violence and political corruption without consequence of what comes after- i.e.: what can be learnt when the libraries are burnt to the ground? In such a context it may be difficult to grasp or relate to any future and architecture is about imagining a place for futures.

It is through a hyper-poeticisation of waste that there exists the potential to create a realism of the irrelevance of death and rather communicate the value of life and its continued and intertwined cycles. In other words, waste could exist as a narrative by which secularity can extend itself or perhaps even find itself cultivated into a [video] [Zizek 2006] religious outlook that might relate to reincarnation.

However, this dissertation investigates how waste transmits beyond matter moving along the branches [see chapter theory] of disposal and discarding, but also exists as matter of a more conceptual nature, be it consciousness in the form of stagnation or of an abandoned building that cannot be used for its purpose like Figure 20c.

FIGURE 28: Diagrams drawn based on the writings of Pfeiffer, IMW 2016.



1.



2.



3.



4.



Waste, besides being the disposed matter, exists as the uncultivated space and mind, which is also what this dissertation seeks to engage with.

As stated in the introductory chapter it is clear that humanity is in full confrontation with its finite environment, coming to terms with both the eventual and inevitable collapse [Frampton 2007: 344]. Frampton writes conclusively about the complex territory of the capitalist surface, that it exists within a network of abstracted boundaries or fiscal fences that separate individuals from communicating because of access to the environments in which we interact. The ordering structures of capitalism do not reject its responsibility to both the environment and the planet, however, extends itself in directions hard to understand, therefore the dissertation seeks to explore how architecture can serve as this medium of message about the relation between environmental capitalism. Introducing the economics of waste and the precariat social class [see chapter SLOW] that still function within the classic principles of supply and demand, yet generate an economic gravity that disregards the consumptive attitudes of capitalism, rather operate with a system of reassigning value to that which was considered worthless.

Architecture is not the combatant/enemy to 'the system' that is capitalism, which Frampton associates to the issues at hand of resource depletion, rather the author would suggest that architecture should exist as the tool by which introductions to 'otherness' can begin to be carried over as a liberal social consciousness that is relatable and navigable to any individual.

How can architecture simply communicate to an individual a hope for a future, thereby reaching a conscious state of empowerment in light of our overwhelming world of crisis? The following chapters will unpack waste in its social and spatial capacities and define the idea of waste beyond the landfills, as well as **the matter accumulating in our bins. It begins with the unpacking of waste expressions and their meaning to the author,**

based on readings and accepted ideas, but also the rejection of certain attitudes.

WASTE OF PEOPLE:

FOR PEOPLE TO BE WASTED DOES NOT ONLY REFER TO GETTING EXTREMELY DRUNK BUT SPECIFICALLY THE WASTE OF SOCIAL POTENTIAL [IN THE FORM OF TRANSACTIONS] THROUGH SOCIAL ISSUES SUCH A POVERTY, HOMELESSNESS AND DISEASE. [CH SLOW]

WASTE OF TIME:

Not making the most of time.

WASTE OF SPACE:

Empty/ unoccupied /unaccessible space or a person who is regarded as unnecessary.

WASTE OF WASTE:

Letting waste be.

WASTE NOT WANT NOT:

Name of the last exhibition hosted by SLOW at the drill hall in JHB.

WASTE OF WATER:

THIS IS THE GREATEST CRISIS OF SOCIAL ISSUE YET. LACK OF ACCESS TO CLEAN DRINKING WATER CAUSES DEATH WHICH A LIFE WASTED BY THE DISREGARD OF THE WELL BEING OF ANOTHER.

This is the conclusive part of this chapter because waste can be unpacked in so many ways and this year itself could go to waste if there is no definitive stand taken by the author of this dissertation about waste.

FIGURE 30: Collage of photographs of scrap yards in Silverton, IMW 2016.





The greatest resource at risk of waste is water and this is something directly related to the built environment and the way in which we can deal with this is by using fewer resources, recycled and reclaim spaces and materials and also activate places where people can access information about technologies and the future awaiting.

To conclude the author would like to state that she believes,

THERE IS NO SUCH THING AS A WASTE:
ALL THINGS EVEN THOSE DESIGNATED AS
WASTE HAVE VALUE WHETHER PHYSICAL
OR JUST CONSCIOUS FOR CONSIDERATION.
TRUE WASTE - SOMETHING OF TRUE NON-
POTENTIAL CAN ONLY COME ABOUT WHEN
WE DISREGARD VALUE OF LIFE IN ALL ITS
FORMS, THEREBY ACCEPTING WASTE AS
AN ENTITY FOR REJECTION RATHER THAN
REFLECTION.

FINALLY, WASTE IS A
NECESSITY FOR CREATING
- IE. ONE CANNOT CREATE
WITHOUT WASTING - WE
CAN MERELY GO ABOUT BEING
CONTINUOUSLY AWARE OF OUR ROLE IN
RELATION TO WASTE- ARCHITECTURE
CAN FACILITATE THIS AWARENESS

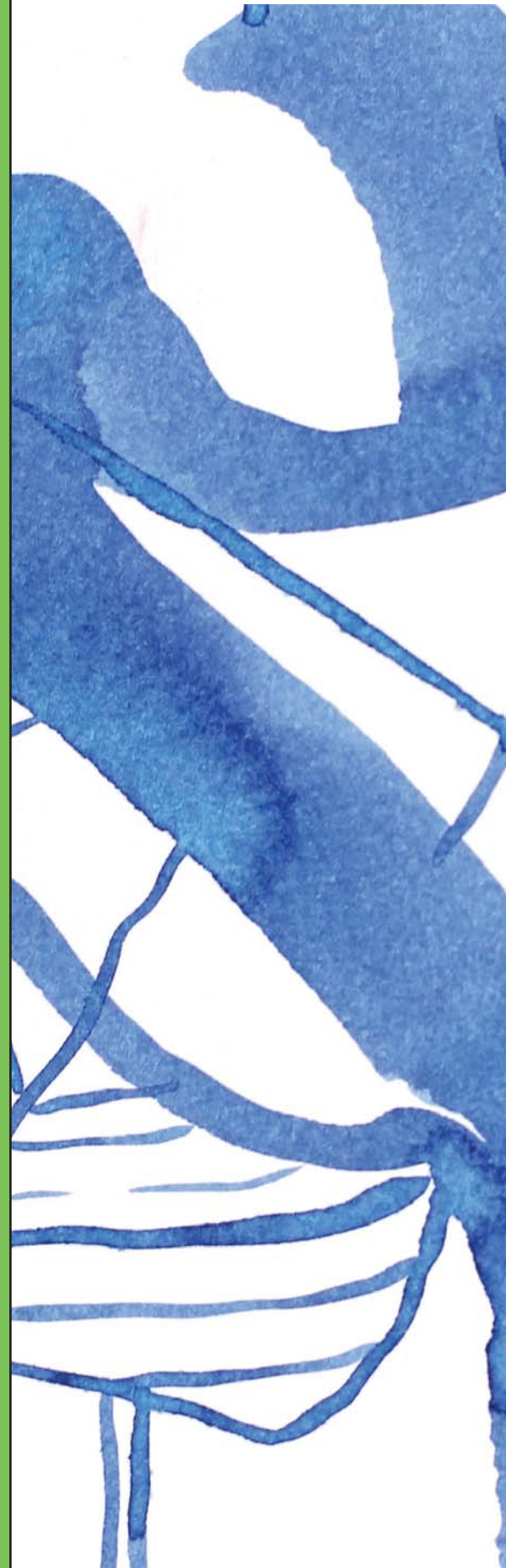




FIGURE 33 : Early sketch of the branching logic which is contained within the map of Silverton, IMW 2016.

The background of the page is a watercolor-style illustration in shades of blue. It features a network of branching lines and shapes, resembling a map or a complex diagram. The lines vary in thickness and some are solid, while others are more faded or blended into the background. The overall effect is that of a hand-drawn sketch or a conceptual map.

WASTE
IS A
TOOL
FOR
COM-
MU-
NICA-
TION

[rejecting the accepted theories]

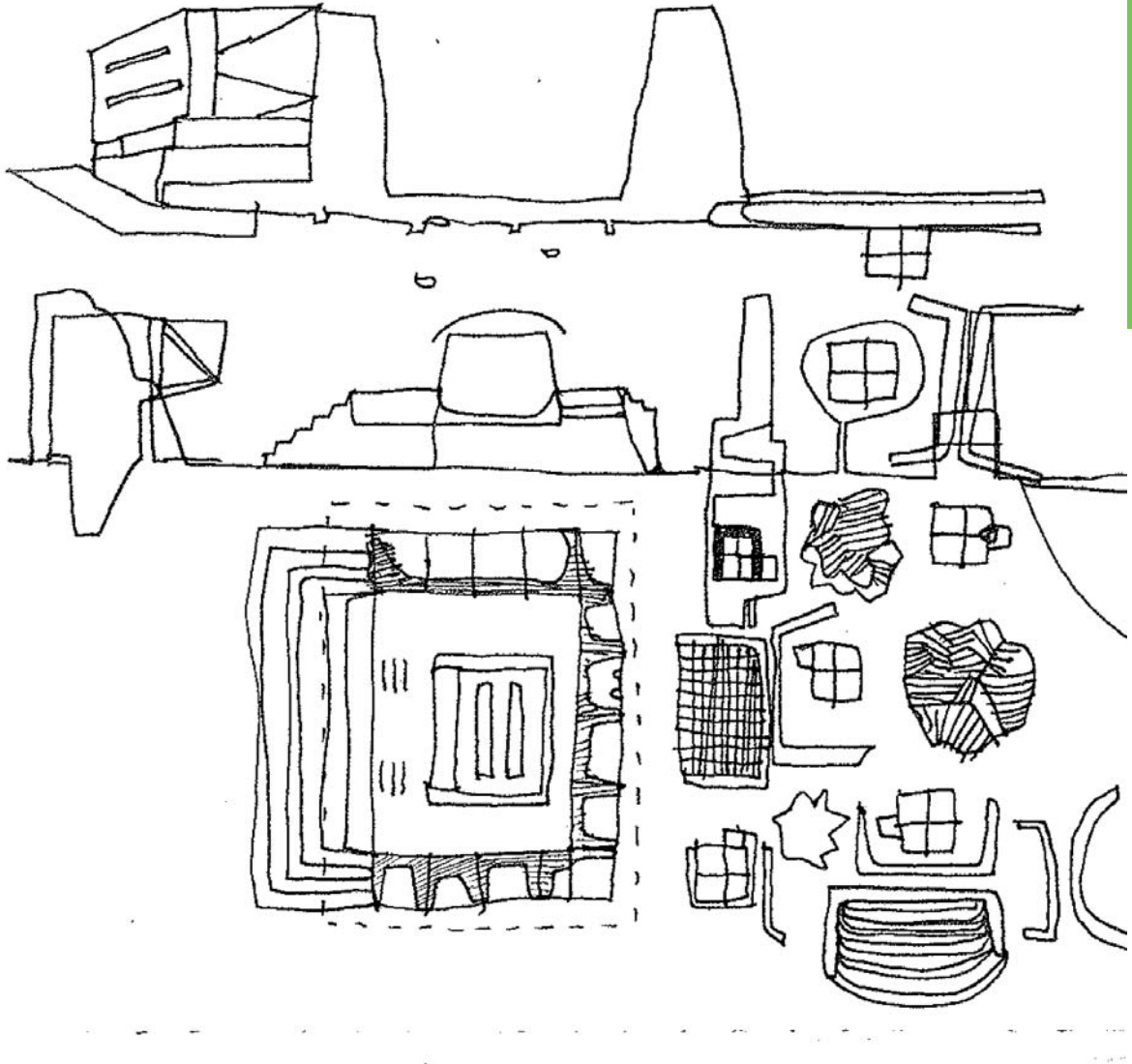
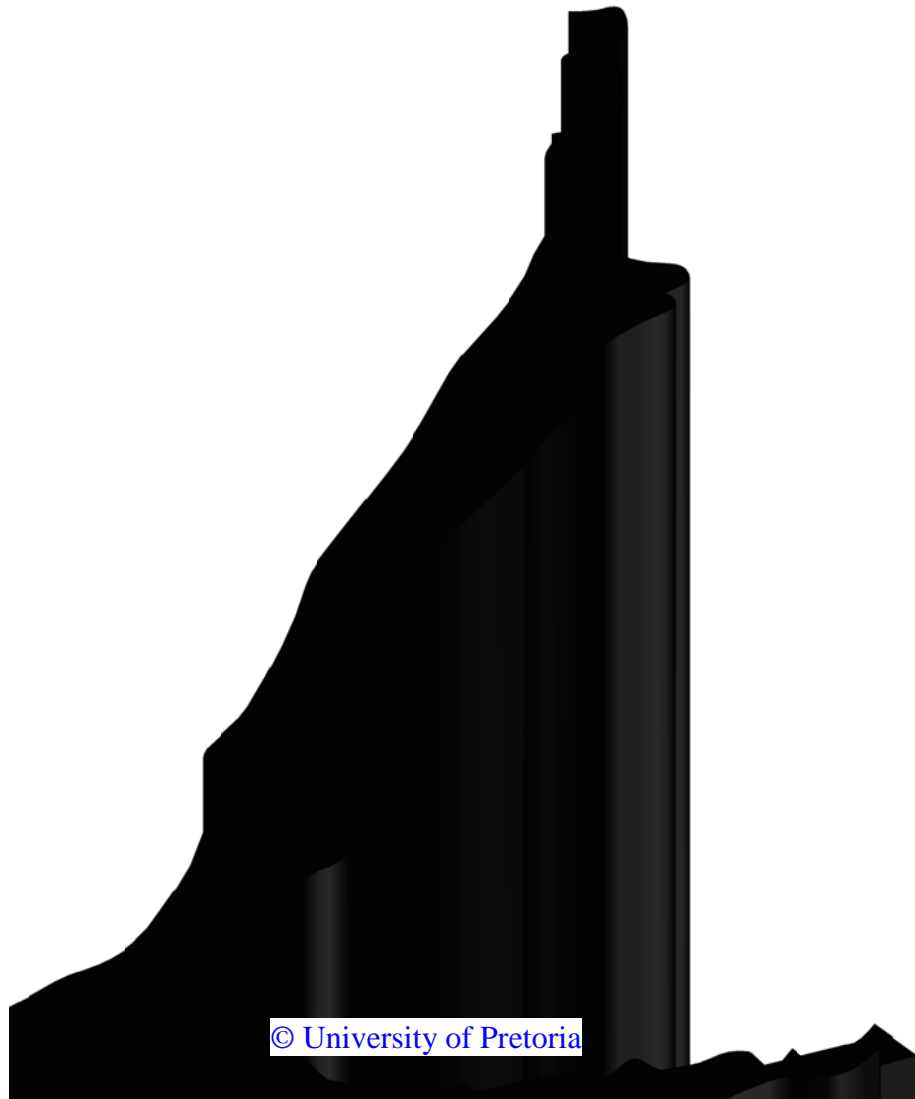


FIGURE 34a: L Urban Vision diagrammatic conceptual sketches, Fig 28b: Vectorised and 3-dimensionalised branch concept diagram, IMW 2016.



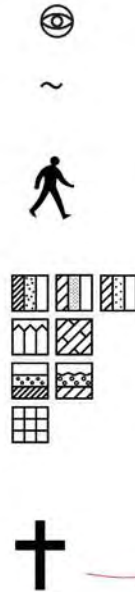
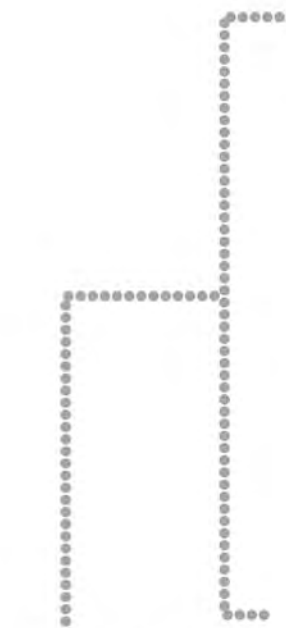
02. THEORY

QUALIFYING INTUITION



THEORETICAL

Various interpretations of place are needed to understand the programs that exist there. These are then taken further into an interpretative framework to generate an idea about place and explain it and the area around it.



MAPPING aimed to decipher the region into a set of symbols which could be continuously used as a set of building blocks.

SYMBOLS were both physically representative, whilst some were more intangible.

TRANSACTIONS were extracted and grouped based on collections of mappings in specific areas. This then came to forming an urban vision.

GEOGRAPHIES and **TIME** as based on histories read, maps collected and writings read in relation to place, time and the experience of time in relation to intellect and intuition.

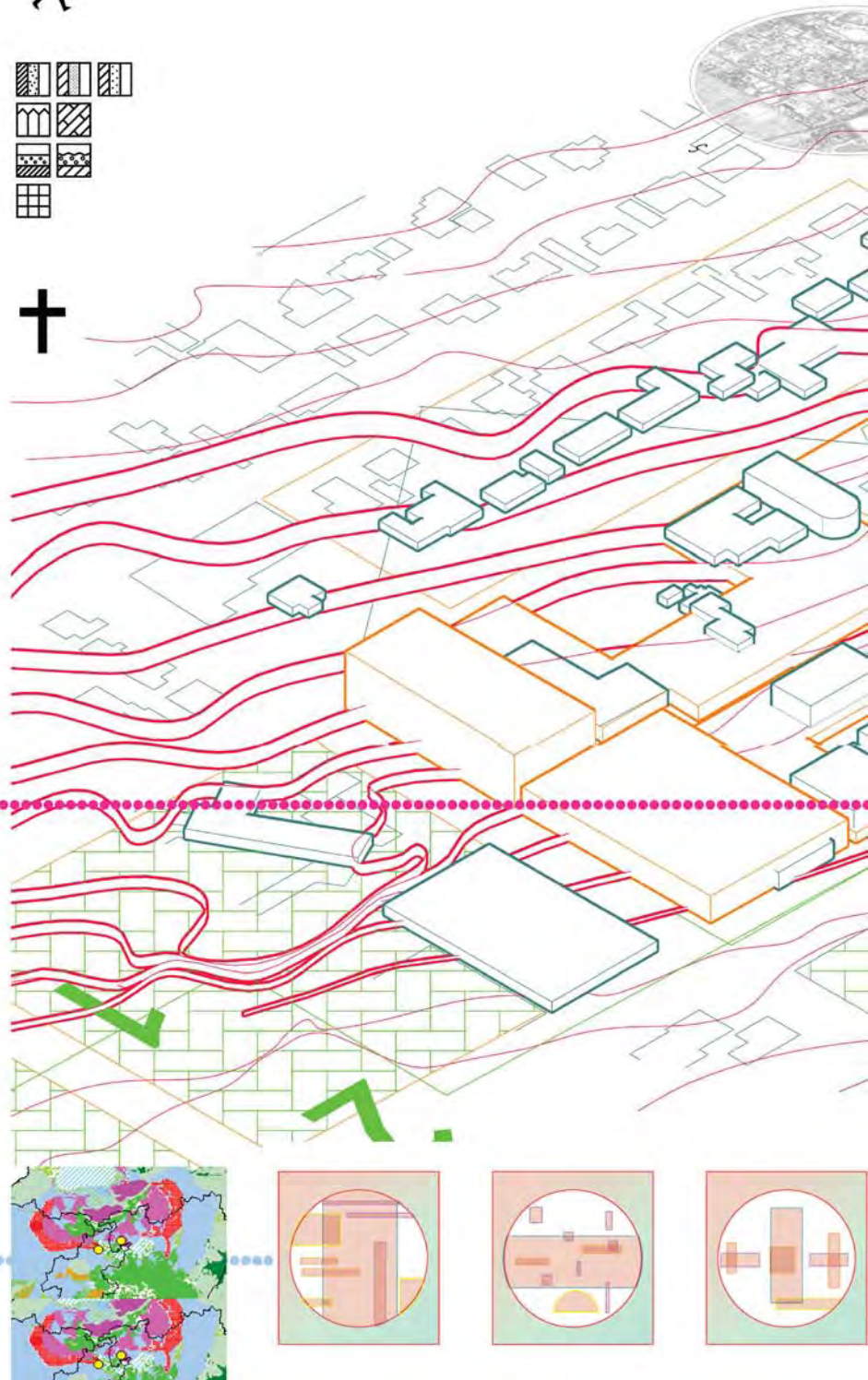
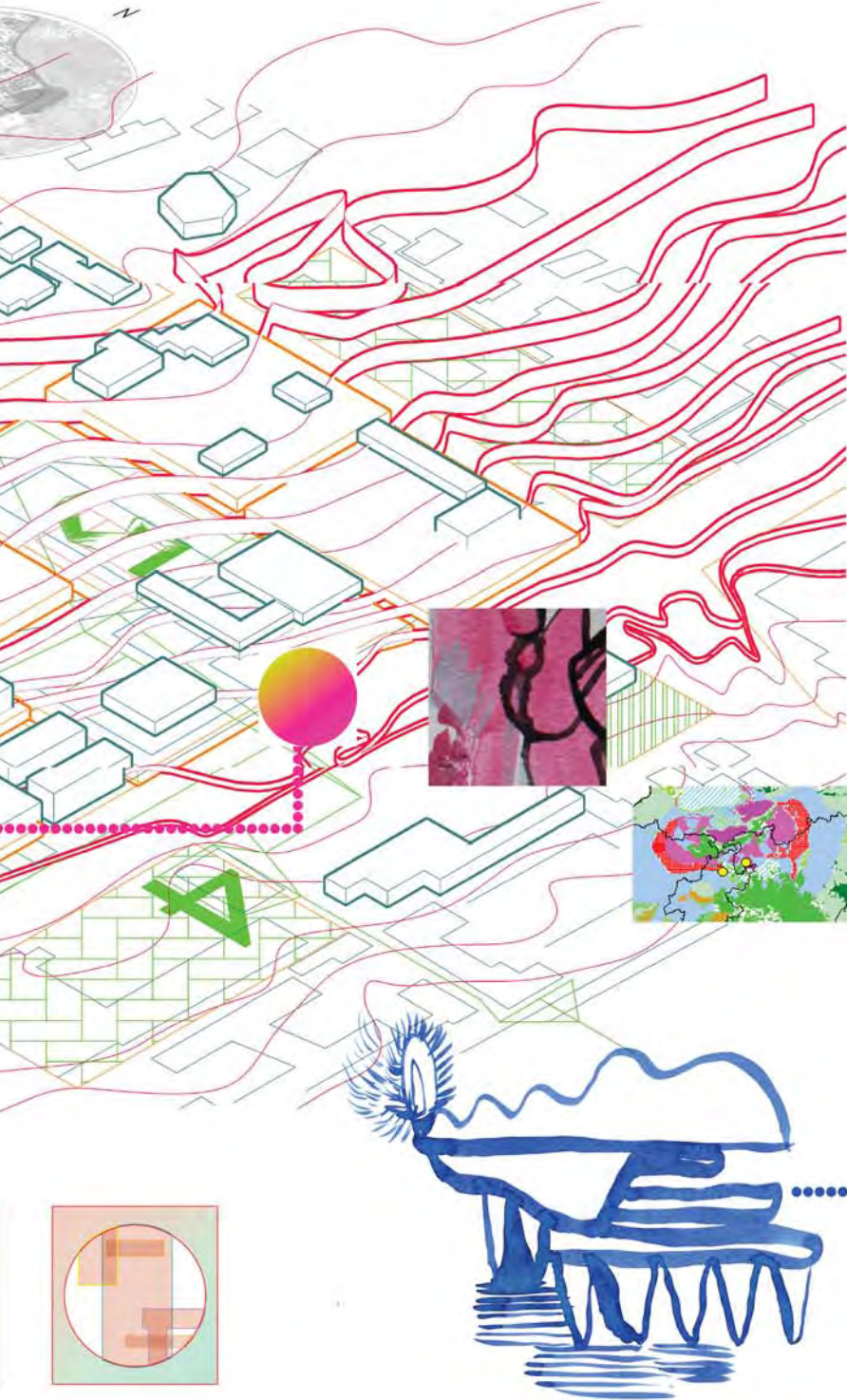


FIGURE 36 : Poster made to communicate the vast landscape of theory relating to context, issues and methodology to produce a codification. approach.



LANDSCAPE

and what to respond to. How people move, what the framework/vision, all these are the systems used to architecture sought to be introduced to it.



CONDITIONS derived from mapping, were sheets/ cards that interpreted each mapping into a set of principles and potential spatial responses.

SILVER as an element is also part of the composition of gold. This precious metal is manneristically representative of the value of Silverton, but also the loss of value which occurred during drought, depression and wars. [Kritzing 1980 :64]

DIRA / E.T.S.A words of an African origin used as part of the urban vision to try and embody the vision's intention to retain the making characteristics and qualities that are already existing in the region.

When two people speak the same language they understand one another – and when a design speaks the language of the theory or vice versa, the understand one another and are able to explain each other. Theory is a language we learn through play, question and experience.

THEORY OF MAKING

Hans-Georg Gadamer states that theory through making is the act of moments, but is also about asserting various attitudes and conditions in which one keeps oneself [Ganshirt 2007:209]. This is something the author of this dissertation believes, although she herself does not claim to be the author of theory through making, rather contends the norm that theory be the initial informant of design and that theory is embedded in the architect themselves. Written theories exist as deep pools from which to draw aligning theories, which we as architects utilise to substantiate their actions and decisions in our makings. The process of making is a sure ‘act’ which guides theory because of the measurable matter to relate to and be interpreted. Although this could be considered a post-rational method, the author argues that it is the nature of intuition to rather use theory as the codification of actions and therefore as a tool for understanding the meaning of making so that making can be better understood.

BRANCHING THEORY

Figure 28b on the previous page refers to the conceptual understanding of the topic of waste as branch theory. This diagram represents how theory was discovered through the visual language of drawing and making. Branching logic theory relates

to a type of mathematical thinking, however, at the time of this diagram being drawn and generated branch logic was attributed to the way in which different types of waste are created and moved along a system of disposing. The intuitive expression of an understanding of issues relating to waste, allowed for a discovery of a school of thinking related to science which then lead to further exploration and arrived at the ideas of syllogism, which in essence is the reversal of branch logic.

To summarise: the way in which an object of waste exists is as an energy potential that traverses along a selection of pathways that eventually become its final destination. The matter is disposed of and is then either destroyed along its selected channels or can be upcycled, recycled or downcycled.

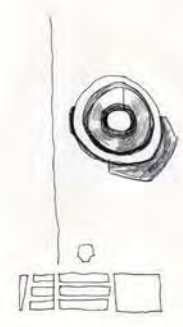
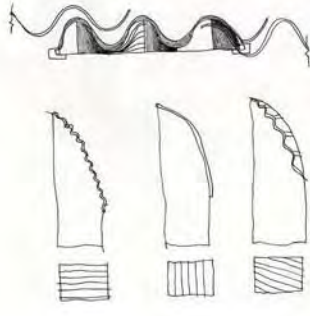
Syllogism suggests that a conclusion can be deduced from two premises – and this follows a branch logic in representation, flowing from two to one, as if the return to the root – the core.

This dissertation attempts to transform waste branch logic into a syllogistic logic by selection of client, programme and eventually the architectures. Applying an understanding to the flows of waste through our lives is not deductive, but expresses part of a movement towards a greater understanding of waste culture. By understanding the path better we can work the logic along the path of a syllogistic argument and destroy the source of waste.

INTUITION

The drawings to the right are drawings completed a month before the academic year was to begin and in comparison to the drawings on the following pages [figure 32], which are part of an exercise facilitated by Arthur Barker and Johan Prinsloo

FIGURE 38: Collection of scans of drawing from a pre-thesis exercise by the author, IMW 2016.



DOOR



BACKGROUND:
WASTE ECONOMY
WASTE ECONOMY
WASTE ECONOMY
CREATIVE ECONOMY
CREATIVE ECONOMY

4 ECONOMY

TYPES OF WASTE SITES:

DUMP	STEEL	WASTE SITES (WASTE)	WASTE USE & CONSUMPTION
------	-------	---------------------	-------------------------

WASTE (materiality) (s)
 (s) materiality
 (m) land discarding
 (n) area of land (WASTE/STEEL)
 (n) dependencies
 (n) dependencies

CONTEXT:
 selection - preference CLIENT: sub/s/cov.
 feasibility: compare - size (market (economy))
 construction materials - approximate distances

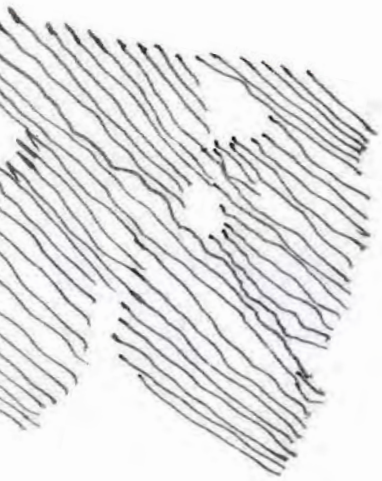
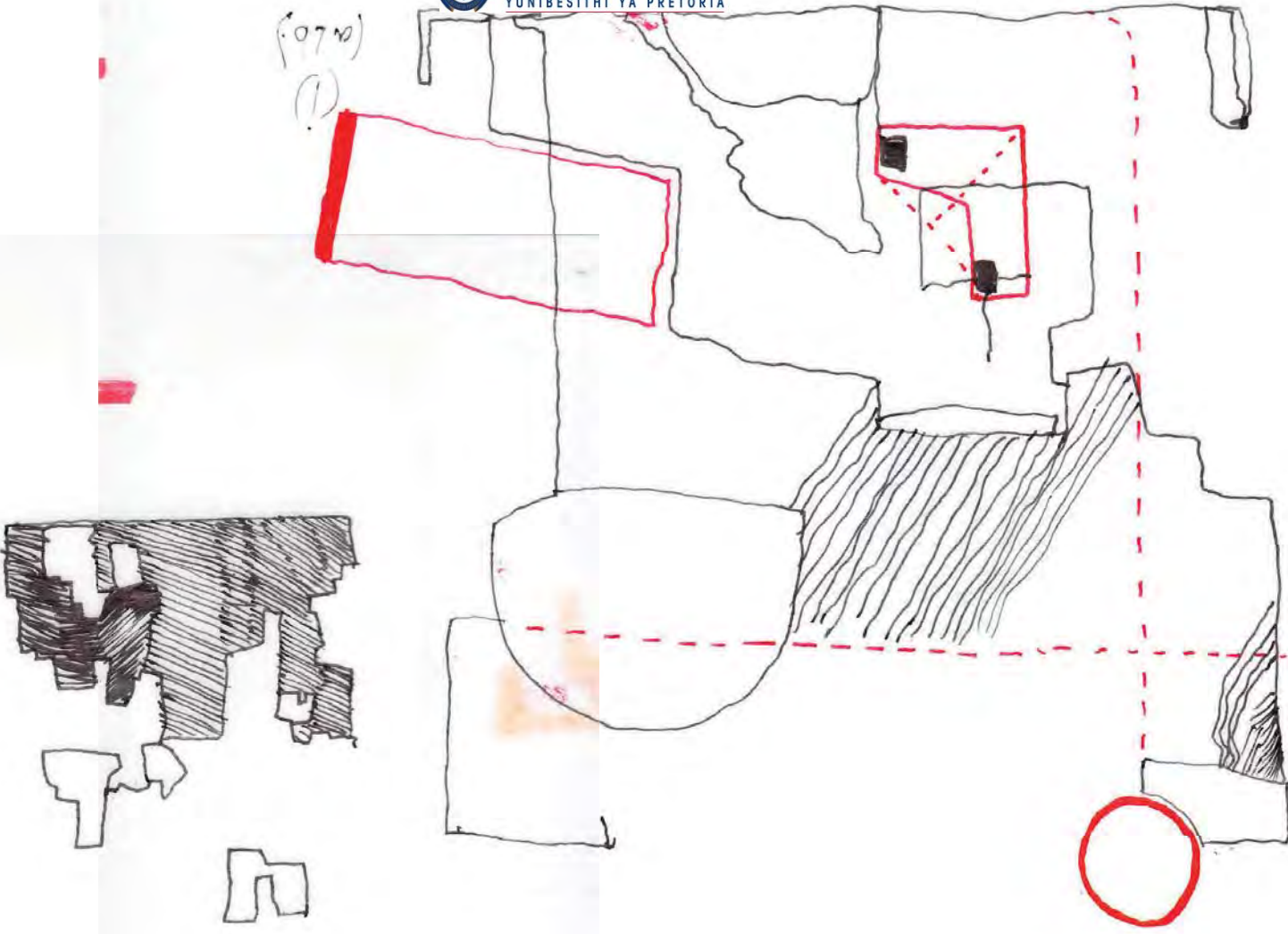


FIGURE 40: Drawings from the pre-thesis exercise for the Master class 2016, coordinated by Johan Prinsloo and Arthur Barker.



(070)
(1)



In the first weeks of the academic year it can be deduced that there is a value in the language of drawing. The exercises both elicit a certain type of imagined architecture, less bound to context than the type of projects that are completed as part of a MSc of Architecture and both sets of drawings communicate the potential of the drawing to become physical. The exercise done by the author produced a mini-dissertation and a sort of warm up for a complete package of the meaning of architecture, whereas the exercise facilitated as part of the University focused on process rather than get students to aim for a final product, although the final set of drawings and model was pinned up for viewing.

What the author intends to communicate here is that all drawings, their layers, their phases, their models and their wholes are the same, because of an intuitive desire that exists within the architect as artist to create meaning - these layers and repetitions and iterations are all the same meanings just in different formats - and as stated before this year the author intends to focus on the understanding of process in an attempt to unpack how drawing embodies meaning and how that meaning becomes revealed through drawing.

[UN]LEARNING CONSTANT

Another theory that the author associates with is that of the constant flux of knowledge. Recently there has been a video circulated that asks for the notion of Western science to be destroyed as we know it and rewritten in the context of African knowledge. As a western white woman, the author would like to state for the record that she is not of the opinion that Western knowledge should be eradicated as it forms part of another narrative of culture, place and people, however, recognises the value in questioning that which is believed to be understood and also in the ideas of UNLEARNING, which is a principle practiced by a Pretoria collective of artists call the 'Capital Arts Revolution' which seeks to explore the abstract, emotional and qualitative value of the arts without the structures as we know them.

SPECTRUM'S OF EXPERIENCE

Finally in relation the understanding of spatial experiences the author resonates with the thinkings of Henri Bergsonian and his critique and writings about the sciences and their failure to define time by means of experience of the subject, this same philosophy of the inaccuracies of science to express the experience of time is believed to be the wasted potential of architecture. Thus, the selection of conditional methodology and symbolic languages to try and codify design in such a way that it becomes accessible enough to repeat and therefore as a comparative tool for understanding how methods produce different architectures. The author has not been able to test her method with other architects, although through the presentation of the urban coding, vision and conceptual translations of this into the terms of value and understanding of solutions, the author has been able to lay out a clear method which could be reapplied to any place.

SO WHAT

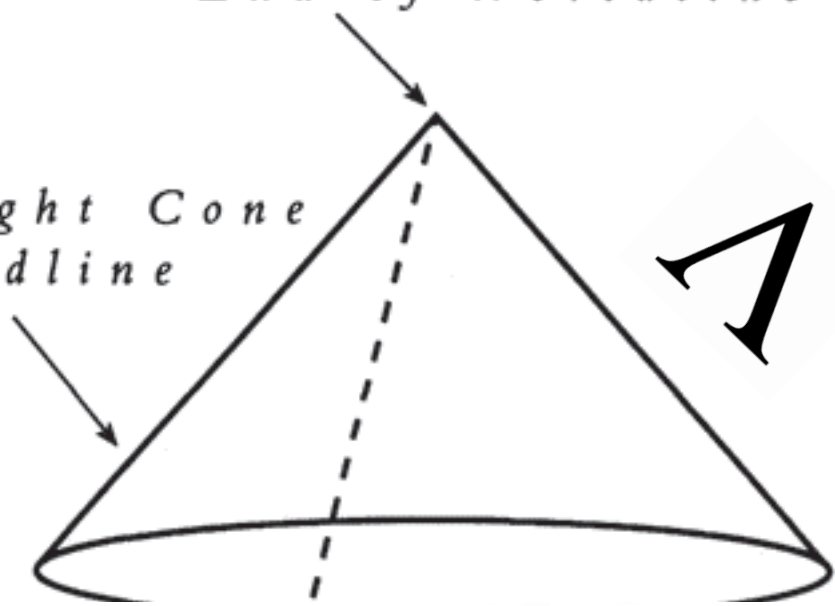
Theory is a platform of fluid knowledge that can be taken from, given to or become enveloped in, but overall it embodies the ethics of the role theatre, a surface/platform for the reflection of attitudes at all frequencies. At a glance it is clear that the theories of cosmological constants, branching and spectrum are the foundations for the eventual conceptual strategy to space making for waste architecture as the cosmological constant becomes embodied into the beacon and the branching into the movement through place and the spectrum represented in the philosophies of frequency of architecture and its experience.

FIGURE 42 : Diagram collage of an illustration of Bergson's theory of time and experience and of how the spectrum of experience alter through the section of the building.



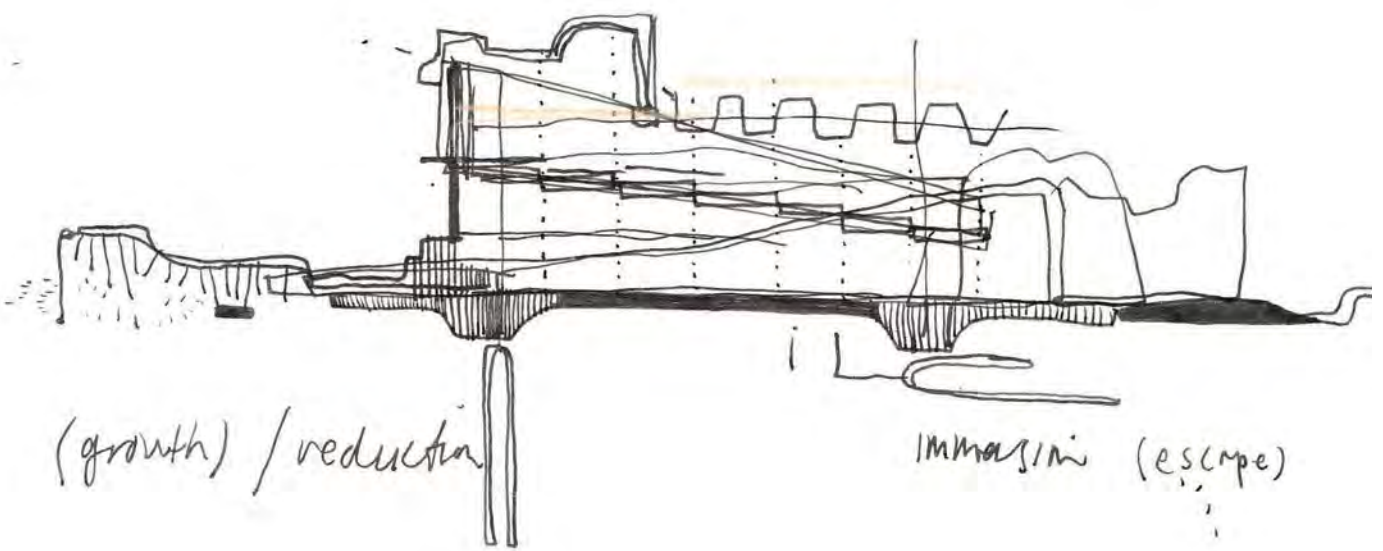
Law of Worldline

Past Light Cone
of Worldline



() / absurd

banat (news)

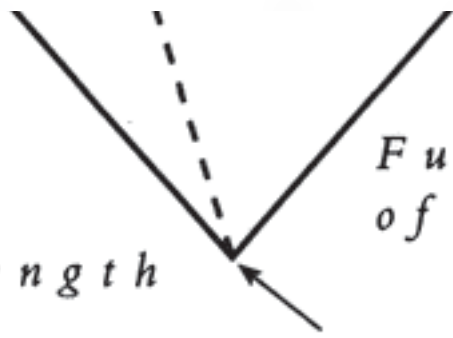


Time



Length

Width



Future Light Cone
of Worldline

Beginning
of Worldline

[reflecting on the client]

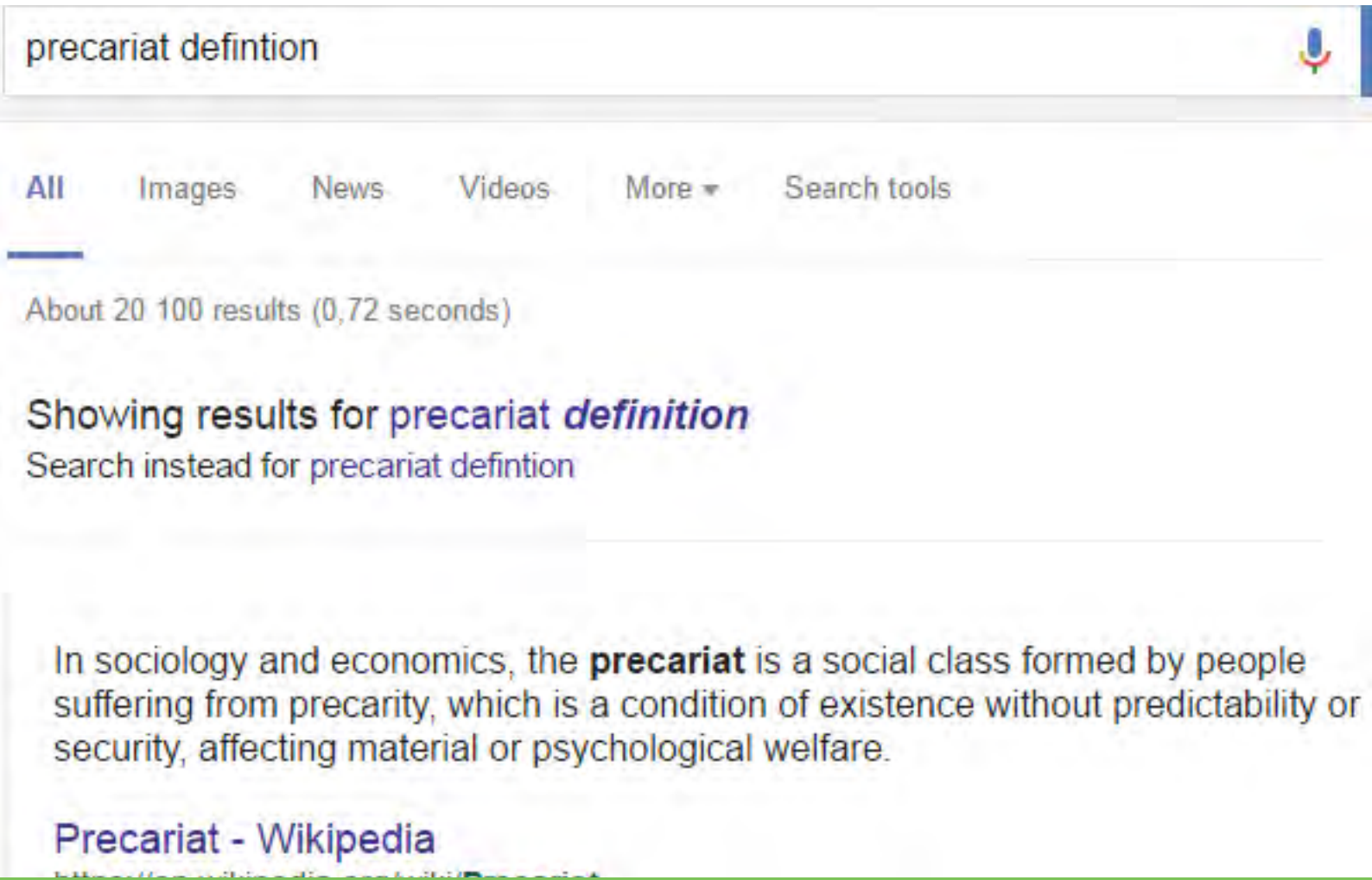


FIGURE 44a: Screenshot from google of the definition of Precariat. Fig 36b: Film photograph by IMW of 'Matter out of context' of plastic and wire waste located in the wilderness of Dullstroom in 2015.



03. SLOW[A]

COLLABORATIVE LEFTOVERS

'Dirt and waste are merely the products of systems of social classification. Where there is dirt there is a system.'

Jeremy Till 2013

SOCIAL WASTE

The Social Life of Waste Arts [SLOWA] is a regional network of artists, researchers and institutions that has been allocating funding to investigate, document and communicate through event, art and exhibition the current issues relating to waste. The quote above by Jeremy Till aims to relate how, through waste, a collection of systems have begun to establish themselves, especially those of an informal level in terms of social structure, mainly referred to as the 'precariat'. [Reynecke 2015: 15]. [See figure 36a].

What the precariat represents is the precarious situations and assumed chaos associated with waste: the dirt, the landfill cliffs and the danger of pushing around a trolley heaped in waste, but also selling waste at fluctuating market prices that do not necessarily allow for the freedom of lifestyle which is also associated to the precariat. However, the existence of this social class displays how a number of people have decided to respond to perceived chaos through the creative process of order. Social phenomenon such as these are what an organisation such as SLOWA emerged from and begun their research and activation of this social class as a means to communicate its potential value, and also to some extent advocate the social crisis at hand that exists parallel to that of the environmental one, but finally to communicate an otherness to the defined systems.

LIFE WASTE :

The social issues are plenty, and as the process of waste unpacking continues so too does an understanding of potential solutions for social issues.

For example, waste as building material in the areas where housing is an issue, water wastage management where water waste is an issue, basically waste is the type of issue that brings about positive change that also inspires technological development, however, it is argued that waste should not even exist in the sense that matter of such value become discarded in times when resources are scarce and water is low.

The environment has become an economy, or as Zizek explains in his online video [scan qr code] about how ecology has become the new religion in its promotion of a conservative attitude to development rather than encouraging the growth of the artificial. Think technology that is not about solving issues but rather about realising potential, imaginings and dreams, much like Archigram cities, and their potential to walk, lift off and travel into space.

It is through the author's involvement in this network, as an artist and researcher, that the topic of this dissertation is situated in waste. The dissertation seeks to contribute to how architecture can function for temporary networks such as SLOWA in order to extend its own life span as a temporary network. The dissertation also incorporates the principles of the network by unpacking the name for example, by which to make an architecture. Therefore, SLOWA becomes the client, the social beacon for addressing the values assigned to waste through observation in life.

OF WASTE :

The network consists of four different hubs in four different cities; Harare, Maputo, Johannesburg and Pretoria. Every year each hub hosts a regional workshop for the duration of a week, where four artists from each hub contribute their skills and works of art to a culminating event of a final exhibition that is open to the public, as a means of communicating the agenda of waste potential. In the past year, regional workshops have been dedicated to sharing ideas, knowledge and skills. During workshops there is a generation of new information that could be utilised as a primary set of resources from which to begin formalising the network.



FIGURE 47 : Photograph of the artist from Maputo making screens with reused plastic bottle caps, IMW 2016 and QR code to <https://www.youtube.com/watch?v=lQbIqNd5D90>.





The workshops also work towards the greater goal of contextualizing the issues surrounding waste in our societies and making possible solutions clearer, as well as more didactically accessible to the greater public.

The author visited Maputo in 2016, with her introductory chapters, to propose how her dissertation attempts to incorporate the artist agenda of the network into a real world context, so that the research could align not only with the authors own ideals relating to waste, but also align to the goals and outcomes of the network itself.

The realness of the dissertation's client is a critique on the role of architecture in general. In reference to the previous chapters which outline the various issues related to waste, resource endangerment and the environment in relation to architecture, it is clear that architecture no longer needs to serve as monuments of grand consumption, rather architecture of humble representation and in a Vitruvian sense of legacy is needed. How can we keep justifying mass development when resources are scarce? The author's intent of selecting the temporary yet real client is a means of expressing and exploring how architecture itself can be temporary, small and slightly apologetic about how it has played a definitive role in positioning humanity in a situation of compromise.

Yet as waste become the object by which we begin to measure new architectural actions by, what then becomes the informants of design that contribute to waste consciousness? An attempt to use waste form [in the leftovers sense] as a generator was useful in terms of design mechanics but not for social reconstruction, therefore the client of SLOWA requires a programmatic codification of space that directly engages with waste attitudes of rejection, reflection and accepting. Then, in the same manner that the artists of the network use waste as a material for language so too does the material quality of this architecture come about at a much later stage. Instead of making it the major focus of the architecture, it becomes the binding aggregate which is then mixed into the fluidity of the social and spatial precariat.

WASTE WASTE:

Programmes of engaging with waste:

INFORMATION LANDSCAPES AND TRANSACTION SPACE

As technological advancements continue, so too do the means of using it and Futugawa states in the writings of the Morphosis special issue by the GA Document [2005], ‘... with each new advancement comes a new means of building,’ it seems that information landscapes are the ones that have become the most complex in a time where advancements are becoming more and more frequent.

From an architectural perspective, the important point is that we need to translate technologies into architecture for a collective experience. How we do this is via different media and perspectives, ranging from digital screens to lecture halls? Because it has become a new form of language, the a younger and newer generation is learning about at rapid rates and are becoming extravagantly incorporated into our everyday. Therefore, the author seeks to be the technology of transactions for social waste to be utilised.

THE ARTIST RESIDENCY AND THE ARTIST

Spatial Requirements of an artist residency according to the Alliance of artist Communities Guide [arts.gov 2011:6] for residency specifies are related to drainage and floor finishes that ensures the material which will be worked with by the artist will not cause permanent damage to the architectural finishes. Ventilation requirements are dependent, much like SANS on the type of occupancies but in the case of a residency, again also to the type of material to be worked with. Residential requirement are also standard and

FIGURE 48: Scan from journal demonstrating the translation of transactions and spatial requirements for artist residency into diagram.



ventilation: chemical passages, air cycling

methods of volunteering + fundraising

- positive reinforcement
- mentoring
- role playing
- pairing

community raising

art raising

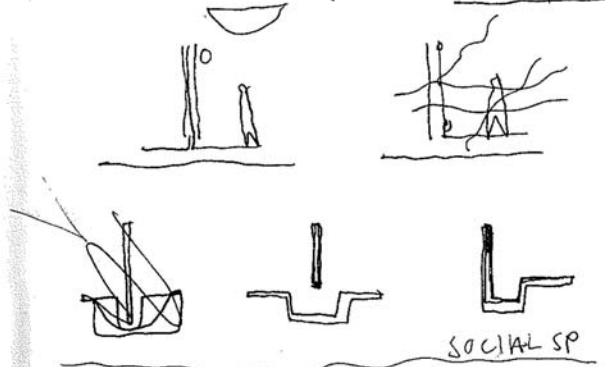
AAC architects perspective
GARDNER-STUDIO

Harry Teague

1. Light: south, soft, natural, artificial, led, colour balance
2. Inside out: access to the arts
3. Maximise space: volume des state, use sculpture - moveable,
4. Proper mthods: WiFi, ...



Form/Function: utilitarian function
formal freedom
material selection rugged,
durable, cleanable,
malleable, approachable,
durable.
simple walls - wall types



1. Mix: central mixed use, community public interaction, activity group classes, casual interact, receptors

Food culture, more community opportunities, indoor outdoor, day, night, rituals, entry plans.
mixes of public and private solution, connectivity, promotes organic happening between situated

Services: when or walls without pipes
Flexibility: floor, material selection

Experimentation: medium spaces



sometimes same as different medium
shared spaces - experimentation
private studios - specific

Toxins: proximity ventilation

Community programs: artists to community or community to artists communal on or off-site

⊗ Connected to local building services: community, municipality, builders association

Director perspective

talk to artists: what works well beneficial changes to that which is



require basic amenities for an artist. The most specific requirements are those of the gallery and spaces in which is to be shown because of lighting requirements for art works and also for public access to the space.

THE GALLERY AND THE EVERYONE

The gallery serves to be a space where art can be shown and displayed and therefore seeks an understanding of the kind of arts that will be shown there. The current movement towards digital arts also influences the kind of spaces needed. According to the AAC guideline document there are three main considerations described as 'Mixing, Eating and Balance' which in short are concerned with how the artist studio space mixes with that of the public or in the case of this dissertation - how it will mix with the social part of waste; designated spaces for eating and the waste aspects thereof and finally in reference to balance is related to the mixing of public and private but describes the need adapting qualities to space to allow for a fluctuation of use.

THE TOILET AND THE VISITOR

Although the spaces for learning can happen with dialogue halls, amphitheatres, open air stands, the lawn, the gallery and the makers studio - there is a desire to also make an exhibition of the toilet itself - the space of human waste creation. As written about in the chapter WASTESCAPES, the author believes strongly that water conservation is vital as a life source for people and nature alike. Something like a low flush toilet saves litres of water [Koolhaas 2014: 55], however toilets deal with their waste in wasteful ways despite their water saving abilities, for example, when toilets are able to treat liquid and solid separately even more water can be preserved. The way in which we dilute clean water with 'dirty' matter is problematic merely because there are better ways in which to do so. There exist

an abundance of attitudes towards the toilet, not only its technology but even in the position of the person using it, ie. the squat versus the sitting position. Therefore considering the programme of the toilet as an informant of design is a way in which the author not only seeks to make an exhibition of this space but also to consider and explore the potential also as a beacon of attitude transformation.

THE ARTIST AND THE RAGPICKER / WASTE PICKER / THE LEPER OF FRANCIS

Poets find the refuse of society on their street and derive their heroic subject from this very refuse. This means that a common type is, as it were, superimposed upon their illustrious type. ... Raggpicker or poet — the refuse concerns both. {Benjamin 1997 : 46}

The writings of Benjamin [1997] about Charles Baudelaire distills a part of waste which the project identifies with - about how waste is able to serve as metaphor or inspiration or tool of superimposition into the art of writing - that which is physical only in its ink and pages - beyond that waste is transmitted into consciousness and this speaks to the more transcendent spaces of waste - that will be a part of this dissertation - those spaces where ideas of waste are destroyed and created in the form of dialogue exchange. For example the arrival at this interpretation of waste was through dialogue with a friend, Patricia Theron and as an artwork on writing I include her interpretation of Benjamin's quote.

The raggpicker is a recurring motif in Benjamin's writing and offers a useful metaphor for his textual methodology. Benjamin focuses on the margins of the modern city, scavenging amongst the texts and oral histories that have been omitted or neglected. Literary raggpicking resurrects discarded texts, forming them into new texts. Benjamin was interested not just in what is, but in what was and what might be. He is looking for where the imagined city meets the material one. [Theron 2016]

FIGURE 50: Photograph by author of the Waste Art Fair event organised by SLOW as part of JHB Art Week, the skate event.



[reflect on the context]



FIGURE 52a: Sketch by IMW (2016) of the Pioneer Museum House in Silverton. 32b: edited photograph by IMW of the interior of the community centre of the site block.



—|— Δ~ —|—

04. AG | AU | ♦

SILVER, GOLD + PEACHES



SILVERTON'S CLOUDS

'Where is the pie in the sky?'

Dylan T. Graham

South African Painter

Architecture responds to place and to people in a way that encloses people according to their environment. Without place there can be no foundations, without people there can be no use, but this is a reality merely because of the capitalist culture in which we find ourselves situated at this time. In the spirit of the artist who questions the architect, a friend and artist, Dylan, would ask of the author 'Where the pie in the sky' was, wondering when architects would return to their art of creating places that people were dreaming of visiting – not needed to visit or when would architecture escape its governance from gravity or basically where did all the art go?

Yet architectures' art is in its ability to meet with gravity and allude to the sky despite its matter, or the time being that is if one is to consider the pneumatics architectures of the Desert Cloud by Graham Stevens. The silver clouds heated by the sun creating structures in the air inhabitable only by the eyes, but also an architecture for the desert of place. Yes, even the could is bound to place according to the heat coming from the earth to the amount of moisture in the air at a specific place. So as it goes, Dylan, the pie in the sky is where the best berries are.

PEACHES

Silverton came about from a set of different transactions, some written about by Kritzinger

[1987:12] about people like the Hans Mundt and his wealth made at Pilgrims Rest from gold, but also those belonging to the land itself, before it was a land believed to be rich in Silver.

Despite silver being discovered in a mine further east of Silverton in 1900, that discovery is believed to have given it the name, the landscape of Silverton, according to geological studies at The University of Pretoria. Eriksson [1989:19] describes a tropical and marshy character of place with shale rock formations. These characteristics, although Silverton today seems dry, can be detected in the fluvial like contours that exist today.

Silverton also exists as a buffer zone [Badenhorst 2005:14] of a post-apartheid legacy. Although Kritzinger discloses details about the blatant separation of local tribes in the area from the town edges where it was believed to be unsafe along the railway lines where poor white families were also situated. And so, along the rails an industrial buffer zone strengthened. progressing toward the hills on the South were small agricultural type lots, where peaches were farmed, and then further South the wealthier white families lived. Today, the suburbs still exists as middle class suburban context. The agricultural lots have become scrapyards or other small businesses ranging from breweries to hardware shops.

'What are all theses artful domestic exhibitions but suburbias service to 'every man in his humour' MUMFORD 1961:491

Lewis Mumford in *The City and History* [1997] writes about the suburbs and how despite being the result of capitalism, escape from illness in the city and other narratives is that the suburbs today exist as a place where the individual can express themselves through their home, their fence, their lawn and their car. The suburbs are the ultimate show ground or in the case of this dissertation, gallery of humanity.

FIGURE 54: Timemap of Silverton by IMW, 2016.



Its very name being based on the discovery of Silver in the north eastern boundary of the town {KRITZINGER 1980:45} The farm of Hartebeespoort has since been split apart and began to form smaller quarters of what is today known as Silverton which has since experienced everything from violence to redevelopment and the removal of invading trees, whilst continuously being home to a variety of industrious and hard working people.



- 1846 David Botha settles at the farm called Hartebeespoort
- 1853 Bought from David by the Vermeulen Family and then the area of Silverton is demarcated on the farm
- 1858 The Silverton farm, number 308 is laid out
- 1859 The Silverton farm is declared and the Guilliam house becomes property of the Silverton Municipality
- 1872 The Northern part of the farm is sold to Cornelius Mall
- 1873 Parts of the farm are sold for 105 pounds each to Hendrik Vermeulens' son Jan Albert and his sons-in-law Guillaume Schoombe Pretorius en Willem Adriaan Fourie
- 25 September 1874 Pilgrims Rest Gold rush [Hans Mundt capitalises] Buys farm for 1400 pounds + Builds halfway station Moreletta Spruit believed to have gotten its name from Mundt's wives name, Aletta
- 1900 Silver is found and farm is sold for 9000 pounds to the Silver Mining Company
Thatched home replaced for a Victorian House
- 1905 the portion of the Deirdepoort farm is laid out. Plot number 469 with a total area of 666 hectares, and the Cullinan Diamond is discovered
- 1915 The Silverton tannery is established, 1920 Tannery is extended in relation to the meat boards and in 1929 it is mapped and in 1937 is further adapted.
1936 Silverton is supplied with electricity
- 1960 Sawmill and steel foundry established in Koosdoerspoort for building passenger coaches
- 1954 Era bricks is established West of Eersterust
- 1958 Eersterust is formalized and proclaimed a coloured community and has even divided
1960 Silverton Population reaches 5000 approx.
1961 Mundt family donates estate to Silverton
- 1967 The Silverton tannery gets allocated as top one hundred industry in the JSE
- 1972 The Municipality donates the Guilliam house is donated by the City of Pretoria to the Cultural Historic Institution.
Charles Marais, the same Charles which Charles Street is named after, laid out and surveyed Silverton.
- 1975 Cultural History Museum becomes the Pioneer Museum and the Silverton tannery produces 1/3 of South Africa leather demand
- 1979 Eersterust reaches a population of 17 000 people
- 1980 The Silverton Seige | 2 Hostages died Valerie Anderson and Anna de Klerk
- 1983 The tannery closes and becomes an industrial park
- 1991 the group areas act is abolished, but migrations do not commence
- 2000's Removal of Trees along Pretoria Street

Yet the isolation from the city or centrality resulted in a continuing dependency on the car and soon time was a toxic waste of traffic. The suburbanite was miserable having to dredge from one place to the next, enclosed and separated from any instance of discomfort.

Today, the ebb and flows of the place continue as with the Voortrekkers during their annual visits to the Voortrekker Monument for the 26th of December. As they dredged through the town of Silverton to arrive at their places of centrality, so too did the wilderness of a natural landscape, so too did the various tribes and so too today the taxis, cars, trucks and cop vans run along the main artery of Pretoria Street.

WASTE SPACE

The location of Silverton was selected as site not only because of its affordable land prices, but also because of its relation to physical waste. Despite producing abundant household waste from the suburban areas, in the form of organics, plastic bottles etc, there also exists a great amount of industrial waste ranging from steel to plastic to leather offcuts. This existing culture of disposable excess therefore seemed an ideal location for the situation of an organization such as SLOW.

The context also provides an opportunity for social enrichment. This particular area in relation to the CBD of Pretoria and one of Pretoria largest locations, Mamelodi and other surroundings ones like Eersterust, serves as relevant landscape to which to introduce an architecture of syllogism, i.e.: the bringing together of that which was discarded.

The identity of Silverton being that of the 'Drive-Thru tool shed' [Bosma 2016] with everything you need to do everything with, can be consolidated and represented through architecture that accesses its context so directly that it then can activate

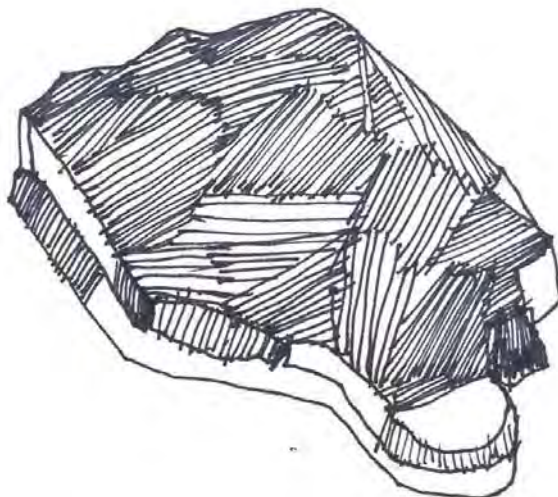
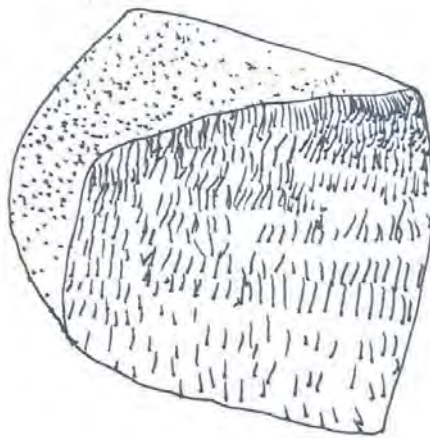
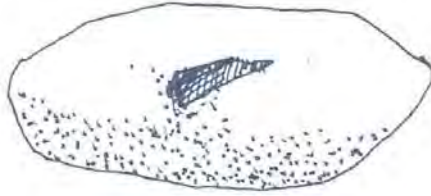
social potential. It is the hope that an architecture can create a community that is more culturally enriched that has more to access than the TV and the workplace. To introduce art to the community ,using the waste of the place specifically, architecture can serve to communicate potentials through a breakdown in misconceptions etc. Architecture is then the facilitator, the role theatre of social change which in essence, if the project used R50 to get itself started, would merely need a shaded area with a good surface for sitting so that information exchange could occur. The program seeks to be a space of information transactions and thus develop a typology responding to the context and form the new cloud that can form around every building in the area.

It is often assumed that the consequences of the suburb and its typology have resulted in a fragmented social fabric whereas Silverton was once a half-way house, a place of stopping over and resting, it currently exists as a place of passing through, its only destination being the remaining Pioneer House in Gauteng where the Boeremark happens every Saturday and any form of space is occupied every Sunday for the purpose of worship there is a social fabric of the weekend here. Then as the week begins again, the transport races through the streets and the car dealerships wait, the artisans come find their gems, the manufacturers come and source their parts and the engines are all revving at full capacity within the absolute typologies of the factory.

WASTE TYPOLOGY

'What is typology?' Another point raised by Pfeifer in the Birkhauser publication [2015: 19]. She goes on to write that 'The type is not invented, not designed, not developed, the type emerges, grows, culminates, decays, flattens. Types are organically concrete and she concludes by saying that the typological

FIGURE 50 : Sketches of rock collections IMW 2016, titled: Plastic rocks and the Monolith as an intuitive exploration of the beauty of rocks as objects.



embodies collective meaning. In light of this the author recognises the meaning of the industrial and suburban typology and seeks to explore how typology can be intersected, transformed and designed, invented, decayed, culminated and developed by curating the embodiment of meanings to communicate as the messages of value of place, person and programme.

SCRAP GARDENS

Silverton is the context for this project because of its spatial and social potentials. Not only situated in its fruitful abundance, with a not so known history of the artist Willem Boschoff winning his first art prize in the very school situated down the road from the proposed site [Kristzinger 1987:54], but also because if one were to observe the images on the right of the page you can witness what the author refers to as the scrap gardens of Silverton.

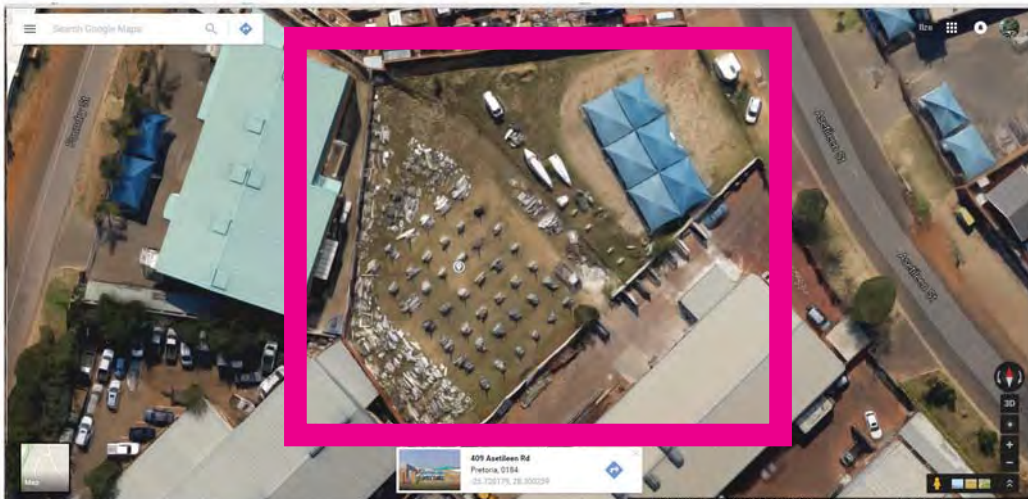
They represent is part of this spatial organisation and legacy that extends beyond the typology of the industrial and the suburban that the author seeks to make available to the general public through her architecture, as a tool for learning and medium for making art.

The final site which is disclosed in the following pages both conceptually and physically does not seek to attach itself to these identified sites of Figure 52 a,b and c. Rather the final site is an existing cultural block on the main street of Silverton; Pretoria Street. Not only does this block sit on a the connection artery of Silverton to the city, as well as the eastern suburbs and Mamelodi but also this site houses the community centre, two churches, several shops selling hardware and car parts as well as a few residential sites. the block therefore serves as embodiment of the spatial character of the Silverton, merely lacking that character which is considered the 'dirty' of our everyday - for that reason an existing

industrial typology shed is what the author attaches to - not only the invisible desitination - a condition which will be discussed in the following chapter based on the mapping and codification of place, but also a way in which to connect the public to this hidden layer of spatial character that belongs to Silverton.

The rest of the block is surrounded by Fakkell, Fountain and President Streets. Fakkell Street leads into the main industrial artery of the site and also travels over the hill in the direction if the CSIR and the Scienza area. Whereas President Street exists as the quiet parallel to the main Street of Pretoria Street but also as an oppoprtnuity of connection between fellow group members which is the urban vision is transformed into the waste artery that connects between Juan Cloetes architecture of pre-production and pre-consumerism in relation to the authors project of post-production and post-consumption.

FIGURE 58: Site clippings screenshots of existing waste yards in and around Silverton. Google Maps Online with QR code to Silverton map link.





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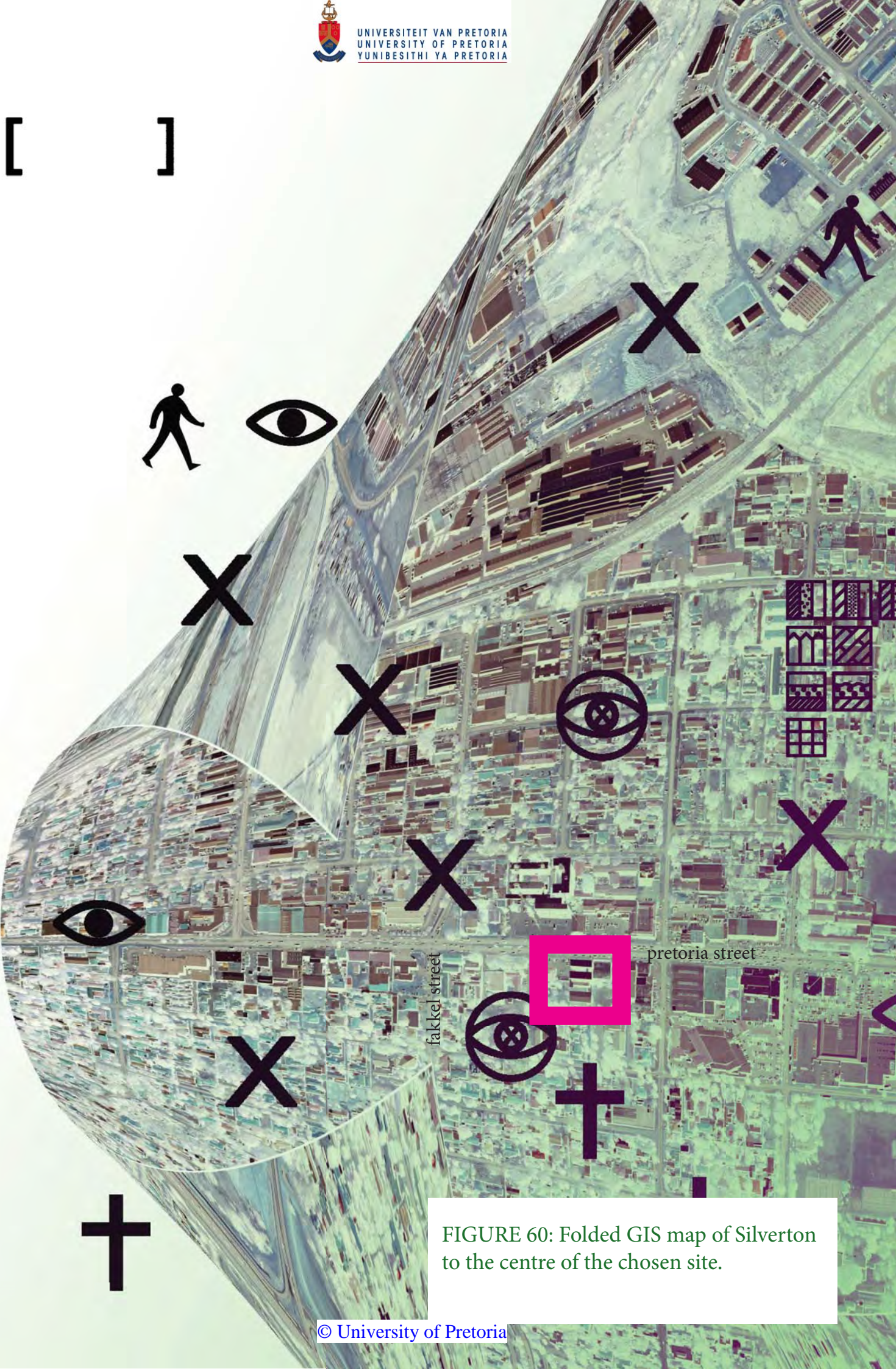
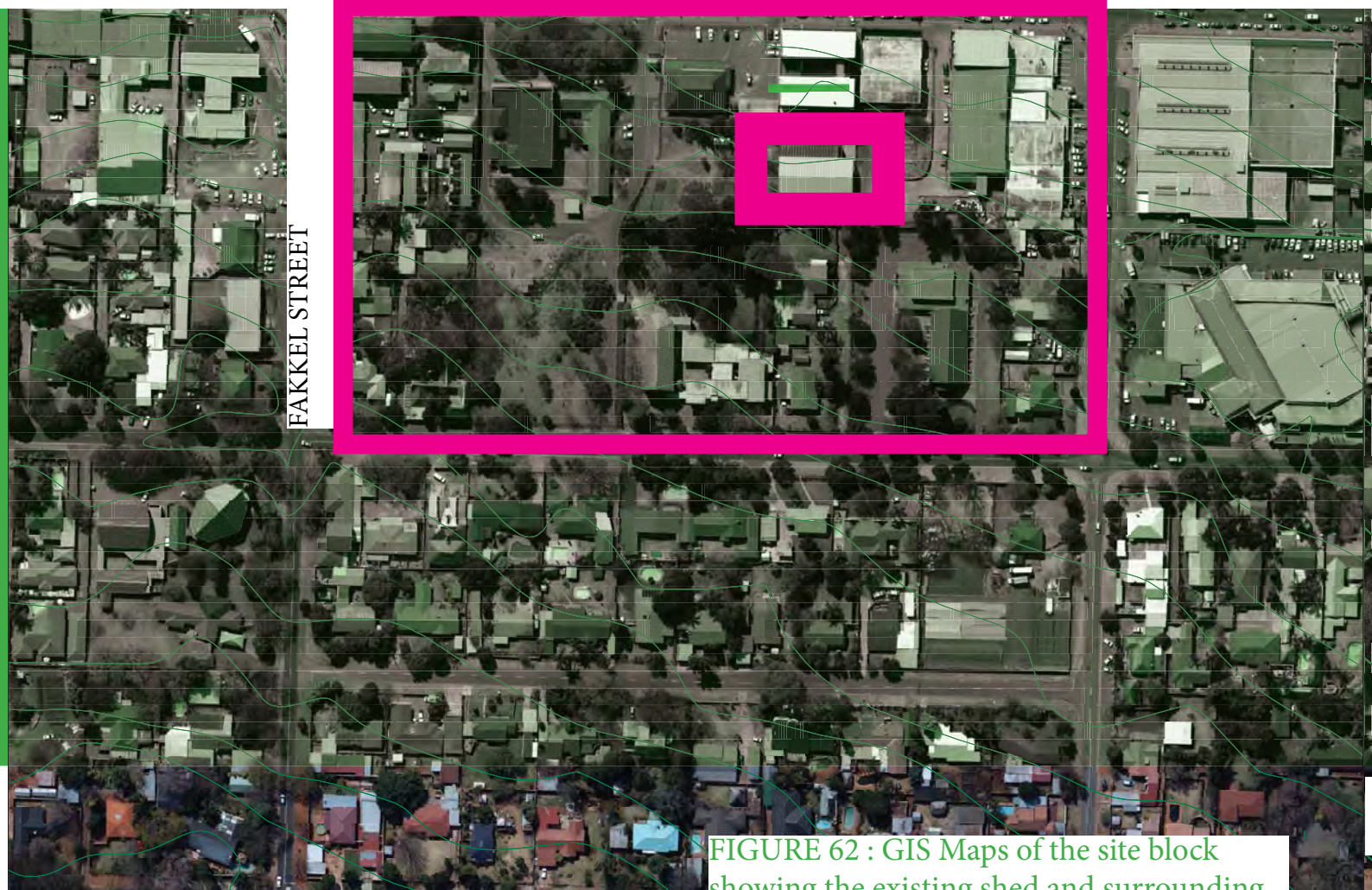


FIGURE 60: Folded GIS map of Silverton to the centre of the chosen site.





PRETORIA STREET

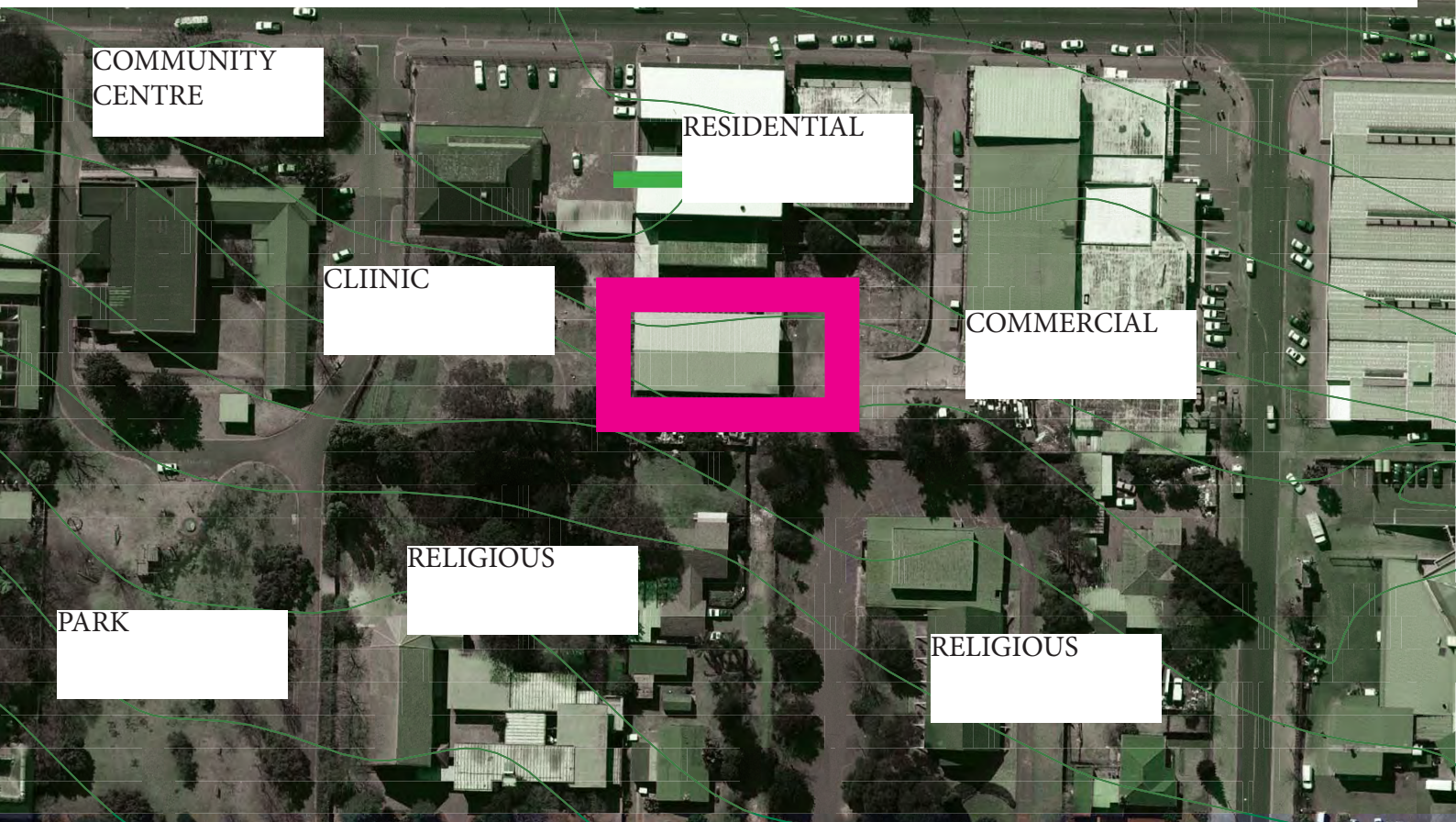


FAKKEL STREET

FIGURE 62 : GIS Maps of the site block showing the existing shed and surrounding area and the site block. The site of the existing shed is in the bold pink block.



PRETORIA STREET



COMMUNITY
CENTRE

RESIDENTIAL

CLINIC

COMMERCIAL

PARK

RELIGIOUS

RELIGIOUS

PRESIDENT STREET





[accepting the rejected]

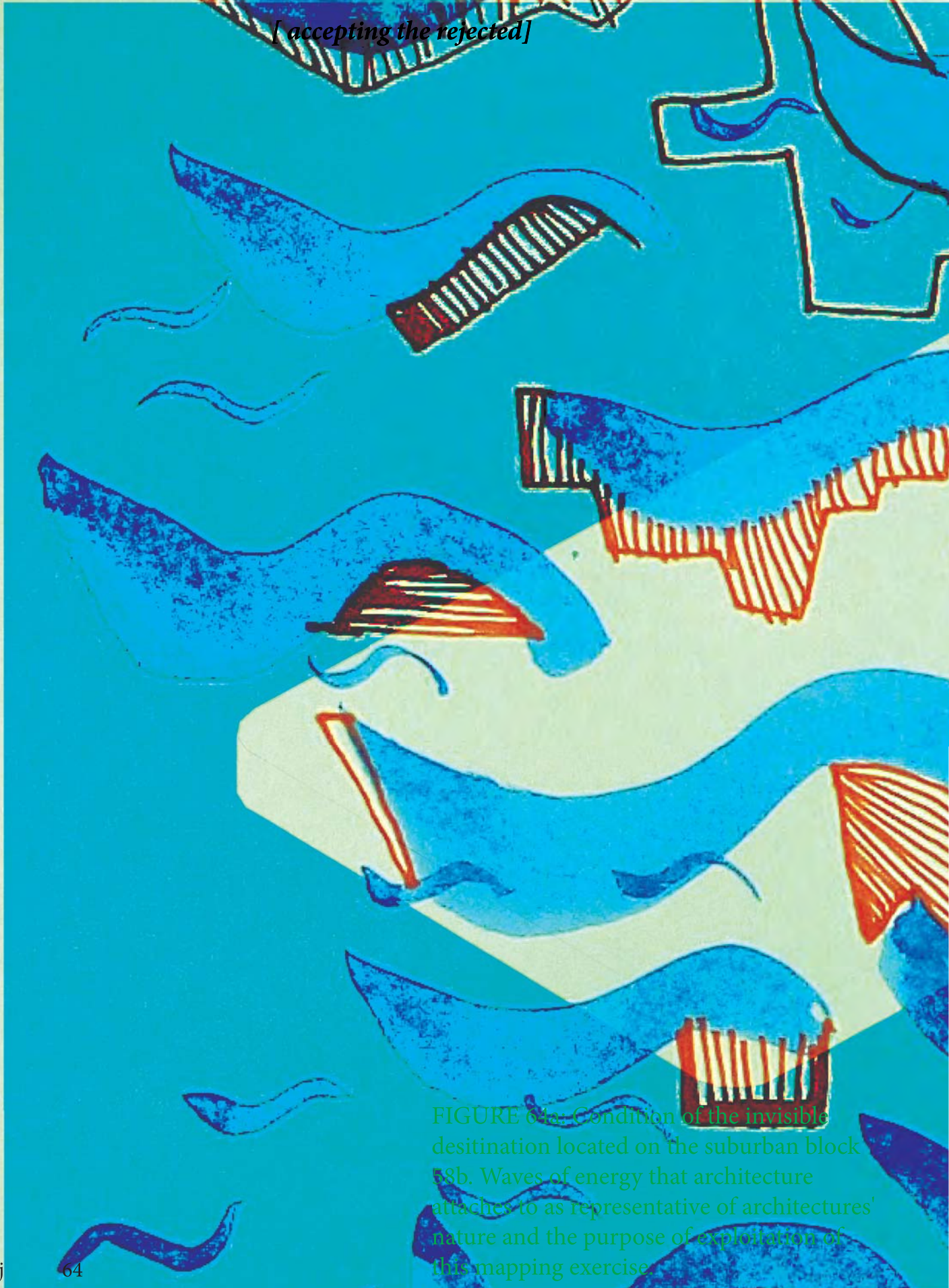


FIGURE 64a: Condition of the invisible desitination located on the suburban block 58b. Waves of energy that architecture attaches to as representative of architectures' nature and the purpose of exploitation of this mapping exercise



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# 05. CONDITIONING

METHOD OF CATCHING FREQUENCY

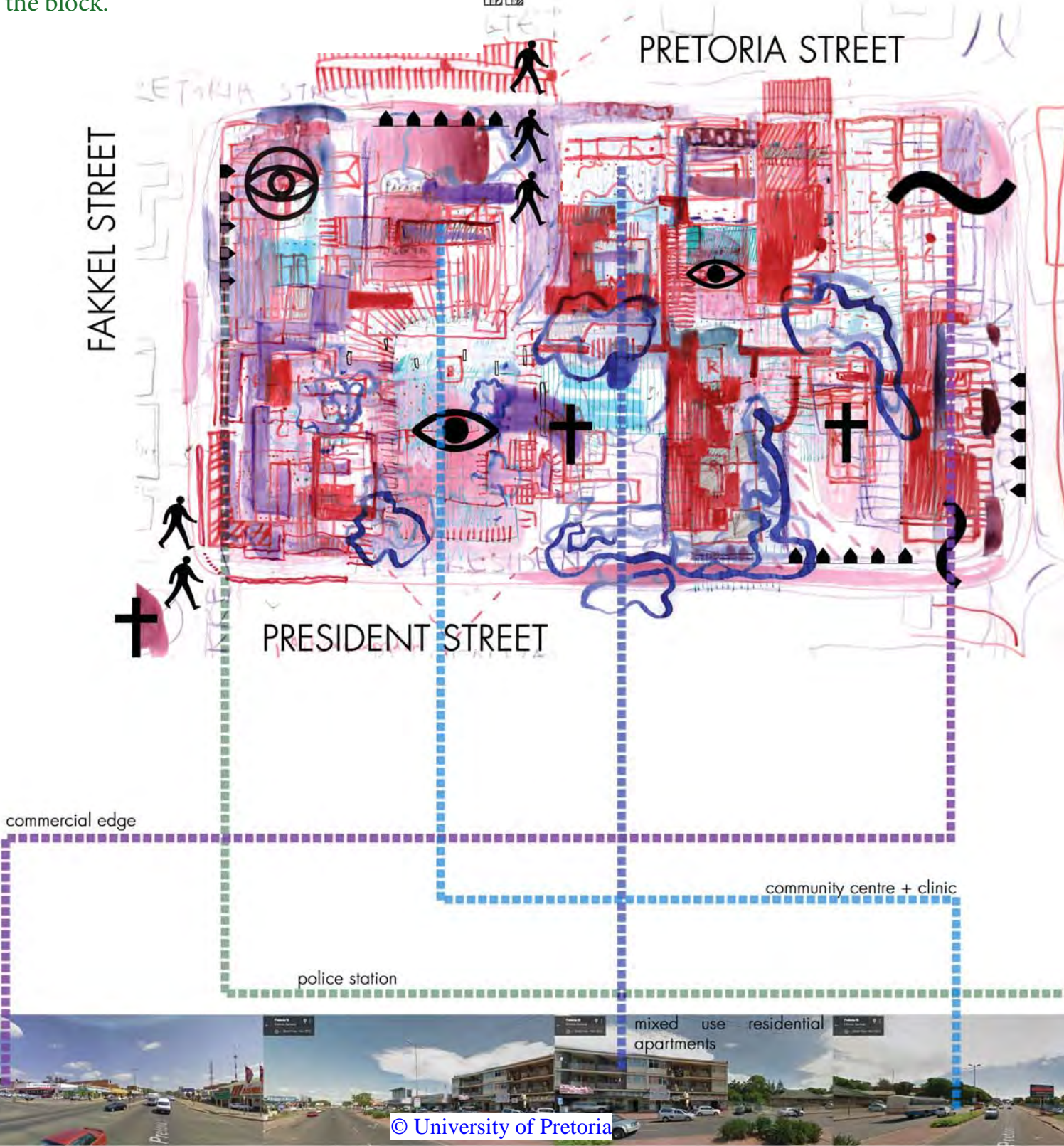


FIGURE 66 : Layers of site unpacking, from bottom to top. 1. Experience of private and public and the spectrums, PINK as public and Blue as private. 2. Overlaid vision of block development, strengthening of edges and insertion of new energy and rearrangement of public space to fit into the activation of programme. 3. Connections between sites on block. 4. First proposed site of the park space. 5. Possible interventions in red. 6. Natural elements defining space on the block.

NG

id what to respond to. How people move, what framework/vision. The image below is a merger of 3. To the right is the unpacking of all the layers that

all the site richness through the program of the arts. It is also clear that the richness of site is not as visible as the URBAN visions' aim to unfold the nature of the public.







# MAPPED VISION DEVELOPMENT



**BASE MAP / EXISTING CONTEXT** : Civic activity combined with commercial edges, filled in with a few residential lots which are already transitioning into commercial regions, dotted finally with two churches. Surrounded by a telkom LTE hotspot, the UITKYK market and the Shell filling station.



**VISION MAP ZERO**: Under-utilised movement potentials can be altered through NODE establishment and removing the residential transitions. Node linking to the civic centre can support artistic programs while latching onto the Pretoria Street commercial border. Art programs can also function as mediators and facilitators within the block.



**VISION MAP ONE** : Edges become more defined whilst retaining the suburban spatial quality. Commercial boundaries become less monofunctional and the medical centre establishes itself by stepping back from the street. Cultural-artistic programs leak into places and form edges. *[BEACON]]]]*



**VISION MAP TWO** : Spiritual spaces flow over into the the cultral leaks and to assist in defining the public space. Mixing of programs happens through establishments of the leaked defined edges. *[FREQUENCY]]]]*



**VISION MAP THREE** : Gateways and passages through the block become the architecture. Cultural edges relate through to commercial edges using spiritual spaces as mediation mechanisms and the medical centre continues to exist as the landmark of place which anchors the artistic residency and the cultral civic nature of the block. *[ROLE theatre]]]]*



**VISION MAP ALL FLOW** : Boundaries softened and hardenend according to the map of private and public gradients to generate a flow of awareness, art and comunity. Public : Pink  
Private : Blue  
and all gradients between.



## MAPPING

*'We stubbornly think we are inhabiting a city, but we are inhabiting situations.'*

*Rem Koolhaas [2011]*

As a visitor to place, we choose to experience the places of a site along the vehicular access routes because of its ease of access, but there are so many layers to movement and experience of place. For that reason architects refer to photographs, social studies, dialogue and interviews to present a more objective understanding of place. Architecture serves not the architect so much as the user of its architecture.

In the case of Silverton, with its extremely automobile-orientated nature, this may then seem to be the truest manner in which to experience the site. However, beyond the lanes of cars, taxis, buses and waste trolleys there are the valleys of the passenger, ranging from footpaths, pavements, fence gaps, train tracks and the slipping sliding hillsides, where the police frequently ruffle through the overgrowth to shake out those inhabiting the in-between. Like Rem Koolhaas says, the city is an inhabitation of situations, there is more to place than space, there is time and there are people.

On returning from mapping Silverton to the space of the studio, the architect is always the bearer of a collection of photographs, sketches and a range of experiential data from which we are responsible for the translating into architecture. If anything, a very ethical approach to any architectural project begins in the urban vision, which is a guide for how to respond to place. However, the method of 'Conditioning' as it were is based on presenting blatantly, the subjective experience of the architect as a means of experimenting with what architectural potential can come about, from embracing the subjective quality of design.

As it goes with photo documentation, the images

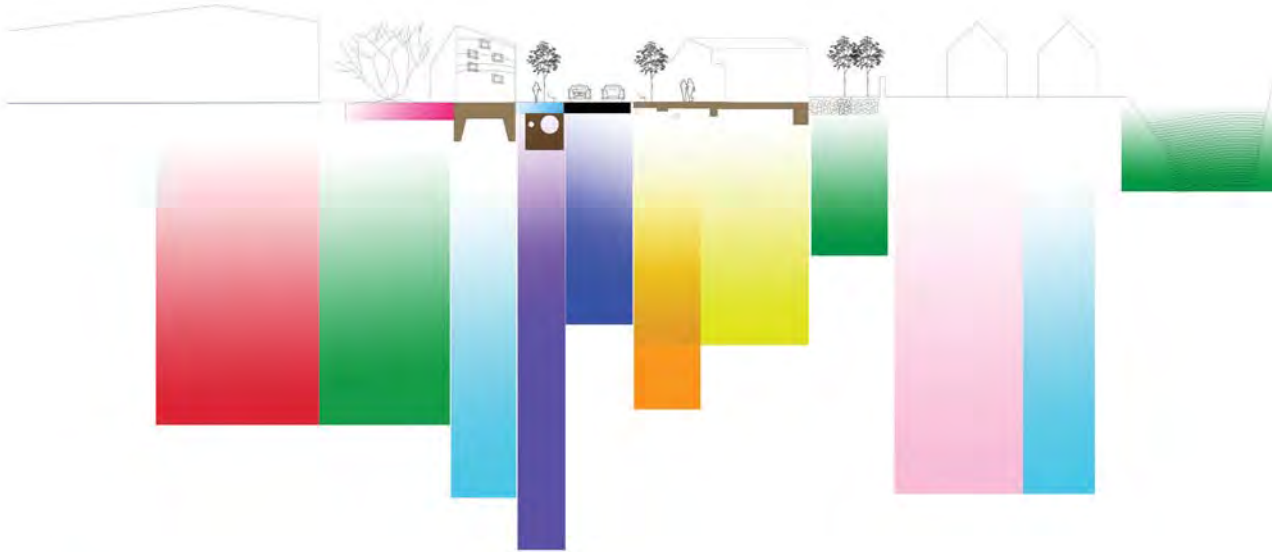
were of what seemed to be the broken and patched together pieces of a neighborhood that was indeed thriving along the semi little highway of Pretoria Street, a facilitated drive through missing what seemed to be any form of arrival space. As a group, we derived a framework core from the associations of experience to symbols that then later become, like letters in the alphabet, the means by which we constructed the sentences of urban strategies that sought to see Silverton uplifted to the status of visually successful. This was the basis of symbolic language that the author sought to continue throughout the year.

The urban condition of Silverton required an understanding of place through a codification. Due to the existing suburban-urban binaries [Mace 2015:3] there was a need to approach the place in a literal subject sense and respond to the language of form and physical spatial conditions through experience and thus to develop a language that could be continuously referred to throughout the design development of an architecture, so that this could be further developed as a methodology that could bear findings and if anything be used again in future.

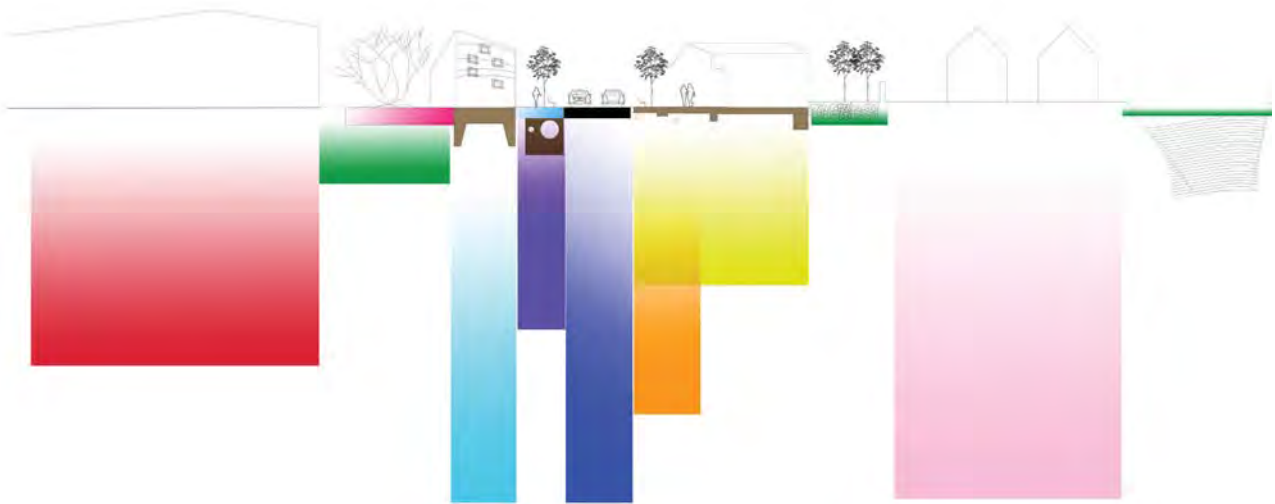
The word conditioning often refers to things along the line of 'training', 'preparing' or even 'brainwashing' or in the more everyday way to the washing on ones hair with conditioner, thereby 'softening', 'sealing' and 'treating'. Overall to condition is an explained transaction of time with place and people that is presented as a means or tool to classify and justify approaches to responding to place.

As with all urban frameworks and to refer specifically to those which have been developed for the city of Tshwane, the agenda is to improve the existing conditions. Yet often frameworks are so complex, long-winded and cryptic that they take years to implement and often get rewritten along the way.

**FIGURE 68: Section diagrams by IMW (2016) of the existing typology and programmes of space in Silverton and proposed vision of adjustments.**



- |                                                                                                             |                                                                                                             |
|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
|  infrastructural           |  primary vehicular network |
|  small scale agricultural |  pedestrian informal      |
|  commercial mixed        |  industrial              |
|  pedestrian formal       |  residential             |



- |                                                                                                              |                                                                                                               |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|  infrastructural          |  primary vehicular network |
|  small scale agricultural |  pedestrian informal       |
|  commercial mixed         |  industrial                |
|  pedestrian formal        |  residential               |

In other words, this becomes shelved and in the opinion of the author, failed frameworks and thus in a sense wasted energy, time and resources in the conventional sense of it all.

To avoid this failure, the mapping process was unified into a simple code, which may in itself appear cryptic because of the nature of its language being visual and symbolic. However, it can be argued in accordance to Venturis' writings in his book, *Complexity and Contradiction*, that architecture is the language to a language of symbolism that is explored through the representation of language that then becomes realised through form and image.

Therefore, it would seem only logical for the urban exploration to express itself for the benefit of architecture in a similar manner. The author hopes that this exploration can be contributive to that.

The mapping presentation is available at this link, here you can find a concise collection of the different conditions that were identified and mapped.

[http://issuu.com/adialidal/docs/silver\\_island\\_mapping\\_presentation\\_](http://issuu.com/adialidal/docs/silver_island_mapping_presentation_)



The urban vision presentation is available at this link. Here you can read and see how the mapping was translated into a spatial codification to be applied to all members that exist within the proposed framework.



[http://issuu.com/adialidal/docs/revised\\_urban\\_vision\\_auton\\_august\\_r/1](http://issuu.com/adialidal/docs/revised_urban_vision_auton_august_r/1)

This dissertation seeks to confront the suburban context of Silverton through the insertion of an architectural typology for cultural-civic suburban block, as a mechanism by which to activate the lost transactions of the artisan of the industrial wasteland and the artisan of the fine arts world as well as the spectrum of people between.

In this lexicon of pseudo stability from the windows of our car seats, Silverton provides a precedent-experimental platform for the unpacking of both social and architectural issues related to waste for the greater urban context of Pretoria. In the writings of Mace [2015:4], about the urban-suburban binary, it is clear that beyond stating that there is value in spatial waste, there is also value in the spatial waste in being a guidebook of sorts on urban issues. The addressing of this binary is done through the programme of cultural insertion, which is currently a very urban cliché experience, that of the gallery and the art residency. Thus, the author's intent of bringing about an urban programme into a residential suburban industrial context is a way of literally engaging with the binary at play and demonstrates how architecture of non-urban contexts can embody an urban narrative by which to recognise and confront the nature of binaries overall, even those beyond spatial debate – like those of political and social concerns, for example binaries of race and waste.

## SILVERSACTIONS

Both material and immaterial realms of the context have mapping and vision unpacking exhibited conditions of the urban ideal, only at lower densities.

X

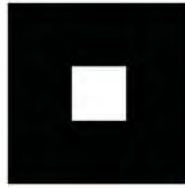


## CONDITION : Transactions

Seated at the train station, watching the cops raid the fields of the homeless drug users. A dog violently jerks at its leash, hunting the next scent of criminal. Passing by the Dykor bridge the vendors are blooming from the tunnels. Some transactions are nicer than others, but transactions nonetheless with their own set of values, agreements and currency.



FIGURE 71: Example of the designed condition card for communicating the experienced spatial conditions and propose spatial strategies for urban vision. proposal. IMW 2016



## CONDITION : Absolute

the industrial spatial language has developed a series of absolute forms that present themselves as the demigods of place. A respect for their territory becomes almost an automatic response, like a uniform wearing police officer carrying his status on his shoulder, places seem stark, unpenetrable and unapproachable.





## CONDITION : Invisible Destination

The signifiers of a station are marking the trail towards yet, yet as the newcomer to place, we find ourselves unsure of whether to continue onwards. Only as a collective do we meander onwards.



Silverton is a place of cumulative and withheld secondary resources drifting along a series of shifting orbits. This architecture seeks to activate the specific condition of the invisible destination, as a response to the absolute of the typology of industry.

To follow are images with annotations for explanation of mapping, visions and eventually application to the site.

The images to your right are sections of main streets that show, using the tool of colour gradients, how different programmes sought to become more intermeshed as a means to open up the industrial typology. Whereas the image below communicates the mixed nature of Silverton, although still very contained into grouping.

## DEVOLUTIONS

The conditions of the absolute and invisible destination are two conditions which the author specifically refers to in this dissertation.

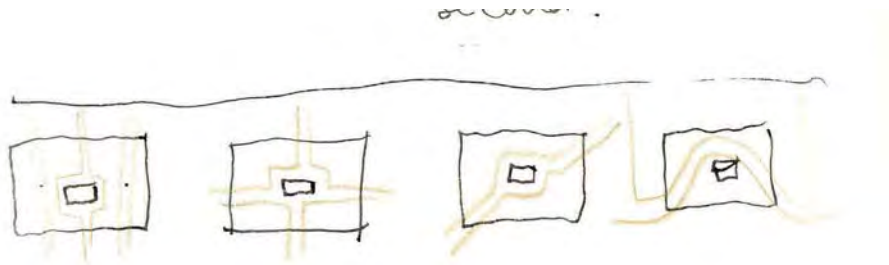
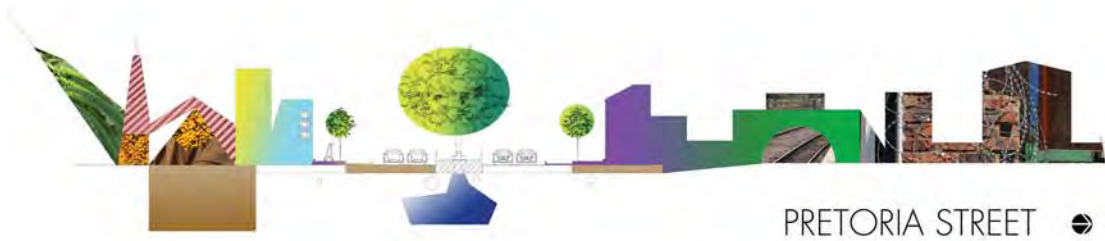
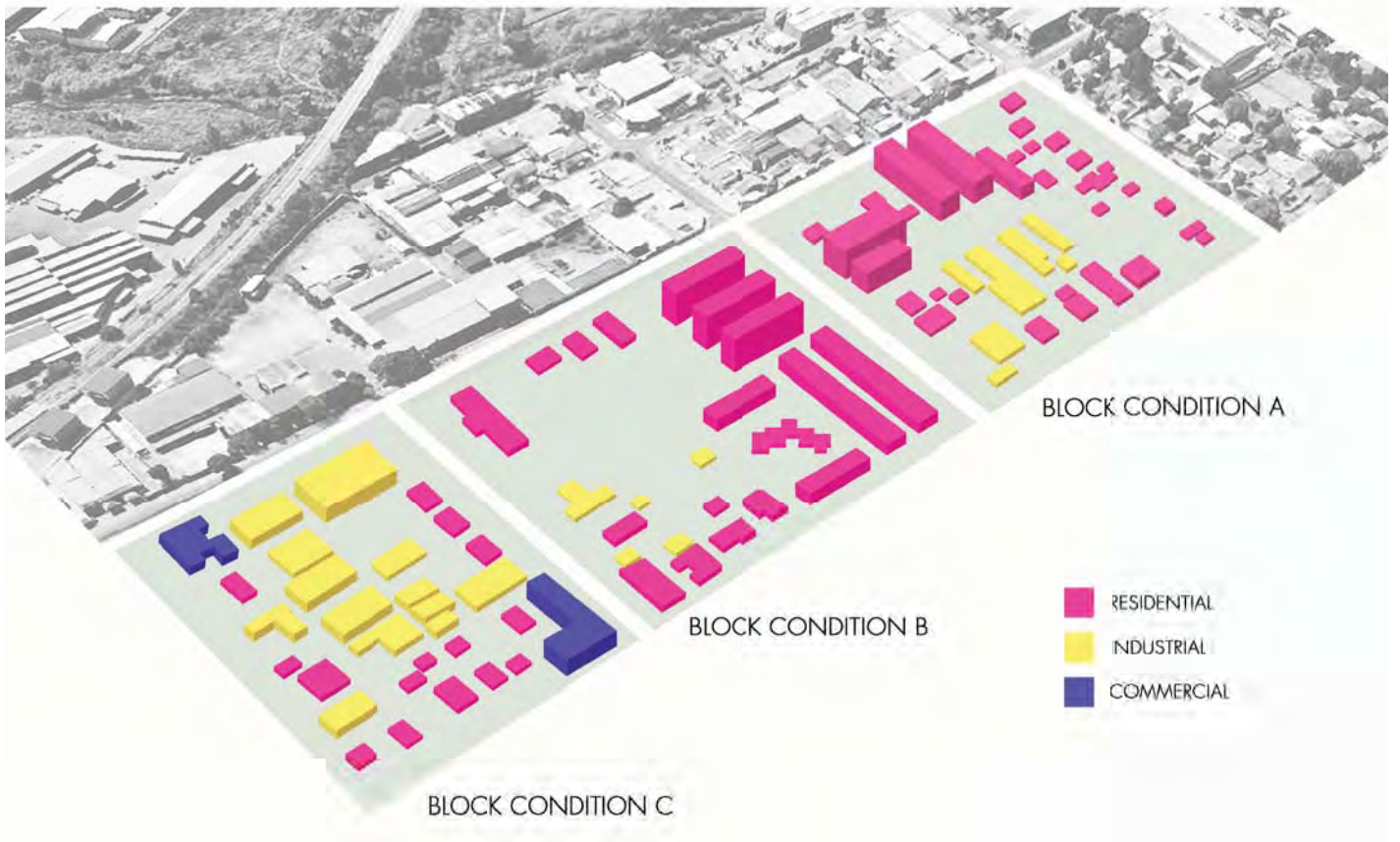


FIGURE 74 Site visions of how the shed exists within the block. 68b. 3d and sections of sites and their typologies and the vision of missing typologies into a state of openness.





Silverton was mapped into a set of conditions which were then grouped and coded into a set of transactions. These transaction were sculpted into a set of edge conditions which then slot into a proposed Artisan corridor, into which the sites of response then slot into and respond accordingly.

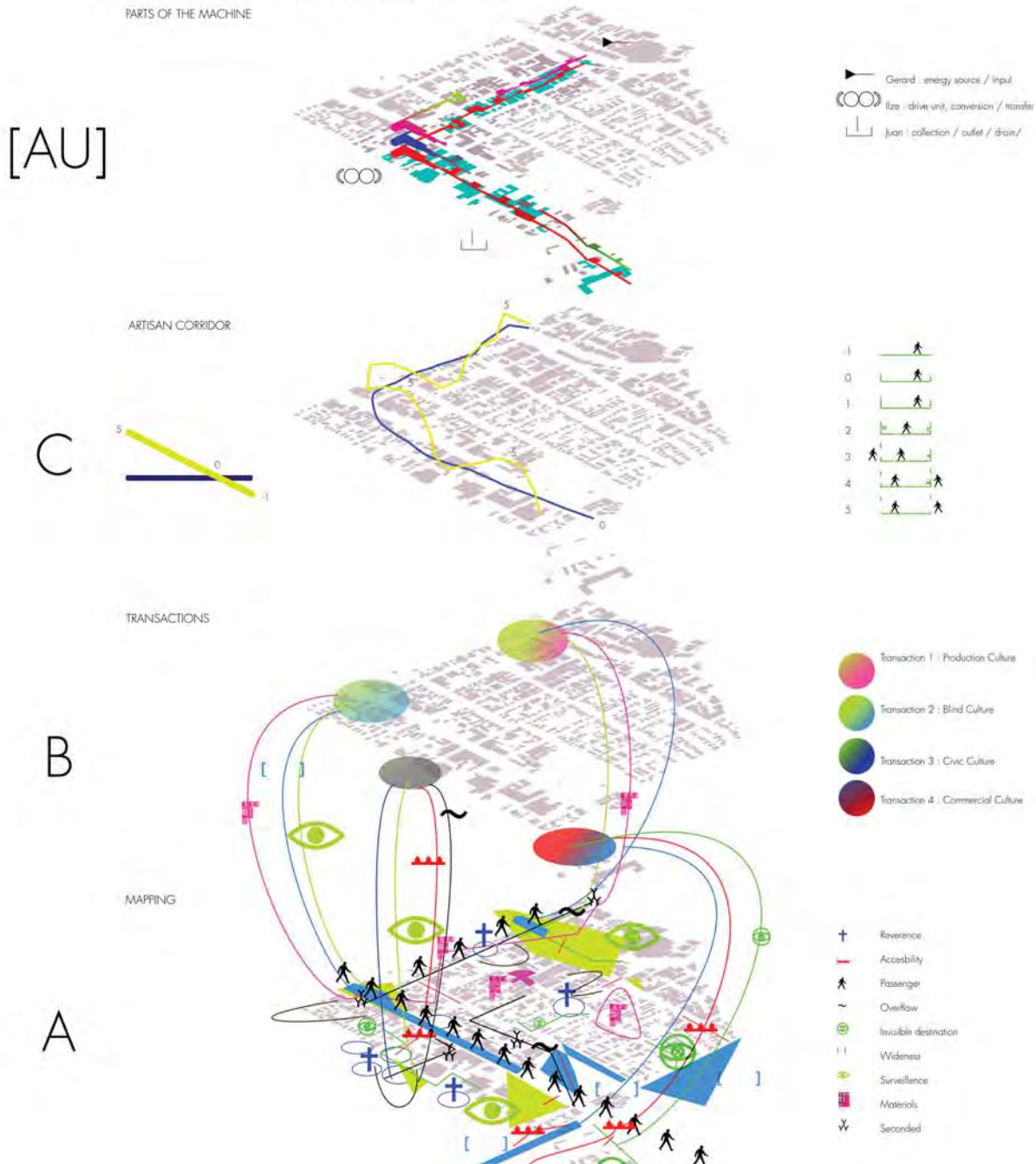


FIGURE 76: Extracts from the urban vision explaining how the conditional mapping then became a tool for shaping energies along an artisanal corridor . 66b. Showing how the vision developed from contextual situations that were visited and informed the conditions mapped and translated.

The vision for Silverton is aimed at strengthening the existing mixed industrial, commercial and residential typologies through the introduction of a artisanal corridor connecting the three sites. This will run parallel with the re-introduction of urban agriculture and reinforcing circulation routes and public spaces.

CONNECTION

4

THE THREE NODES ARE CONNECTED  
 PINK : WASTE CORRIDOR  
 RED : PRODUCTION CORRIDOR  
 BLUE :

FUTURE GREEN SPACES

3

GREEN SPACES ARE TO BE PROTECTED AND FORMALISED IN AN URBAN AGRICULTURAL METHOD THAT ENCOURAGES BIO PLASTICS AND FOOD PRODUCTION

TYPOLGIES / DENSITY

2

THE EXISTING MIXED USED NATURE OF THE SITE MUST BE RETAINED AND EMBRACED INTO EDGE CONDITION IN A MIXED USE MIXED USE TYPOLOGY

CIRCULATION DIVERSIFICATION THROUGH NODES

1

THE THROUGHWAY OF PRETORIA STREET BECOMES DIVERSIFIED THROUGH THE DEVELOPMENT OF NEW ROUTES AND PATHWAYS IN RELATION TO NODAL DEVELOPMENT OF SELECTED SITES

SITE

0

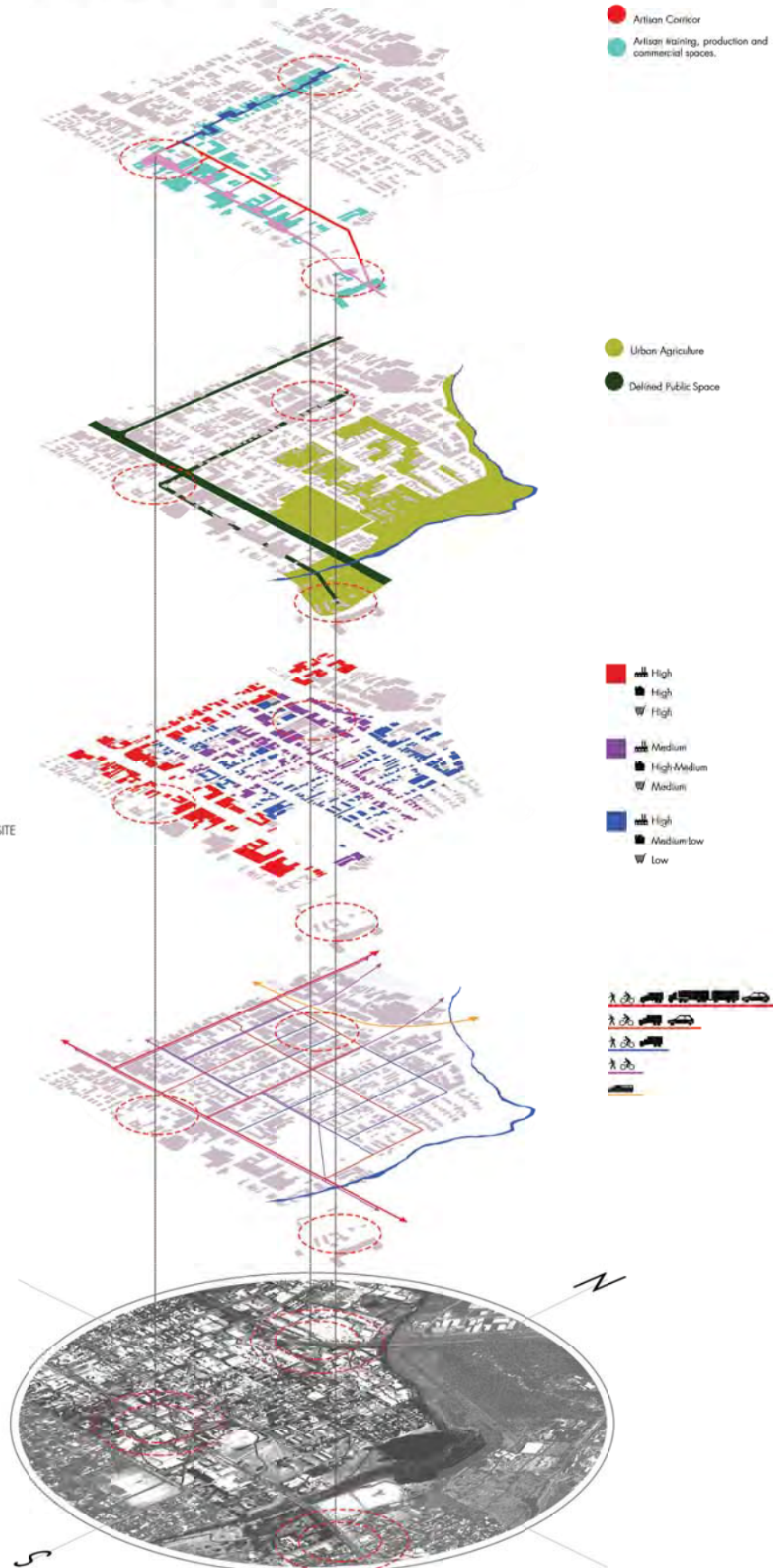




FIGURE 78: Historical archival map of Silverton with overlaid site location and conceptual sketches communicating the extent of spatial connection towards the Southern Science edges.. FIGURE 72b Collection of photographs of approach to site.



Telkom L  
thetstreet from Residential  
block.



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA



Silverton police  
station



Envisioned public entrance to shed



Shell garage on  
Fakkel Street  
across from  
Police Station.



Residential stariwat of  
block to the north of  
selected shedsite. Behind  
the man is the envisioned  
public entry way - existing  
as car drive through.

(LOST)  
(WASTZ)

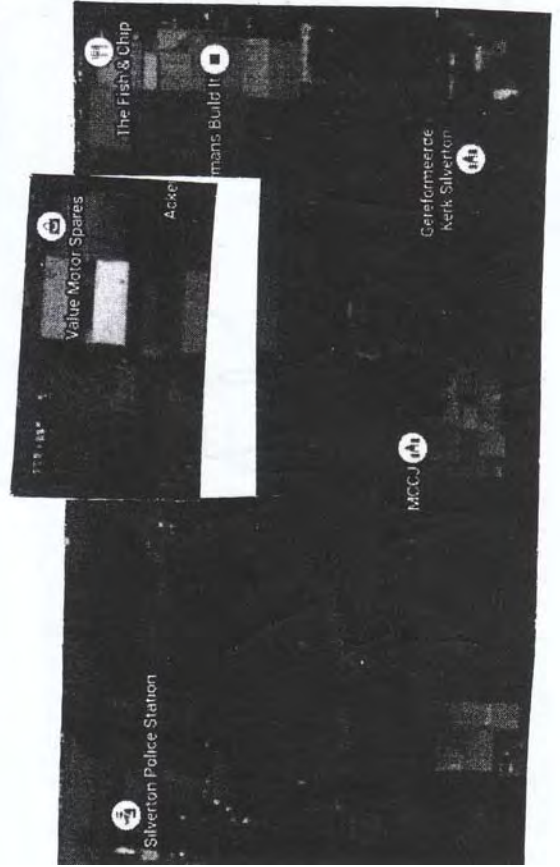
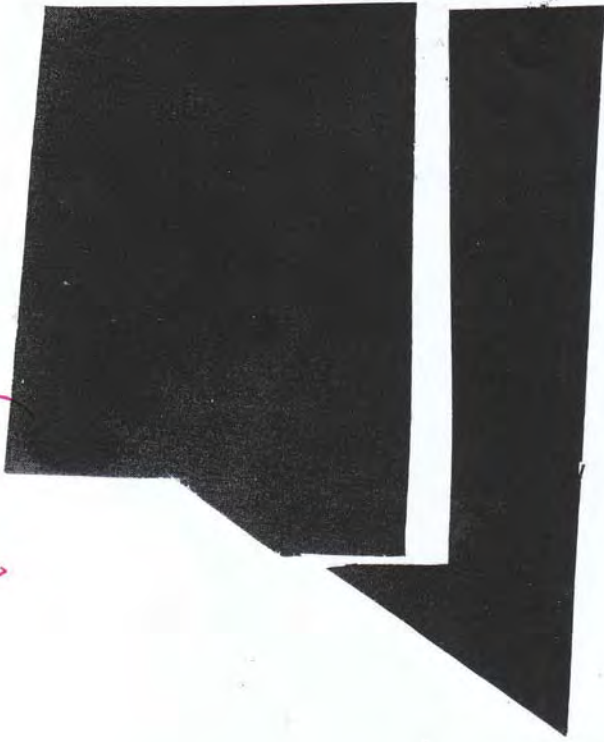
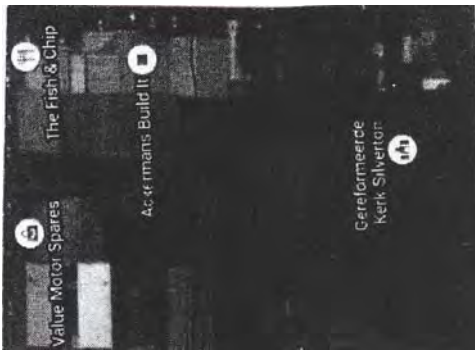
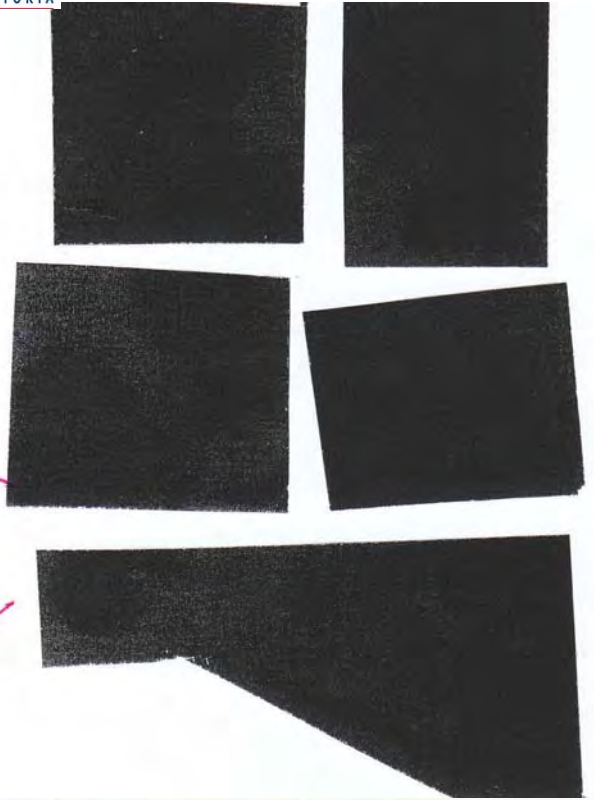


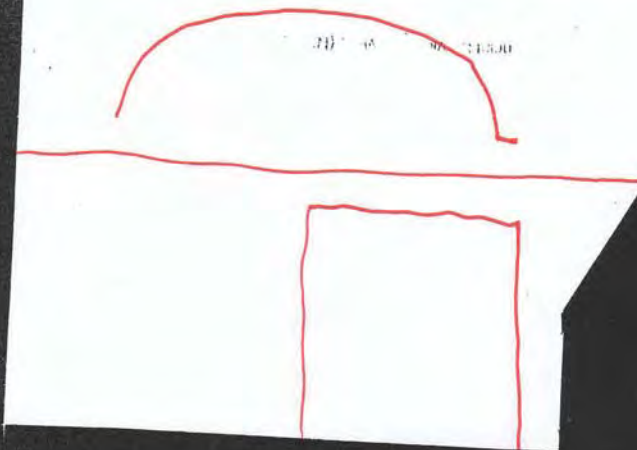
FIGURE 80: Process work of applying mapped conditions then categorised into transaction types. The following images are photocopied maps that have been cut, recopied, drawing on to devolve the greater urban vision onto the site itself. This exercise became complicated but served as warmup for the understanding of where the architecture was to start occurring.



(SITE)

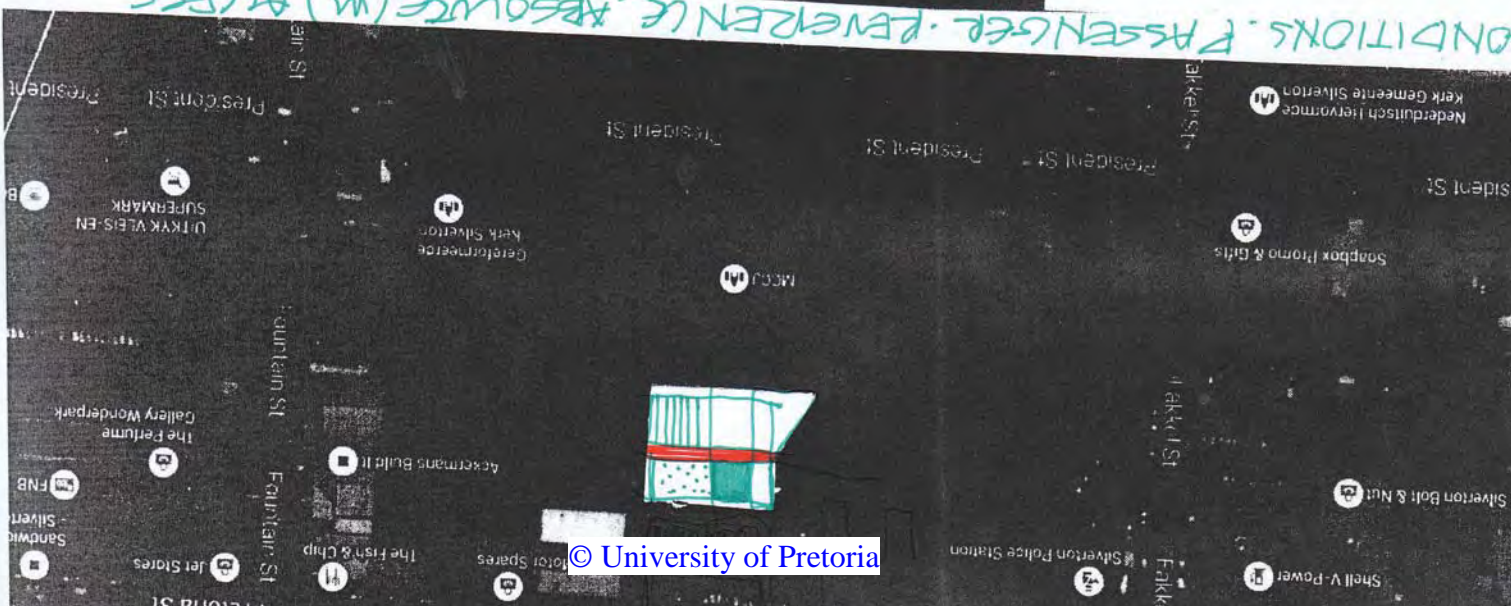


Chomner. sephen welkomafatzi



OVERFLOW

CONDITIONS. FASSENGER. REFERENCE. ABSOLUTE (M) ACCESS.



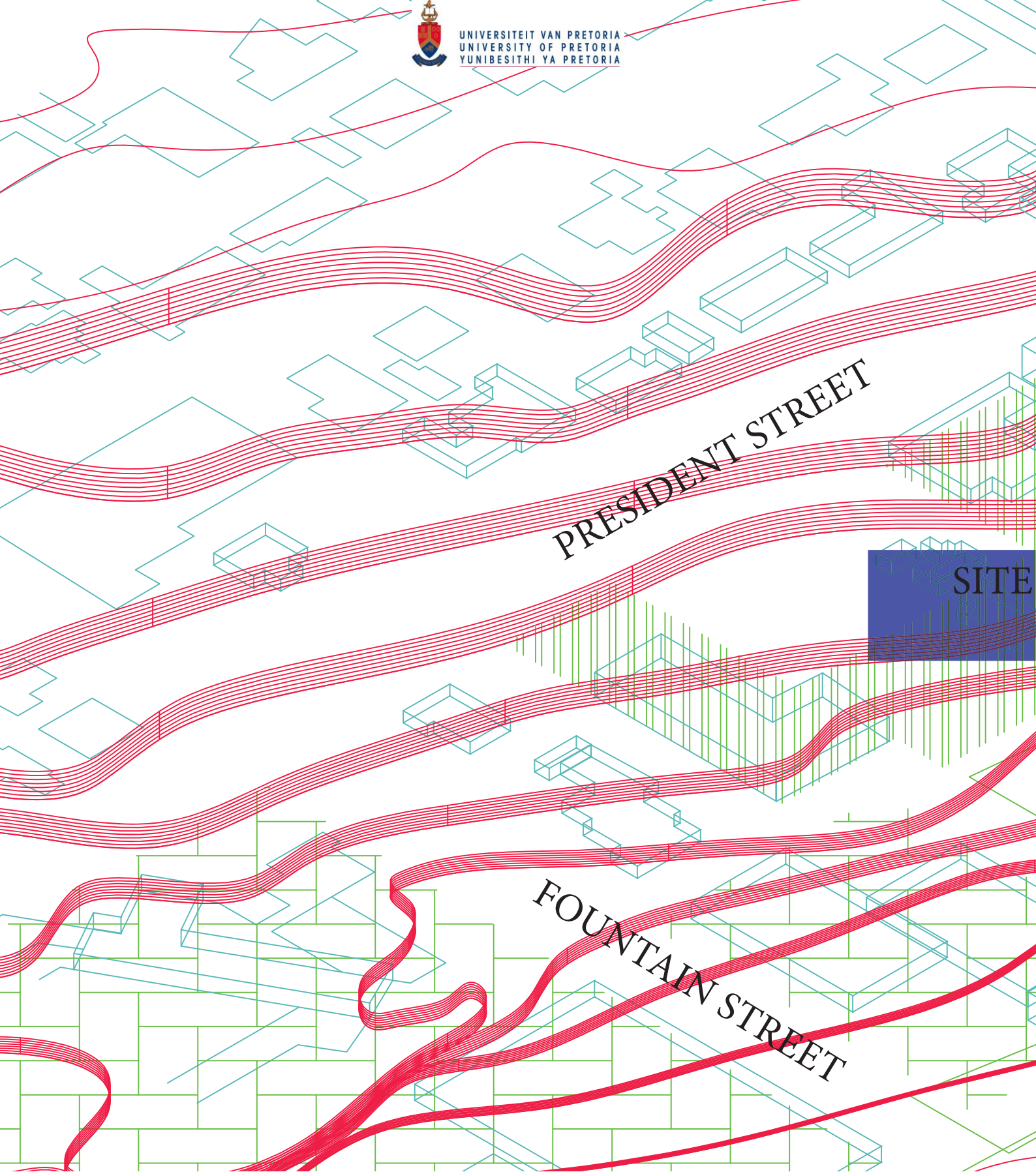
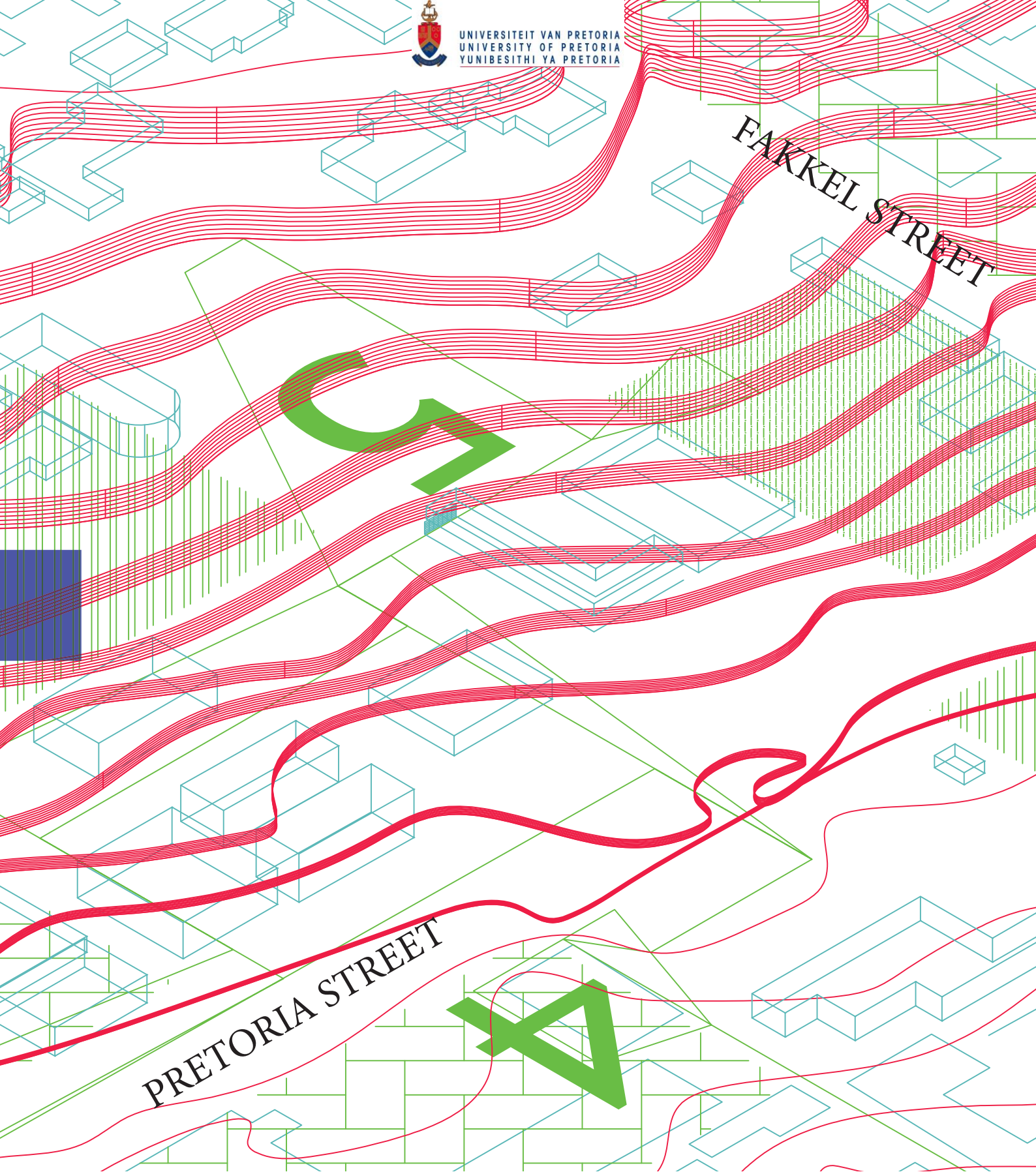


FIGURE 82: Conceptual Map of Site overlaid onto contours and vision surfaces.





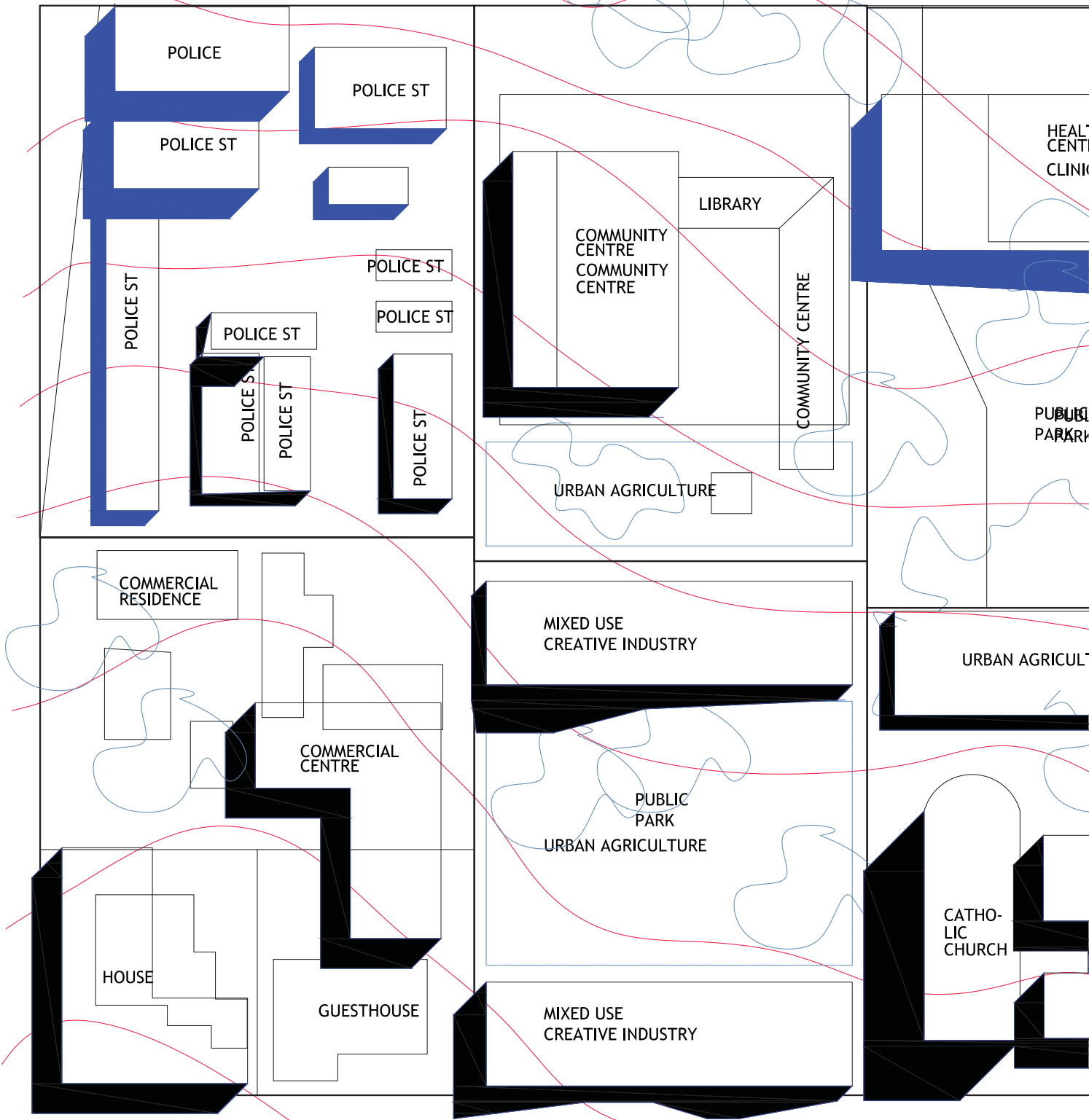
FAKKEL STREET

PRETORIA STREET



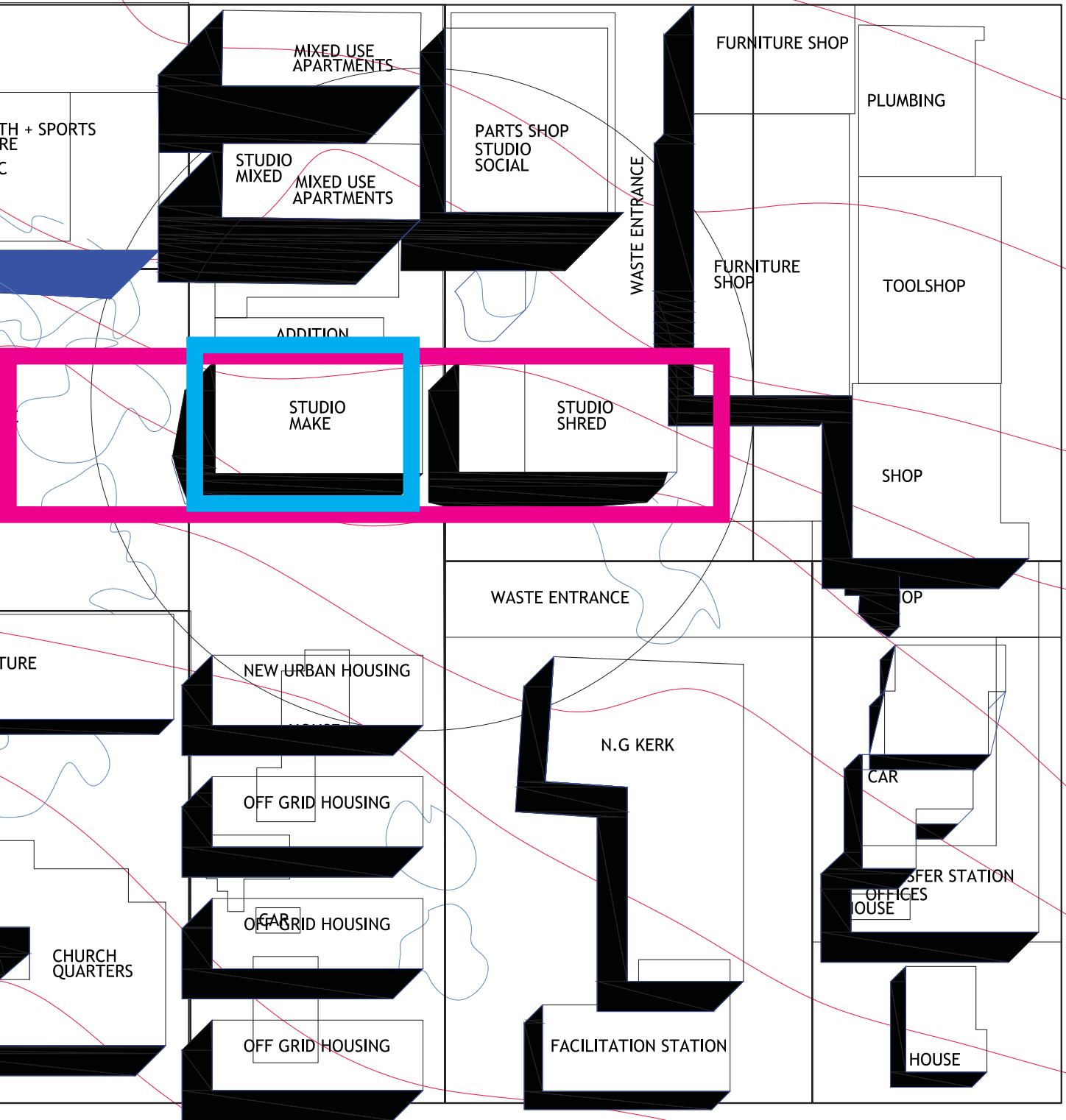
FIGURE 84 Devolution of vision symbol onto the site block as a freestanding image of codification.





PRESIDENT STREET

FIGURE 86 : Site block with pink block outline demarcating the site extents that see the building open up onto the western park,



*[ reflecting of accepting ]*

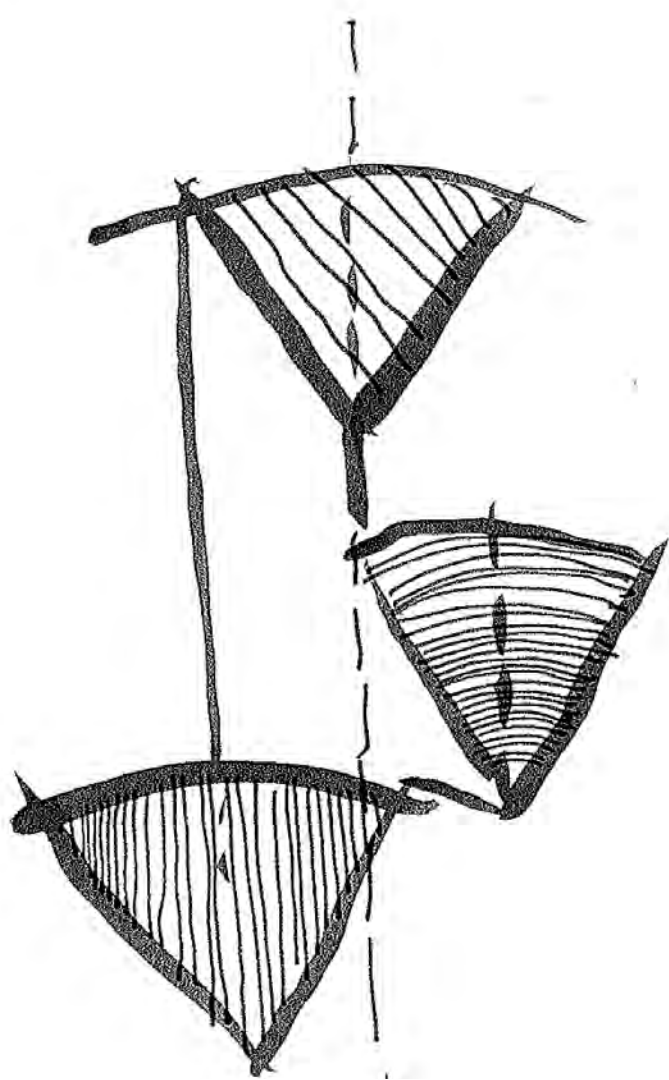
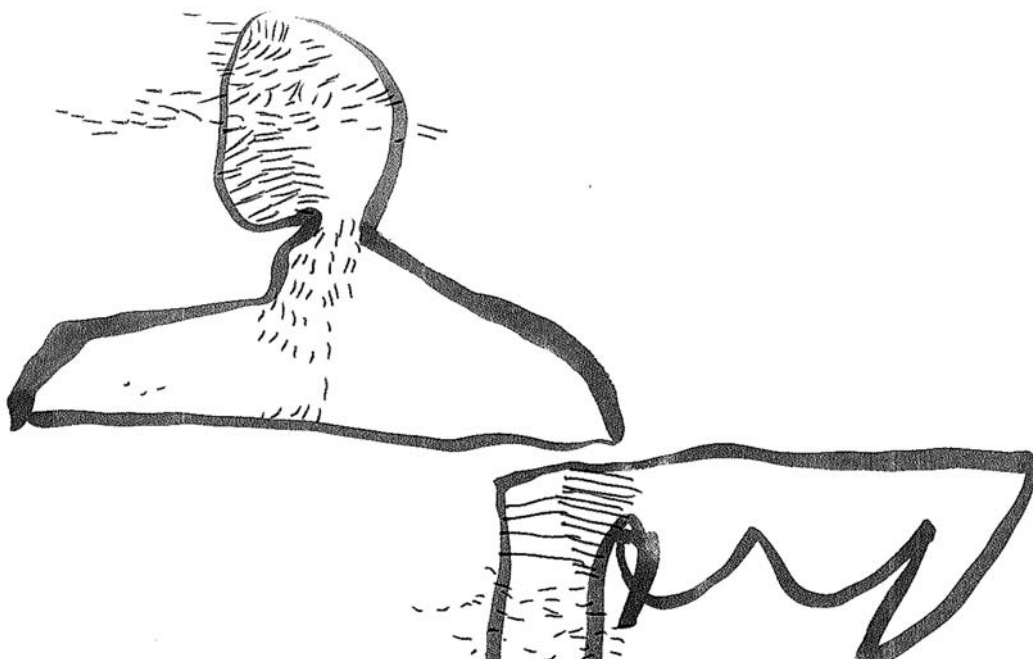


FIGURE 88: Sketches of theory continued into conceptual development, branching and compartmentalization through resource commodification as base for developing the attitudes to waste that then resulted in the conceptual strategies for these attitudes. IMW 2016.



# 06. CONCEPTS

## SOCIAL POTENTIALS



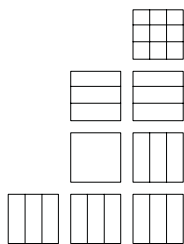
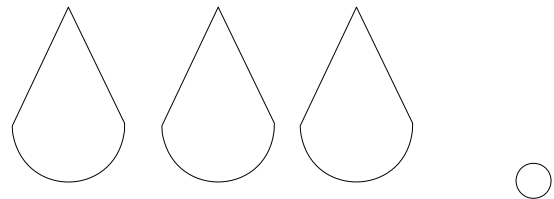
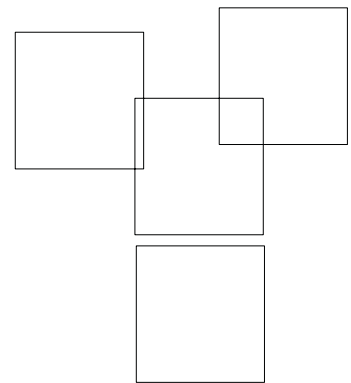
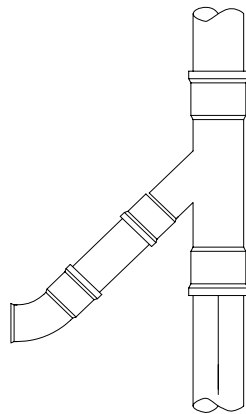
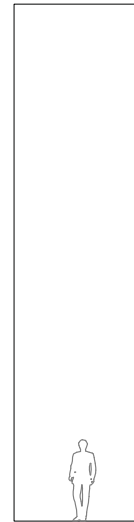
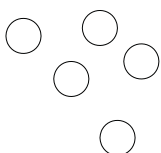
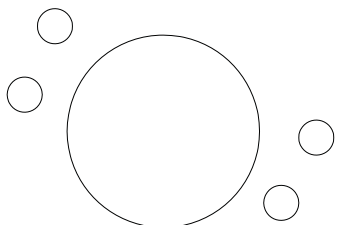
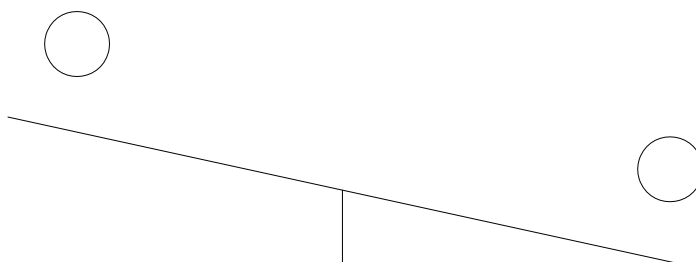
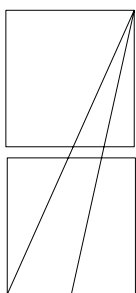
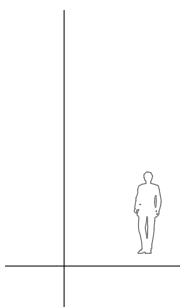
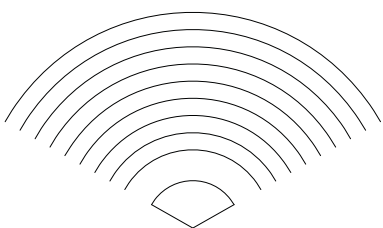
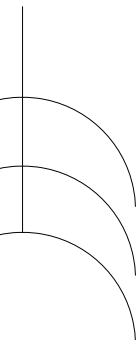


FIGURE 90: Diagram of symbols relating to programmatic requirements for the artist residency, including water, wifi, eating space, access to materials and experience of scale, IMW 2016.





Waste in all its parts, its physical, its spatial and social parts have been unpacked in the previous chapters and alongside this, as part of the introduction of this book, the statement was made that the author designed through observation, three attitudes towards the value of waste. Spatial waste and its potential sought to be explored through the context of Silverton and its typologies of architecture and conditions, whilst social waste and its potential sought to be explored through the selection of a client, SLOWA and through the programme of transactional spaces as a typology of potential activation.

The attitudes were designed to investigate how one would go about using architecture to bring people to waste and engaging with it?

The author has hypothesized that art, considering its current and historical standings in the history of South Africa and the world, stands as the most powerful tool by which reflection of our societies political and economic struggles come about.

So as art establishes itself, not only does it speak of a positive future in the creative industries of South Africa with events like Design Indaba, Turbine Art Fair and the Social Life of Waste art fairs – the relevance of the programme can be justified. What the conceptual strategies thus sought to justify was how architecture can function like art, as a means to address attitudes and issues alike.

However, there is an obvious exclusivity when it comes to art. There are people who do not enjoy art, there are people who do not enjoy to see waste as art and there are people who believe certain types of art to be inappropriate. For example, the ANC Women's League took to marching about Ayanda Mabulu's painting of Zuma and one of the Gupta family members, so there exists social consternation relating to art. Even better because

now my dear South Africans – we have what we call dialogue – and this all through art. But is that dialogue accessible to the precariat, waste picker or the housewife?

Where does this dialogue manifest itself in such a way that a democratic society can be sustained in its access to more than art and information, but also to water, freedom of speech and shelter and in the case of 2016, free education?

It does so in architecture, in a space of transaction.

## THE ATTITUDES TO WASTE

Accepting value

Rejecting value

Reflecting value

A space of transactions is, in essence, the entire platform of Silverton as the mapped conditions stated. However, when the conditions themselves become organised and grouped according to categories of transactions we are able to get three types of transactions. Those which in their time, place and personal relationship are lost transaction, discovered transactions and neutral transactions. These types of transactions relate to the waste attitudes that will be unpacked here in social scenarios.

By ACCEPTING – The waste picker is one such a person who chooses, not necessarily through freedom but through a strive for freedom, to engage with waste and accepts its role of life-giving, in its own capacity. The transactions of accepting are both neutral and found in their equivocal exchanges of matter.

**FIGURE 92: Poster communicating how existing programmes on site, in conjunction with mapped conditions and proposed vision, result in directions for a conceptual translation.**



# CONCEPTUAL BASE

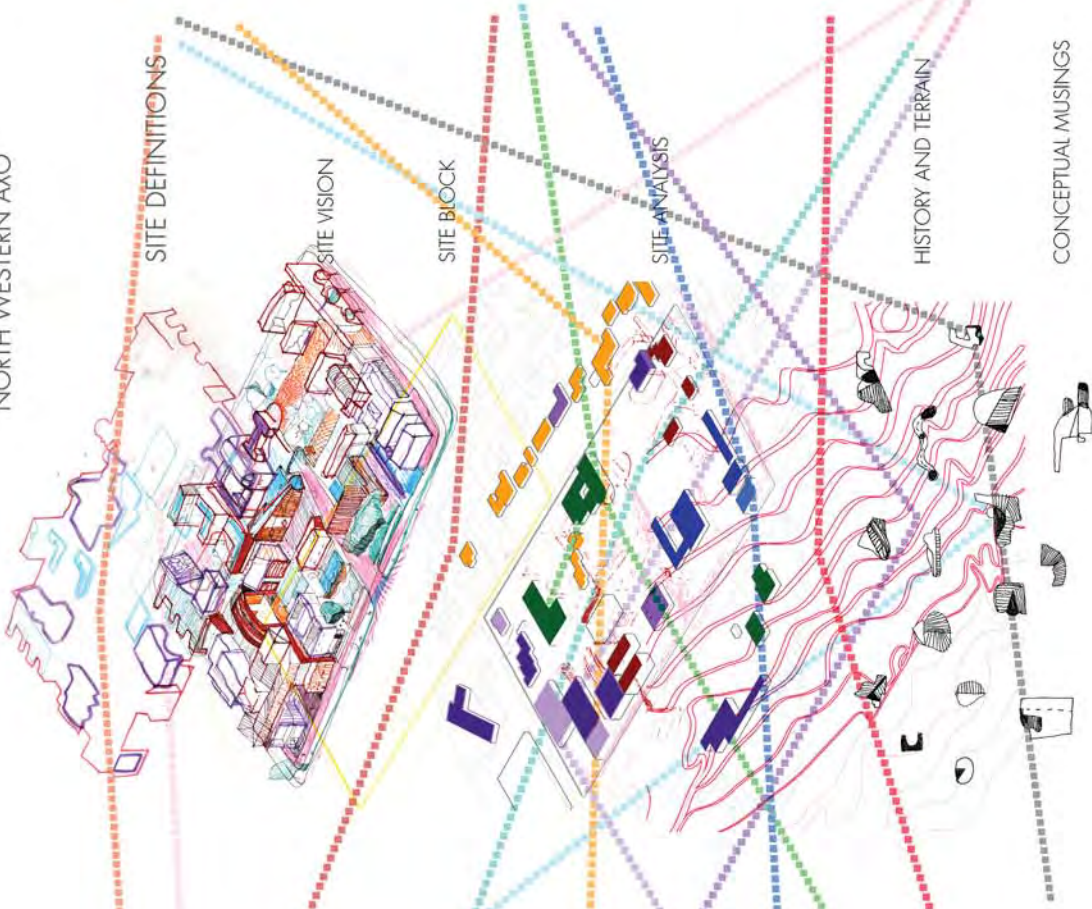
PROCESSES



LEGEND



NORTH WESTERN AXO



CONCEPTUAL DIRECTIONS

ART as a beacon of dialogue



ART as a stage for transparency



ART as medium for learning



By REJECTING – the nihilist, the person who consumes and exhumes at the same rate, the rate of exchange is equal but lost because of the minimal rate of exchange, however, it could be argued that by withdrawing from systems of dirt that you, in fact, exchange yourself with it in a different manner. But do those who reject waste and its value also reject the creation of waste for purposes of waste?

By REFLECTING – a person who is a waste generator, who has not always consciously applied themselves to the understanding of waste in its entirety, yet is in a process of exchange with transactions both lost, found and neutral.

The following words were initiated through a personal understanding of not how waste is generated or disintegrates, rather how it is considered in a social context. The concepts were then generated in coordination with these attitudes in asking what kind of spatial performance could embody, address and present the situation of waste to all attitudes in different ways. These ways have been named the BEACON, THE ROLE THEATRE and THE FREQUENCY, and will be unpacked as concepts briefly in text and then further through images. These images will then continue through into the REVEAL design chapter, mostly again, through images of spaces that developed around these concepts and then eventually into the technical chapter named SYLLOGISM. The syllogism chapter demonstrates how all the branches of waste, in its complexity, are able to come together and deduce from all the information, thoughts and drawings a final architecture for the waste-centric culture that we are.

## THE BEACON Δ

This architecture serves to act as the guide not only in its materiality but in its meaning.

The beacon is considered to be the insertion of verticality into the existing architecture. Although referred to first, it exists as the extrusion of role theatre, which relates to not only the surface and platforms of information exchange that are abundant within all contexts, and especially Silverton as mapped out in the conditions, but also as the foundation for the beacon to come about. The beacon is the extrusion of plastics into the form of shelter for the artist but also of the material itself, which the artist in residence is to work with, therefore, a beacon of acceptance of all properties of waste-specific to this building.

## THE ROLE THEATRE \_|-

This architecture, as mentioned in the writing of beacon, is the surface where notions of waste can be played out through dialogue and making. These are the surfaces that need only facilitate change through consciousness and exists as the foundation of the project, but also as the silent servicer to the facilitation. The architecture of the role of theatre alludes to other wastes in an attempt to allow for greater reflection on the topic.

## THE FREQUENCY ~

SOCIAL POTENTIAL through TECHNOLOGY AND THE DIGITAL

In his think piece about post-modernism, Charles Jencks writes about [AR 2011 website] the term 'new cathedrals' as an anachronistic metaphor for the gigantic server farms that anonymously house, on remote desert sites, the hardware of Google's search engines, but the ever-changing software packages and ethereal data banks that they create.

FIGURE 94: Diagram of the spatial and social inhabitation of the concepts, IMW 2016.



BEACON

ROLE THEATRE

FREQUENCY

The image, in its essence, is an object of representation [Bachelard and Jolas 1994:10]. The image painted at the Lascaux caves in France did not feel anything like a cow, a hunter or even taste and smell like the bloodshed from that hunt. It felt like stone; hard, cool and rough, dry and maybe even moist. The image was sculptural. The same is true of hieroglyphs, the flood tablet with the epic of Gilgamesh and other ancient carvings of narratives onto objects, the image itself became the image of place [Certeau 1984:79]. The image itself is more than just an image, it too is a surface which allows for the existence of image.

The surface of the screen is the place where the image exists and also fails to exist because of the narrative which is embodied within it. Gotschall [2005:177] makes the argument that storytelling is only as old as spoken word, however, it could be argued that storytelling was first 'the visual action' from which storytelling arose, and therefore language.

Yet the amount of 'visual actions' which take place in the 21st century is enough to make the world shake off its own axis and stir up a few oceans and volcanoes. Technology combined with social networks allows for the constant exchange of information, most of which is becoming exceptionally visual: memes, Instagram inboxing, emoticons, stickers, etc. The abundance of visual stimuli related to action has resulted in a hyper-representation of reality [Ross 1995:148] which has contributed to the extreme abstraction of reality as described by Beckmann [1998: 180]. Thus, more and more the image becomes questioned as a false place with only a figurative truth.

This figurative nature of reality represented in image is criticised for being meaningless; the likelihood of manipulation of image makes image either untruthful or fictional.

This becomes problematic for the arts which are dependent on the figurative language of all things, including image, as a means to make meaning from reality about reality.

How then do we feel the image and its realness? This paper intends to explore the variety of meaning of places related to the digital image in order to understand the new territories of the online world and its effects on image culture [Wessels 2014:3].

## CONCEPTUAL PROCESSING

The diagrams on the left are of values towards waste, communicated into spatial experiences, that led to the conceptual responses discussed in this chapter. As we are led into the following design chapter, it is the author's intention to remind the reader of the process of making and how drawing has a significant role to play in revealing the potential of understanding of space.

The top diagram expresses the accepting architecture that is associated with the beacon.

The second diagram expresses the rejection of the role platform, not only of waste but also of the body falling through space, the role platform facilitates movement.

The third and fourth diagrams express the concepts of frequency and its embodiments into not only the displacement of the body from top to bottom with the architectural element of the stairs, but also of the fluctuations of time in architecture. From the empty space, that is only the image of frequency, to the occupied space that is the energy of frequency captured through the resonance of architecture.

**FIGURE 96: Drawings of spatial experiences based on the values of waste of rejecting, accepting and reflecting.**



# CONCEPTUAL DIRECTIONS



ART as a beacon of dialogue



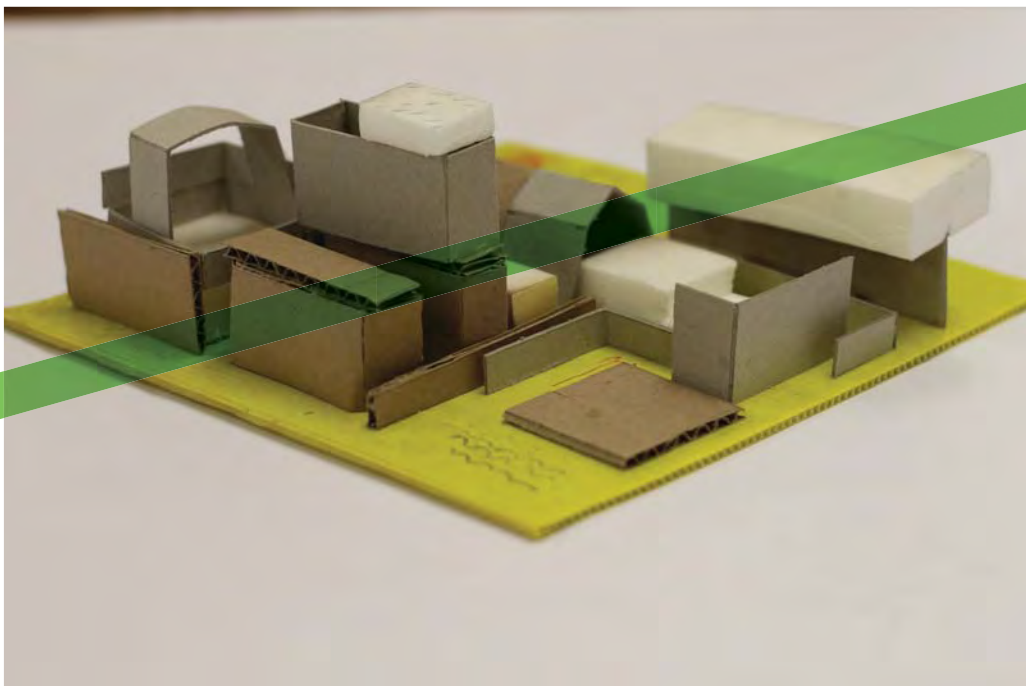
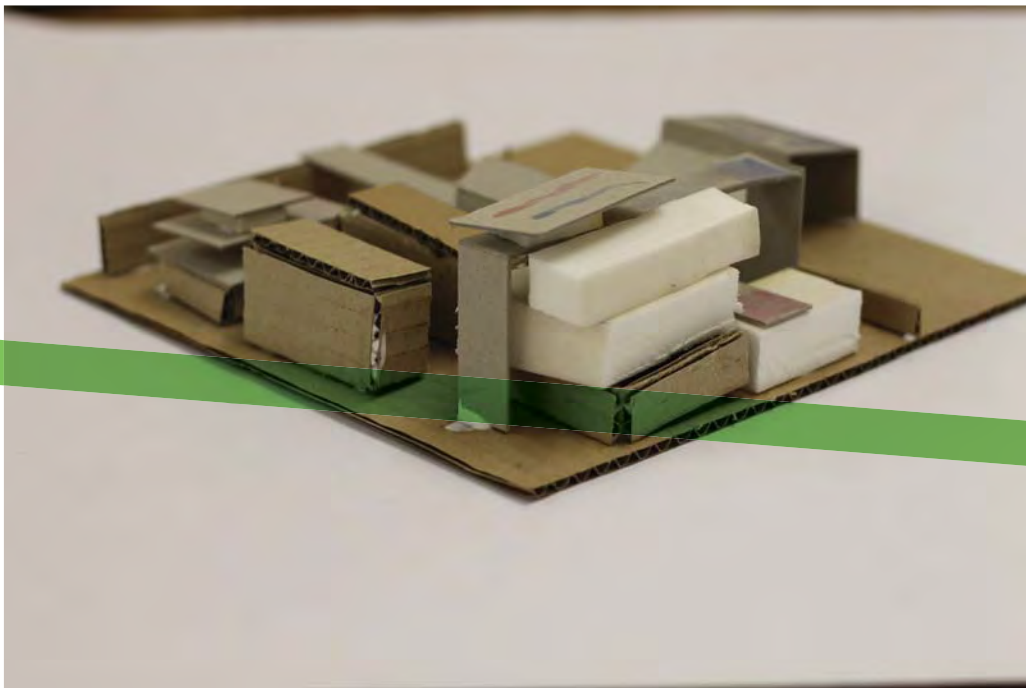
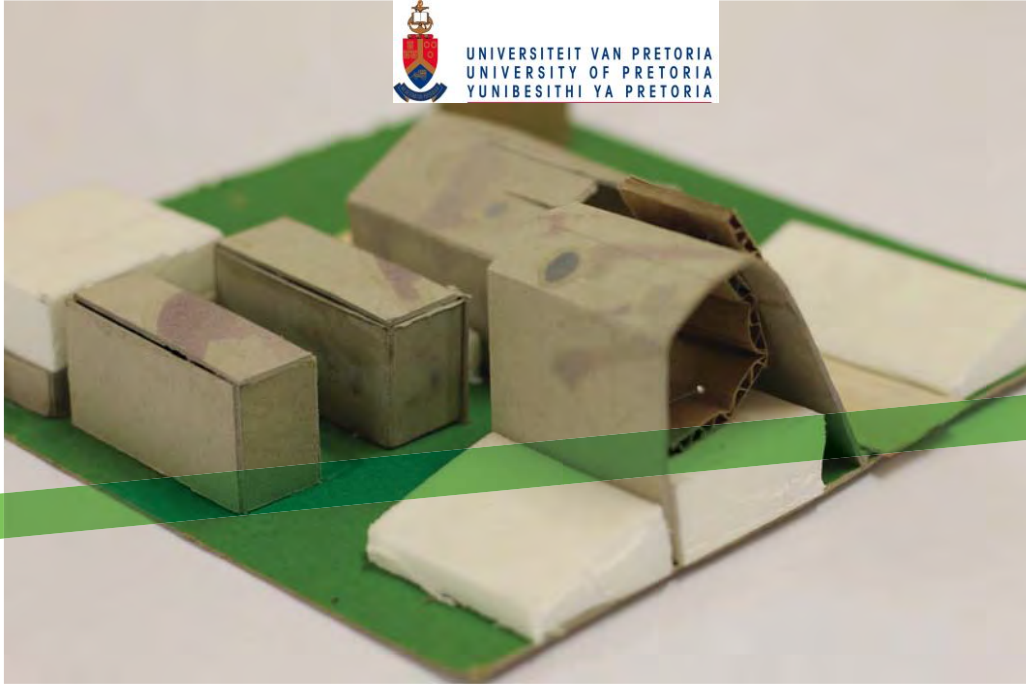
ART as a stage for transparency



ART as medium for learning

FIGURE 98a: Conceptual directions illustrated as different types of lights, flames and sources of energy and their translation into spatial models for block visions.







# CONCEPTUAL STRATEGIES



## c1. Mentorship PIN [spolia / repurpose]

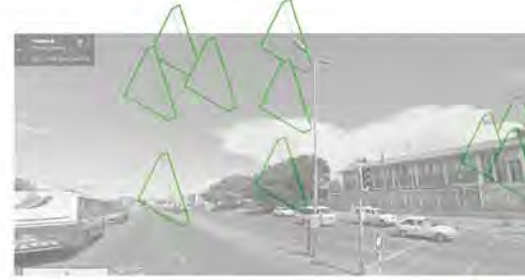
Pairing art with established programs to facilitate new dialogue of creating and its context.

The source of art is responsive to all contexts, yet to what extent can the limits of these proximities to context be pushed. How can the thresholds of conceptual contexts becomes merged as mentors into the arts.

*Performing arts into the churches.  
Visual arts into the Build it shop.  
Digital arts from the police station.*

Making art, is associated to the workshop/studio space, however could architecture facilitate a direct connection between a 'real-world' program and the whimsical Studios and workshop act as small beacon that act as a public interface into not only the making of art, but also the program from which the artists are directly extracting their creating energies from.

The architectural language becomes a unifying factor that facilitates an identity although the architecture would need to be physically seperated. Where clusters of these architecture form, interactive energies merge into a between architecture.



## c2. Role Theatre [disposal + dismantling]

Forcing two programs to become the other in order to better the understanding of one another about the other and about itself. Principles of synthesis, imitation and reinforcement as practiced in art and health.

Art has been introduced as a tool for mediation and facilitation of environments of healing; a field such a art therapy assumes that through interpretative methods of psychology, that one can assist a patient to attain better mental health.

Psychological health is becoming more of discussed matter in media and even popculture.

*Art medical centre  
Medical Arts centre*

The concept seeks to explore how programs can live outwards into the public dimension, and also facilitate a educational virtue about the mysterious and condemned ways of health. What mechanisms of architecture challenge understanding of programs - how can archietecture disrupt the conventions of theatre, of arts of medicine and at the same time allow for spaces to develop within their own professional dimensions.



## c3. Frequency exchange [collect + reject]

$F = v/\lambda$   
Velocity of the wave and the length of the wave.

The community and its range of demographical figures are dwelling, moving and remaining in all aspects of place within the context, this quality if spatial use seeks to be contained as used as a structural pulsation chanhel that runs through the generic conventional spaces associated to an artist residency.

The channel space acts as an informant and dictator of spatial behaviour within the generic gallery volume, bringing a concentrated density of information about the context into the building rather than the building going out to the public.

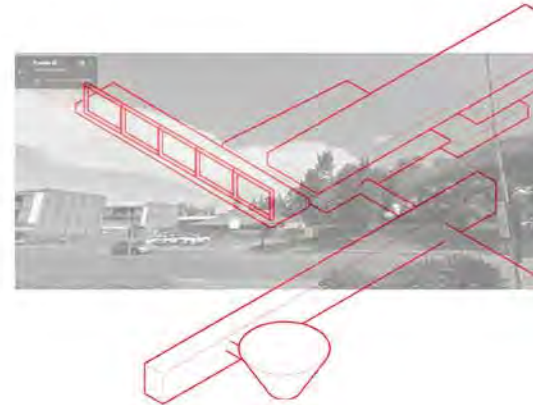


FIGURE 100: Final concept poster unpacking spatially and conceptually the potential of concepts of beacon [then pin], role theatre and finally frequency, IMW 2016.



**Architectural Potential**

- Original adapted into new use
- Form from meetings not objects [outside in]
- Highlight junctions

**Architectural Mechanism**

- Apertures
- Passages / corridor
- Toilet

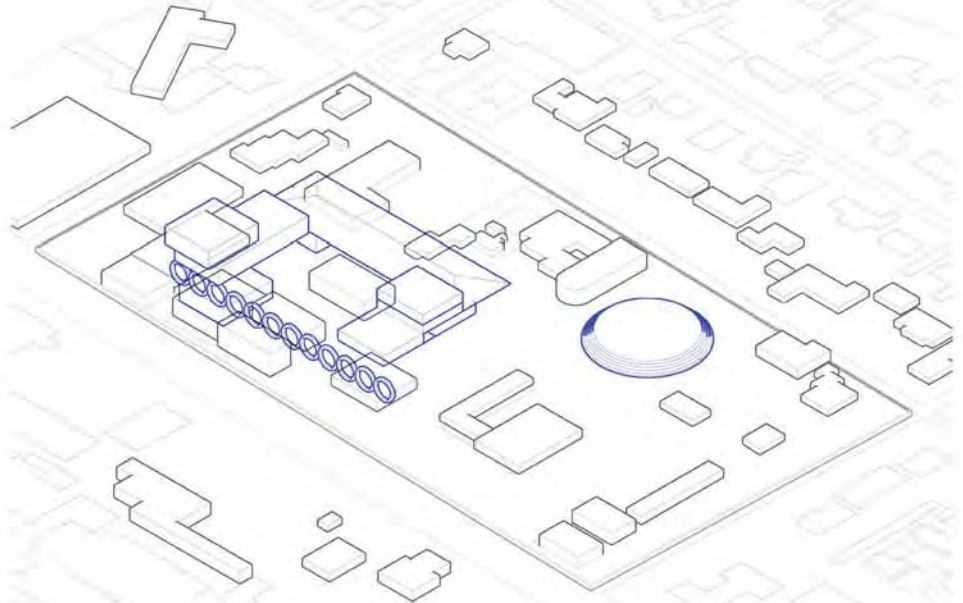


**Architectural Potential**

- Dispose of weak part of program
- Dictate process of breakdown
- Form from removal processes
- Elevate successful qualities

**Architectural Mechanism**

- Stairway / escalator / elevator
- Platform/ floor to wall / stage/ curtain
- Fireplace
- Ramp

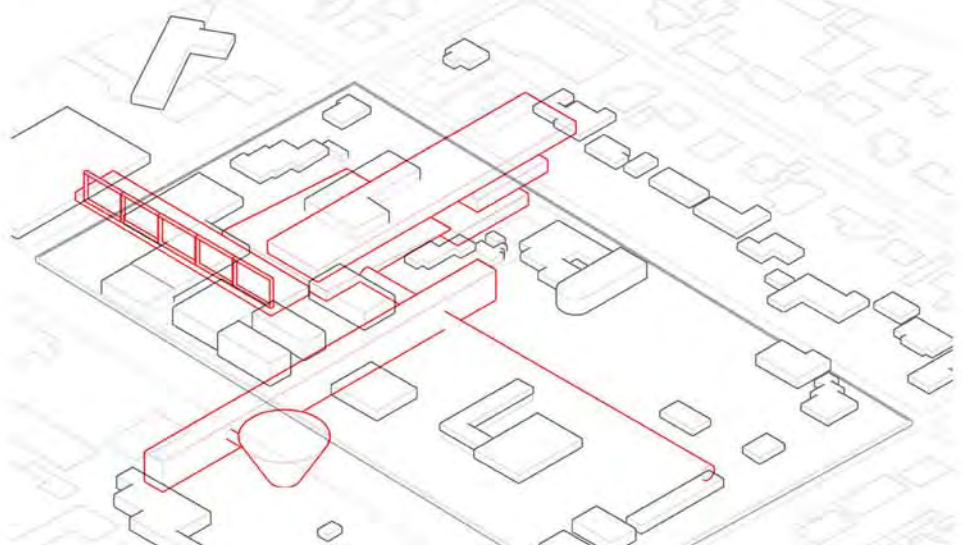


**Architectural Potential**

- fresh insertions of architecture
- Virtual structure/ artificial realities made spatial

**Architectural Mechanism**

- Roof / ceiling
- Doorway
- Columns
- Facade
- Balcony




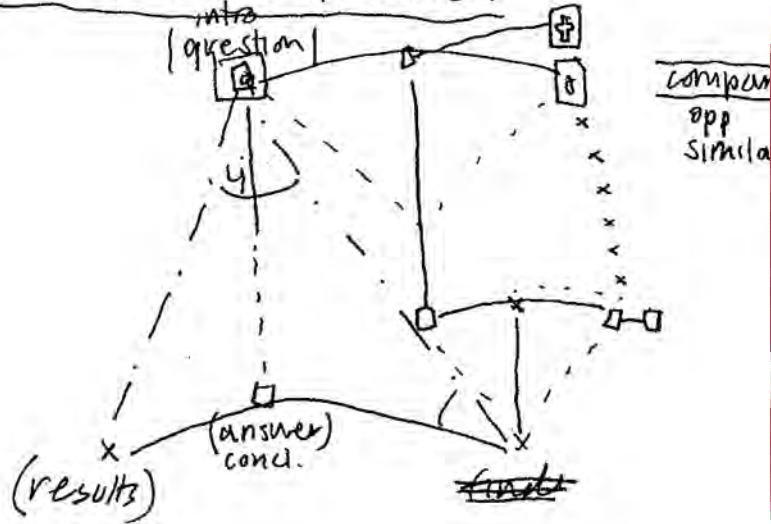


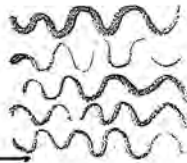
FIGURE 102: Diagram of the concepts overlaid onto the face of time clock to communicate the use of space over time. 92b: Diagram of sketch of branch logic being applied to the structure of the dissertation book serves to remind the reader of this moment in the book where the syllogism begins.



# DISSERTATION FORMULA



comparative method.  
method of dialogue

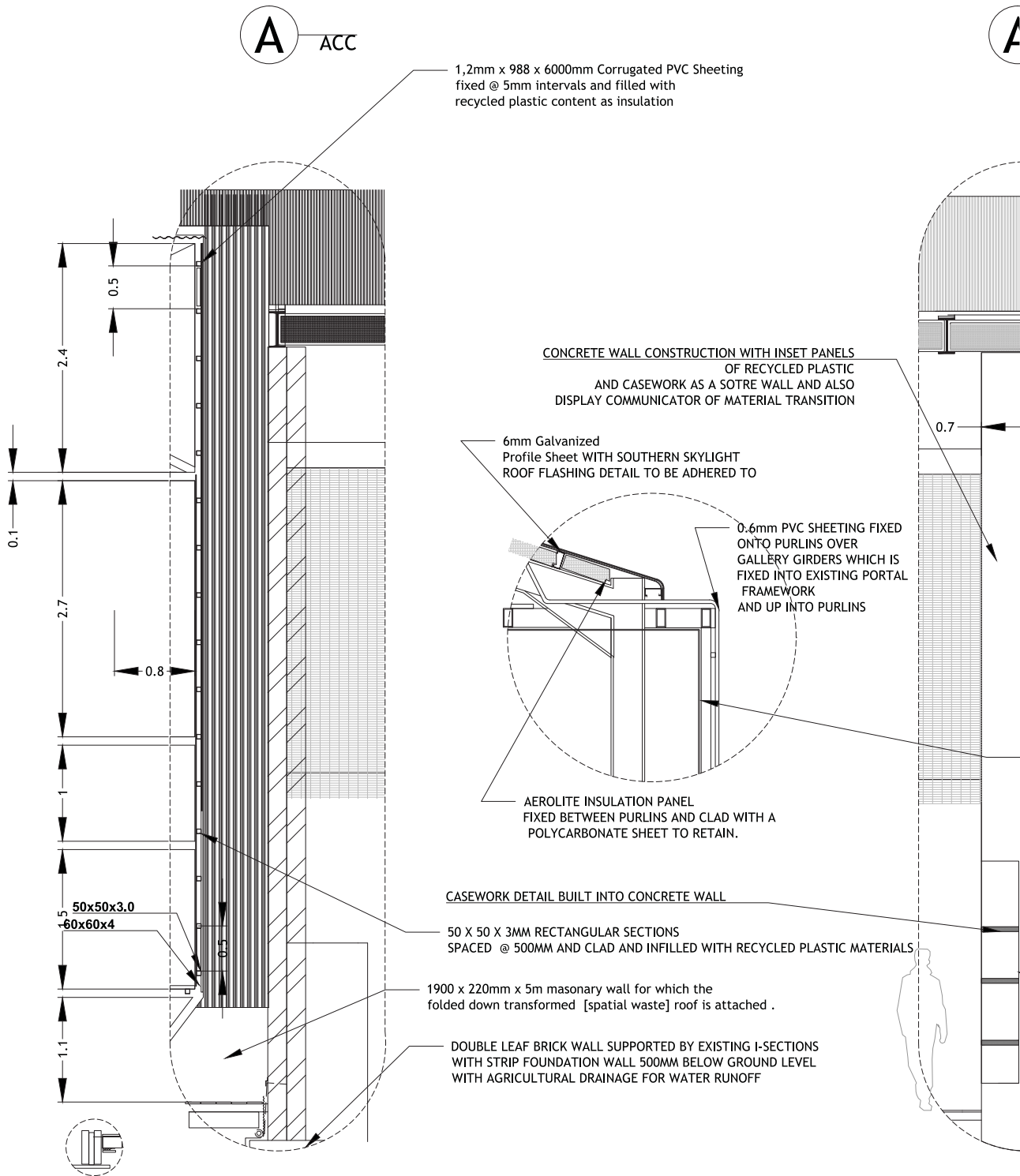


$$\text{wastes } 1 + 2 = 1\frac{1}{2}$$

$$1\frac{1}{2} + \frac{1}{2} = 1\frac{1}{4}$$

$$1\frac{1}{4} - \left(\frac{1}{4}\right) = 1$$

the degree  $y \cdot \left( \begin{matrix} 1 \\ \text{degree of} \\ \text{criticism} \end{matrix} \right)$



## THE ACCEPTOR OF WASTE

The attitude of acceptance is one of regarding that which is considered to be waste as having value. The conceptual response to this attitude was through the RECCN which is an architectural device and through the attitude of accepting by architecturally doing so through the very construction. The acceptance of the house as an extension of the spatial typology and beyond the external world of plastic as its only waste also is to extend pastoring to its place. In order to make sense of the waste within the house. It is the intention to see the construction of waste → a detail fixed with water proofing element → however the general also results in the acceptor not only being the waste before but also the before of waste collection.

## THE REFLECTOR

The attitude of acceptance is one of regarding that which is considered to be waste as architectural device and through the attitude of accepting by architecturally doing so through the very construction. The acceptance of the house as an extension of the spatial typology and beyond the external world of plastic as its only waste also is to extend pastoring to its place. In order to make sense of the waste within the house. It is the intention to see the construction of waste → a detail fixed with water proofing element → however the general also results in the reflector not only being the waste before but also the before of waste collection.

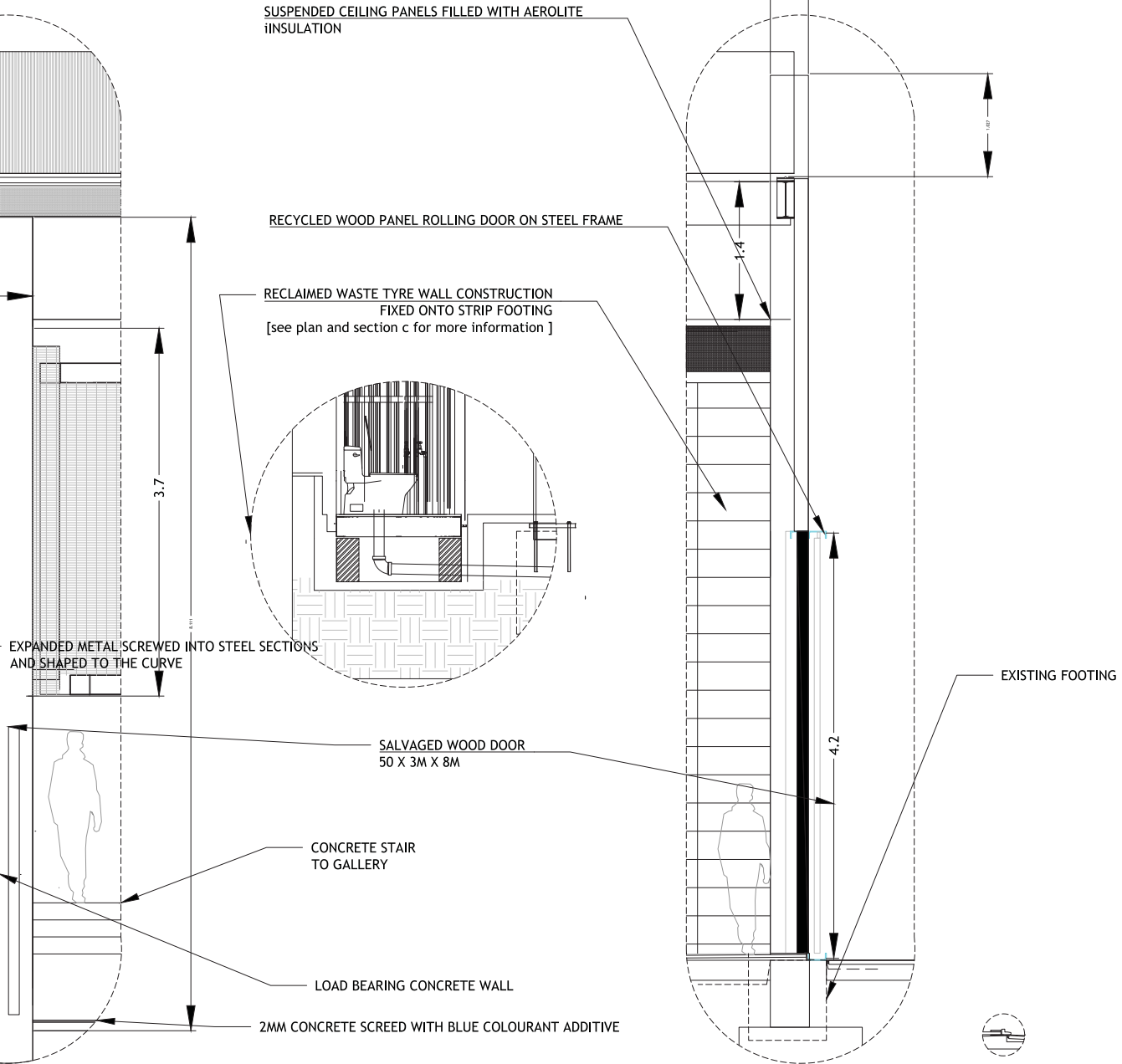
FIGURE 104 Sectional detail drawings of how conceptual value of waste become translated into the walls that divide the spaces and also support the gallery as it pierces through the structure existng,



# INAL WALLS

A REF

A REJ



## DR OF WASTE

being value. The conceptual response to this attitude was through the REACTOR which is an  
its very construction. The structure of the facade are reflections of the industrial landscape  
the data is not the area which accepts the social aspects of waste collection. It is also the structure  
over the potential also results in the reactor not only being the waste bin but also the

## THE REJECTOR OF WASTE

the attitude of rejection is one of regarding that which is considered to be waste as being valuable. The conceptual response to this attitude was through the REJECTOR which is  
an architectural idea embodying the attitude of rejection-programmatically as a space where things can be stored and rejected in abstract ways - rather than physically. Technically the  
structure of the facade are reflections of the social aspects of waste collection. It is also the structure of the facade which accepts the social aspects of waste collection. It is also the structure  
over the potential also results in the reactor not only being the waste bin but also the

*[reflecting on rejection]*

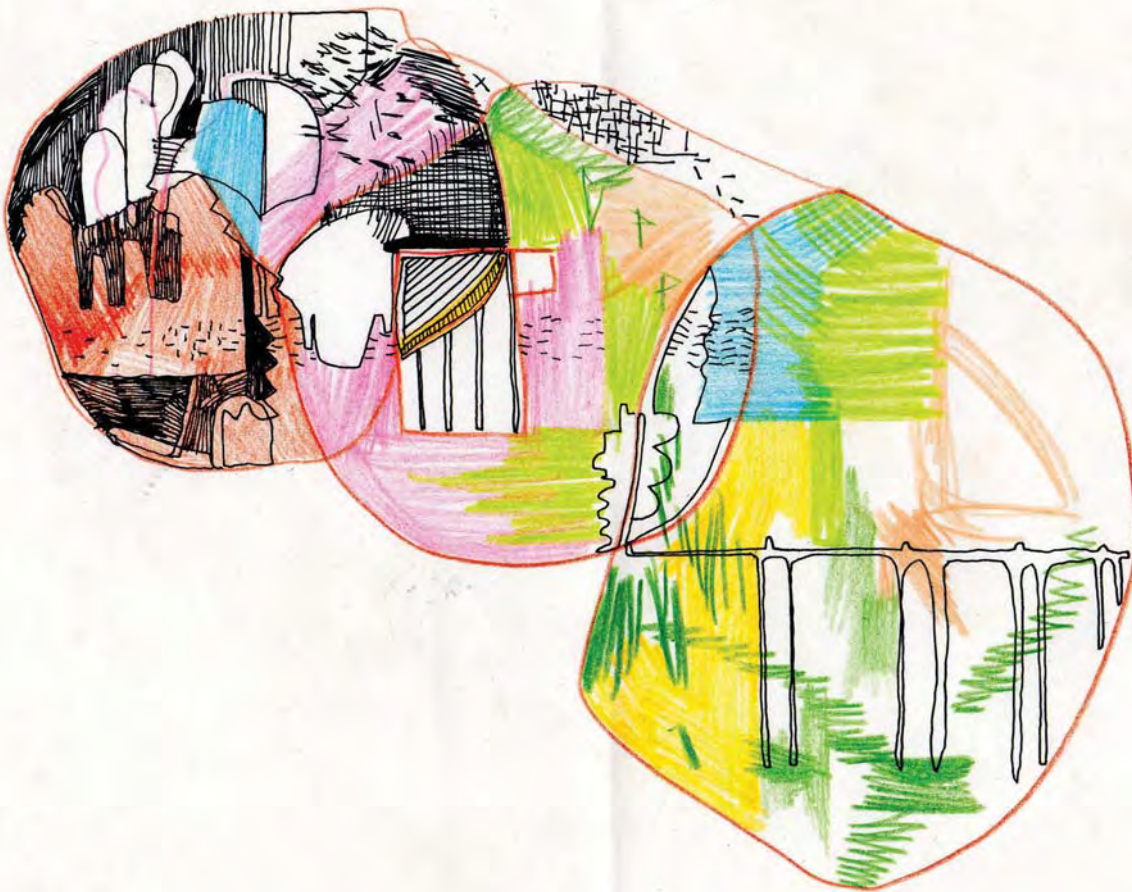


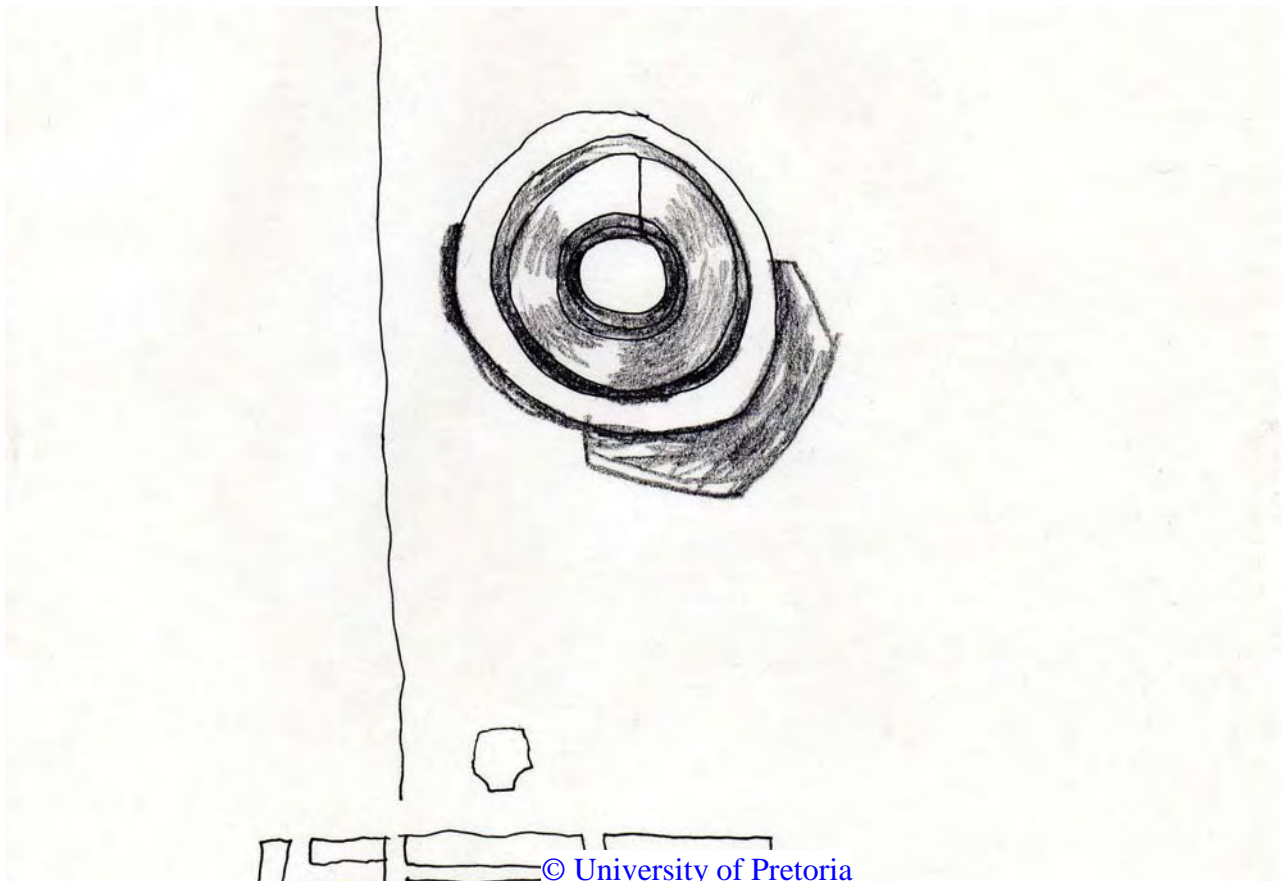
FIGURE 106 Sketch of the spheres of waste and its potential distillation, using colour and line to express a transformation from waste to nature. Figure 96b. An imagined door handle design





# 07. REVEAL

## SPATIAL POTENTIALS





(2)

The transition plane  
The column The vertical



the walls.  
the enclosure  
the roof  
the distribution of energy (downward)  
the collector the resonator  
the transmitter

the beacon, the heat th  
is the place without  
energy; yet represents  
the form of potential  
energy.

all forms of energy.  
here: happen. the zero  
and the infinite.

walls. it says  
beacon walls. plaster

---

"It is the canon its void  
and its walls, its chambers  
and its pathway." GARY WHITE

---

guiding energy of physical  
waste to communicate  
outwards (via freq) the  
message of a medium



FIGURE 108 A later note from a journal describing the place of the beacon - with diagrams of how the beacon and the role theatre and frequency meet and are arranged, IMW 2016

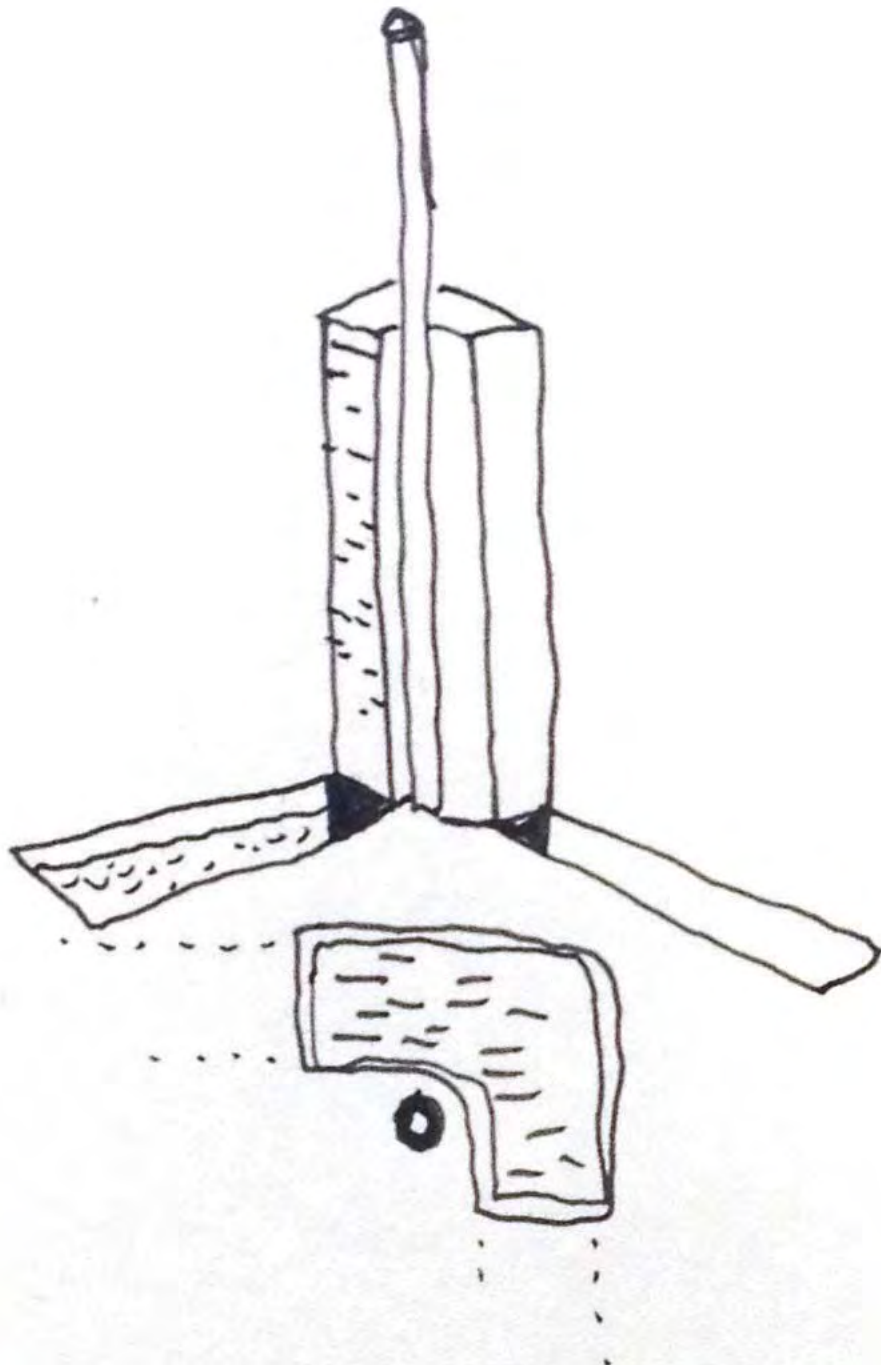
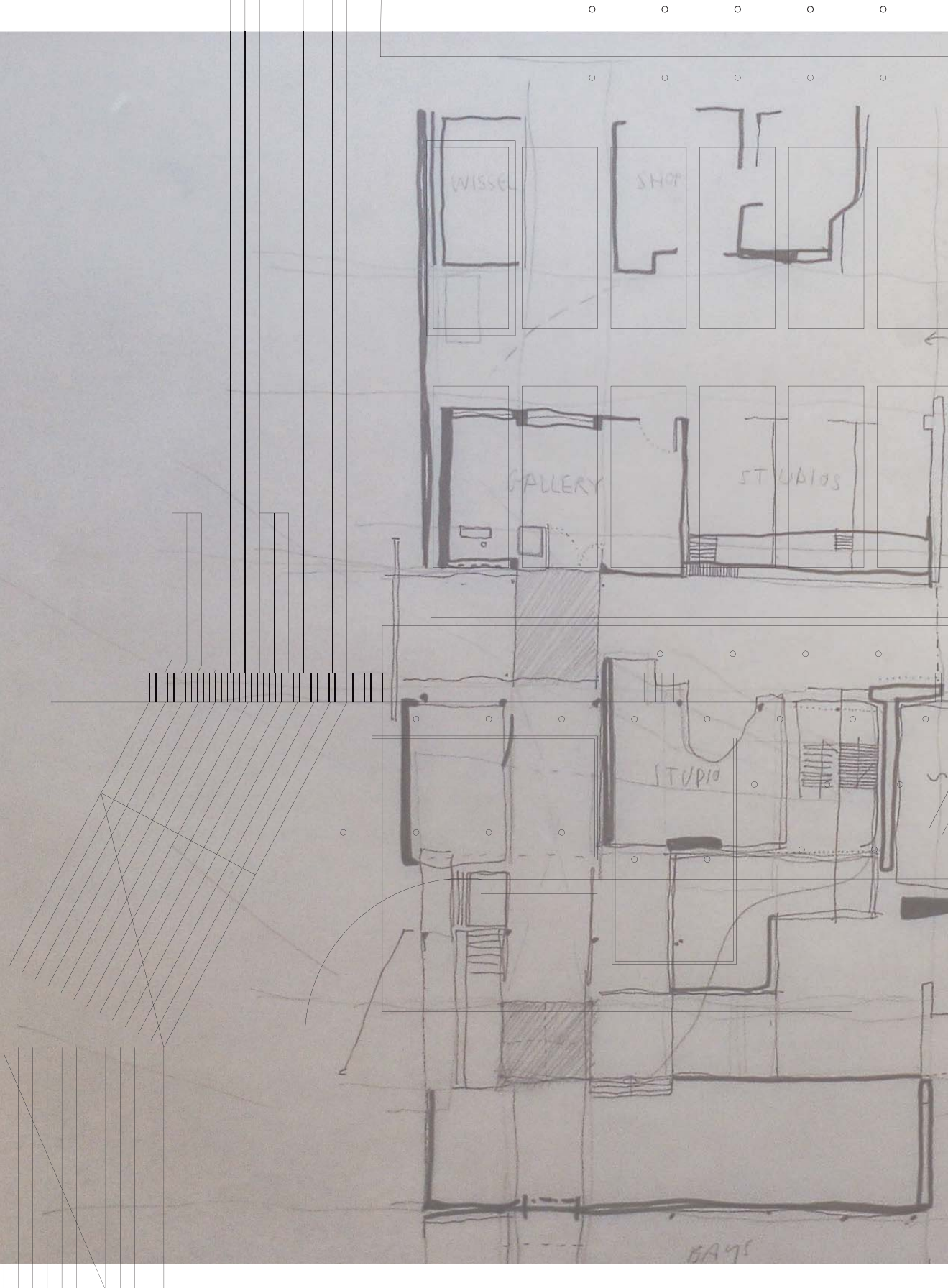


FIGURE 109 A sketch of a column detail  
- exploring structure, an infill waste wall  
surrounding a column, ie: meeting with  
additive materials or constructions, IMW  
2016





When you walk INTO the room there is an exhibition of WASTES in the form of plastics shredded and packaged again. Then from this there is a context of AG contours and context and the AU threads that plug into a 3d printed model of small building growing out of an existing shed laser cut from gray board . CONDITIONS cut from perspex and located across the landscape at positions mapped. SLOW spaces then become unpacked, the social facikitation platforms and the beacons working together to generate, channel, resonate, collect and transmit frequency of informations about waste and its potential to those visiting. Defining further the CONCEPTUAL transference from beacon to roof , role theatre to floor and walls and the frequency to the social performance of the building. The THEORIES of waste spaceand waste potentials then becomes furtuer exploited in the perimeter and surrounds of the building as asks how does waste architecture during this phases of accumulation locate itself in such a context. DESIGN has been a process of iterating the cloud of ideas into abstract forms that finally stand in the presence of gravity in the form of details that extrude frequency, inject frequency, and compress frequency. TECHnically branching old and new.

2559/10/11

Sent via vivo Memo

FIGURE 111: An overlay of digital and hand drawings to demonstrate the similarities and differences and also communicate the method of 'Reveal' and 'growth' in design and also is an image that can be used to show beacon, role, platform and frequency early representations, enclosures are the two role theatres of dialogue space and making space, the diagonal lines are earl indicators of stairs which is an extension of the role theatres spaces - relating to frequency Beacon can only be expressed in the vertical elements as an expression of emergence - the beacon enclose had not yet manifested at this time. IMW 2016 Figure 101B: Screenshot of notes on spatial experience of waste exhibitions

This chapter is one of the hardest chapters for the author to write. On a personal level it is related to the spiritual understanding of design and the manifestation of ideas through creation, yet at the same time, architecture finds itself situated within the logic of the sciences that require states of measurement and rigour and so the unpacking of how elements related to the concepts, formed by the attitudes and spatial visions, become translated into space.

Although rigour is used as a means to find the steps and methods for applications, design exists within a narrative state, where factors of daily routine, diet and mood, scenarios, encounters are all factors that influence design - and along the Bergsonian critique of time unit limitation in the science, the author critiques the translation a science into design. Except for a constant reading into other sciences of chemistry, biology, humanity and technology which then go about an method of interpretation through drawing, which may be seen throughout the book.

## ACCEPTING REVEALING

The process of design is for the author 'to reveal' that which already exists in the mind of the the architect. The author always knows the story, the intent and the path even when they are lost they are the author of the next step. Design is the testing of languages, which in this case is the language of mediums - the author makes use of drawing which then becomes transformed and spatially tested in model building and then again into drawing with a digital medium.

This year of design has revealed to the author how the was always in her mind and it has been through the creation of drawings as simple lines like the plan on the right all the way through to models that were able to be test the dialogue between language and space. The author accepts that although she often receives criticism of not communicating her

architecture clearly - that this is part of the process by which she creates her architecture, however seeks to finally communicate this method by arriving at a finished and legible building through drawing.

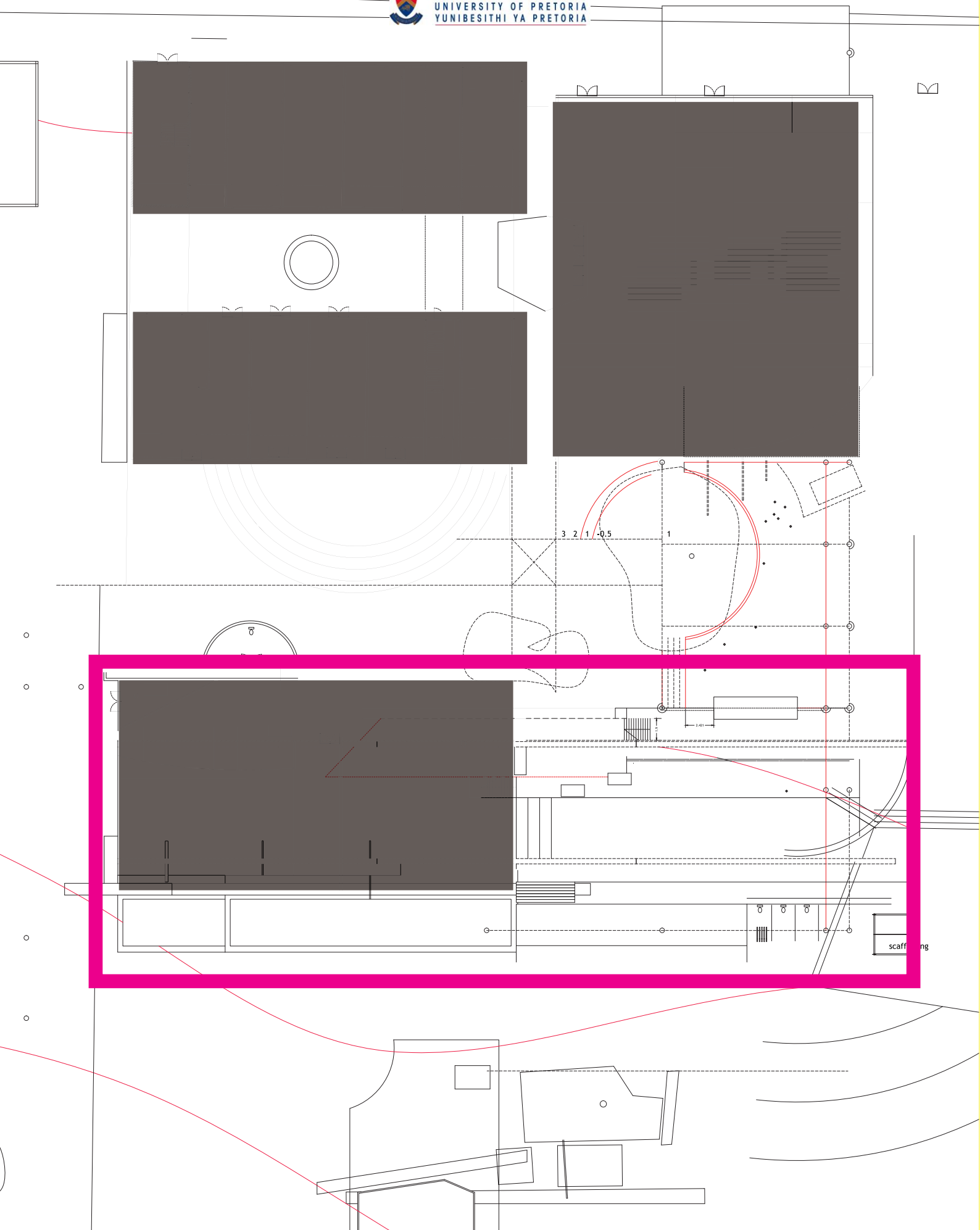
## REJECTING REVEALING

The year and its criticism are that which play a part in the process of design - and merely what can be said is that after every critique there comes about a mode of self-criticism - which beckons any designer to question themselves and their methods, however in the very beginning of this book as part of the introduction the author speaks of how intrinsically connected we are to the projects we do - by choice. In the same way it is almost impossible to reject a method - which in this case in described as 'to reveal' - but only to reject that criticism is not rejection, rather a platform for reflection to come about.

## REFLECTING OF REVEALING

When processing the information of a project of architecture, ie: drawings and models, the arrangement and ordering of these parts is how an architecture of 'reveal' is created. It seems to the author as if the building has always been there, in every line and every suggested enclosure yet through constantly feeding it more information through consideration of applied thinking [making]- that which was merely grew from the page, branching towards the mind of the viewer - to the realm of being heard as clearly as a conversation about the building to be.

**FIGURE 112: Early plan of proposed building, the grey alluding to the existing shed footprint and the pink rectangle to the new building space.**





# BEACON SPACE

## THE ARTIST RESIDENCE

The artist residency design development drew from the author's personal relations to artists and their residency experiences, as well as her own visits to the Nirox Sculpture park situated within the area known as the Cradle of Humankind. The typology of the artist residency is vast, sometimes attaching to existing structures, as this dissertation seeks to do in relation to theories of spatial waste.

In New York alone there are thousands of residencies available for artists working in all mediums, architecture included. Residency Unlimited is an organisation that specialises in providing a source of available residencies for artists to access on a global scale. The artist residency is very much a non-existent program in the context of Pretoria and with the emergence of artist collectives such as SLOWA and Found Collective, there is a need for this typology to be developed.

These relationships with organisation in Pretoria were used as part of an exploration of spaces for different artist[ Figure 105] A set of models that were made according to the needs of eight different artists. The sizes of the studio spaces [in white] were based on the medium of the artist. Illustrators needed small drawing spaces and photographers needed dark rooms, whilst sculpture artists needed spaces for casting, moulding, breaking apart and patina spaces. These models served as the language of the concepts and led to a complexity that distracted from designing the public spaces of the building. As the design of space in relation to waste became more defined, it required that the residency becomes more of a single residential module that could be reapplied, rather than a studio for several different arts.

On a visit to STUDIO FINE in Pretoria North, the author was able to access a clear unpacking of the process of fine metalwork in silver, gold and bronze.

The spatial requirements were highly specific to the material being worked with, and at this stage, the decision was made to further investigate the type of studio that was related to waste and metal work studios attitudes to waste were almost of an extreme spectrum of ACCEPTANCE - not letting a single spec of metal dust escape the space.

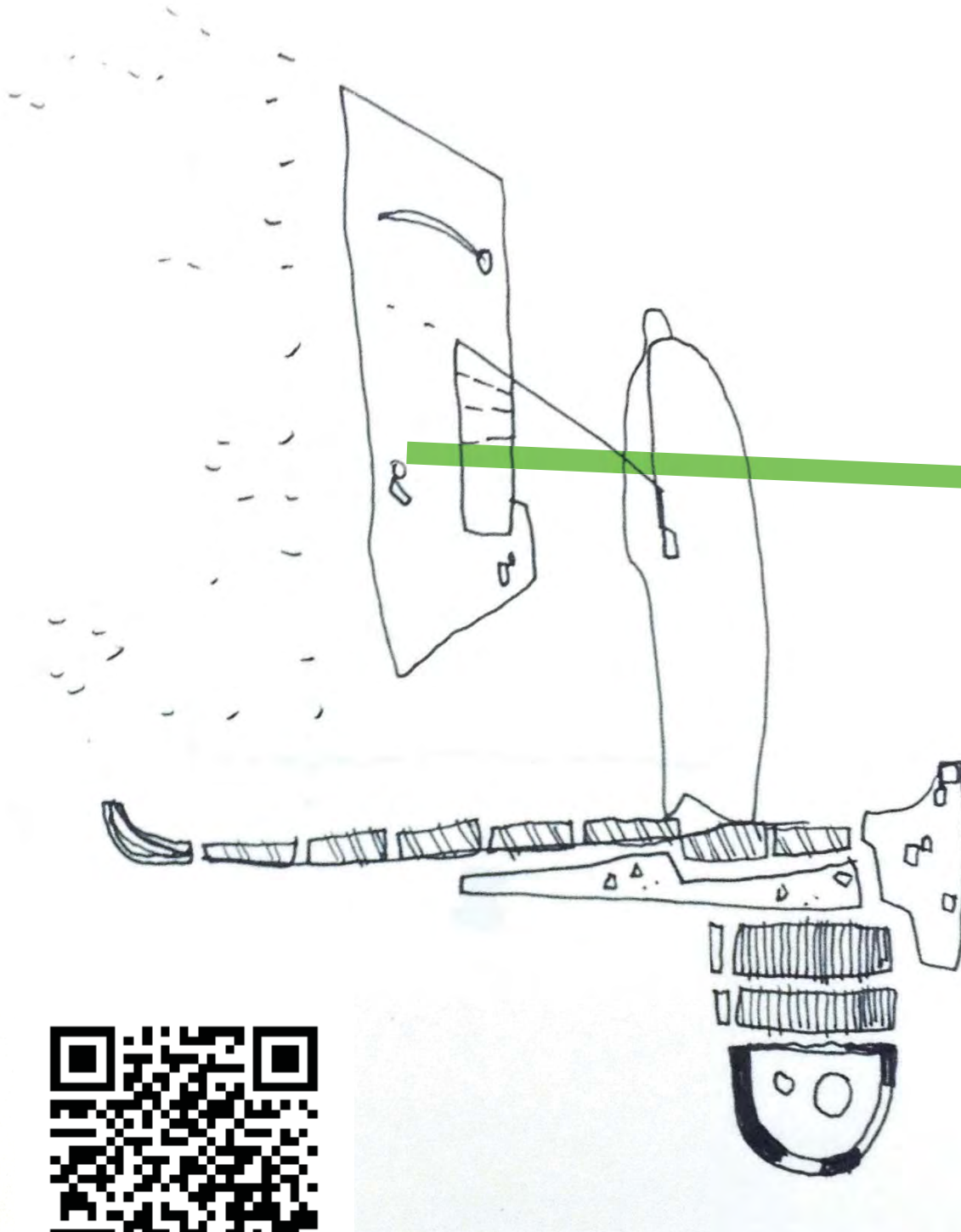
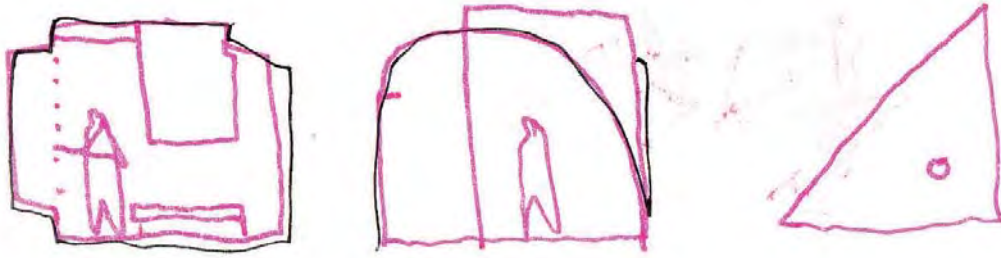
The decision of materiality relating to waste and art came at a much later stage, and in retrospect, the author has been made aware that deciding earlier on a material informant would have been more useful to the architectural developments. However, through this exploratory method, similarities between waste and precious metals were discovered that further informed the author's perception and translation of attitudes towards the value of materiality, which is in itself, as discussed in the theory chapter and wastescapes chapter.

The concept of the beacon physically responds to the issues of physical waste through the activation of partial waste that seeks to alter and transform the social waste through the image of space.



FIGURE 114: Residency space and form explorations in section sketches. Figure 104B : "The Artists Pool' a sketch of the artists creation space, IMW 2016





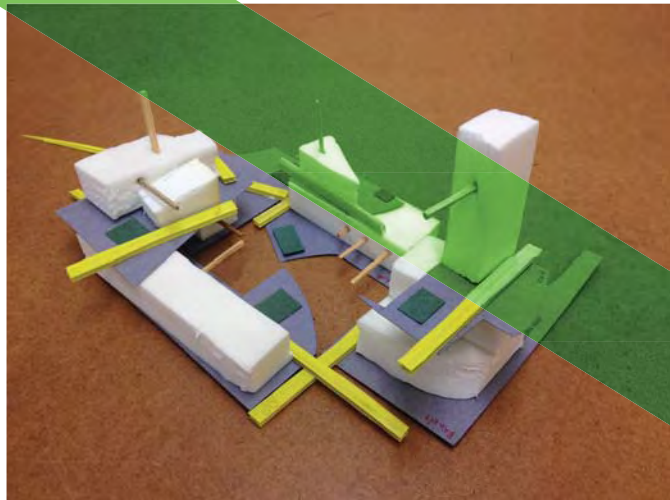
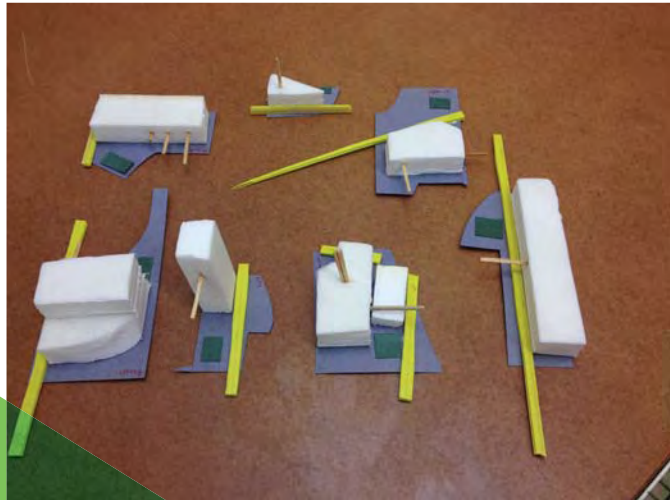
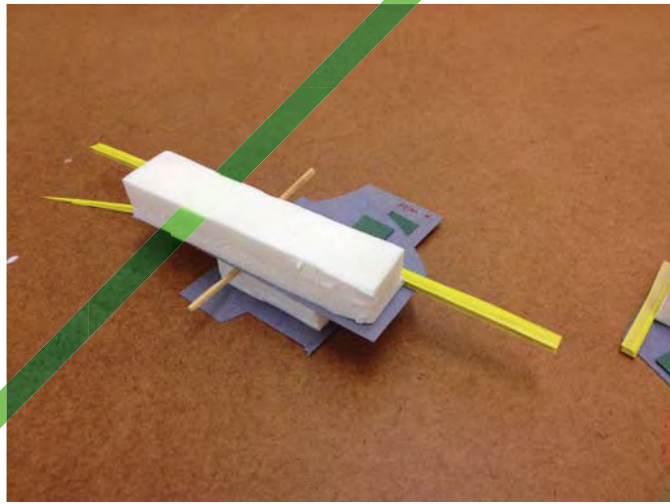
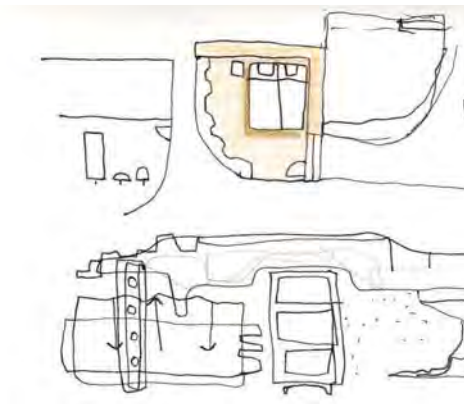


FIGURE 116: Models of artist residency explorations and sketch of the plans of small residential spaces for artists.

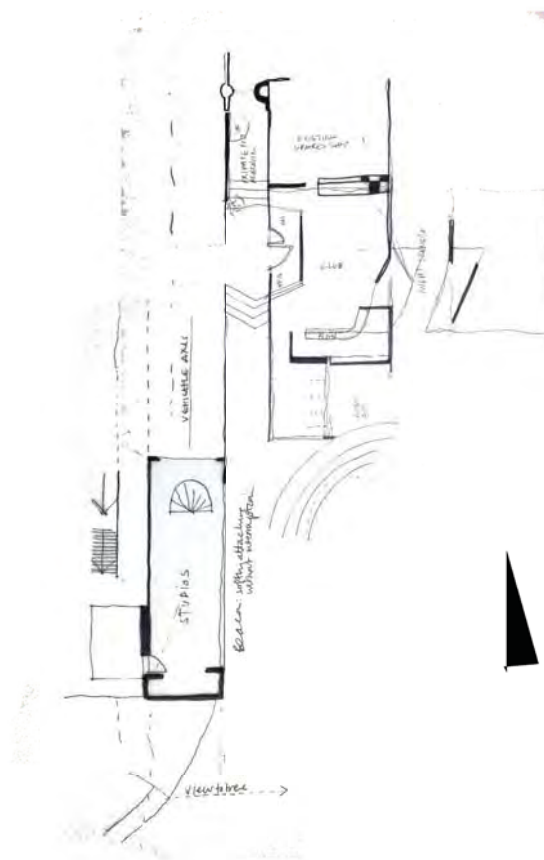
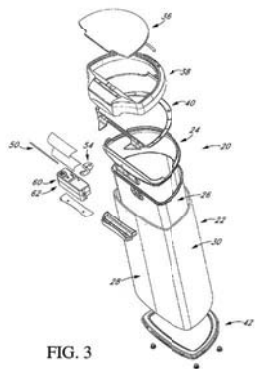


FIGURE 117: Model used to communicate the linear extension of waste into the existing shed building.

# Artist residencies

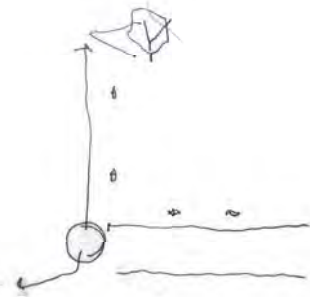
The program of an artist residency is something that is yet to be fully realised in the context of South Africa, but also in the city of Pretoria, which is a hub for artist yet lacks the platforms for their development.

In response to the mapped cond. SECONDED - the architectures see the initial diagram of the 'y' - when either extended into a new di meaning or discarded and arrive point of being ABJECT>



The spaces of social interaction in with artist private studios .

These are the places where WA inserted and also removed - this culmination spaces.



The technical aspects of the program explored through the architectural in the aperture, the opening and how it re CONCEPT of frequency.

FIGURE 118: Precedent, program and writing about the space of the residency - relating to the dustbin of society and references to the Tea house and Nirox artist residency projects.



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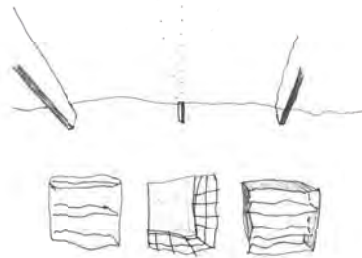
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*PRECEDENT the Nirox foundation, artist residency,  
South Africa and the Tea House by Fujimora*

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# ROLE THEATRE SPACE MAKING AND TALKING SPACE

The notions of waste with their defined value systems went on to inform the unpacking of these concepts.

The space of the theatre role seeks to deal with both value systems associated and defined in accordance to rejecting and accepting of waste.

The role theatre is the facilitation platform - the surface that allows both the tangible and non-tangible aspects of issues relating to waste to be either discussed, presented or created with. Therefore the role theatre manifests itself as both the 'Dialogue Hall' [the talking space] and the 'Maker Studio' [the making space] .

The maker spacer was always central to the design - as its served as facilitation not only of the spatial waste and physical matter, ie; dealing with matters on waste - but also specifically with social waste - in other words creatng spaces where social potential is activated - spaces of discussion and spaces of collective creating .

The role theatre pertains to the floor plan of the building - wheras the beacon for example makes reference to the 3dimensional experience of the building as a whole by which to guide visitors and

function, the role theatre makes reference to the horizontal floor plan specifically.

To the right is a section of the dialogue hall which overhead piercing into it is the the overhead gallery - which serves also as a mechanism of the floor plane but in connection to a different aspect of the program.

Upon the ground floor there exist a set of exchanges that are facilitated through changes in levels. The entrance lobby role theatre were the exchange of inside to outside occurs is level- whereas the level changes upward into the dialogue hall platform - as an expression of an elevated experience of collective and maximised multidinal exchange - but not steps down not in a ninary understanding of opposition but rather as complimentary and balanced into the sunken work space of the maker hall --- where the step in [the artist pool carried over into the maker space platform] - allows for the containment of waste. Each role theatre space- as an enclosure also deals with inlets and outlets of energy -standard size entrance in relation to oversized exits or vice versa. The relationships between openings and the planes of the role theatre will be unpacked in the conceptual transaltions of frequency into design.



FIGURE 120: Sketches of different spatial requirements and sections for the spaces related to making and talking.

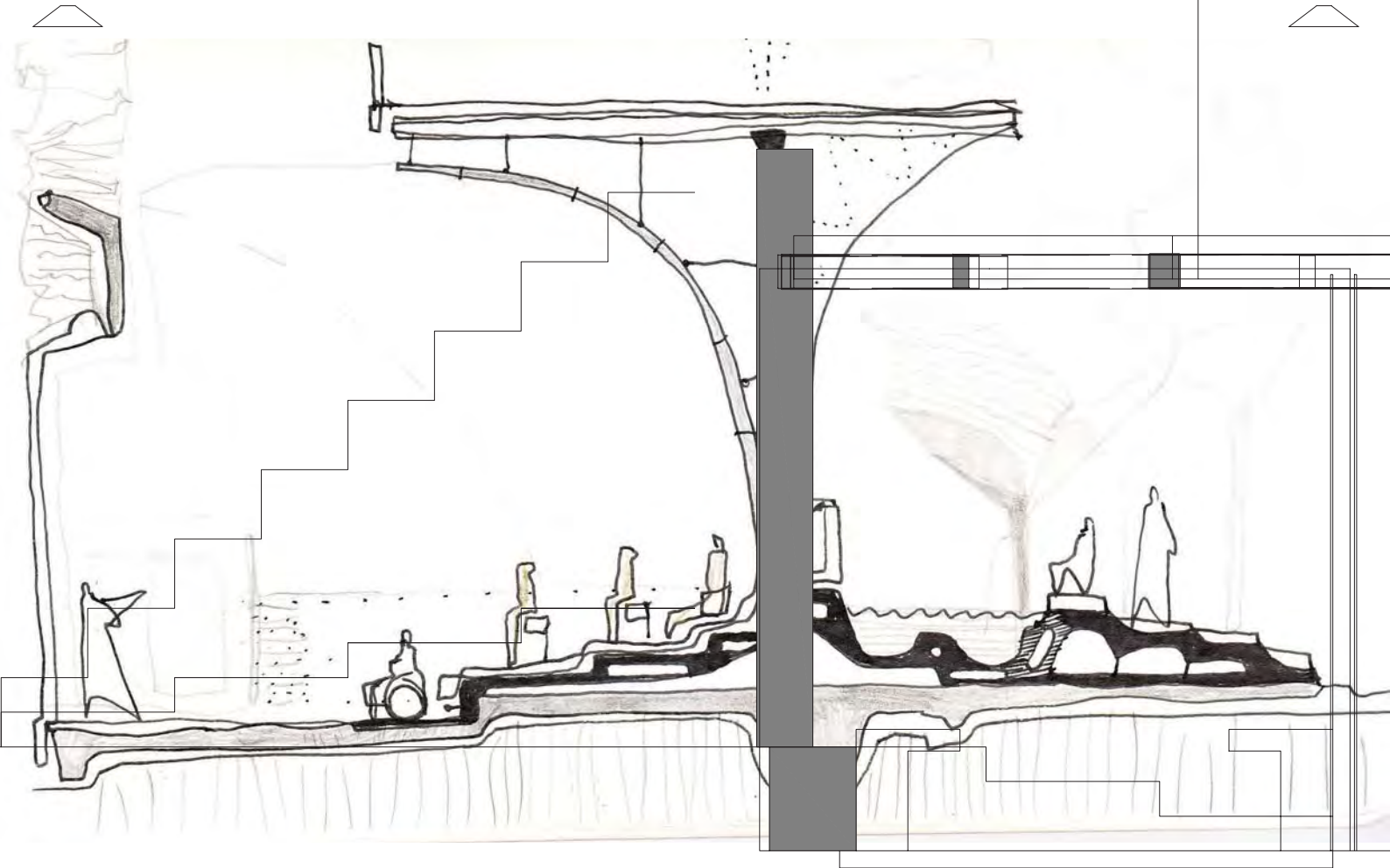
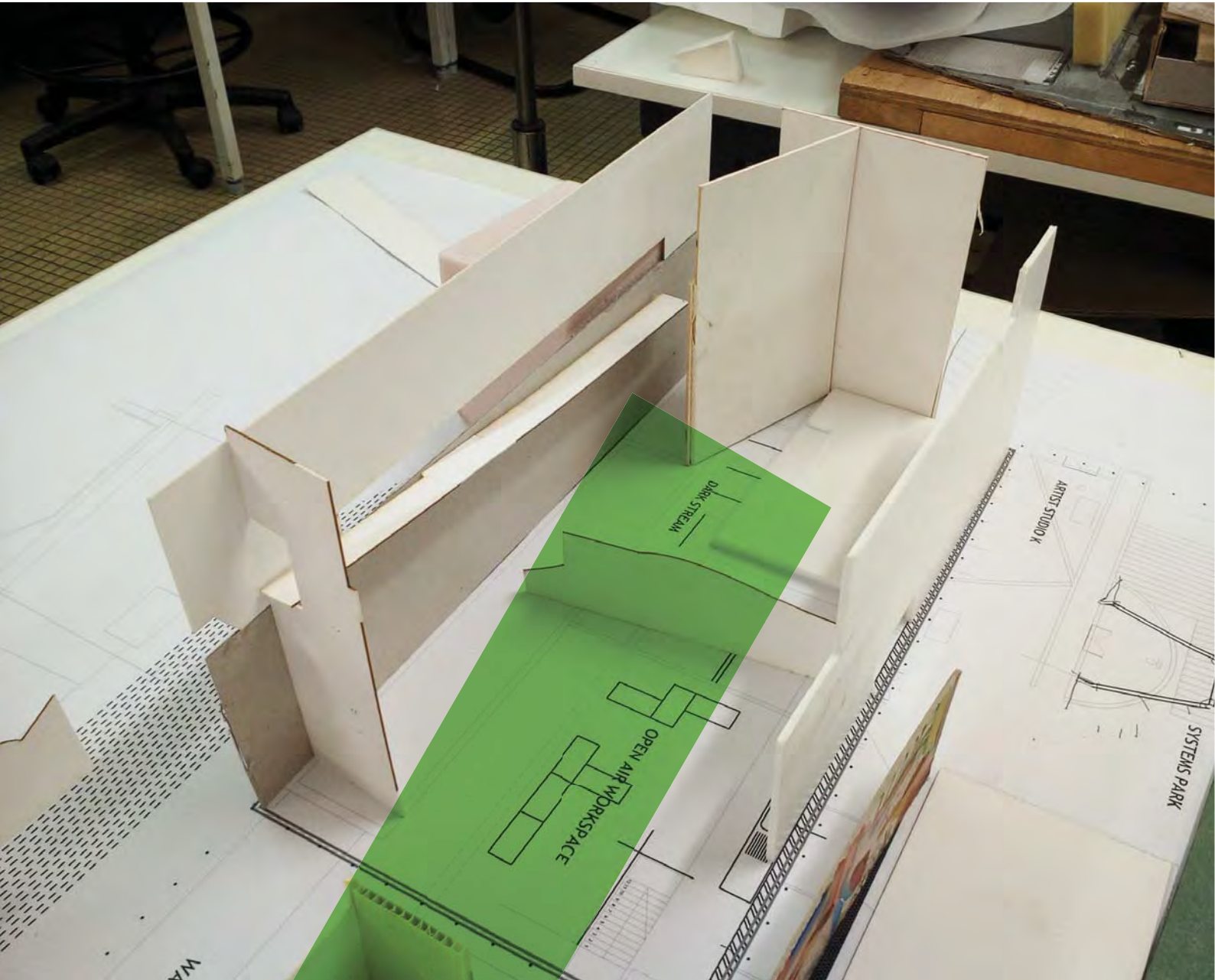




FIGURE 122: July model show dialogue space in relation to the above gallery and circulation. Figure 112b: May model of maker space as the open air workspace similar to industrial spaces

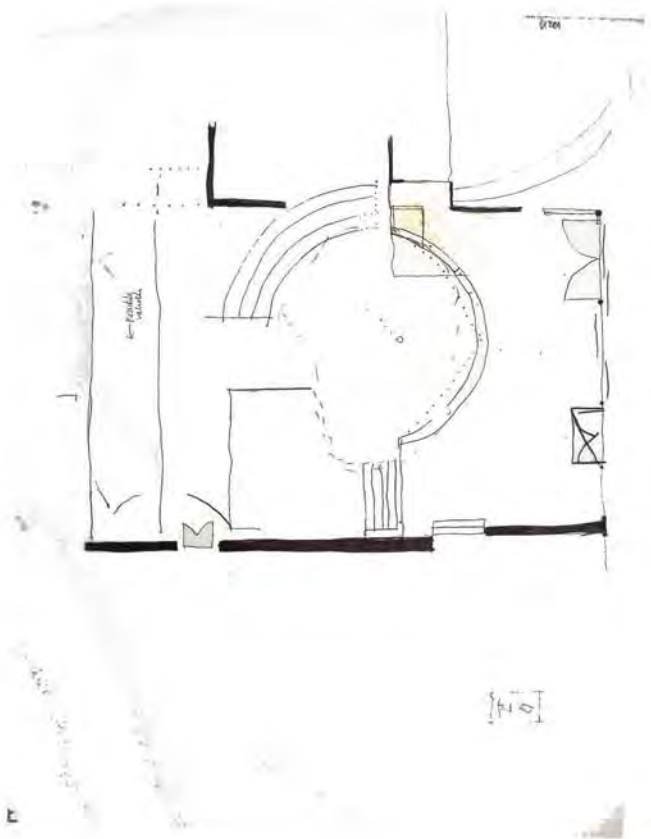
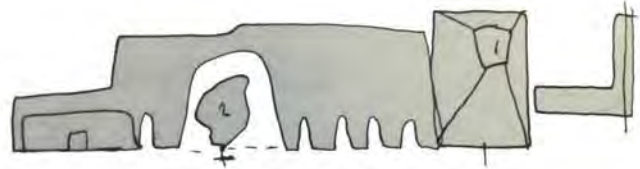




# Talking spaces

Spaces where accepting can occur - but also all the other social factors 0 but mostly where there is pure dialogue, information in the form of real and digital content but with an interface with the outdoor - the relation between virtual and real is necessary in a culture migrating more towards the escapism of the unreal.

The diagram of the lawnmower is referred to as a way to explain how the space is destructive, but curation and meditation yet labourious all at the same time.



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FIGURE 124 Precedent and spatial concept and requirements poster for talking space, IMW 2016



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variety demographic in Silverton and  
to be considered for the spaces - the  
young and the old.

the outdoor - where there is no social  
and only the witnessing - of the  
of the acceptance and remedies  
reflection.



PRECEDENT , Cory Silva masonry ramp stair  
design

cal resolution of seating is the detail  
architecture seeks to incorporate and  
making.



## Maker spaces

*The workshops spaces are to be integrated into the transfer of waste and then into the transfer into gallery spaces.*

*Requiring mechanical space, storage space and transfer, rejection, accepting and reflection spaces.*



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FIGURE 126 Precedent and spatial concept and requirements poster for maker space, IMW 2016



exploiting the mapped condition of  
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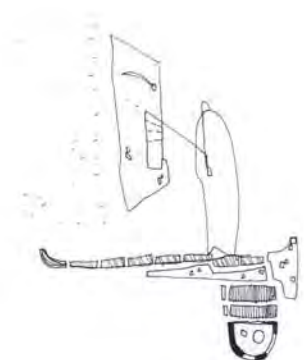
cially there is a need to intergrate, intersect  
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reflection on making is something that  
pens in the spaces of making ---

ough the workshop spaces are not the  
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TRACT CULMINATION spaces - where  
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PRECEDENTS Renzo Piano and SAND studios

artists pool is where all members of  
nimity become the artist - the maker - these  
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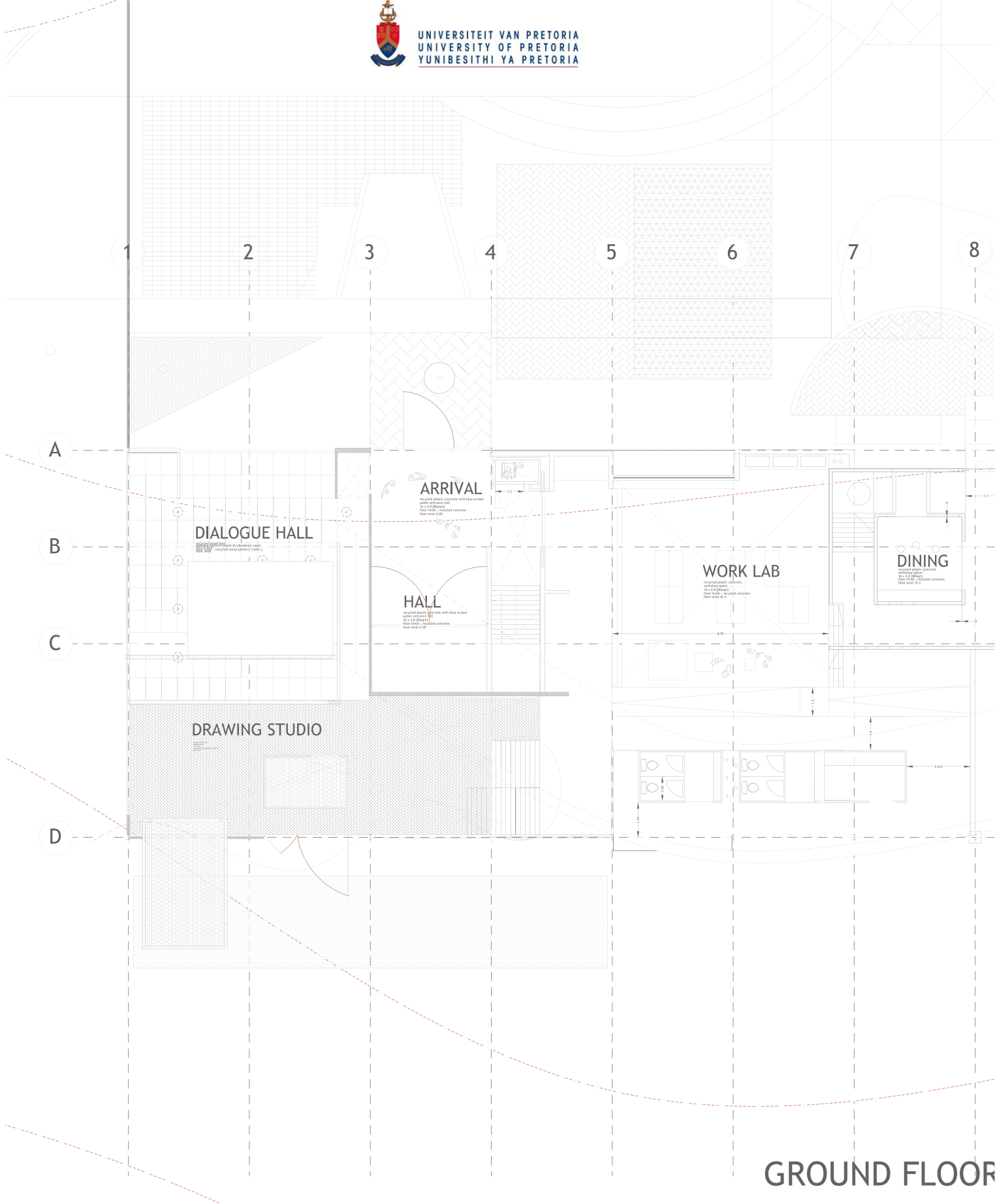


FIGURE 128 Ground floor sketch plan overlaid with gallery curve overhead.



  
UNIVERSITEIT VAN PRETORIA  
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# FREQUENCY SPACE VIRTUAL SPACE

The frequency spaces are related to definitions of the social waste, physical waste and spatial waste and recognises the fluidity of use, time and of architectural elements as systems related to patterns, seasons and the unexpected.

These spaces are the entrances, hallways and corridors places of movement of the human body through space, but also culminate in the gallery which is a space that itself becomes matter in motion and forces the human motion to frequently change and be altered through its own set of arrangements.

Frequency space connects to attitudes of accepting, reject and reflecting - and for the clearest examples of how frequency has been understood in this project - is to radio waves, their transmissions, the forms and their resonance. The beacon not only acts them as a transmitter but also as a resonator - collecting and projecting information - it is a static object which is in fact vibrating with energy beyond that of an intangible translation - it can be heard - as a process of shredding plastic finds itself embodied

The building itself and its design has been a fluctuating frequency of brainwaves that have been captured, transmitted and muted over pages of sketches and drawings- which are to follow.

The frequency element

which situates itself as an elevated slice of earth shaped by the frequencies and flows of a prehistoric landscape. Emerged to facilitate the transformation of attitude through the arts of physical, social [dialogue] and spatial [architectures].

The following images are conceptual elevations created with a range of different types of ink, marker and pencils.

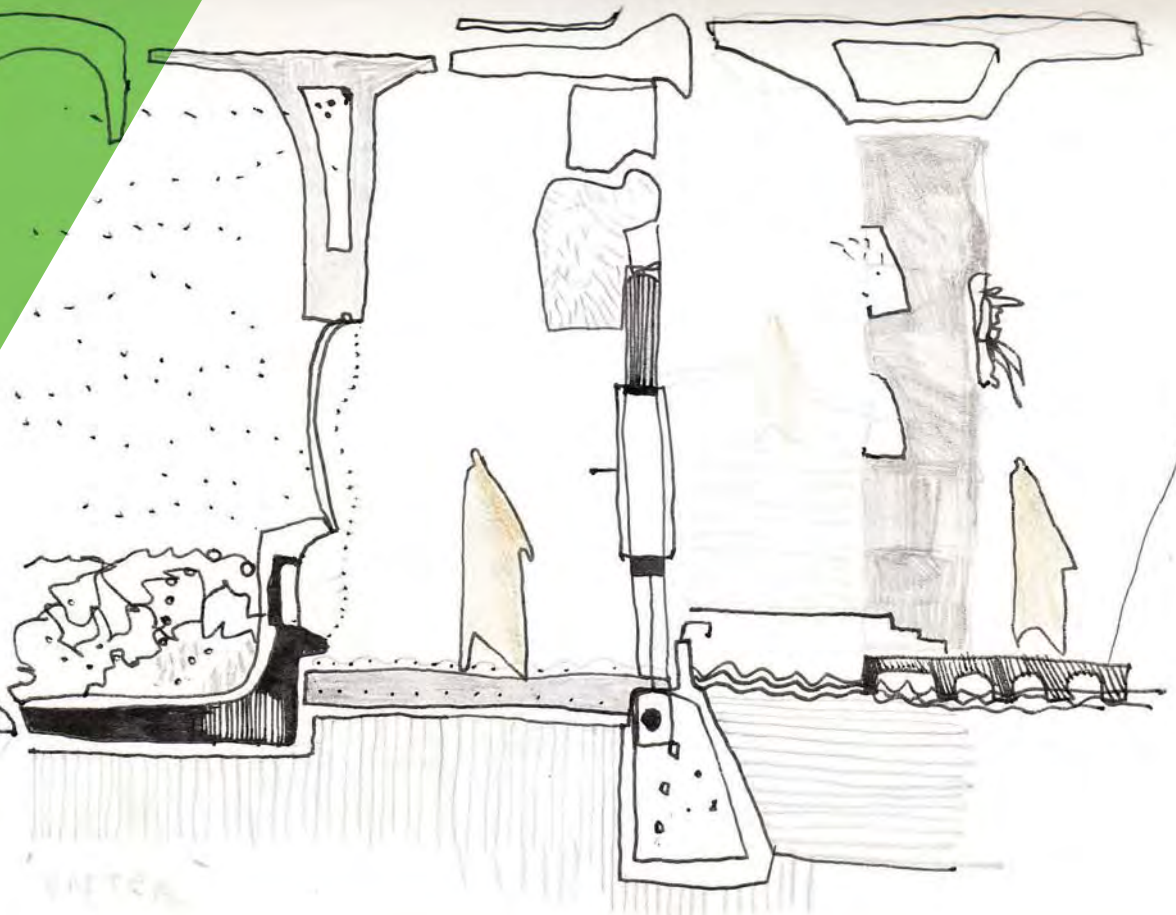
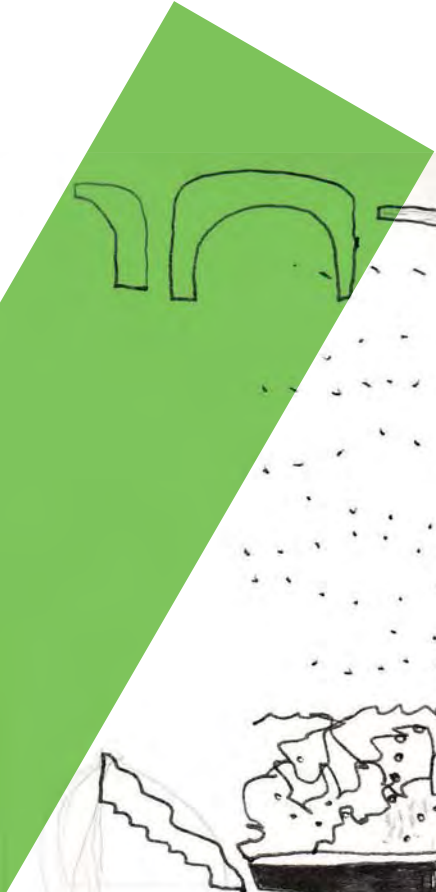
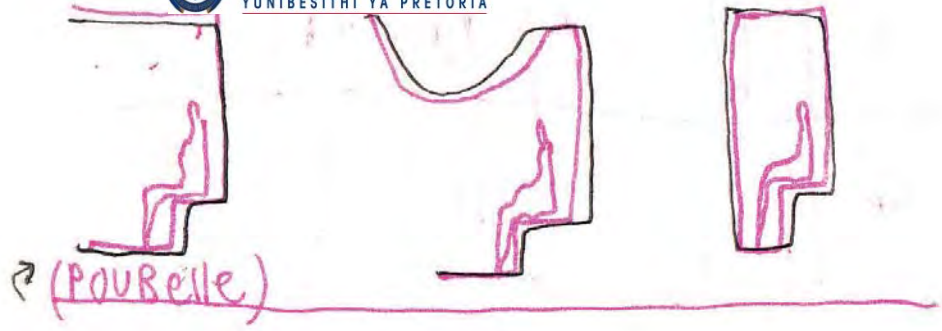
These elevations were then translated into a more regulated, ruled and formal elevation [see bottom right]. This process of conceptual explosiveness' with only the framework of scale, then becomes the symbolic and emotional expression of the building - which then as seen in the formalised elevation, becomes regularised.

What then happens with these two very different spectrums of designing is their intersection, not so much on a physical overlaying method of say - using a light table, rather through the use of modeling.

This has been emergent in the way of designing in this dissertation. The 2-dimensional drawing, although it is the image of the 3-dimensional object, is the tool by which to inform the 3-dimensional and thereby the 3dimension becomes the tool for testing and thus goes on to inform the 2-dimensional, which is then formally, conceptually and finally expressed in the 3-dimensional drawing; the perspective [See Figure 128 on the following page].

FIGURE 130a: Development of branch logic into plan. 114b: Gallery final floor plan sketch, IMW 2016.





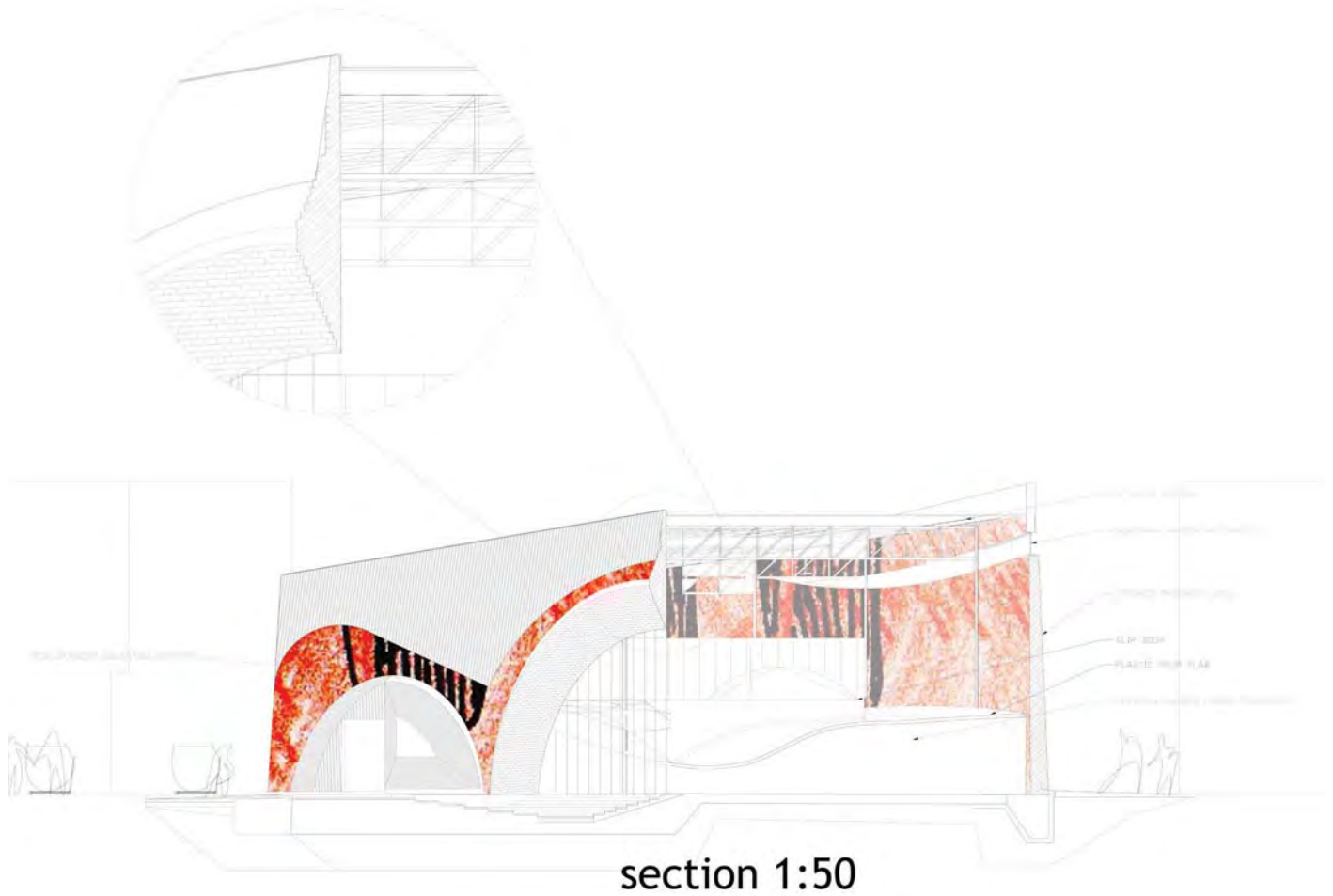
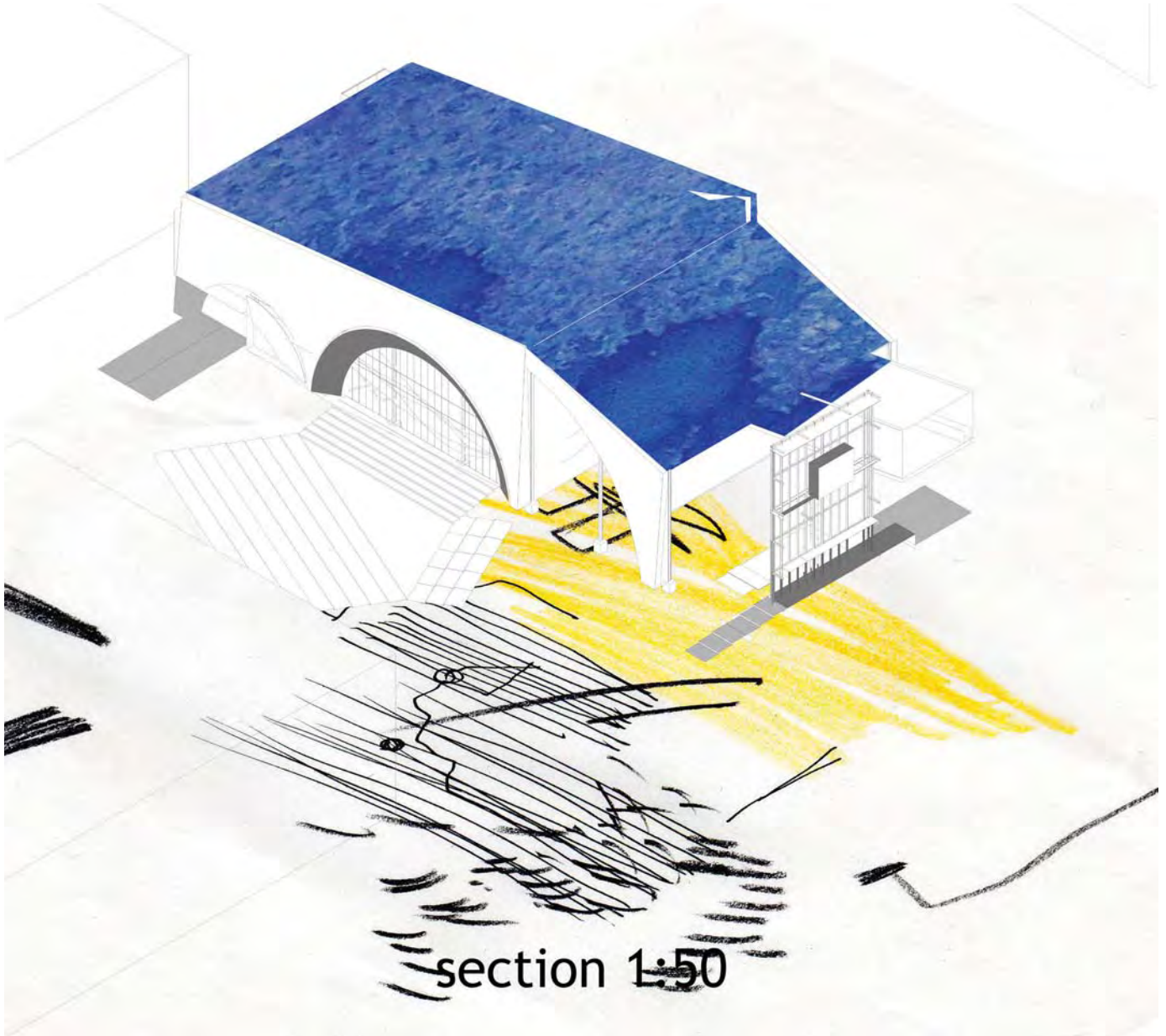


FIGURE 132 : Sections of the now removed warehouse of recycling distillation



<http://tomassaraceno.com/projects/on-space-time-foam/>



FIGURE 134: 'On Space Time Foam' by Tomas Sareceno is an installation at Hangar Bicocca in Milan (2012-13) which illustrates the dreamy spatial potentials that can be explored with a material such as plastic. The QR code can be scanned to access the image at the following <http://tomassaraceno.com/projects/on-space-time-foam/>



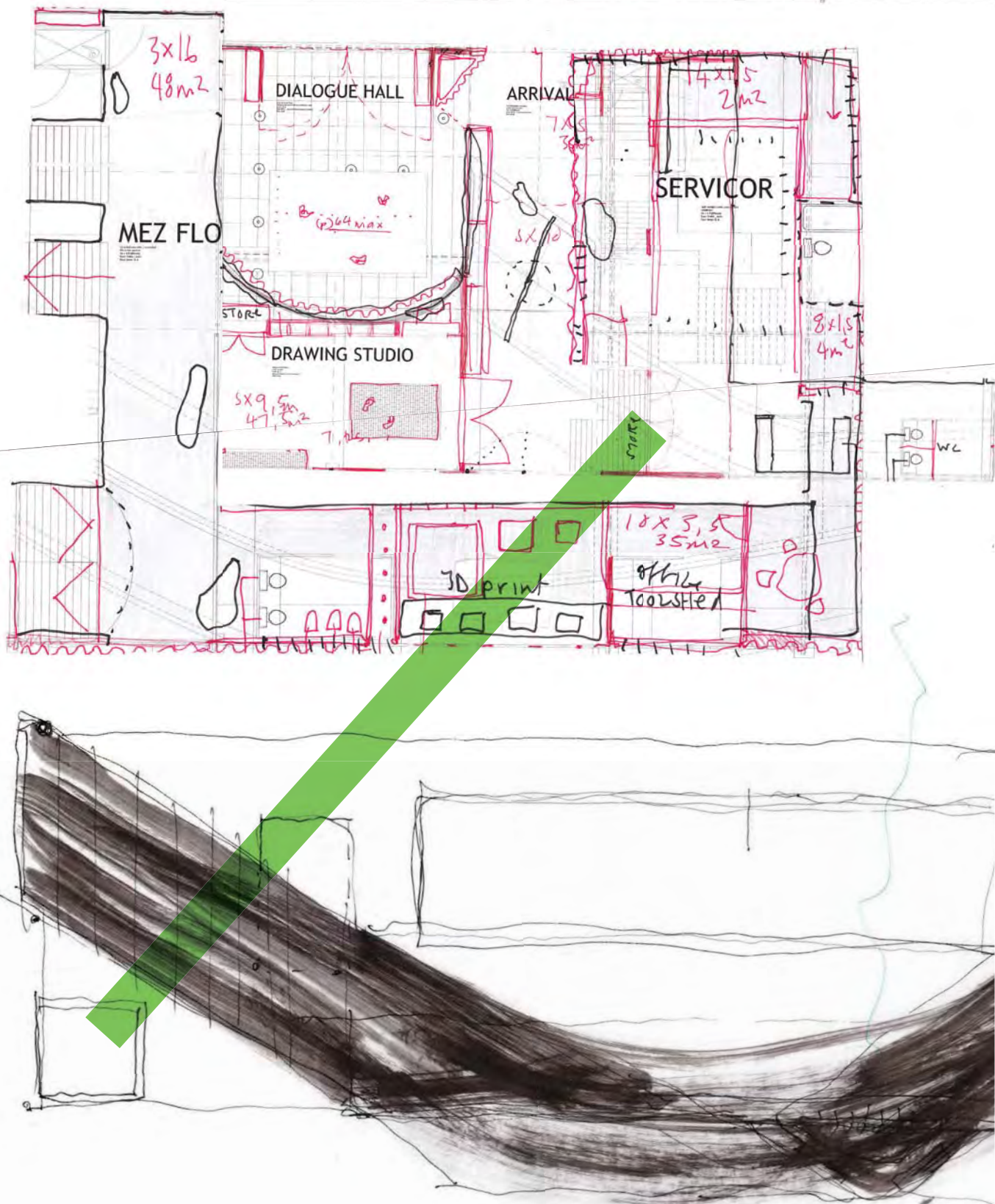
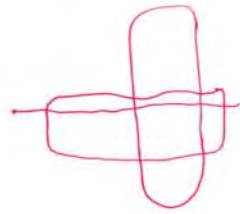


FIGURE 136: Plans in progress, from sketch to print to sketch plans and paint plans reinforcing the branch logic into space.



upstart / movement innovation



BRANCH  
logic  
development



1 (g)



2 (g)



r k f



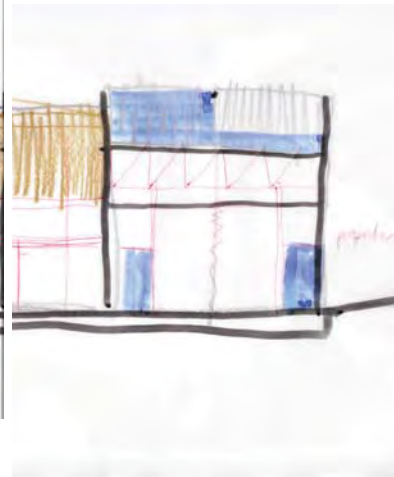
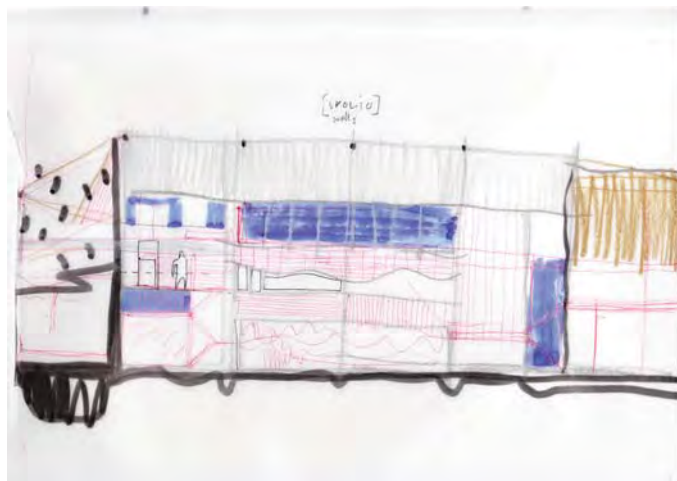
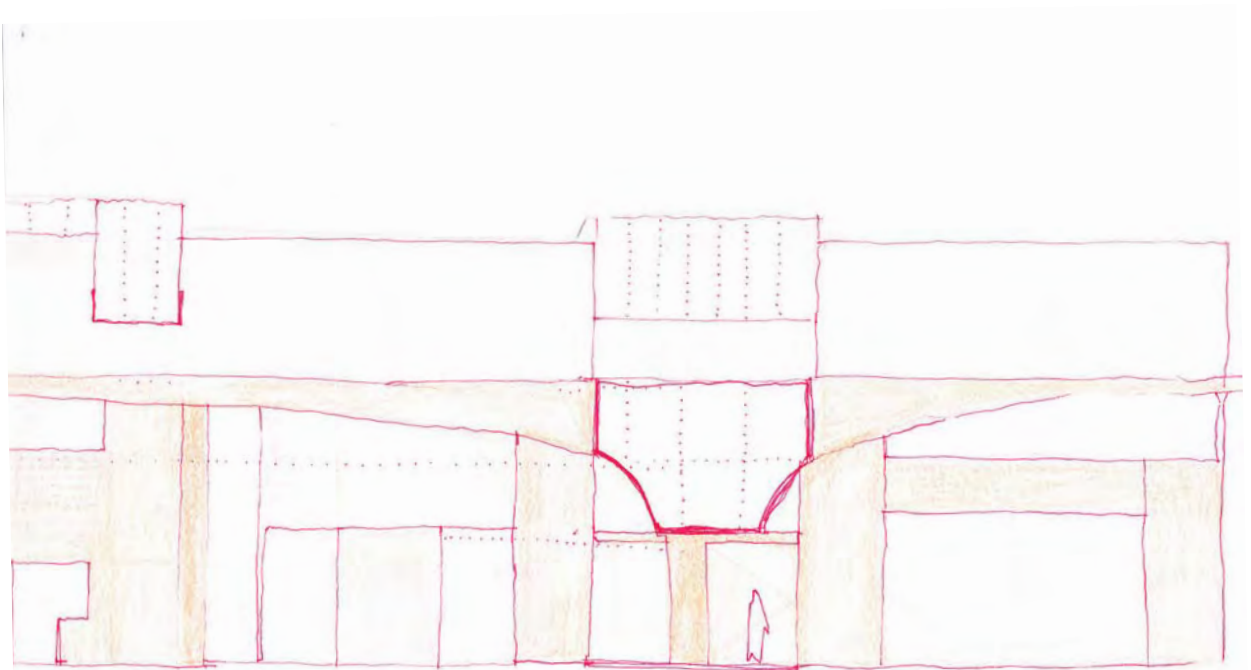
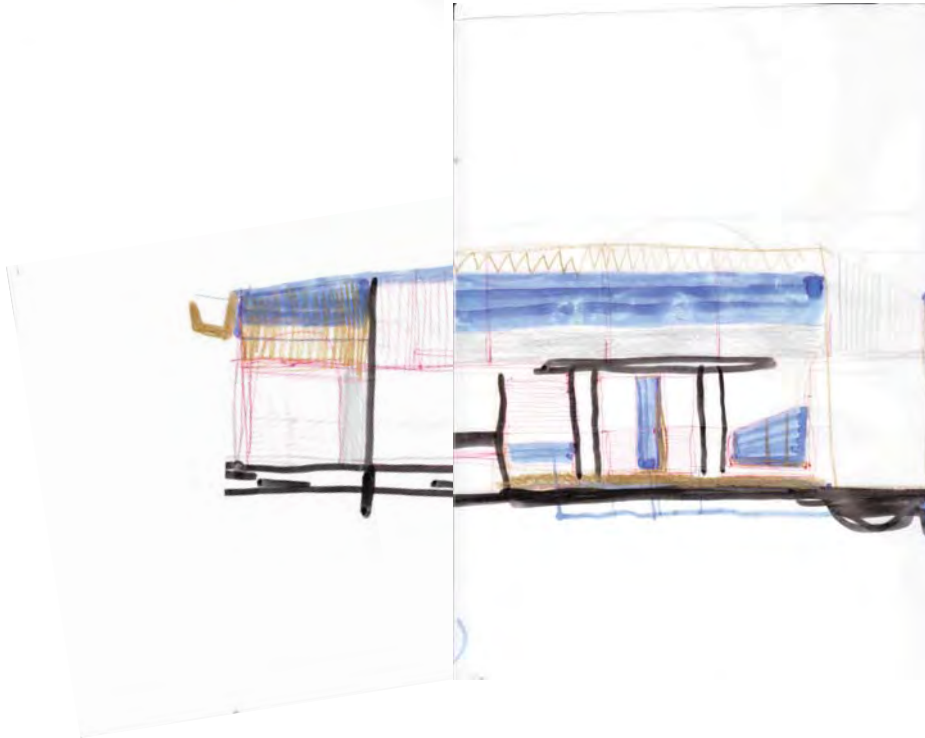


FIGURE 138: Conceptual elevations for the building north and south. Gold represented plastic construction, blue is that of aperture or transparency, red is brickwork and black concrete.





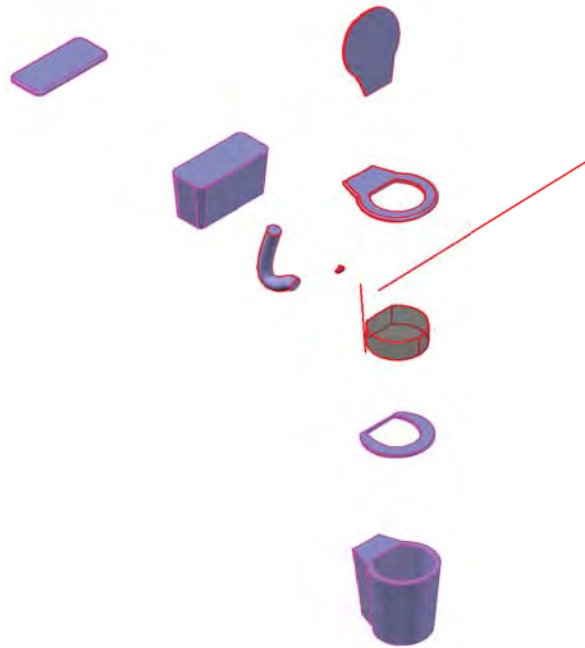
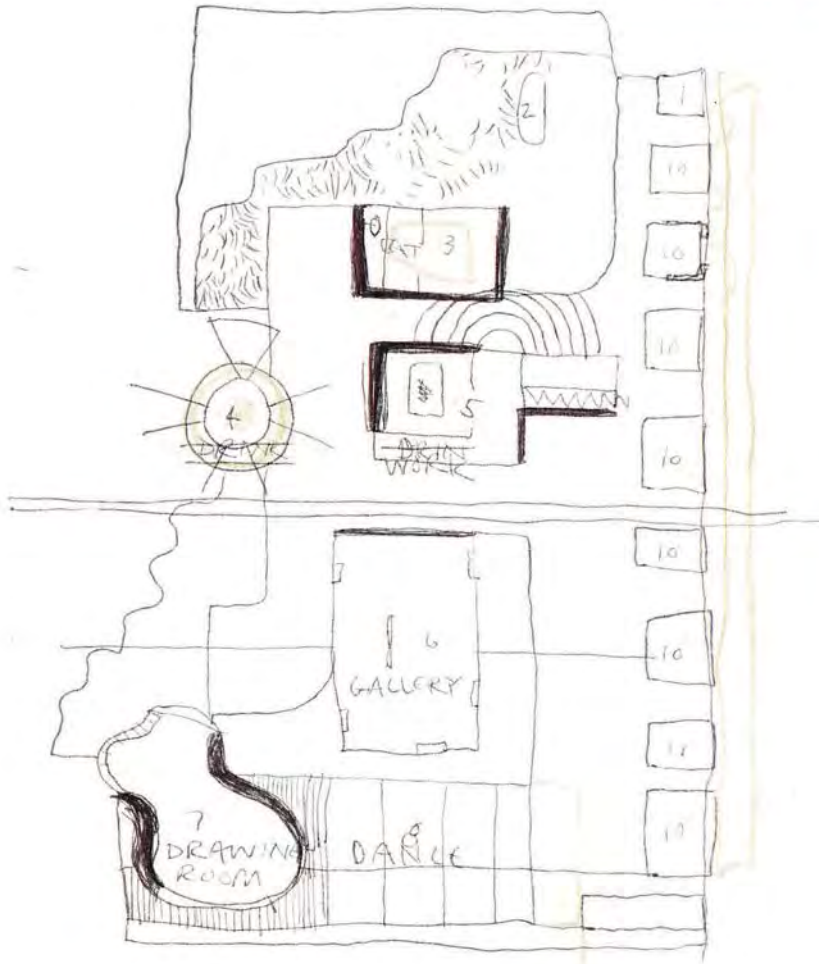


FIGURE 140: Explosion of a cad modelled toilet and explosion of the program of the building.



namiele1970



SPECTRUMS OF  
ARTISTS

- |         |         |
|---------|---------|
| 1 Live  | 9 Eat   |
| 2 Talk  | 10 Live |
| 3 Eat   |         |
| 4 Drink |         |
| 5 Work  |         |
| 6 Meet  |         |
| 7 Make  |         |
| 8 Dance |         |

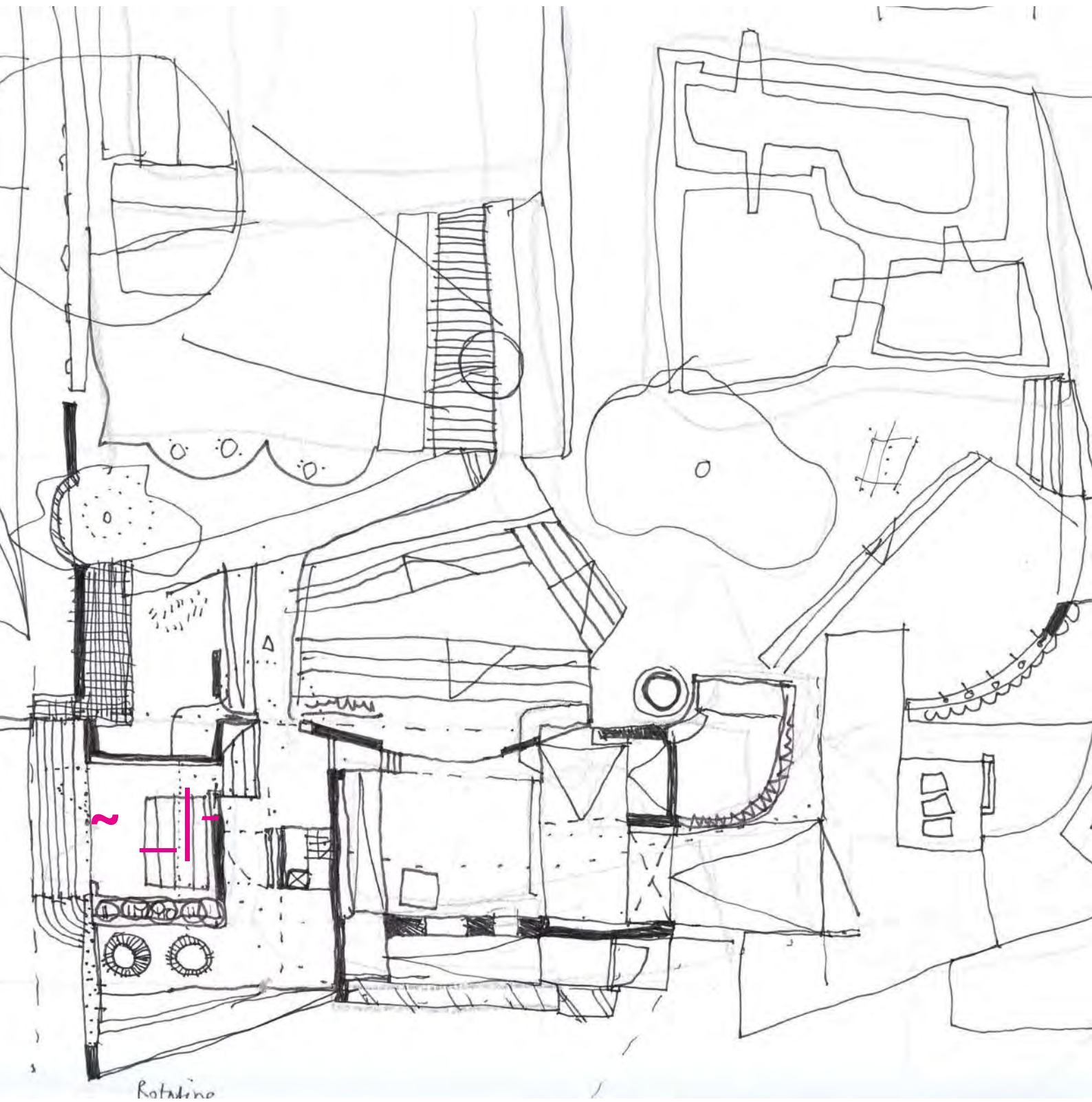


FIGURE 142 : Final sketch plan of the building - after removing the additional portal frame.

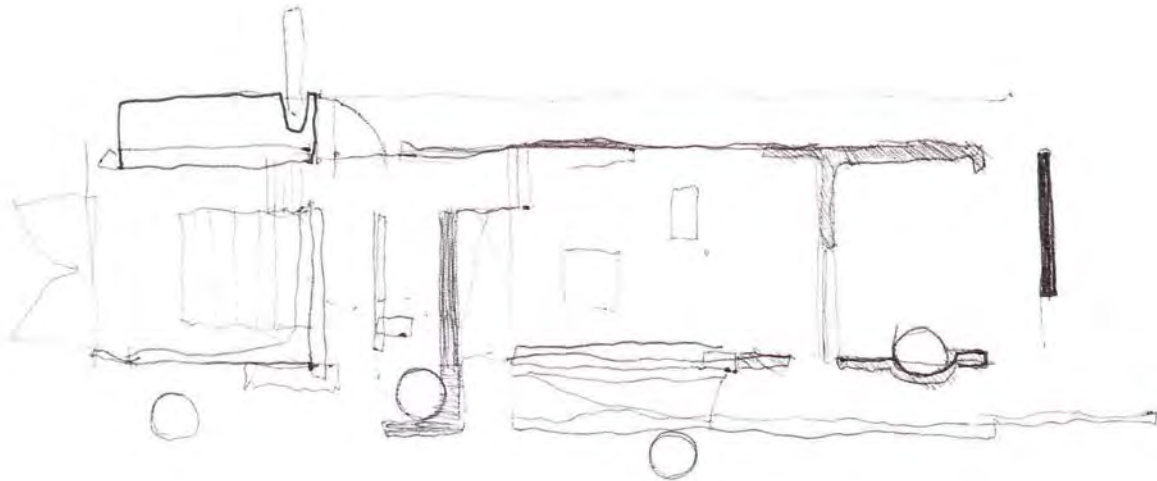
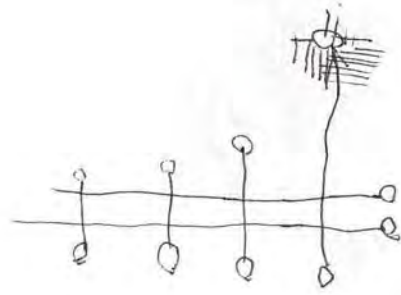
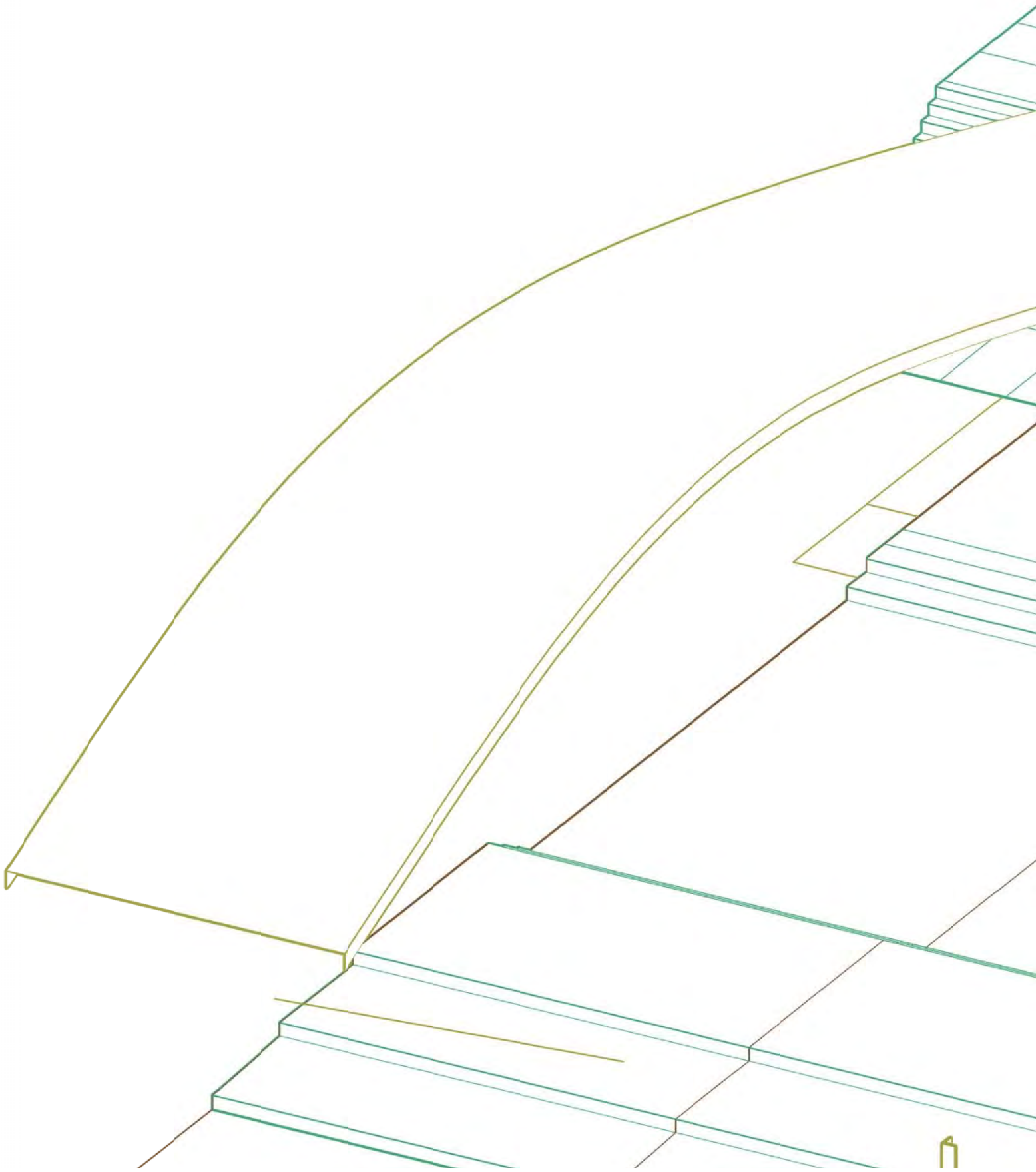
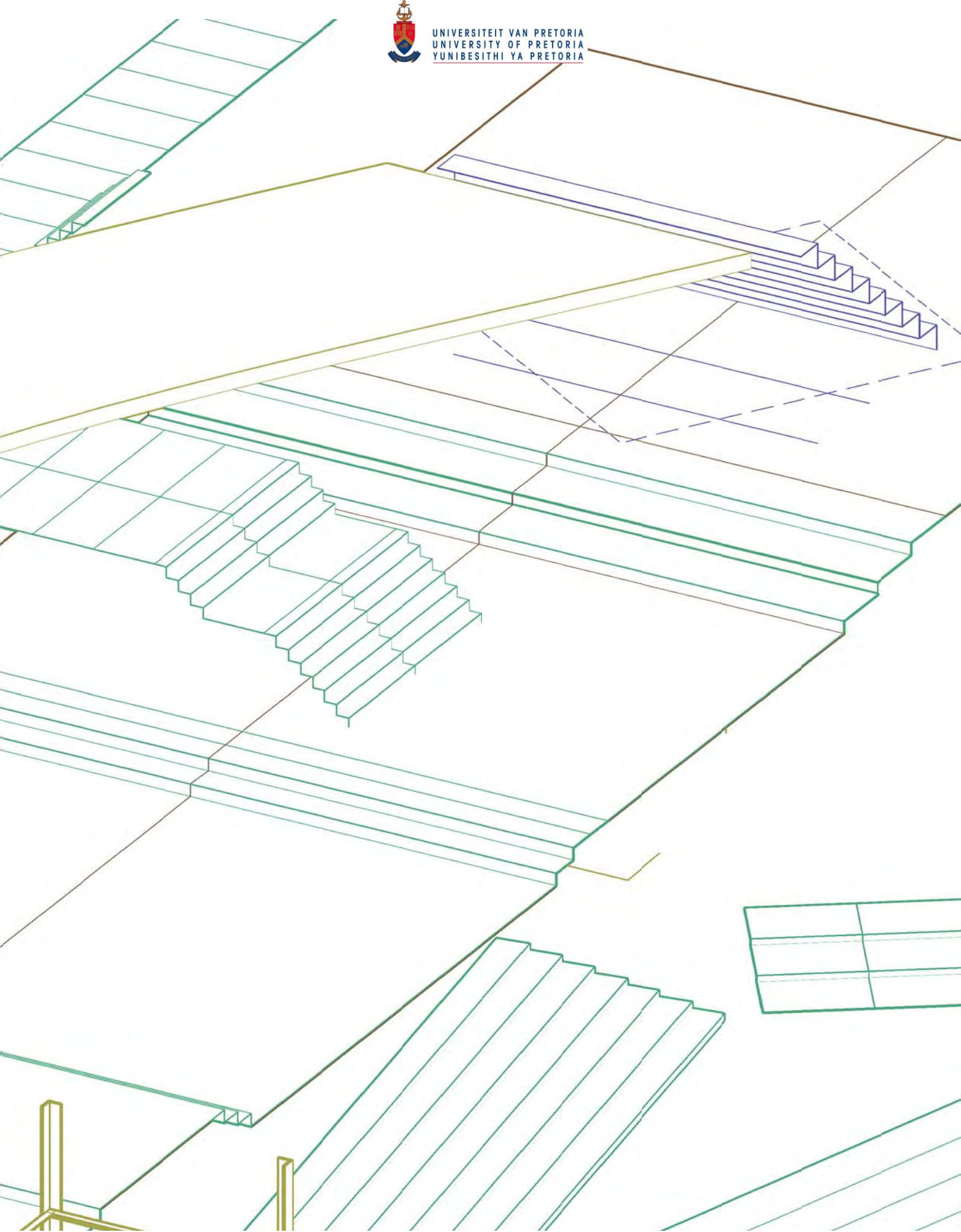


FIGURE 143 : Final partii diagram. sentence of symbols in relation plan spaces.



of the role theatre in relation to the gallery and the beacon structure in the foreground.





*reflecting on rejection*



FIGURE 146a: Artwork by Troy Makaza made of Silicon Syringe extrusions, featured at the FNBArt Fair 2016, photo by IMW, 2016. Artwork by Pedro Pires 'The Inhabitant' made from plastic diesel containers.





# 08. PLASTICITY

## MATERIAL POTENTIALS AND EXPRESSIONS

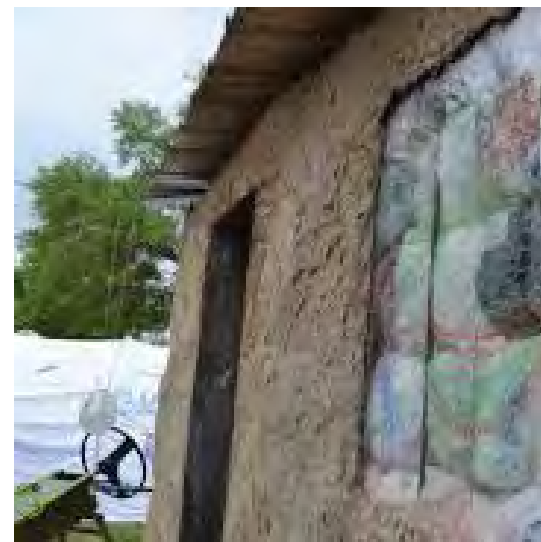
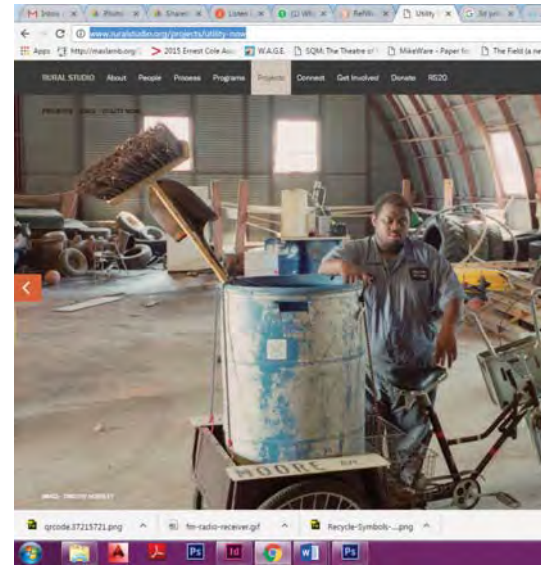




<http://www.ruralstudio.org/projects/utility-now>



FIGURE 148: Shua Architects and their ice cream tub elevated library in Indonesia with Qr code. To the right, Ubuntu Blocks and Rural Studio projects.



## SELECTING PLASTIC

Plastic was eventually selected as the matter of waste. The selection of this material came about quite late in the process of the design. There was always an allusion to waste, which often became misinterpreted as organic waste, with an odour of heavy industrialised processed waste, which had a lot of sound. The plan to the left shows an audial mapping of space, the pink being sound and the black being silence. This map, in essence, represents the linear and collective processes related to all waste before the material of plastic was selected and demonstrates how the physical nature of material relating to waste had very little influence on the design. The project seeks to engage with social and spatial waste and eventually latched onto a material that could embody an aesthetic and accessibility, but could also be an easily managed part of waste.

In the preface of the Birkhauser publication, *Plastics in architecture and construction* [Engelsmann et al 2010:9], the unpacking of plastic as a versatile and incredible material with an incredible history is told; about how it came into being as a replacement for rubber during the industrial revolution and eventually came to be named ‘Kunststoff’ which translates into art dust, or artificial dust, but also goes on to describe how the decline of realisation of prototypes came about during the war and oil crisis periods in the 50s and 70s. However, what is clear from this preface and the publication as a whole is that although plastic has been criticised for its role in damaging the environment, is that it is, in fact, an incredible material that can counter damage to the environment if it were better utilised as material through design.

The reason for building with this material is to let the architecture stand as an exhibition to the disposable excess of waste that is extremely useful and valuable.

On the previous page, is a series of images demonstrating what is just a tiny glimpse into the kinds of material, architecture and construction innovation that is currently taking place on a global level, so much so that when one is to read a book, again by Birkhauser, *Building with Waste* [Hebel et al 2014: 139] it is clear that products like water bottles are manufactured and designed, already modified into a post-life stage for becoming building blocks for houses.

## PLASTIC COLUMN DREAM

This potential of plastic is inspiring, yet if one consults with an engineer or architect today about using plastic as structure, it is imagined to be ludicrous. In an early section on the following page [figure 131], there is a wavy column that was drawn as an art piece of structure, although after consulting with an industrial designer it was clear that such a construction would be incredibly expensive.

This relates to another issue regarding plastic, and that is its main ingredient, which is oil. But if one has to Google ‘the future of plastic’ you find an array of information relating to Bioplastics which is essentially the replacing of oils with natural plant based oils that do not require heavy extraction processes. When the polymer structures of these oils eventually break down, they become biodegradable elements that cause less harm to the planet and its surface.

## PLASTIC PERFORMANCE

The thermal conductivity accordings to SANS is 0.03, the application of the plastics will vary - ranging from insulation using shredded plastic of plastic waste - vs. finished plastic products such as polycarbonates sheeting.

FIGURE 150: Sound and Silence Plan, IMW 2016.

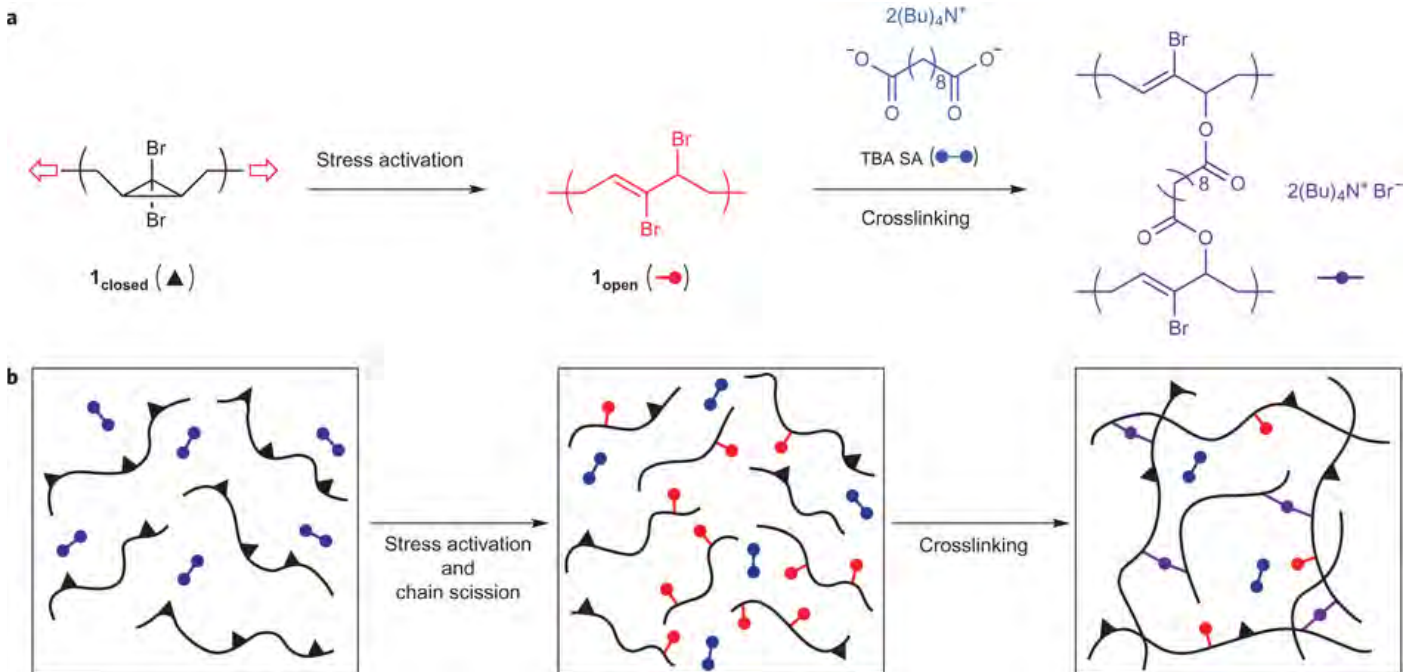


The greatest material concern relating to plastic is its vulnerability to fire. Although there have been and continue to be developments in plastics in relation to this concern [Engelsmann 2010: 76]. This issue will be address in the specifcations of materials of plastic, access to safe and fast exits but also to selectively and strategically select the position of the material and its relation to water, which completes the conceptual attitude through to a technical spatial execution where the relation to the element of water can be dictated by the relation to codification which the measurable standards commonly used in practice.

## PRECIOUS PLASTICS

A recent project by Dave Hakkens called 'Precious plastic' demonstrates with incredible elegance the ease and art of recycling, whether it be considered as upcycling or downcycling is debatable, however the project succeeds in it is accessing a part of waste and bringing it to 1:1 level of replication. With his online blueprints of how to construct each of the machines you see on your right [Figure 138], all an individual needs to do is find a way to make them ie. Funding and Materials. All the information is there, available and reproducible. It is this kind of attitude that this architecture would like to facilitate, not only by physically inserting these machine into the spatial context of the makers spaces, but also architecture as an embodiment of this idea that it can function as a machine that can be made at home - thus becoming a type of book of space and materiality that gives knowledge and information that can be applied elsewhere to the benefits of others - this is an ethic which the author afterall believes architecture could be more proficient in - a fluent communicator of architectural mechanisms, constructions and realisations.

FIGURE 152: Image of Precious Plastics machines from the website of Precious plastics (Precious Plastics, 2016).Figure 143: is of the molecular structure of plastic. <http://www.extremetech.com/wp-content/uploads/2013/08/nchem.1720-f1.jpg>



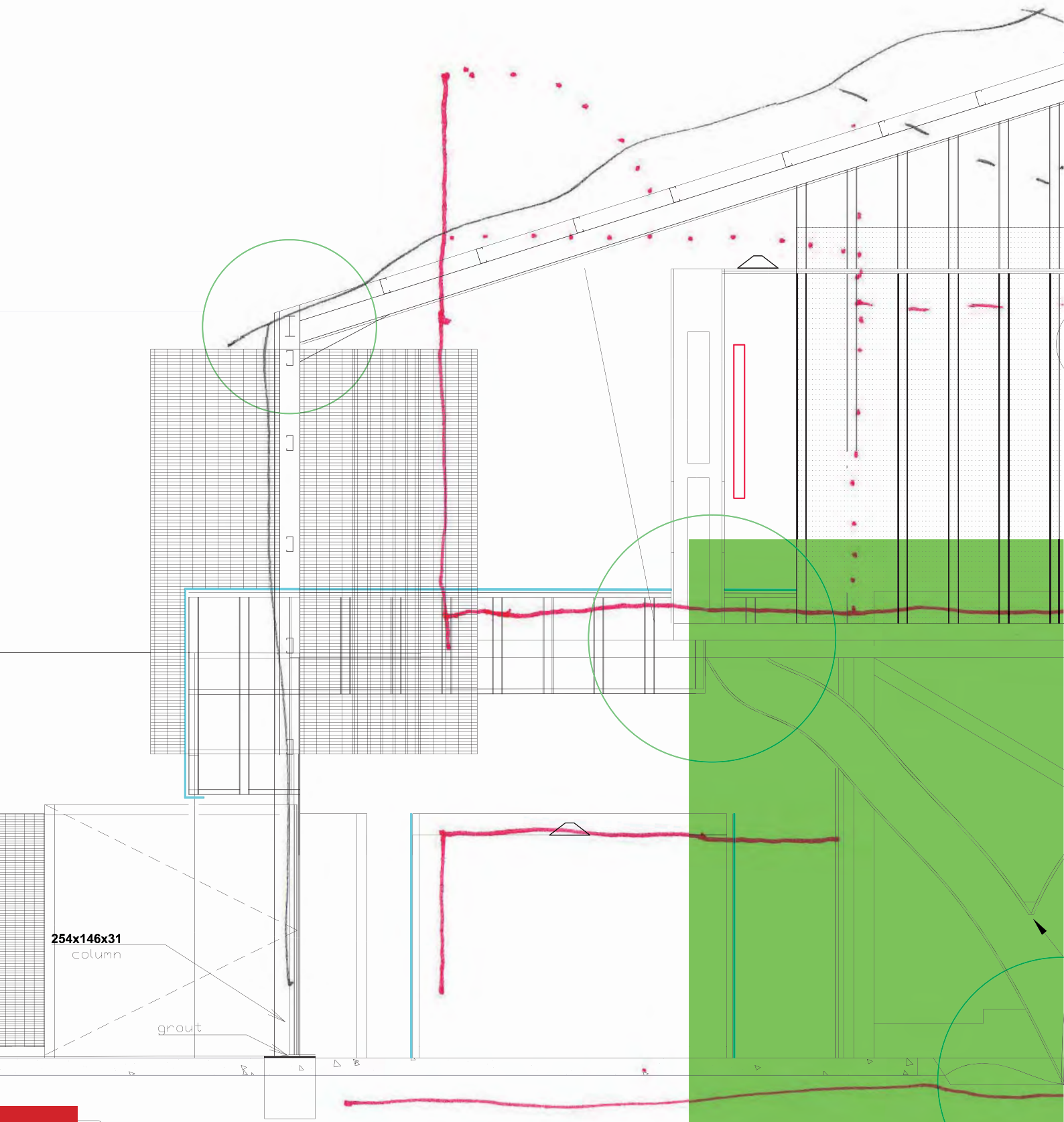
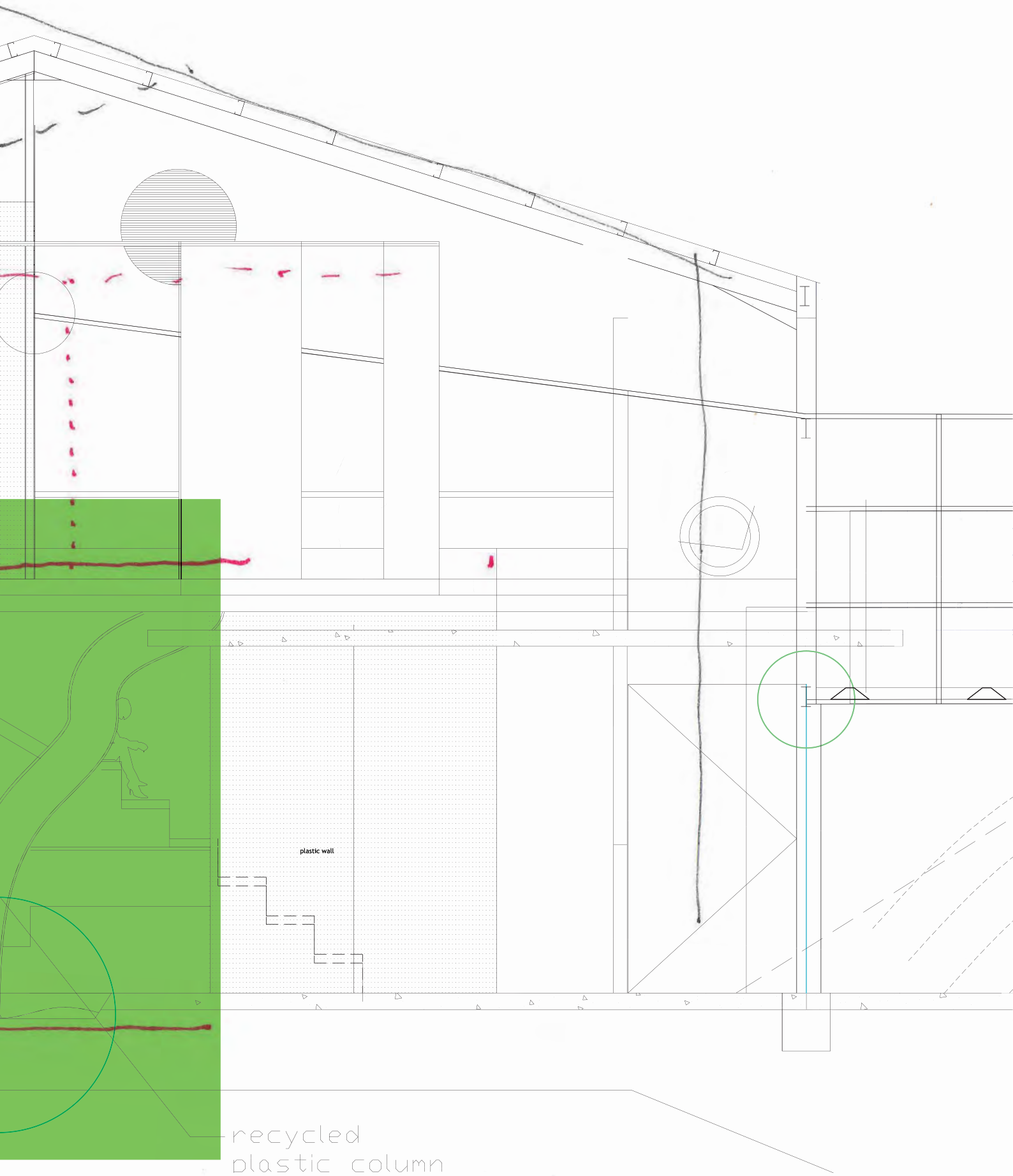


FIGURE 154: Section in progress of the shed with gallery insertion and the imagined recycled plastic column of wavy form





recycled  
plastic column

recycled  
plastic column

|    |                                                           |                   |
|----|-----------------------------------------------------------|-------------------|
| 8  | <b>SB2 Address</b>                                        |                   |
| 9  |                                                           | 0                 |
| 10 | <b>SB3 SBAT Graph</b>                                     |                   |
| 11 |                                                           |                   |
| 12 |                                                           |                   |
| 13 |                                                           |                   |
| 14 |                                                           |                   |
| 15 |                                                           |                   |
| 16 |                                                           |                   |
| 17 |                                                           |                   |
| 18 |                                                           |                   |
| 19 |                                                           |                   |
| 20 |                                                           |                   |
| 21 |                                                           |                   |
| 22 |                                                           |                   |
| 23 |                                                           |                   |
| 24 |                                                           |                   |
| 25 |                                                           |                   |
| 26 |                                                           |                   |
| 27 |                                                           |                   |
| 28 |                                                           |                   |
| 29 |                                                           |                   |
| 30 |                                                           |                   |
| 31 |                                                           |                   |
| 32 |                                                           |                   |
| 33 |                                                           |                   |
| 34 |                                                           |                   |
| 35 | <b>SB4 Environmental, Social and Economic Performance</b> | <b>Score</b>      |
| 36 | Environmental                                             | 3.7               |
| 37 | Economic                                                  | 4.4               |
| 38 | Social                                                    | 3.7               |
| 39 | <b>SBAT Rating</b>                                        | 3.9               |
| 40 |                                                           |                   |
| 41 | <b>SB5 EF and HDI Factors</b>                             | <b>Score</b>      |
| 42 | EF Factor                                                 | 3.8               |
| 43 | HDI Factor                                                | 3.9               |
| 44 |                                                           |                   |
| 45 | <b>SB6 Targets</b>                                        | <b>Percentage</b> |
| 46 | Environmental                                             | 74                |
| 47 | Economic                                                  | 88                |
| 48 | Social                                                    | 75                |
| 49 |                                                           |                   |
| 50 | SB7 2015                                                  |                   |

FIGURE 156: SBAT diagram of the current project [Materials not yet concluded] and on the right is an early Sefaira Model data output of the project.

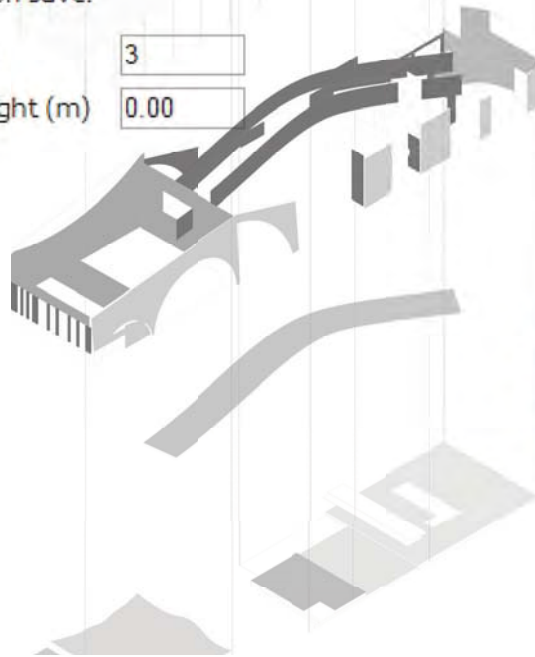


| Floor    | Floor Area                |
|----------|---------------------------|
| 1        | 363 m <sup>2</sup>        |
| 2        | 530 m <sup>2</sup>        |
| 3        | 4 m <sup>2</sup>          |
| 4        | 26 m <sup>2</sup>         |
| 5        | 40 m <sup>2</sup>         |
| 6        | 101 m <sup>2</sup>        |
| 7        | 2 m <sup>2</sup>          |
| 8        | 1 m <sup>2</sup>          |
| 9        | 1 m <sup>2</sup>          |
| <b>3</b> | <b>1,148m<sup>2</sup></b> |

**Need to change Floor-to-Floor Height or Number of Floors?**

Select which to update and we'll calculate the appropriate corresponding value on save.

- Number of Floors
- Floor to Floor Height (m)



**Massing Height:** 11.61m  
**Floor to Floor Height:** 0.00  
**Floors:** 3

## ENVIRONMENTAL REQUIREMENTS

The following images are related to the environmental studies of the building. The Sefaira studies resulted in a high energy building, which if one is to refer to the design chapter [REVEAL] there is an additional building which was initially proposed to house the process of shredding. This decision was later decided scrapped because of the way in which this building embodied the very problem which the author sought to make an argument against: of building small, temporary, and activating existing spaces - upcycling space - an updated Sefaira model is still to be added to evaluate the performance of each space developed by the

concepts. However, to the left is a screen shot of an updated SBAT report of the building project. There is still some information missing from the report regarding materials, as the process of specifying is currently underway. However, what is clear from the SBAT diagram is that the location of the project is highly beneficial to its operation whilst the proposed urban framework of connection and relation to other architecture projects.

The building also responds to the SANS codes by making sure apertures are 15% of floor area and actively reduces the existing wide shed footprint from 16m to the SANS recommended width of 10m see plans. Performances of walls, windows, roofs and floors meet requirements through the specification of materials, which as stated is still underway.

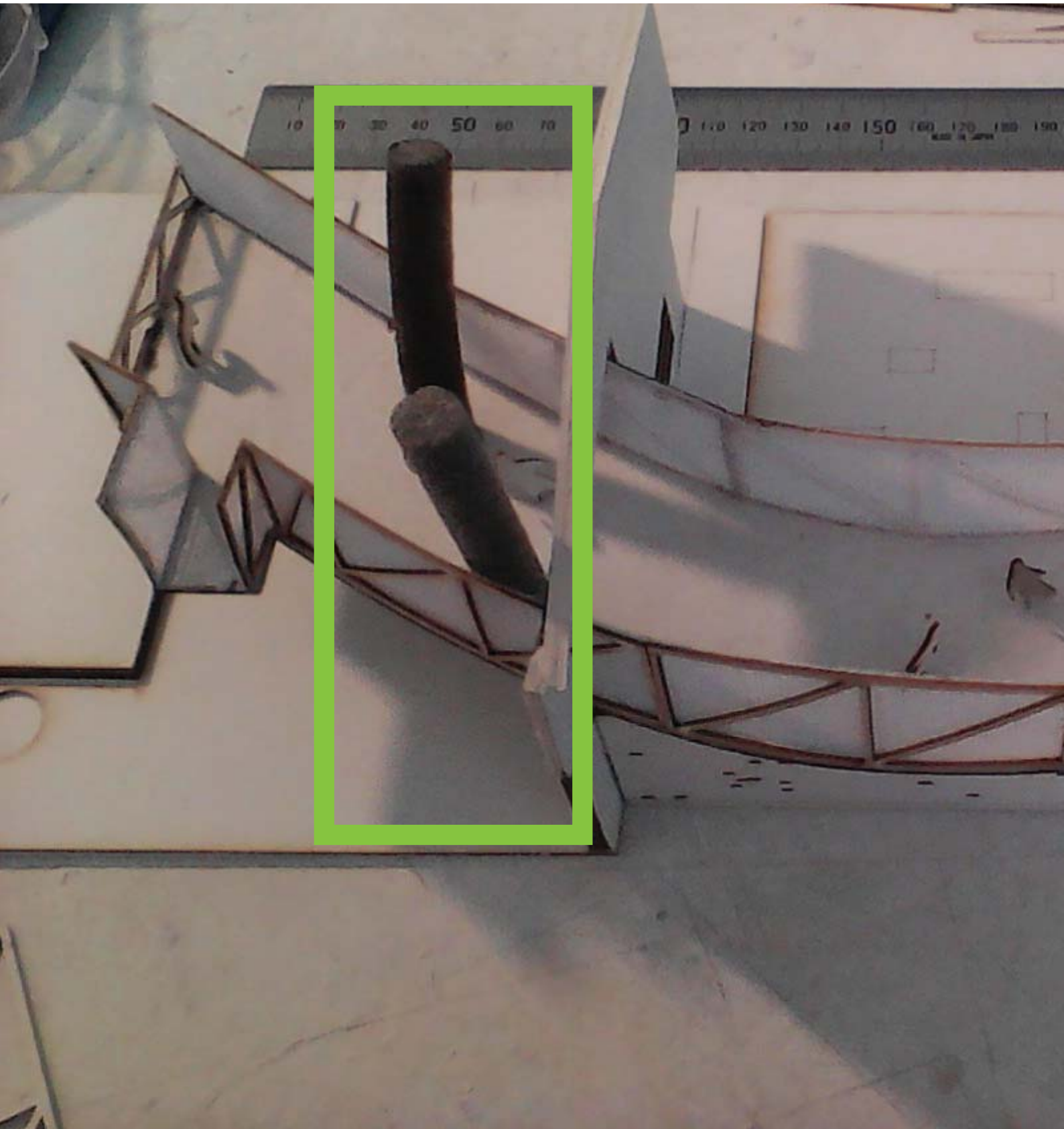
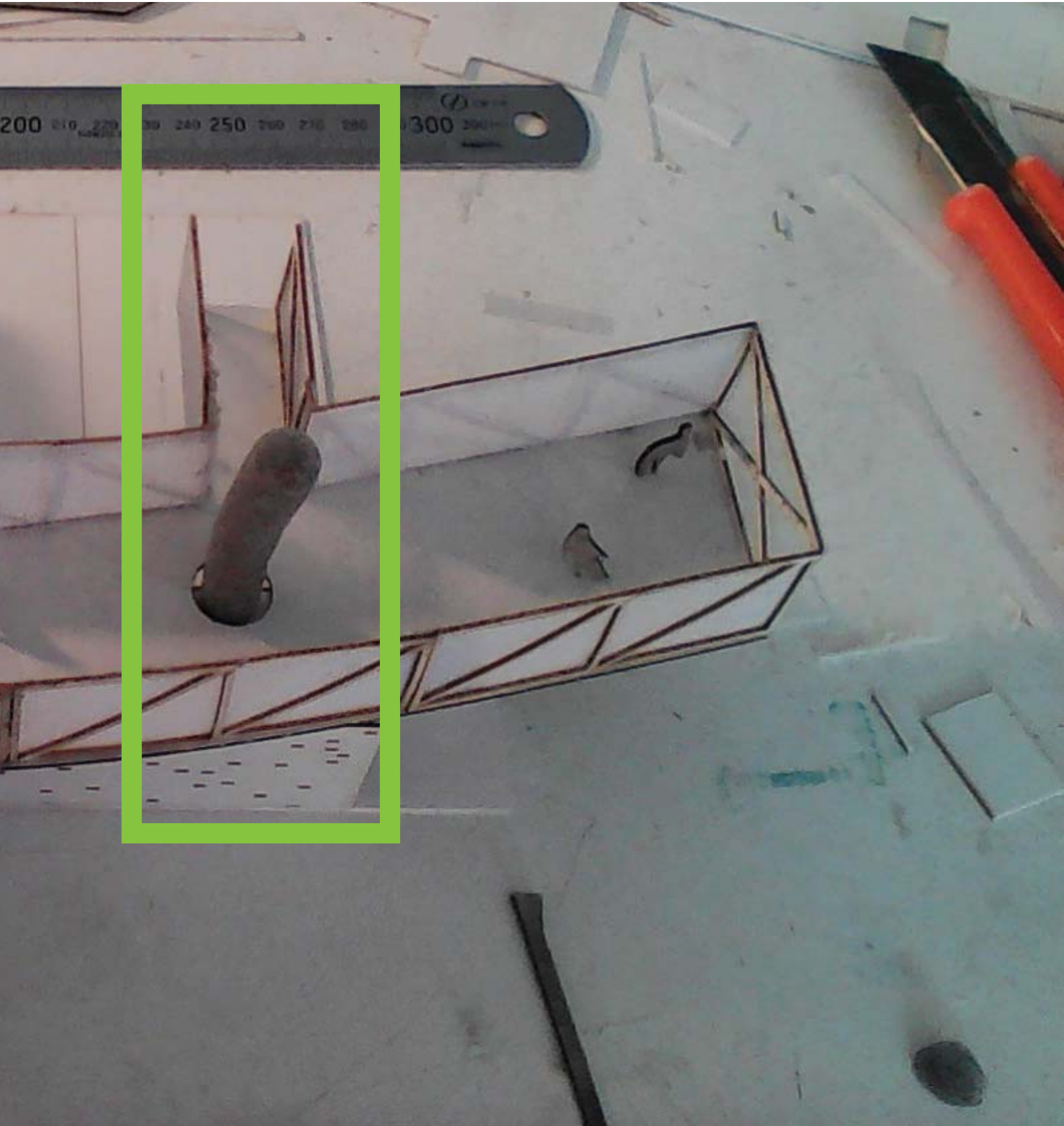


FIGURE 158 Photograph of final detail model suring construction demostrating here the piercing of the plastic columns





# PLASTIC COLUMN

EXPLOSION DETAIL TOILET / plastic column

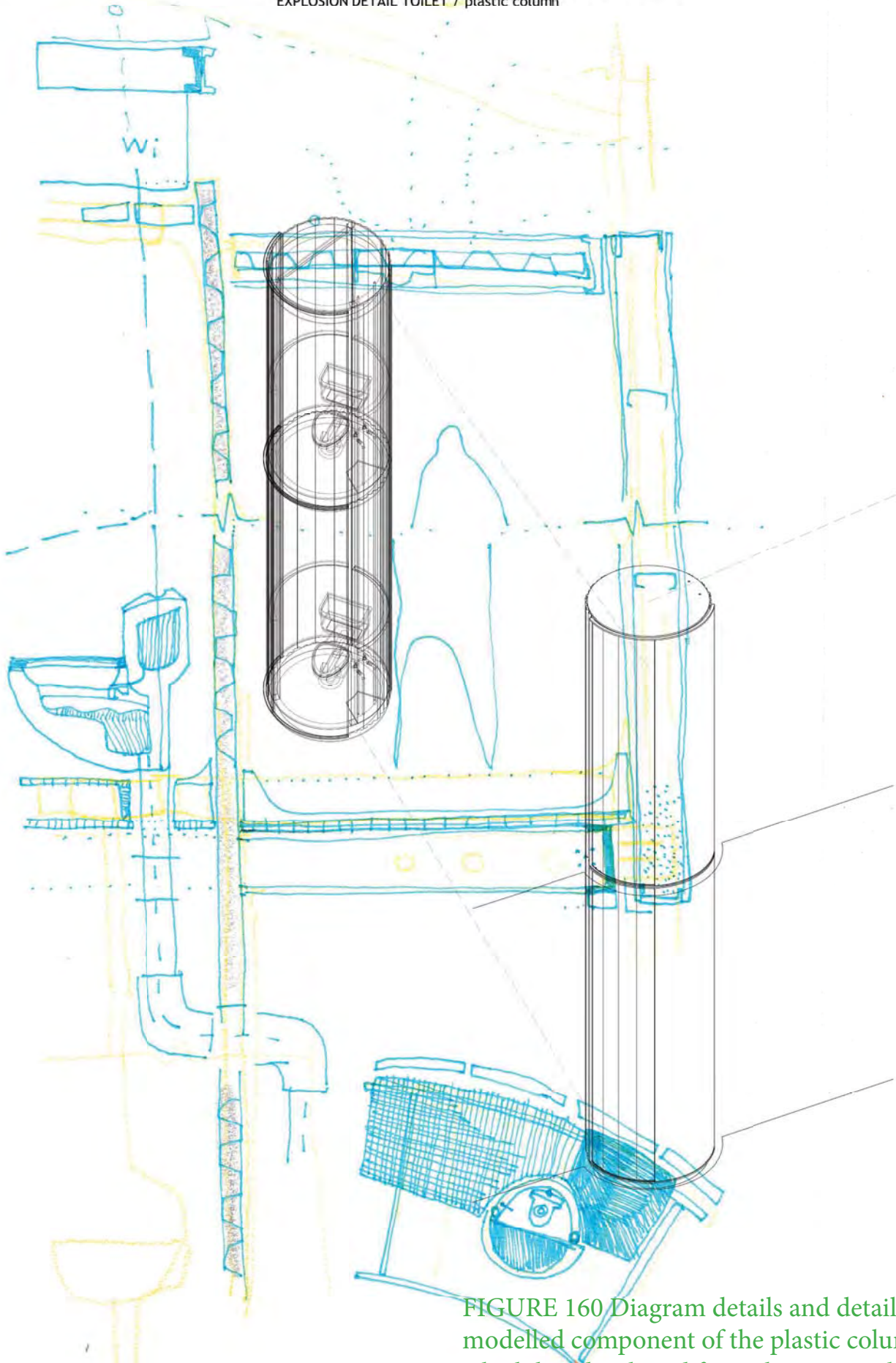
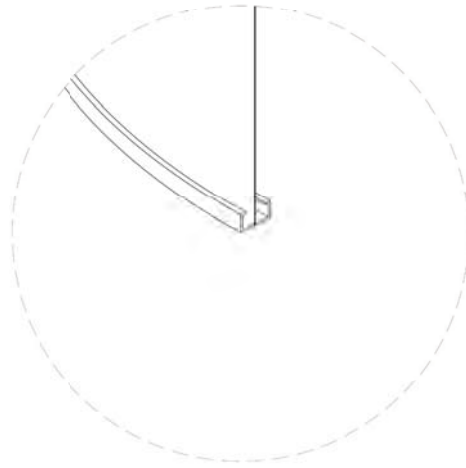


FIGURE 160 Diagram details and detail modelled component of the plastic column which has developed from the sectional waving form into a functional space of waste dialogue relating to water waste literally.



sliding door detail

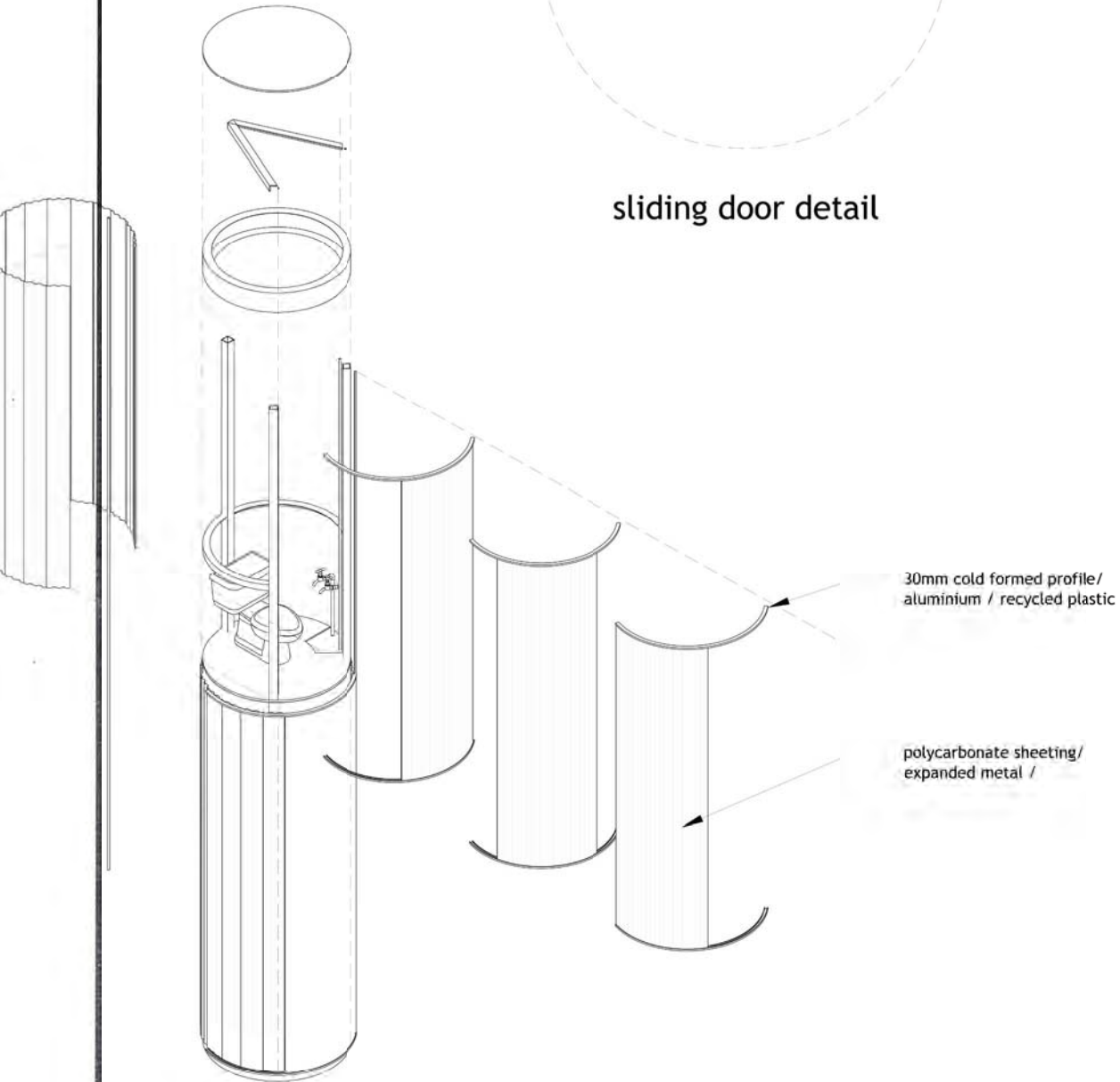




FIGURE 162 Edited perspective drawing of the POO STOEP space where the building quietly opens to the south for events and again make a beautiful exhibition of the toilet.

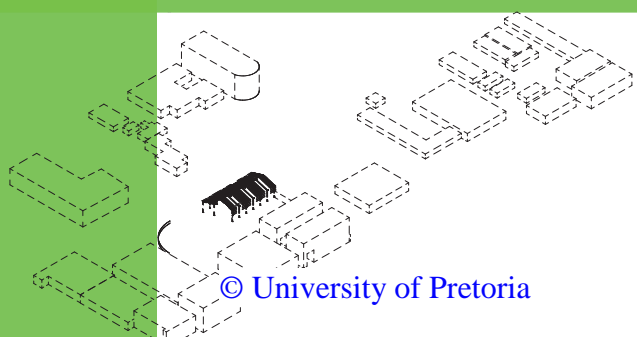
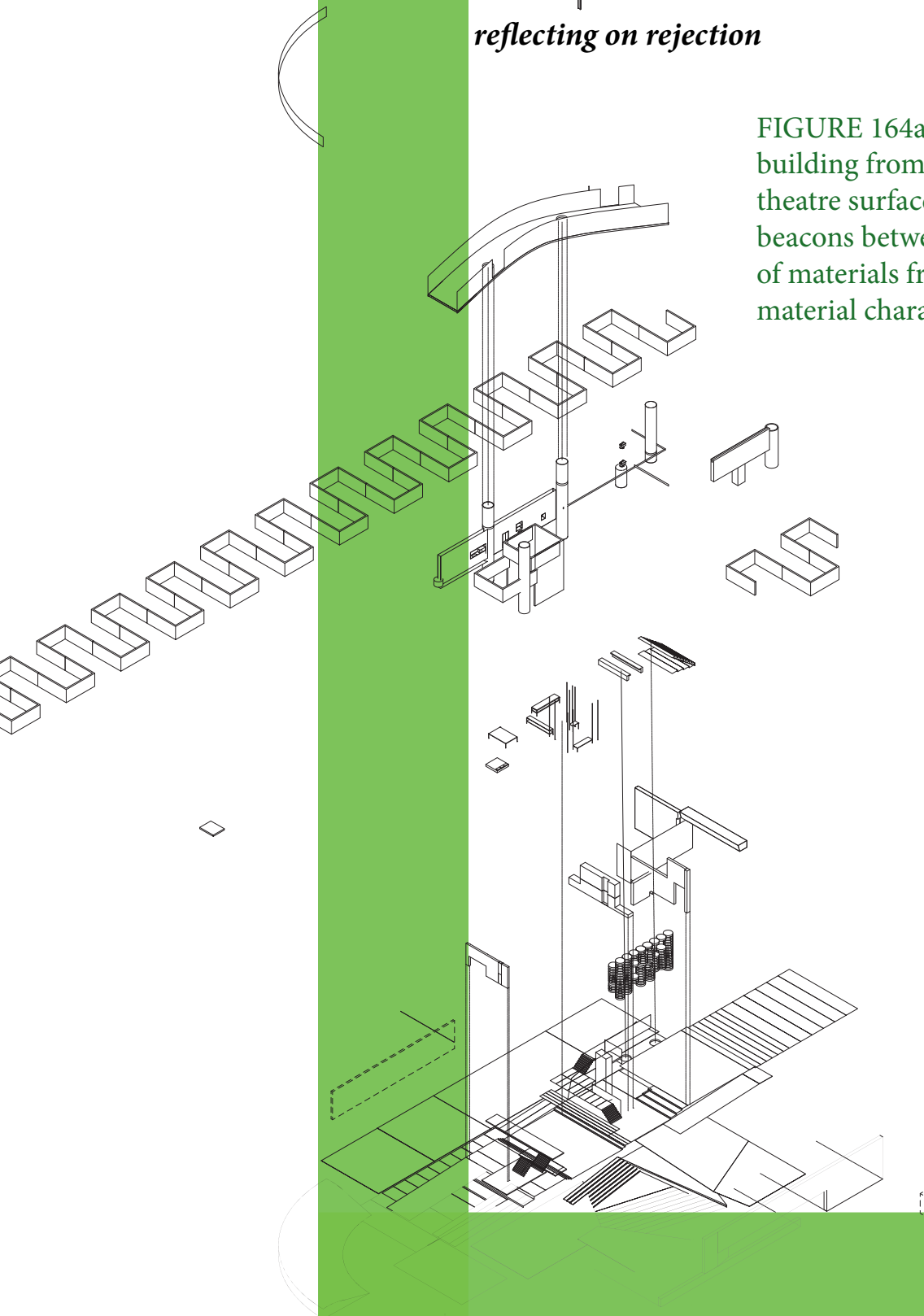






*reflecting on rejection*

FIGURE 164a: explode axo diagram of the building from gallery at the top to the role theatre surface and the bottom and the wall beacons between. 136a: Synthesis diagram of materials from existing typologies and material characteristic in Silverton.



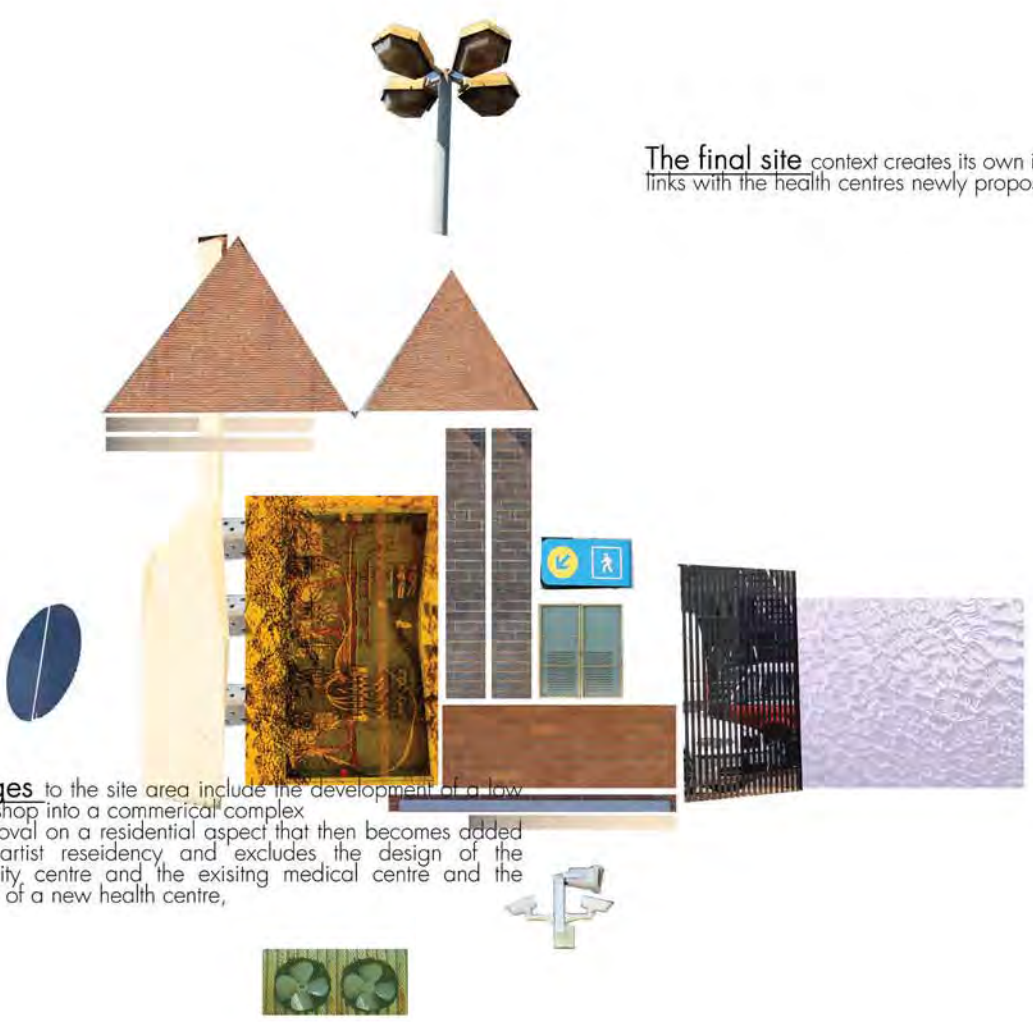


# 09. SYLLOGISM

## SYNTHESIS OF EXCHANGE

The final site context creates its own inner courtyard that links with the health centres newly proposed sport facilities

Changes to the site area include the development of a low density shop into a commercial complex. The removal on a residential aspect that then becomes added to the artist residency and excludes the design of the community centre and the existing medical centre and the insertion of a new health centre,

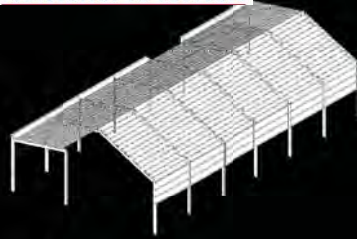


# TECTONIC ORDER



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA

transform



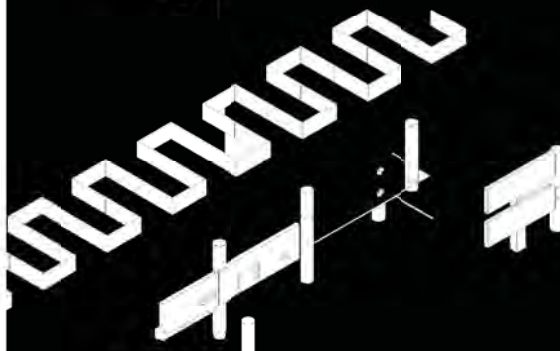
beacon



gallery onto



plastic column



walls



role theatre

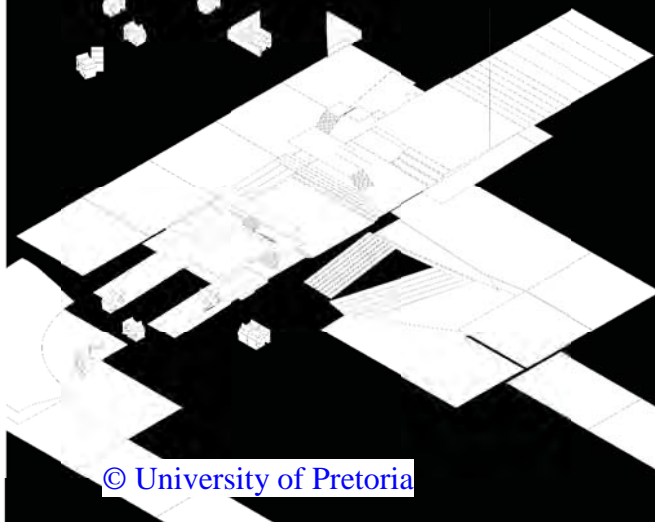


FIGURE  
166 Tectonic  
explosion of  
building as part  
of construction  
strategy

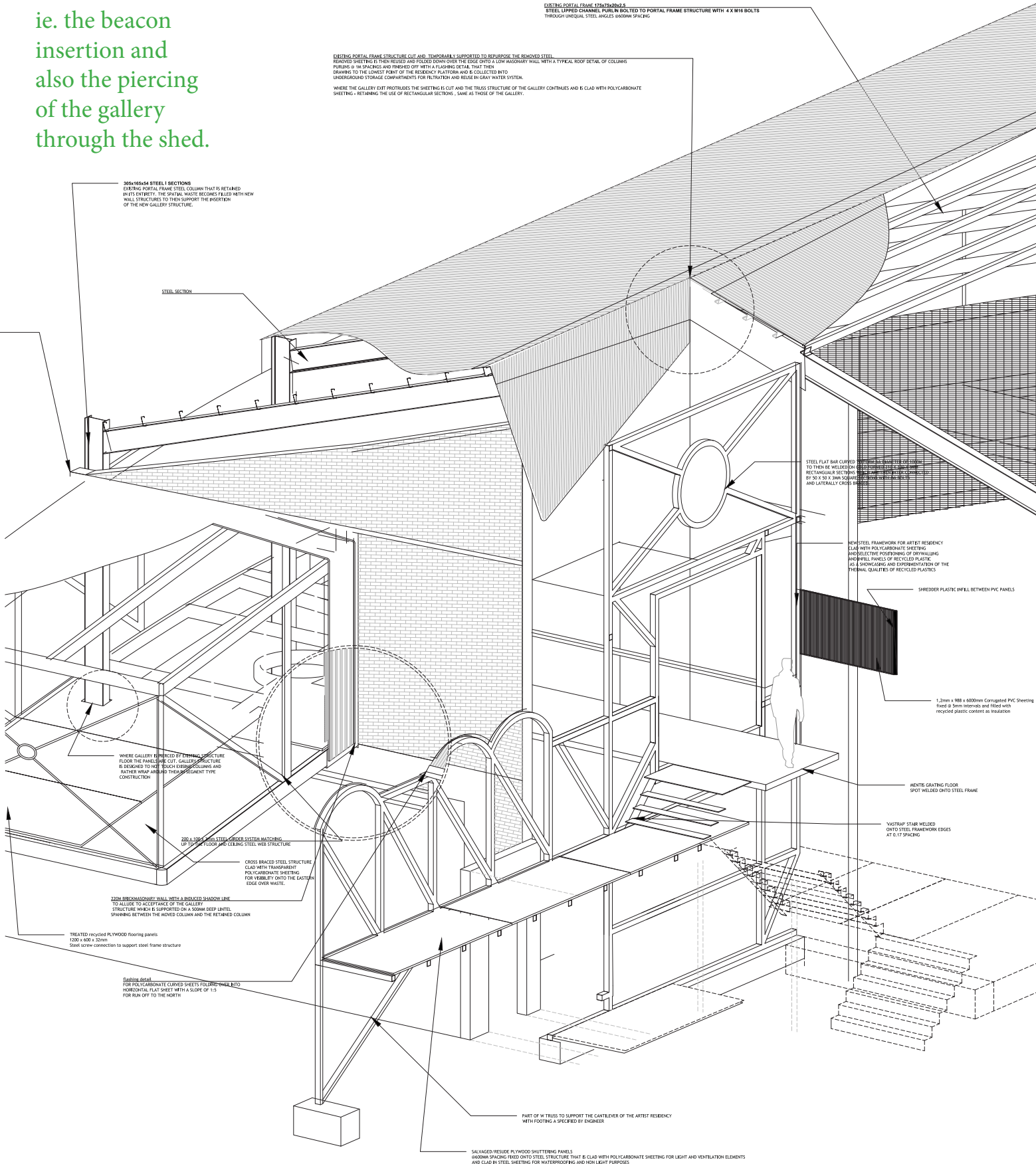


FIGURE 167  
The culmination  
of waste value  
through 3d axo  
detailing the  
moment of waste  
transformation  
ie. the beacon  
insertion and  
also the piercing  
of the gallery  
through the shed.

# THE BEACON

a culmination of values

1:20





' ARCHITECTURE IS WASTE IN TRANSIT ' PETER GUTHRIE

*The Plastic Column*

Architecture continues to take on the interpretation of social, environmental and spatial issues. This dissertation situated itself within the issue of waste within all of the above and sought to explore and extrapolate an architecture of code ; codification of space according to social values relating to waste.

**SOCIAL WASTE:**

The context of Silverton is defined as the landscape of social waste - a place which is neither industrial nor suburban nor residential nor religious nor commercial yet all of the aforementioned. This is a context which is already facilitating the production of waste at all scales and all spectrums, yet this is also the space that is perceived as a wasteland - a buffer zone - an in between - a drive through - yet the author argues that this is this is the INVISIBLE DESTINATION - a spatial condition which the author argues, ART has the potential to transform and therefore the program of an art residency aims to facilitate the unfolding of spatial potential in a place - injecting event and information - the most consumed aspects of the everyday human existence - as a means of revealing potential and addressing the identified attitudes towards waste. Rejecting , reflecting and accepting waste value is what the architecture seeks to facilitation through the concepts of beacon, role theatre and frequency.

**WASTE :**

The material of waste was identified from the start as a valuable resource not only in terms of potential energies but as a generator for design decision making. Finally the material of plastic was selected as the material by which to explore design and structural potentials and make architecture for and from.

The plastic column [above iteration one] emerged - exploring what it meant to use a material associated strongly with waste [the pacific gyre] in architecture. Was it to be as image and representational ? Was it to be material ? The first plastic column existed as a luxurious and expensive extrusion of plastic - commenting on manufacturing methods and also the future of plastic - its structural development [grp profiles] as well as its more environmentally conscious development [Bioplastics].

However finally the plastic column manifests itself in the spatial exhibition of the TOILET> the space of human waste creation also the space most renowned for its waste of water. The architecture continued to explore how space can bring forth the needed dialogue relating to social, spatial and environmental issues - and instead of manifesting itself in material form concludes in doing so through spaces of facilitation of dialogue that can address narratives of waste culture.

**SPATIAL WASTE:**

The INVISIBLE DESTINATION as a spatial condition is that which has resulted in a dispersed and inconsistent collection of attitudes to value of waste - the building seeks to unify those into one place and seeks to also serve as typological formula for all places of this type of codified spatial condition. And so through the conceptual approaches spatial strategies were developed for an architectural response to come about.

The architecture is housed within an existing portal frame shed - lost transactional potential of a community serving suburban block - and as an approach to spatial waste the architecture transforms the shed slightly so that onto this INVISIBLE DESTINATION the BEACON can be housed.

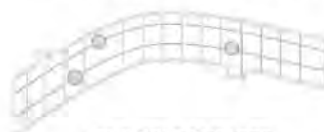
**THE BEACON:**

The invisible destination has inserted into it the waste of its context in the form of an artist residency attached to a spatial condition.



**THE FREQUENCY:**

The beacon now inserted into the invisible destination brings about a social activation of spatial waste through the gallery space, where art becomes the mediator between creation and destruction.



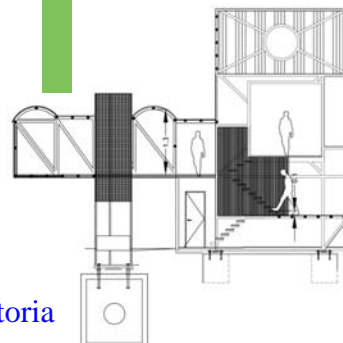
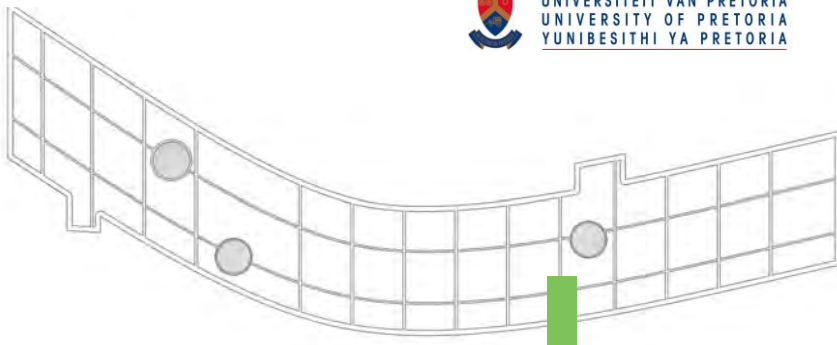
**THE ROLE THEATRE:**

The facilitation of dialogue between all attitudes of waste for the transformation of waste to occur of a non-physical level.





FIGURE 169  
Diagrammatic unpacking of theory, concepts and value onto the space. Beacon accepting waste on the eastern edges and through the gallery of frequency reflection of waste value then spatially concludes in the role theatre which rejects value stigmas through dialogue and opens to the west as a allusion to this excretion of waste concepts.





# AGGREGATE SYNTHESISING

AGGREGATE refers not only to the association to plastic shredding' physical attributes that resemble that of sand but also to the part of the construction, which is concrete.

Concrete has immense environmental consequences on water, considering that there is a legal requirement for it to be made with potable water, which entails in a world where access to water is a major concern, that a glass of water is taken away from a living being for the making of concrete. Man has allowed the process of making to non-directly affect another human being. Rather than ensure there is enough drinking water for the world, we are concerned about the water of an inanimate object. It may be argued that concrete in its finished form has the ability to then provide water - say it becomes a giant bucket to capture water with - when it rains, but by the time the rain should come, all the water reserves have been used to build concrete buckets- the scenario seems fictional but all things are when we consider the futures we imagine and have.

Aggregate then not only touches on the physical aspects of matter wasted, which has been an informant throughout this dissertation, but the notion of aggregate also refers to various parts and particles of this document. This includes the issues to the theories to the concepts all the way through to the design and material unpacking which now, in this final chapter of the synthesis of architecture, sees all the parts of a project mixed together to pour out the final sculpture of the building.

The plastic method of synthesising, abundant in the methods of doing so, also relates to the aggregate nature of elements of the built environment and also construction matter, such as concrete.

Thinking about the construction of the building which often comes too late and if anything this has been a slow process of discovering the language of

architecture. From the start the building wished to speak a language of the industrial typology, that being the initial reason for trying to reconstruct a second portal frame adjacent to the existing on, however later when then smallness was retained and controlled again it was simpler to let the industrial shed typology speak in juxtaposition, contrast and other linguistic methods to the insertion of the beacon and the frequencies and their relation to the role platform.

The technification of the building began like most things in this dissertation, a set of lines and abstract clouds on information that then through processes of drawing became balanced and grounded.

## ACCEPTING WASTE AS AGGREGATE FOR THE PURPOSE OF BEACON

### WASTE AS MATTER:

Walls constructed from polycarbonate and filled in with varieties of plastic waste and shreds.

## REFLECTION WASTE AS AGGREGATE FOR SOCIAL TRANSACTIONS RELATED TO FREQUENCY:

### WASTE AS PEOPLE

## REJECTING WASTE AS AGGREGATE FOR CONSTRUCTIONS OF THE ROLE THEATRE

### WASTE AS SPACE

Where waste is about language, consciousness and not the materiality. Other means of waste construction to be utilised. Like reused wood from concrete shuttering and a tire wall as a reference point of dialogue of other potentials of waste not specifically related to plastic, despite its relation to rubber.

### BEACON AGGREGATE; plastic

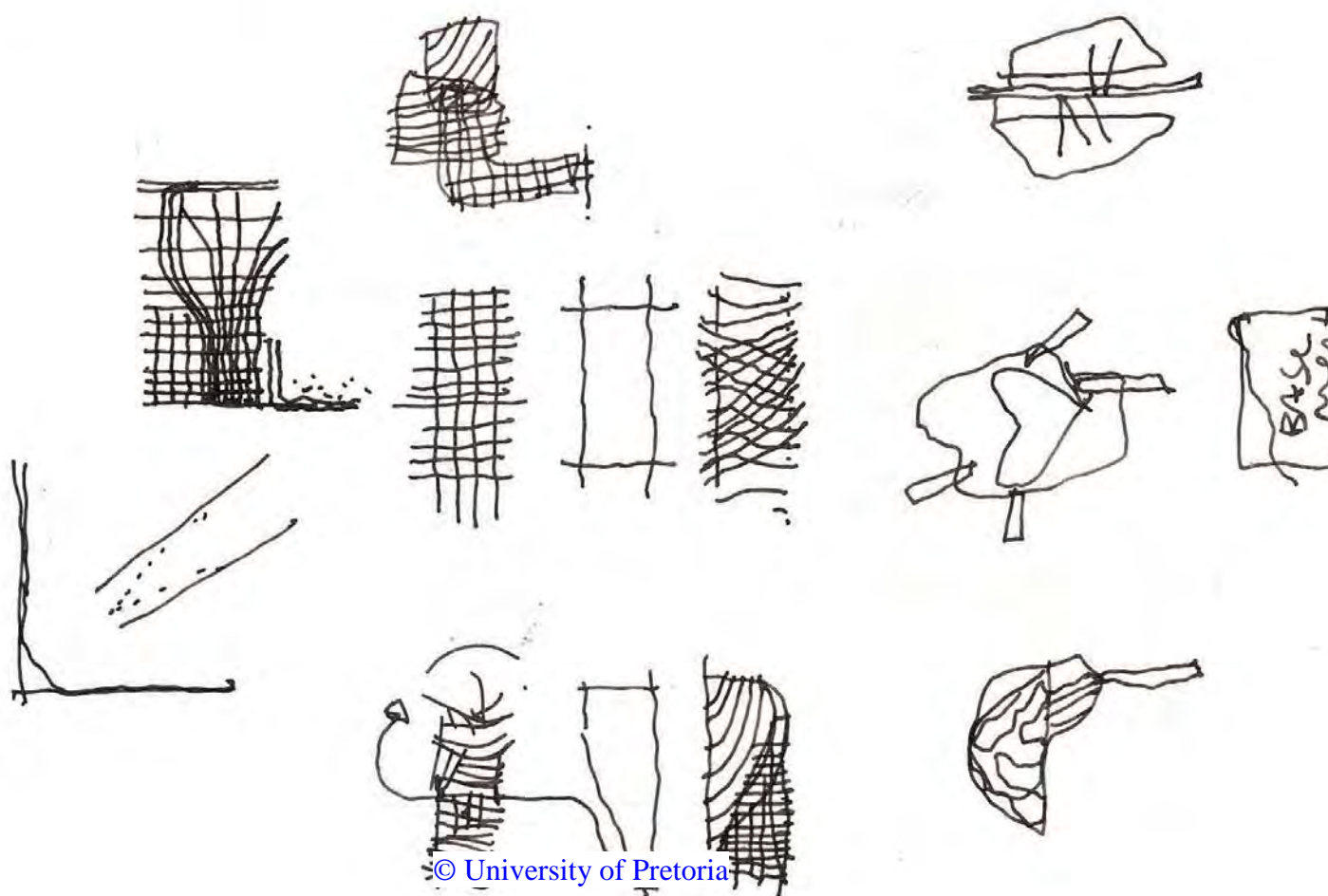
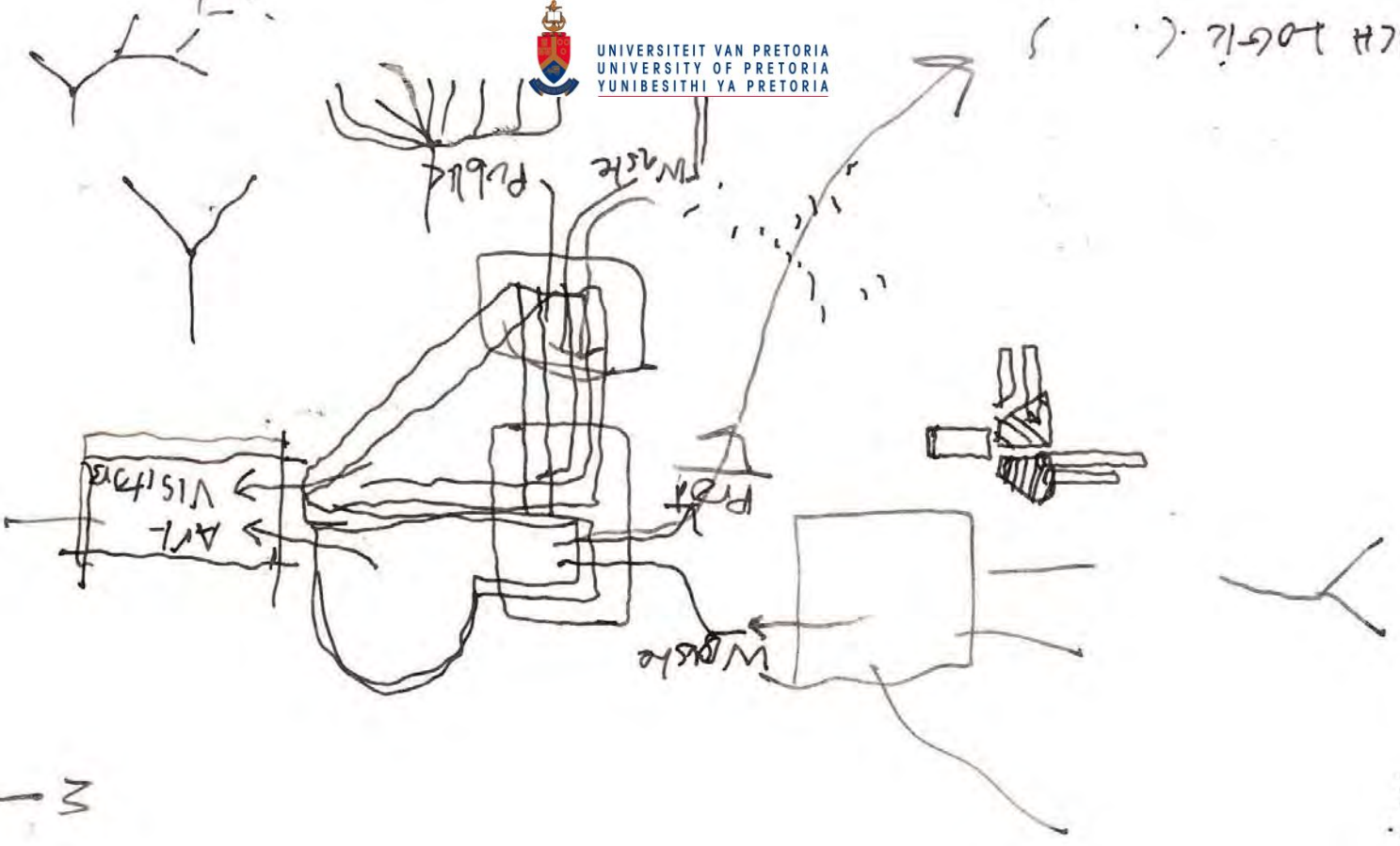
FIGURE 170a: Photograph of red shredded plastic. 138b: Sketches of potential lattice structures to exploit the movement potentials of aggregate, IMW

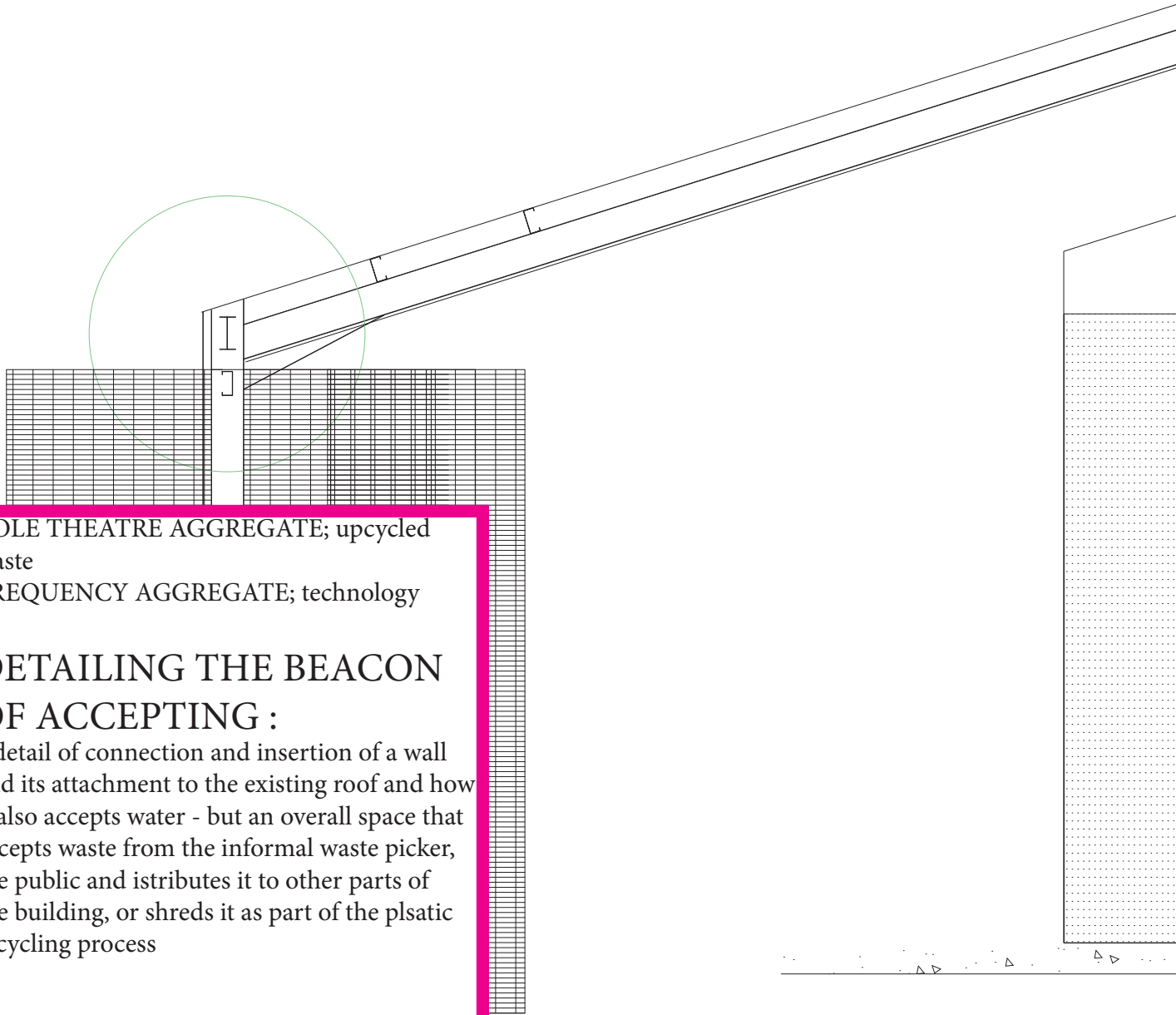
2016





NCN 206-12 (C)





ROLE THEATRE AGGREGATE; upcycled waste  
FREQUENCY AGGREGATE; technology

### DETAILING THE BEACON OF ACCEPTING :

a detail of connection and insertion of a wall and its attachment to the existing roof and how it also accepts water - but an overall space that accepts waste from the informal waste picker, the public and distributes it to other parts of the building, or shreds it as part of the plastic recycling process

### DETAILING FREQUENCIES OF REFLECTION;

a detail of the moving components that adjust to alter space and its use. THE DOOR

### DETAILING ROLE THEATRES OF REJECTION;

the spaces of excretion, the toilets and also the dialogue halls tire wall construction in the ubuntu block fashion

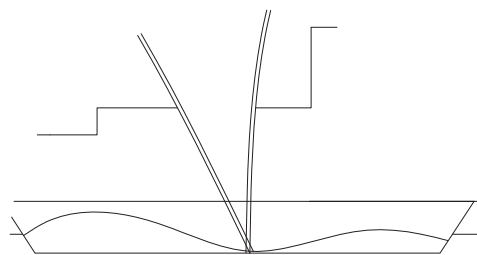
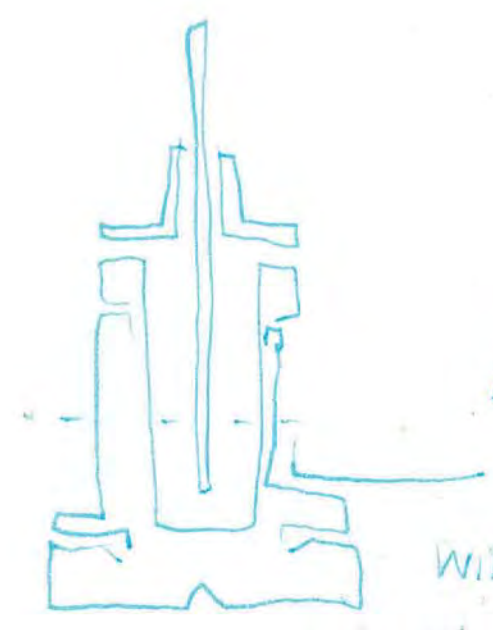


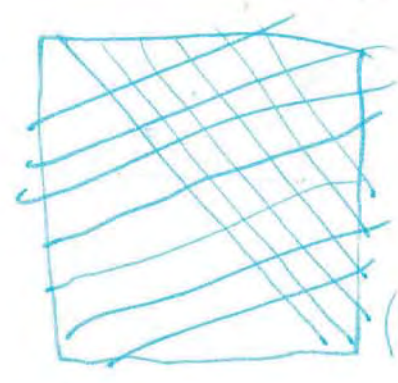
FIGURE 172: Details in progress by IMW 2016. Selection based on the intersection with old and new, giving spatial waste injections of energy.



light plan

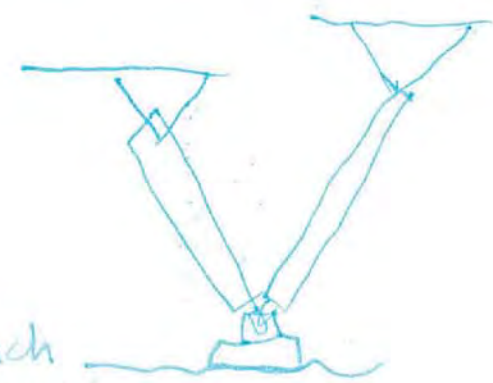
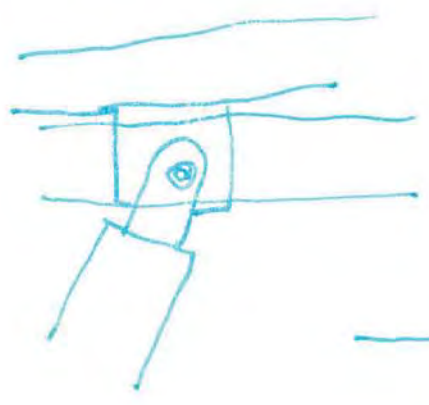


windows



Rebar design

floor design  
(tile)



branch  
connection



# GROUND FLOOR PLAN

PUB  
PRE  
EXIS  
RESI

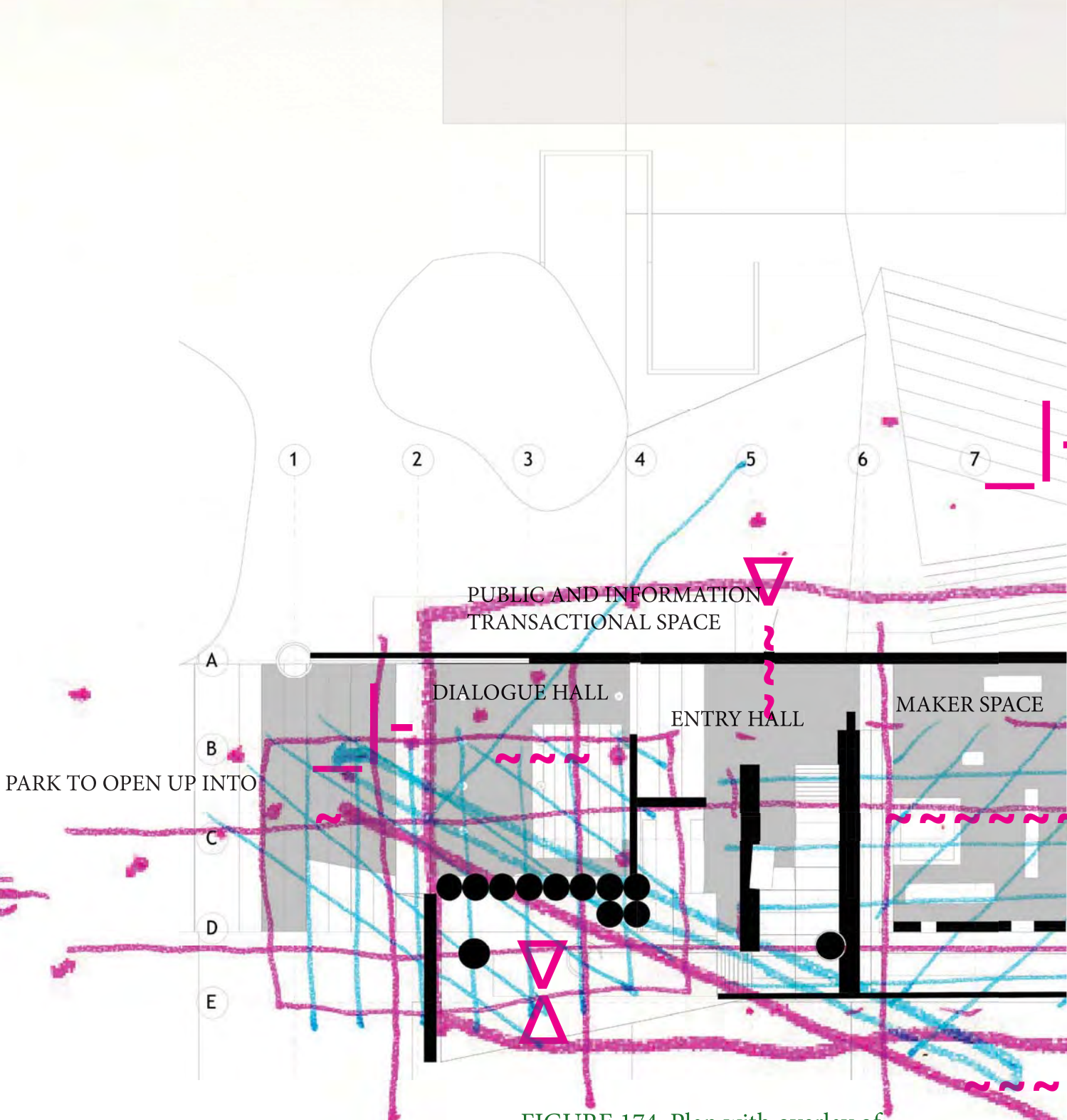
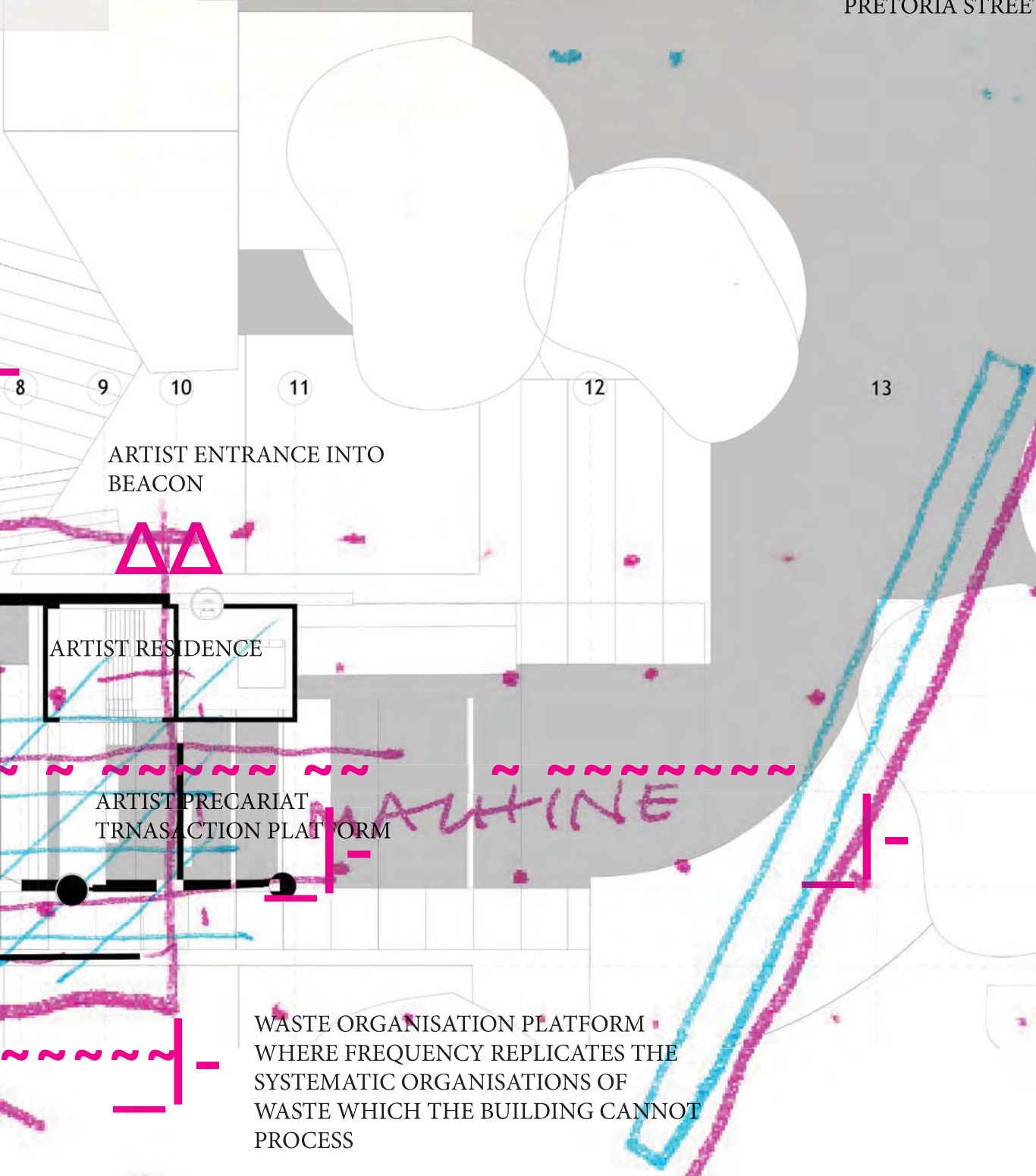


FIGURE 174: Plan with overlay of conceptual symbol language applied to spaces. Legend on following page.

PUBLIC ENTRANCE FROM  
PRETORIA STREET THROUGH  
EXISTING COMMERCIAL  
RESIDENTIAL BLOCK

WASTE ENTRANCE FROM  
PRETORIA STREET





# LEGENDS OF CONCEPTS



Beacon drawing in, guiding in.



Beacon displaying outward,  
guiding around.



Beacon as indicator of entrance,  
gathering, arrival.



Frequency of frequency of waste  
and its linear devolution into  
thought.



Beacon guiding frequency,  
laserbeam like, disrupting the  
linear frequency of waste.



The role theatre, always a surface  
in relation to either frequency.

FIGURE 176: legend for conceptaul symbols  
and their intersections and collaborations  
that unpack how concepts will function  
architecturally.

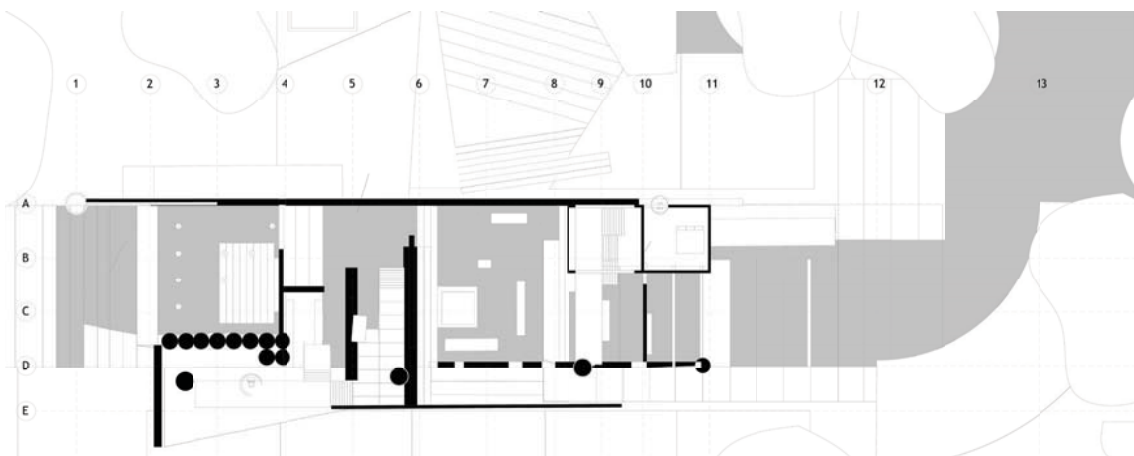
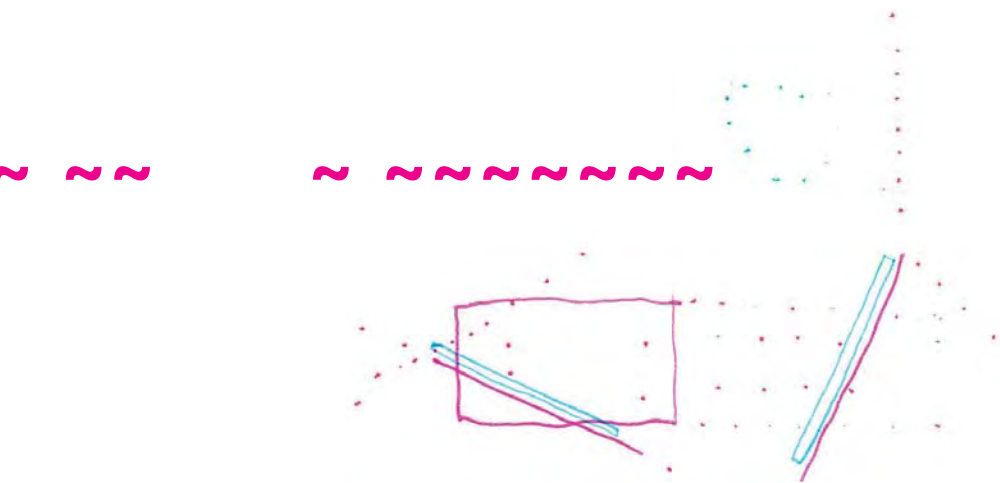
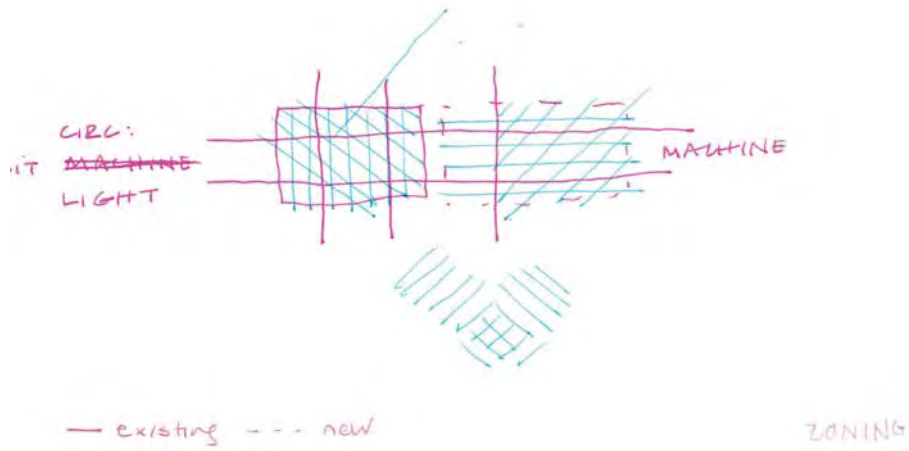


FIGURE 177: Layers of plan parts- Beacon : Roof structure lattice--- Role Theatre surface floor of public to waste intersection and finally the building that resonates all frequencies.

# GALLERY FLOOR PLAN WITH SYMBOLS

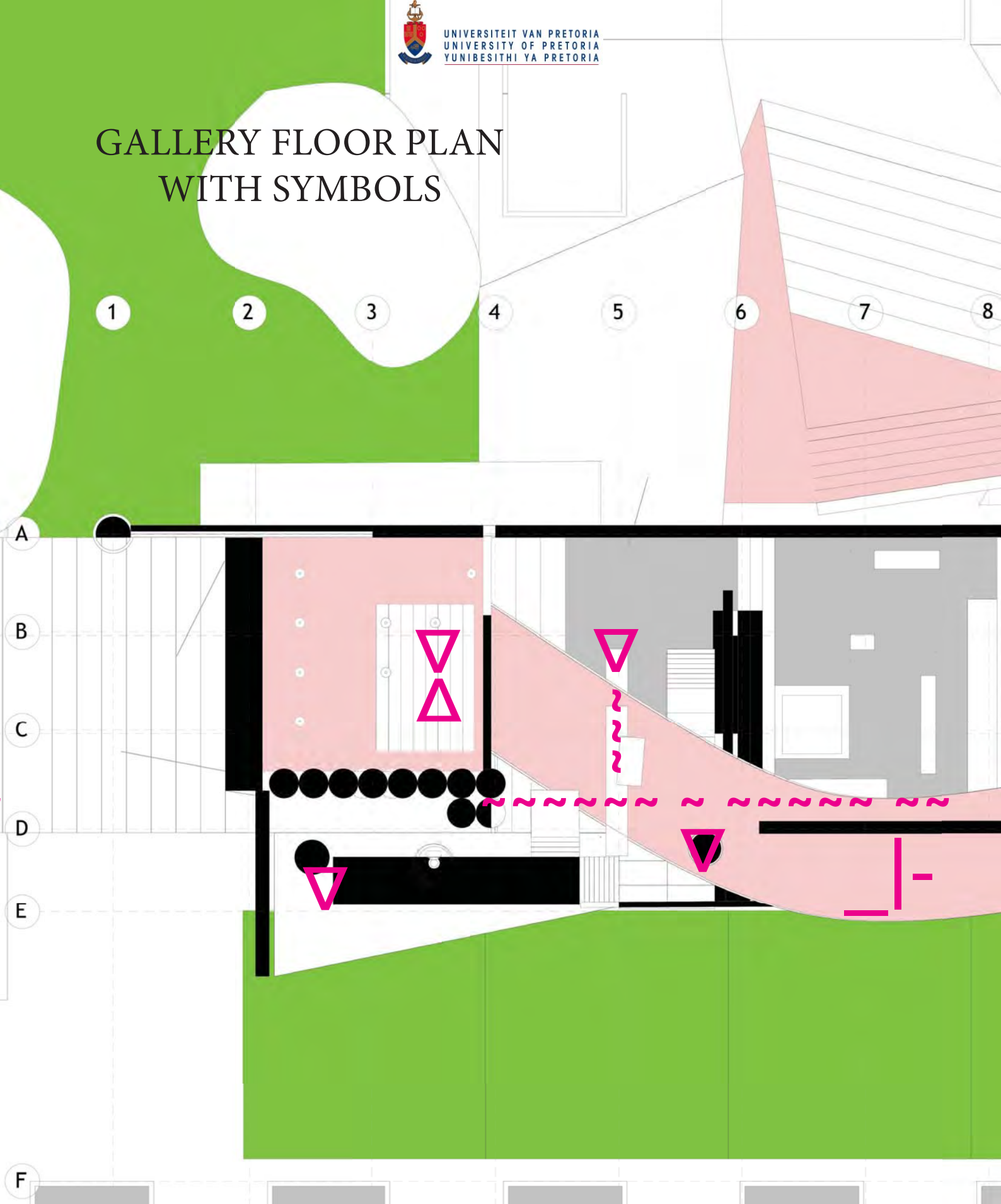
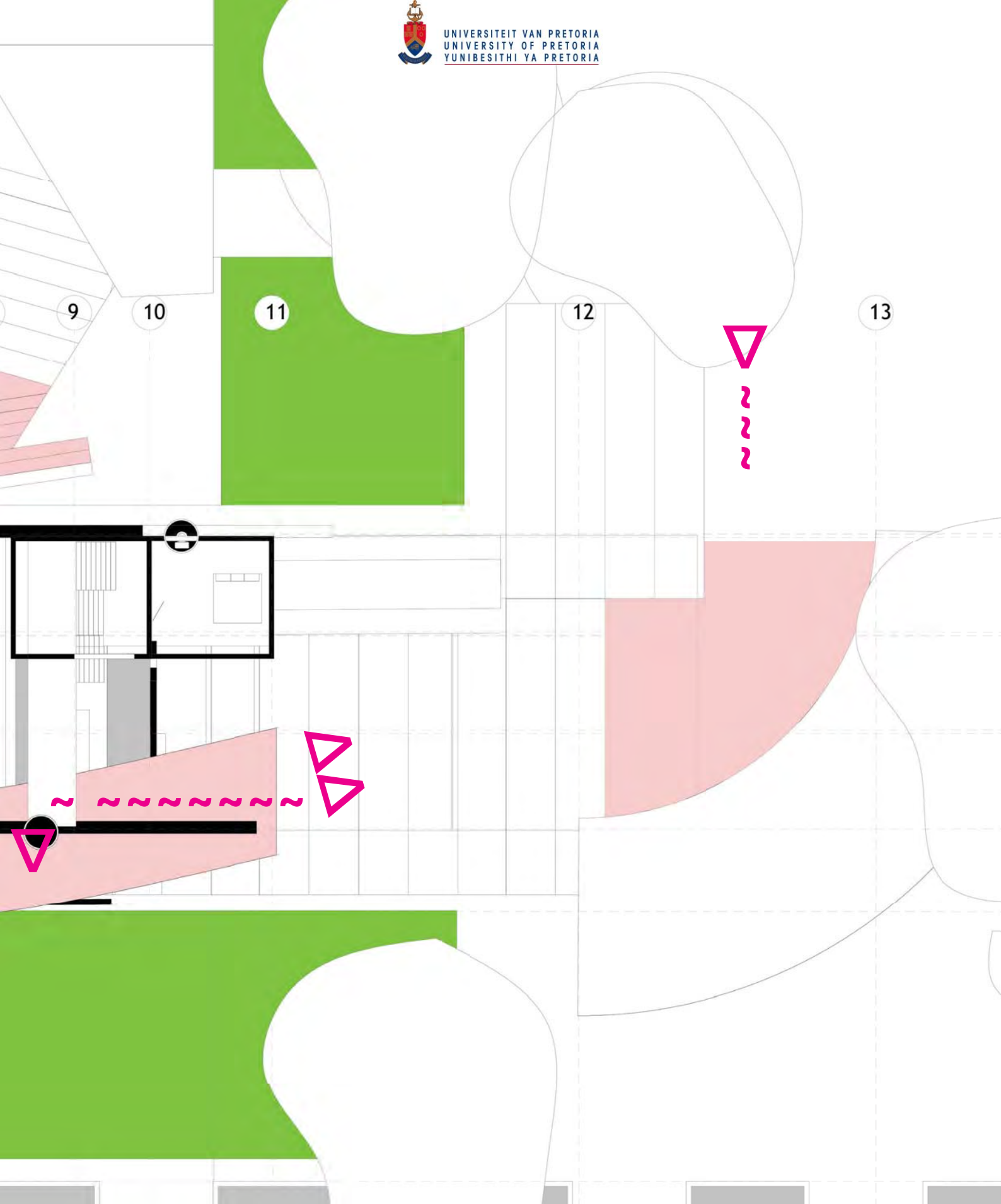


FIGURE 178: Second floor plan of spaces in relation to conceptual symbol language, IMW 2016.





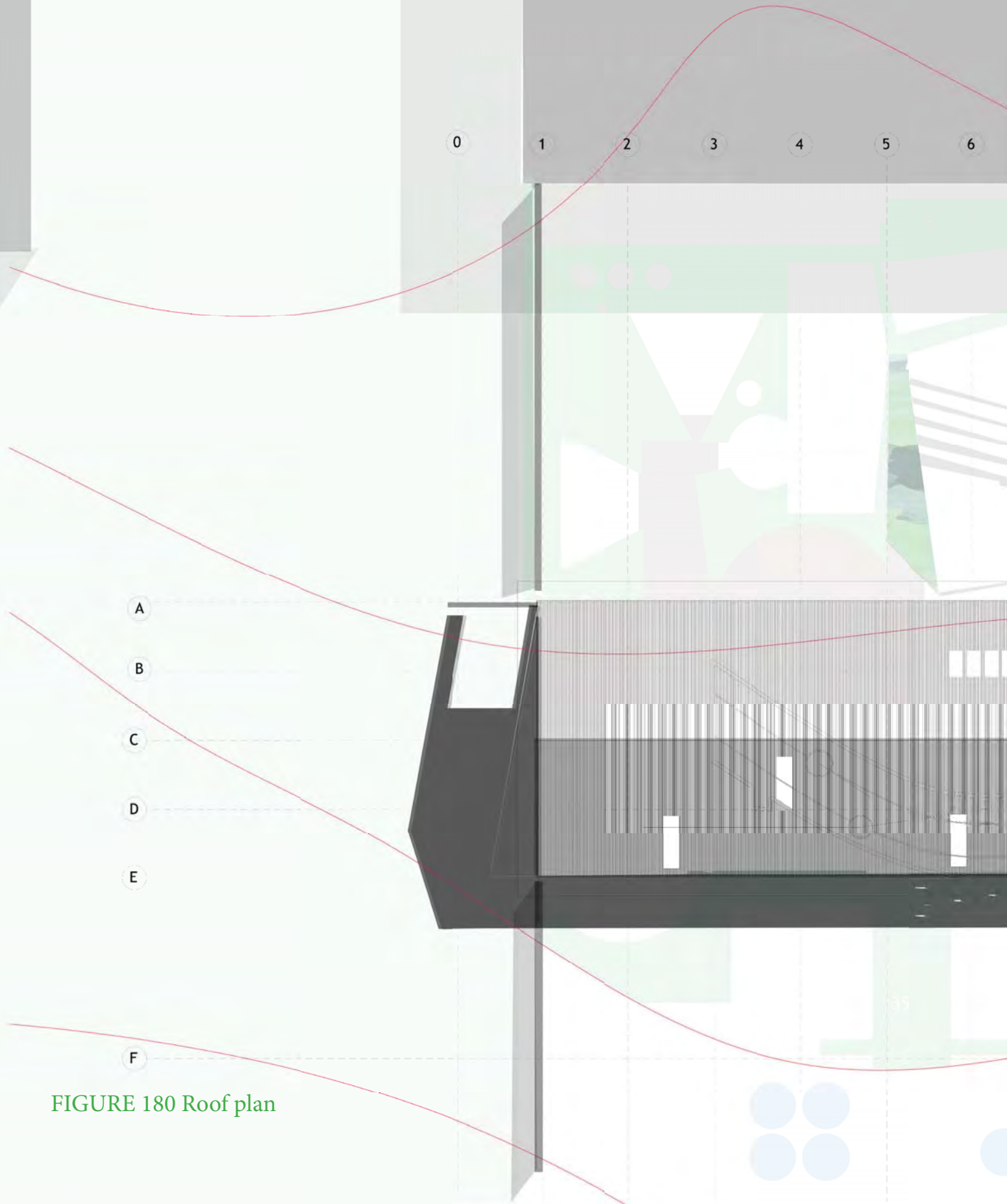


FIGURE 180 Roof plan

ROOF WATER PLAN : WA





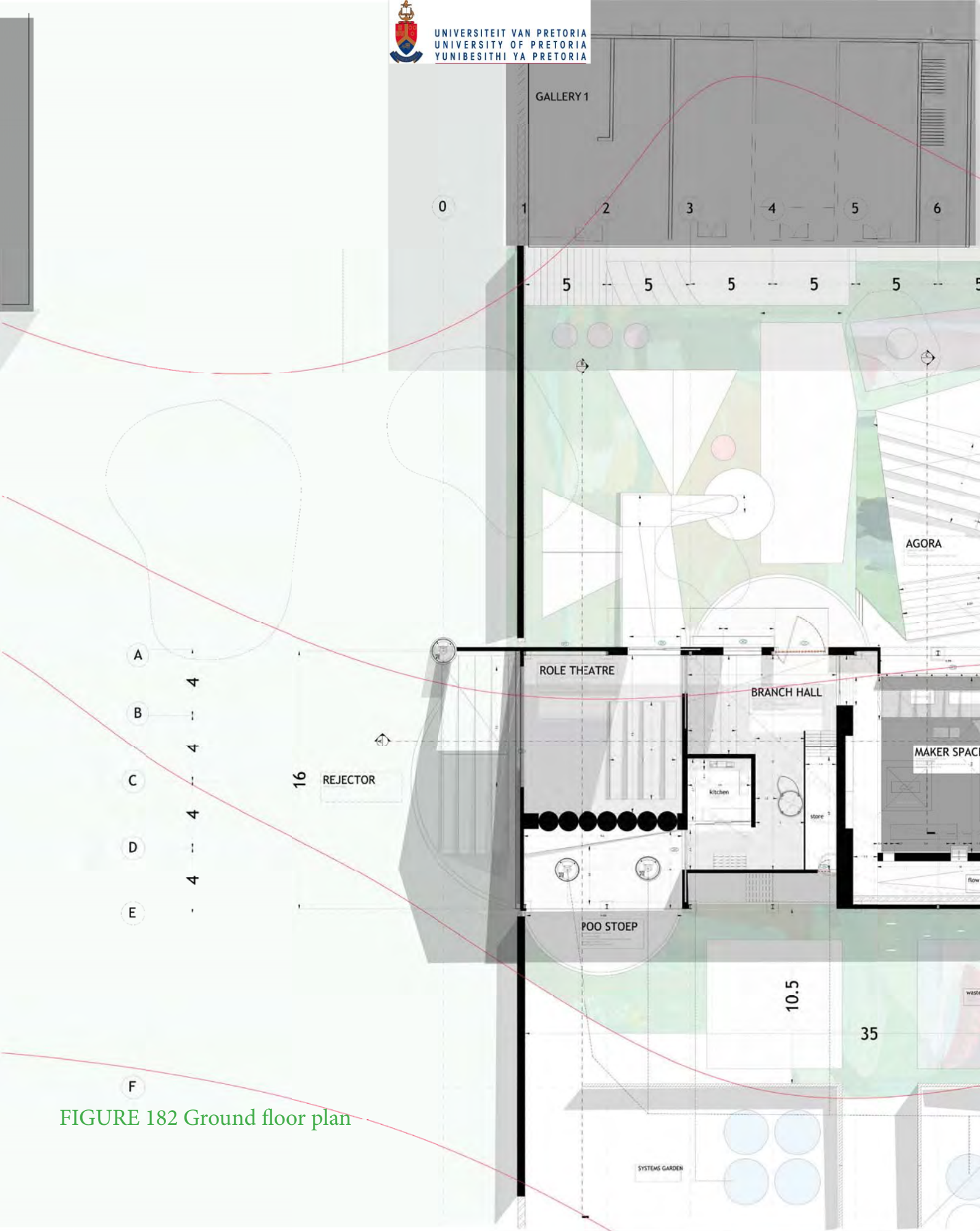
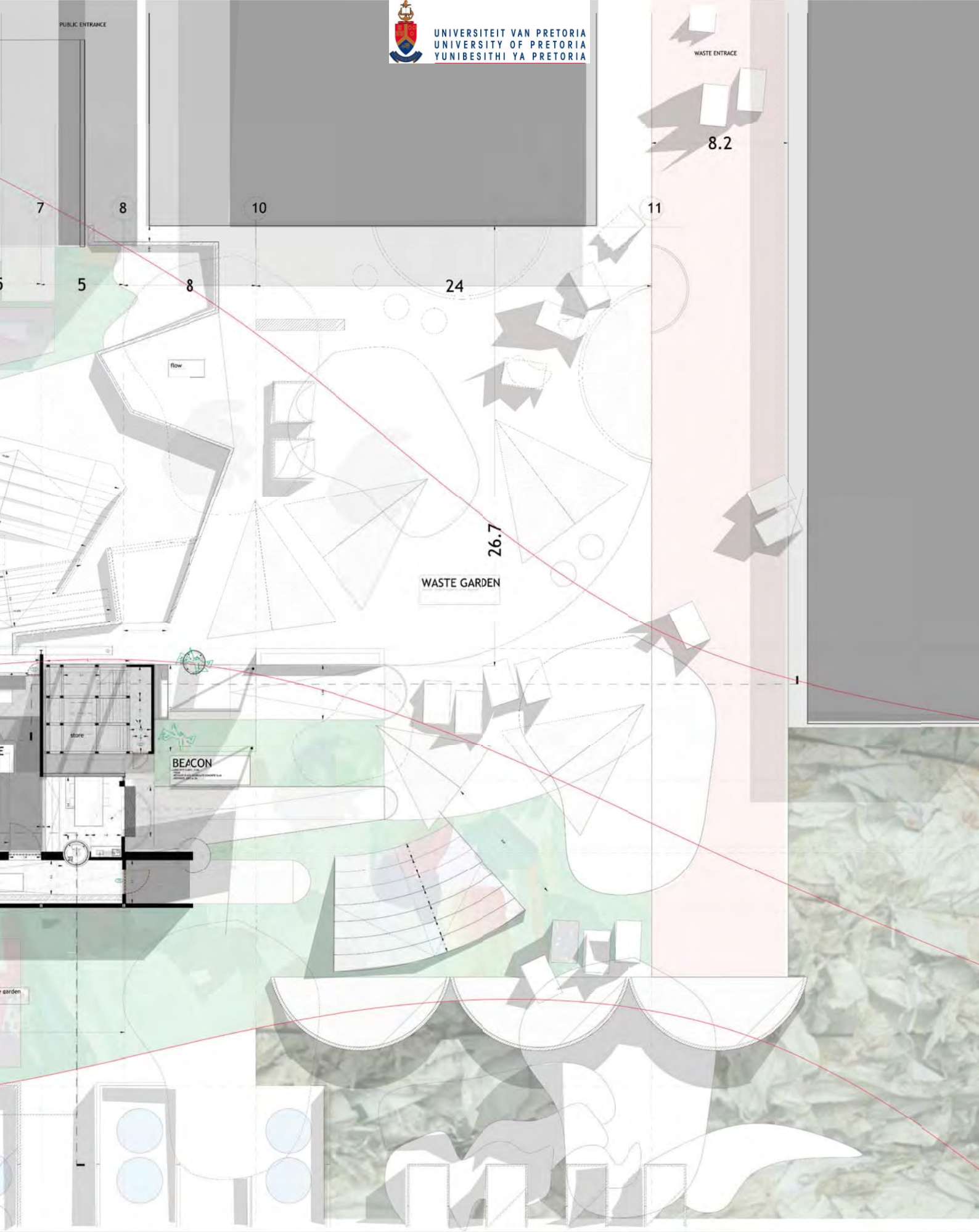


FIGURE 182 Ground floor plan

GROUND FLOOR PLAN : WASOP 1:100





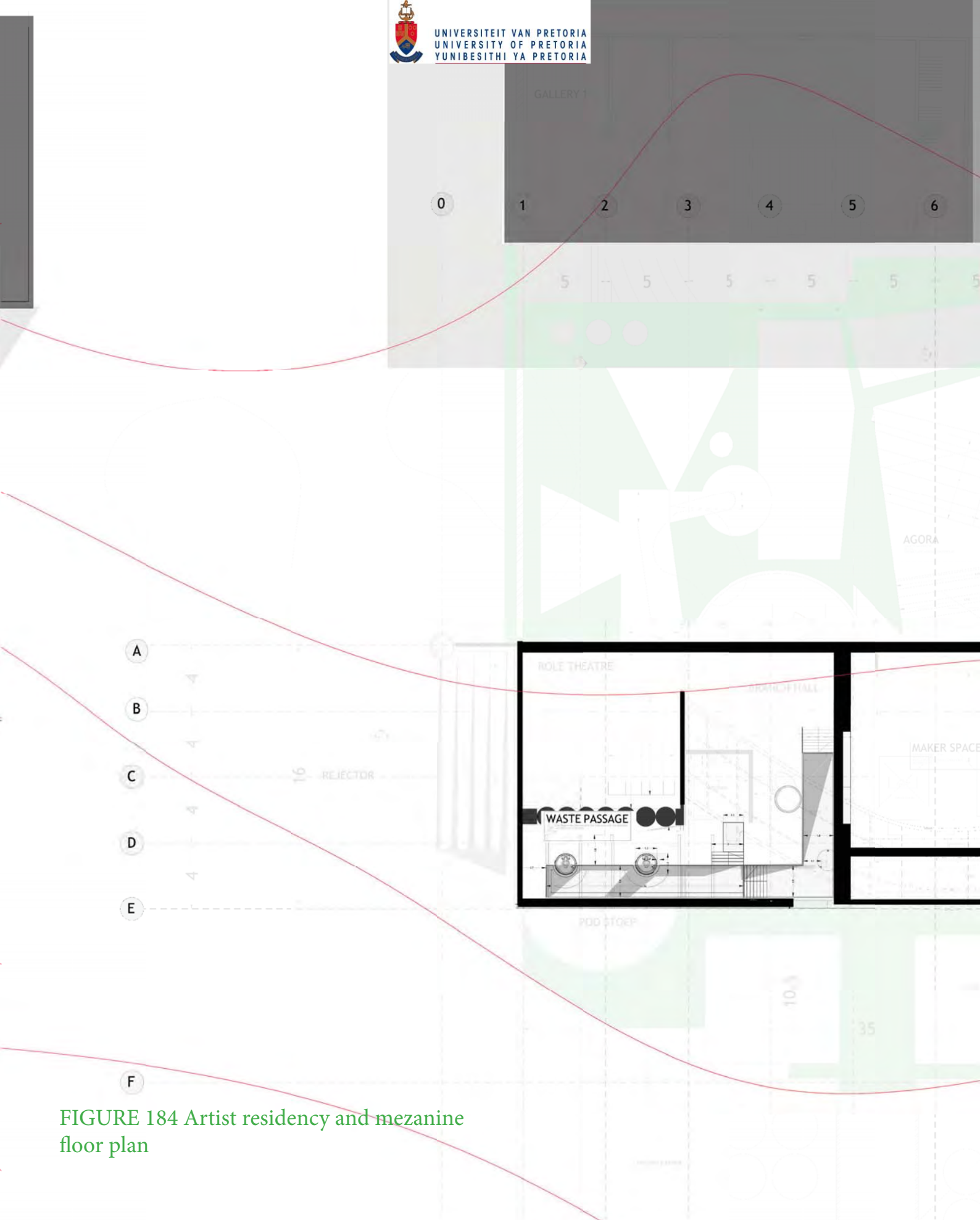


FIGURE 184 Artist residency and mezzanine floor plan



7

8

9

10

5

9

24

26.7

WASTE GARDEN

RESIDENCE

SE COH

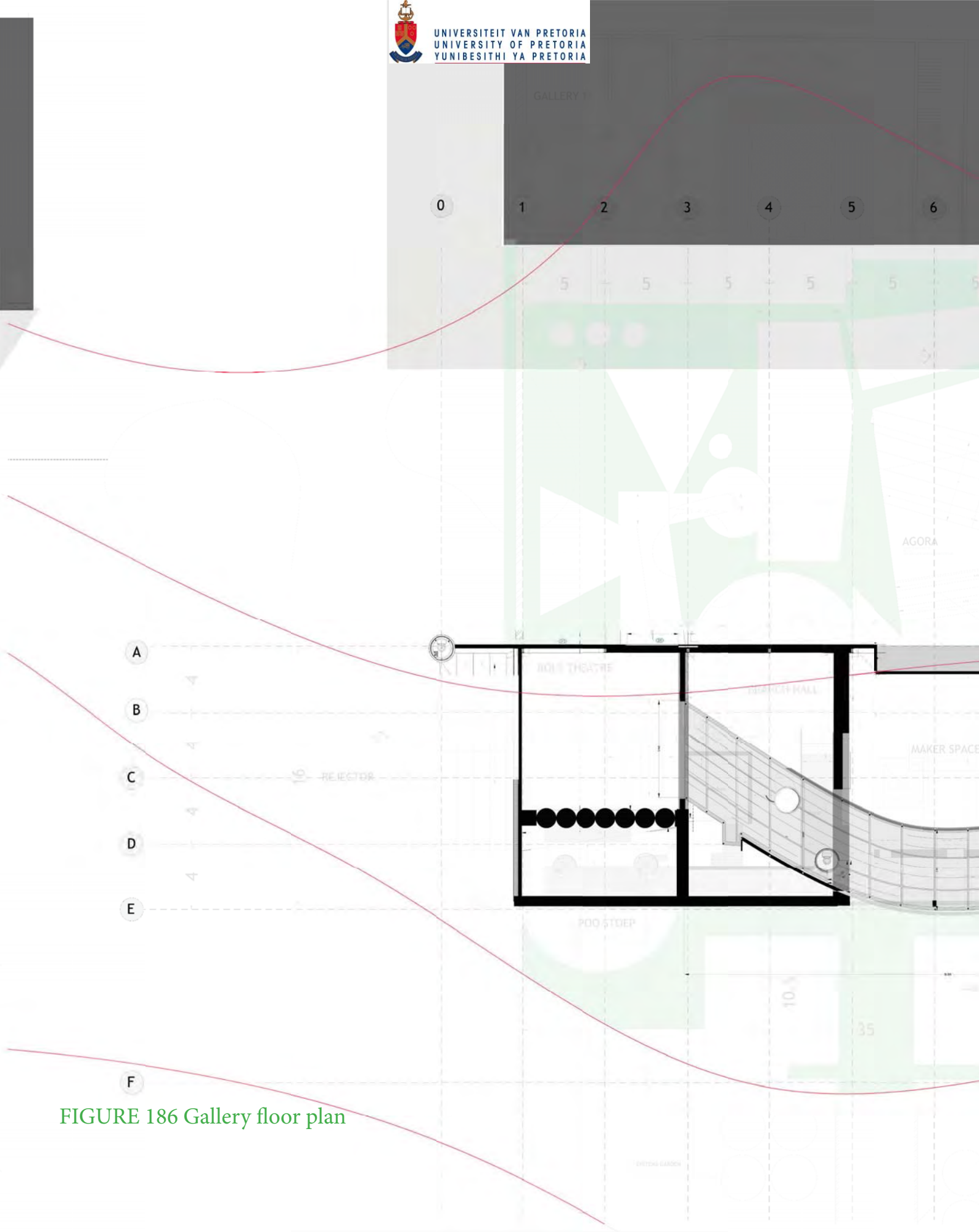


FIGURE 186 Gallery floor plan





7

8

9

10

5

24

26.7

WASTE GARDEN

DEACON



# BEACON ; PLASTIC [NEW]

The structure of the beacon seek to use plastic construction in the same way that they are applied in everyday construction, polycarbonate sheeting and such. The structure seeks to embody the characteristics of plastic of transparency and morphology and experimentalism.

Below is a perspective view of the public entrance, which is essentially the secondary beacon, the artist residency being the first. When referring to the plan it is clear that beacons will use same constructions in different scales in conjunction with surfaces of the

role platform by which to facilitate the movements according to frequency of use etc.

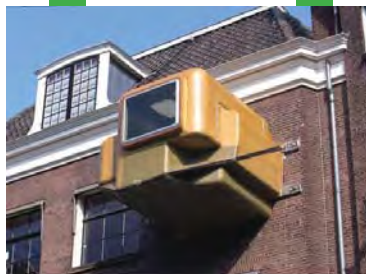
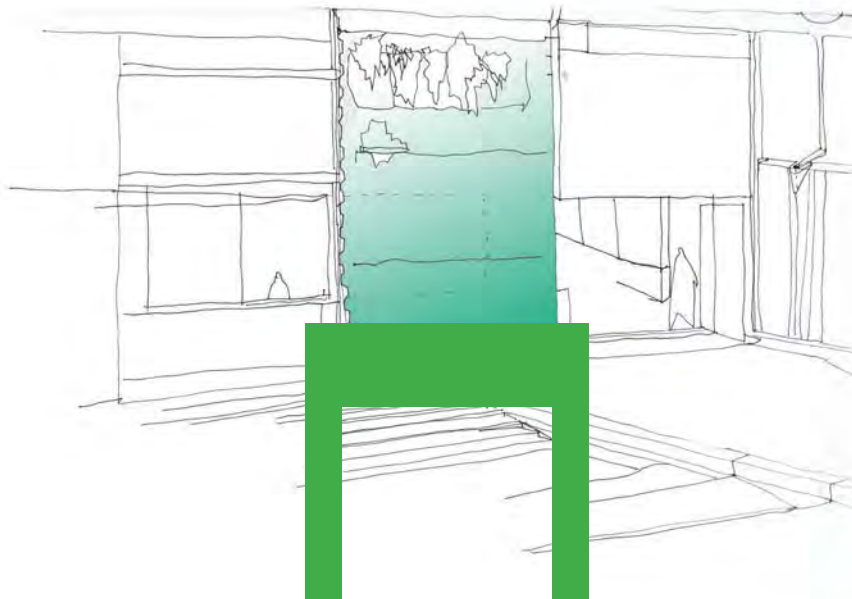
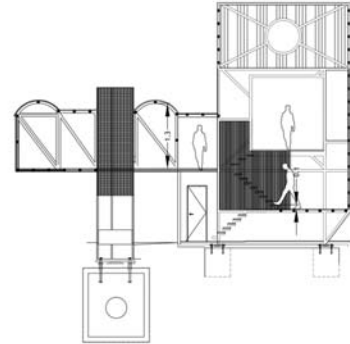
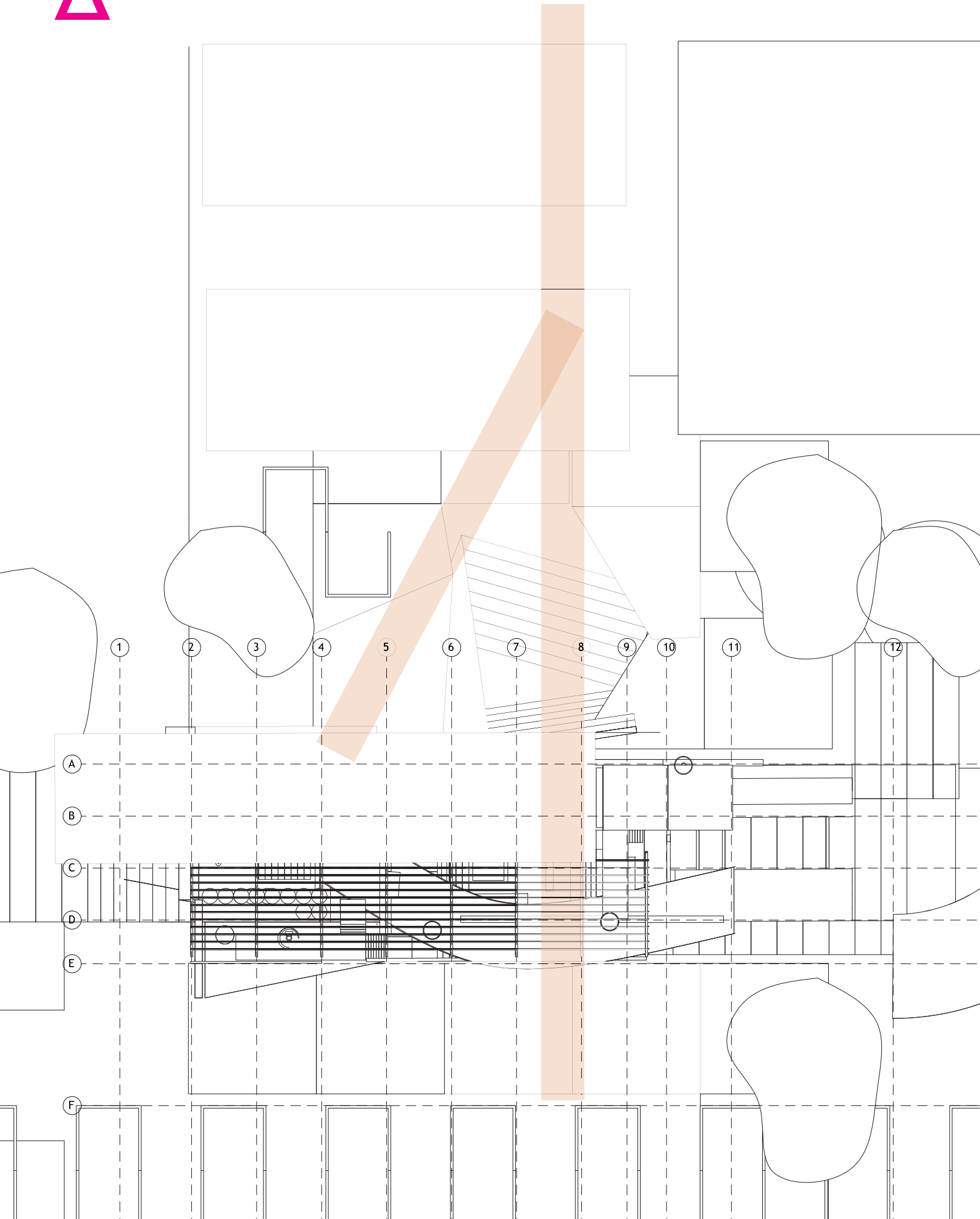


FIGURE 188: Atelier van Lieshout, Clip-On, 1997. Bottom, Jean-Louis Chanéac, Parasite Bedrooms, link to image : <https://s-media-cache-ak0.pinning.com/564x/ab/d1/85/abd1859e4f1ef4ede1e87cf274238836.jpg>



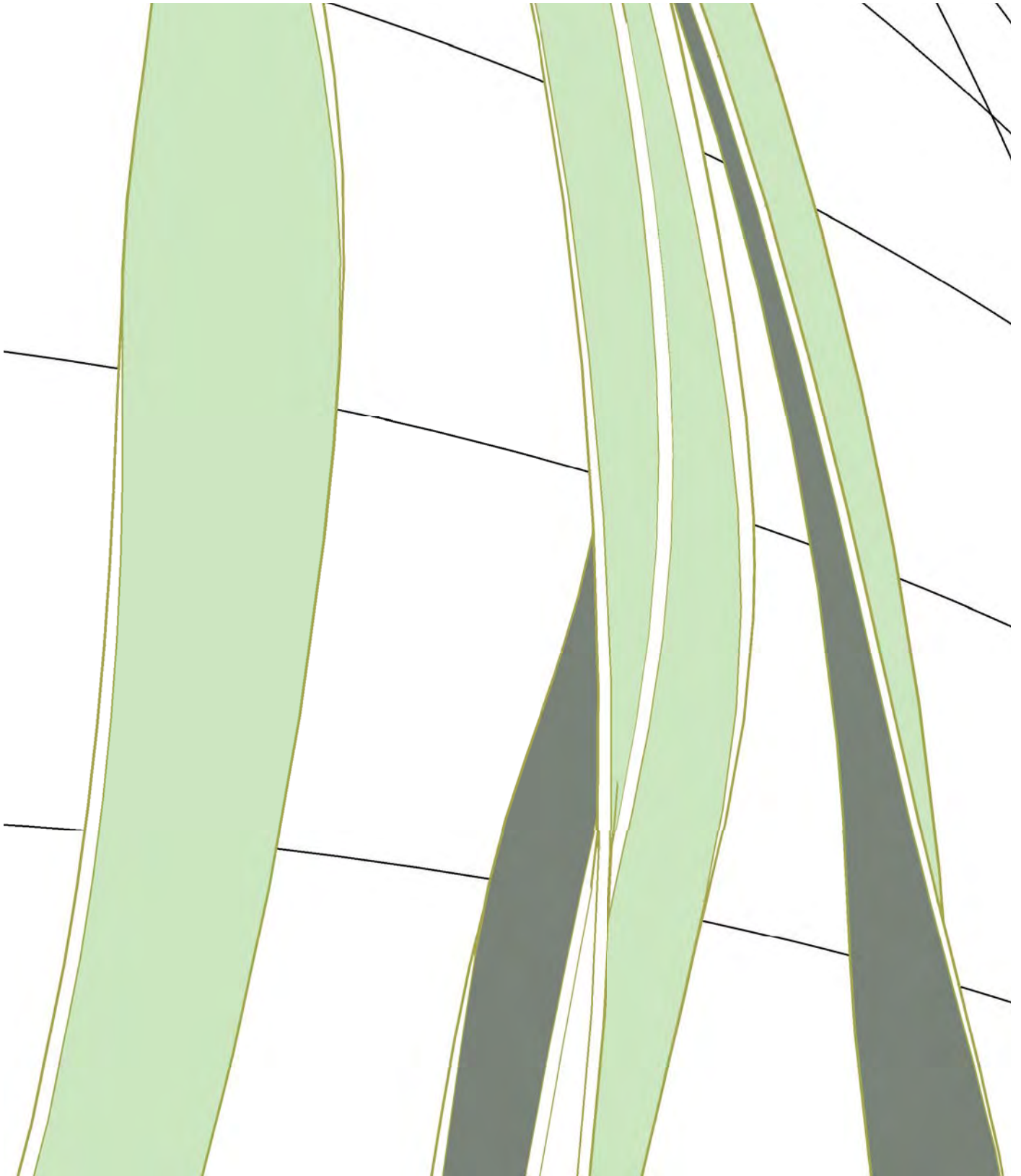
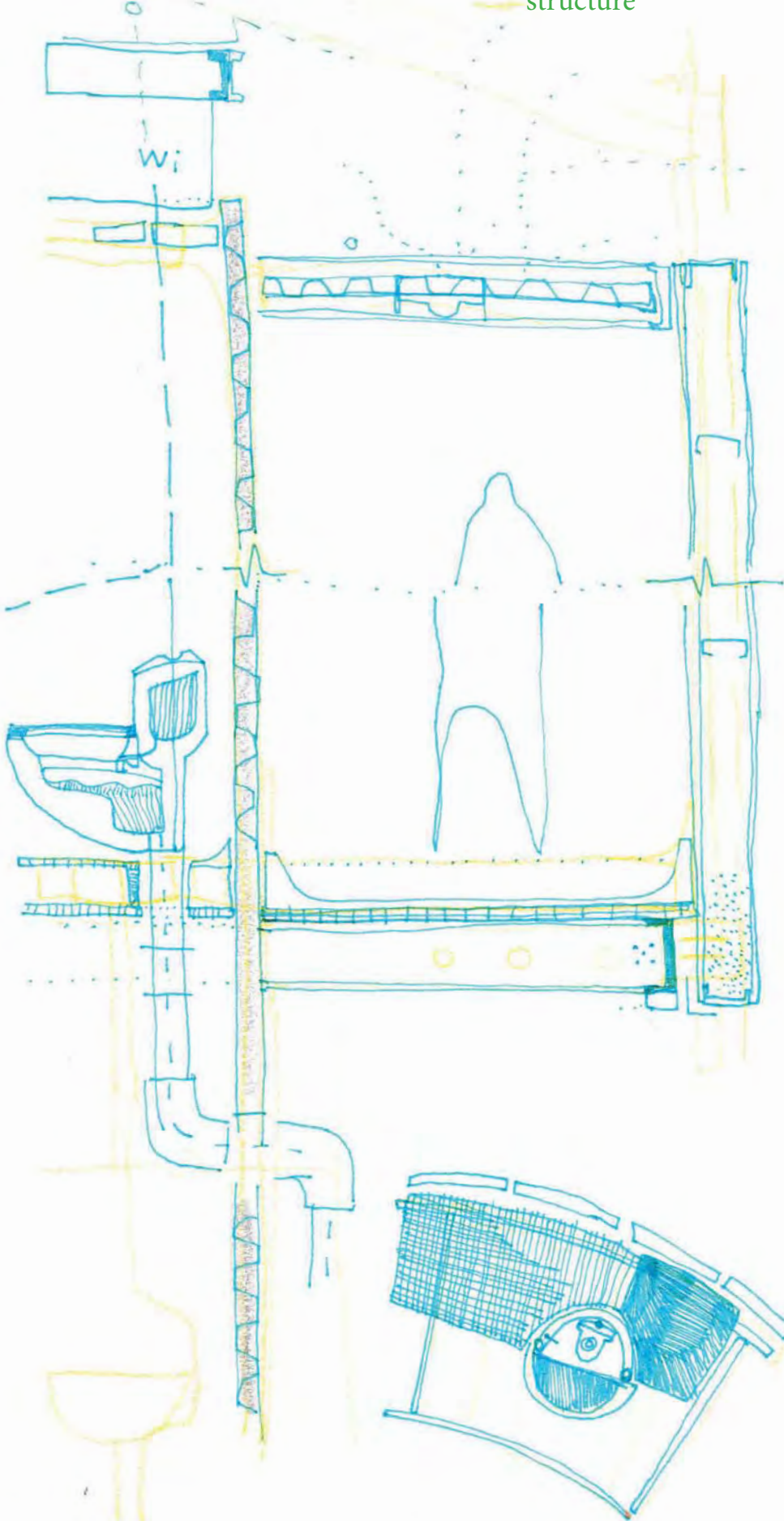


FIGURE 190: Detail modelling of structural elements of steel work for the beacon.



FIGURE 191: Detail section drawing of the piercing toilet structure into gallery floor, as a technical exploration of waste services as structure



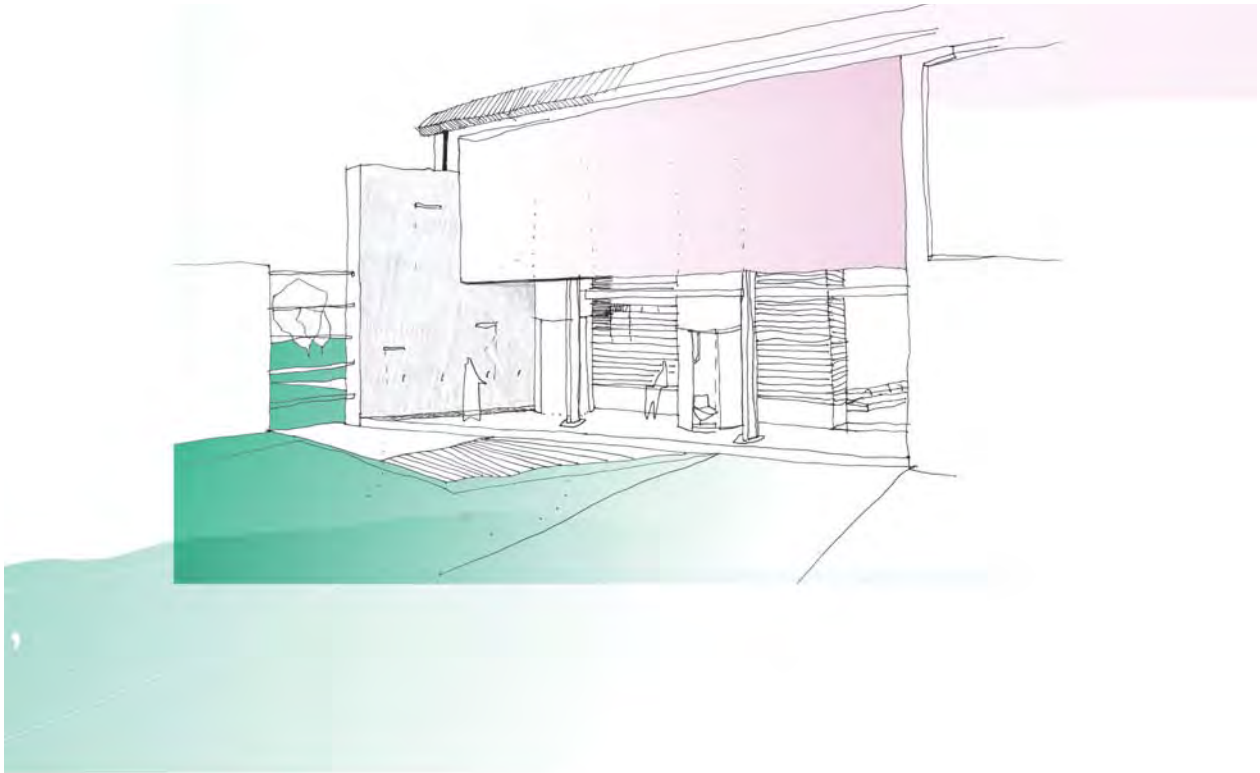


# GALLERY : STEEL NEW AND OLD

The gallery is the connecting platform of the building, that allows the user of the space to access not only art works part of exhibitions within the space but also views in the building below and the process of waste processing outside. The gallery is the final insertion into space but is designed in such a per-assembled way that it can be removed and inserted anywhere, elsewhere as a reverse experiment of the method of realising this architecture.

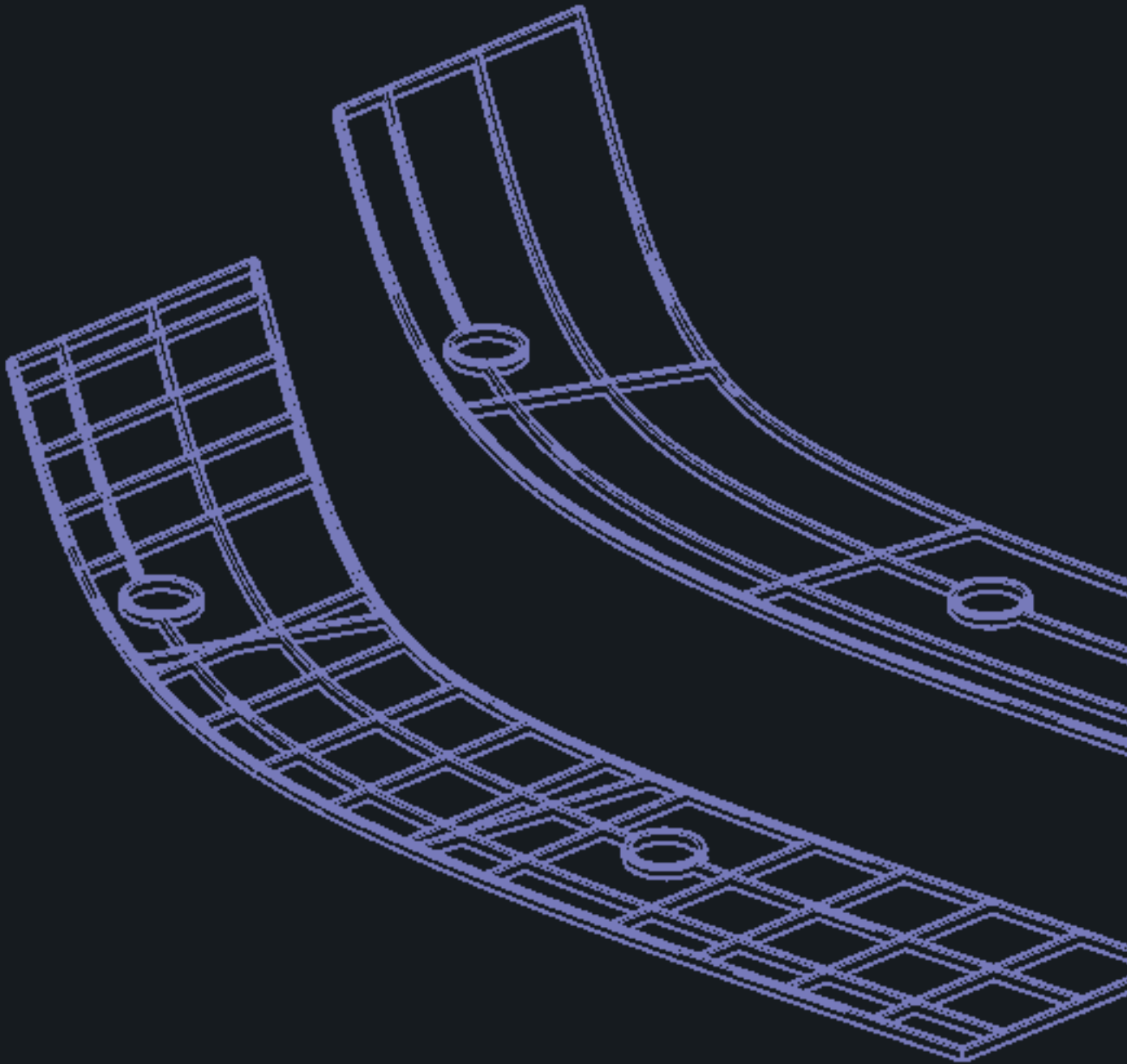
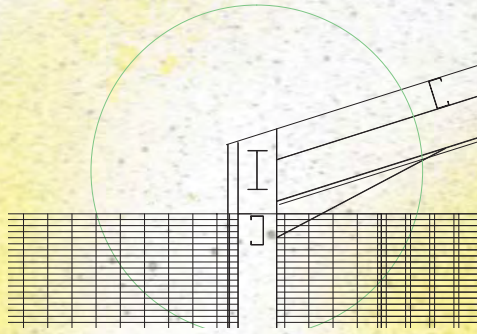
The gallery, as is seen with the symbols above, is the space which incorporates all concepts and this is the

culminating set of details that is generated between an exchange with the gallery and all the other spaces of the building, for example the residency, then the maker space and then the dialogue space. The gallery represents the authors argument of art being the connection between all attitudes and all value systems, and so it embodies all concepts and will live it out through each detail how art accepts, rejects and reflects using the materials of steel as the primary link to the industrial typology.



SOUTH

FIGURE 192 Perspective of the southern facade where the gallery pierces through the face of the existing portal frame and also allows for a social spatial development relating specifically to waste. Opposite pages are steel details [incorrect not updated] and steel modelling of gallery floor and roof components with steel rectangular channels, where circle cut throughs are the service columns.





# WASTE FLOOR: WOOD AND TYRES

The construction of the floor elements of the role theatre, specifically those of the maker spaces are related to the spatial requirements and finish requirements of the AAC residency guidelines.

theatre concepts, does so through the enclosure construction itself- using tyre walls like that of rural studios tyre chapel.

The surface will seek to utilise the positive aspects of plastics in recycled manners as a type of image of potential and will then make use of brickwork construction to enclose it. The plastic foundational quality will not be continued in the dialogue space, which despite also functioning as a space for role

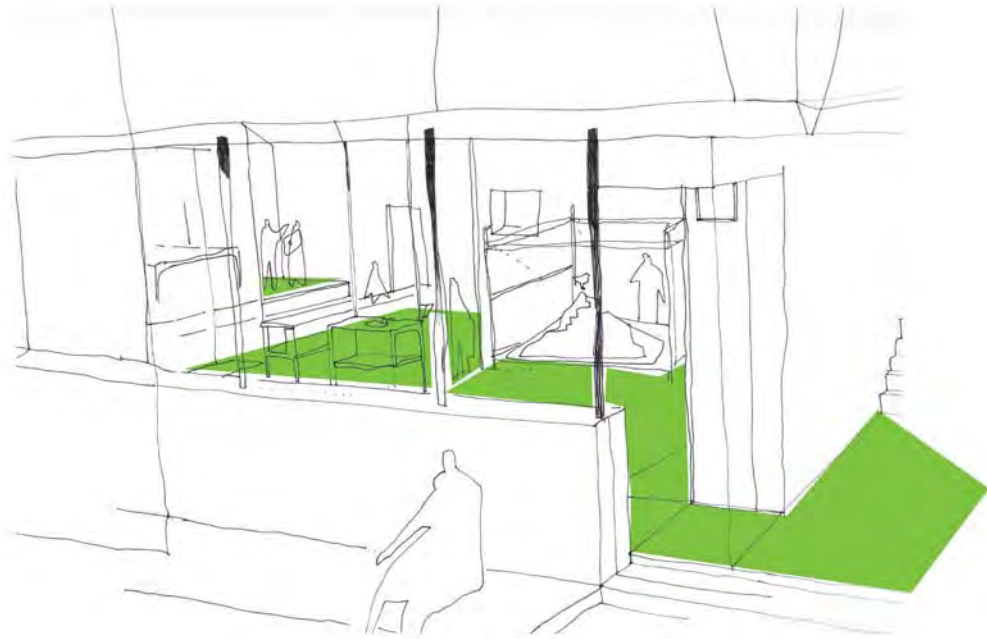


FIGURE 194 Perspective view into the maker space, connection onto elevation with the outdoor role theatre space. 168B Image of Ubuntu blocks as reference to plastic potential as flooring enclosing material.



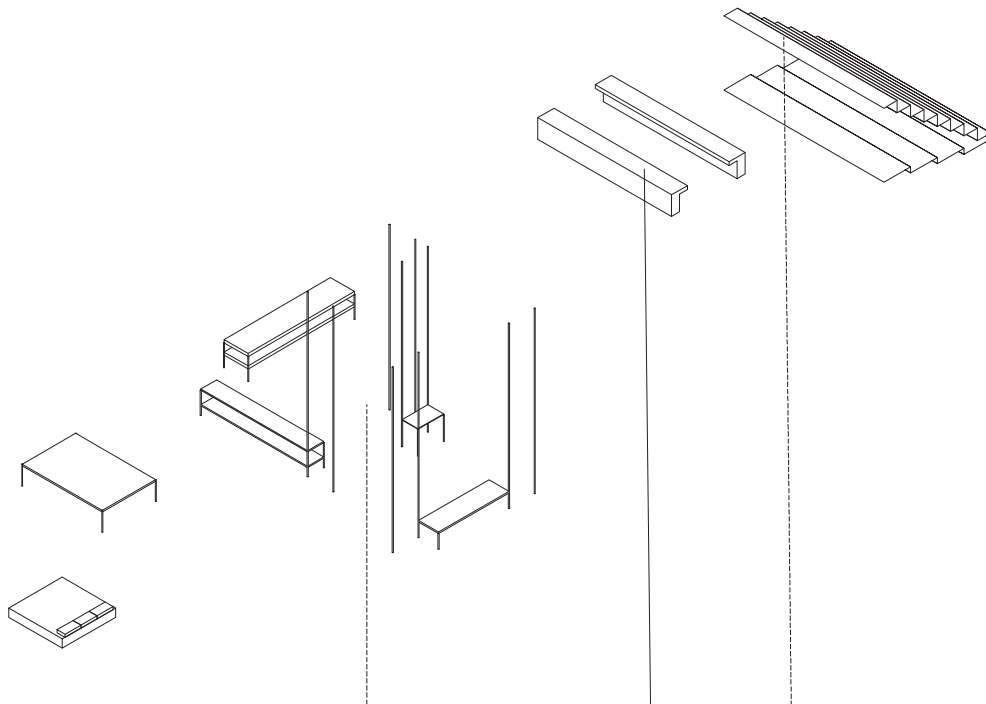
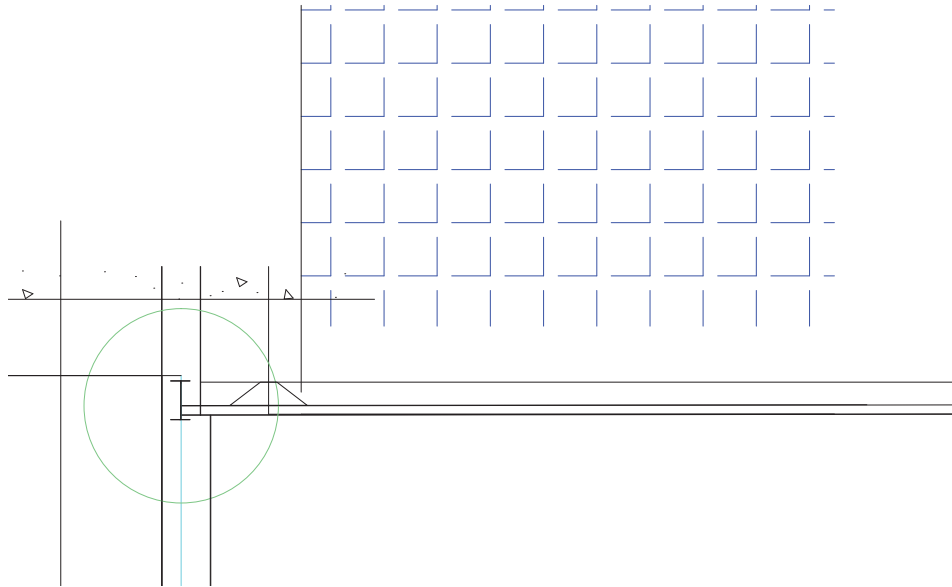


FIGURE 195 Progress detail of elevation forms and structure that accepts, rejects and reflects on energy and waste and a 3d exploded perspective of how work spaces and their surfaces plug into the structure again as part of the the role theatres expression of enclosure according to program.



# DOOR : ~ MOVING COLUMNS

The doorway is the element of the building which could essentially be described as the moving wall. The door is that which permeates and encloses and defines spaces as well as breaking it open.

The building consists of several of these doors, which seek to borrow from both the suburban and the industrial typologies of Silverton.

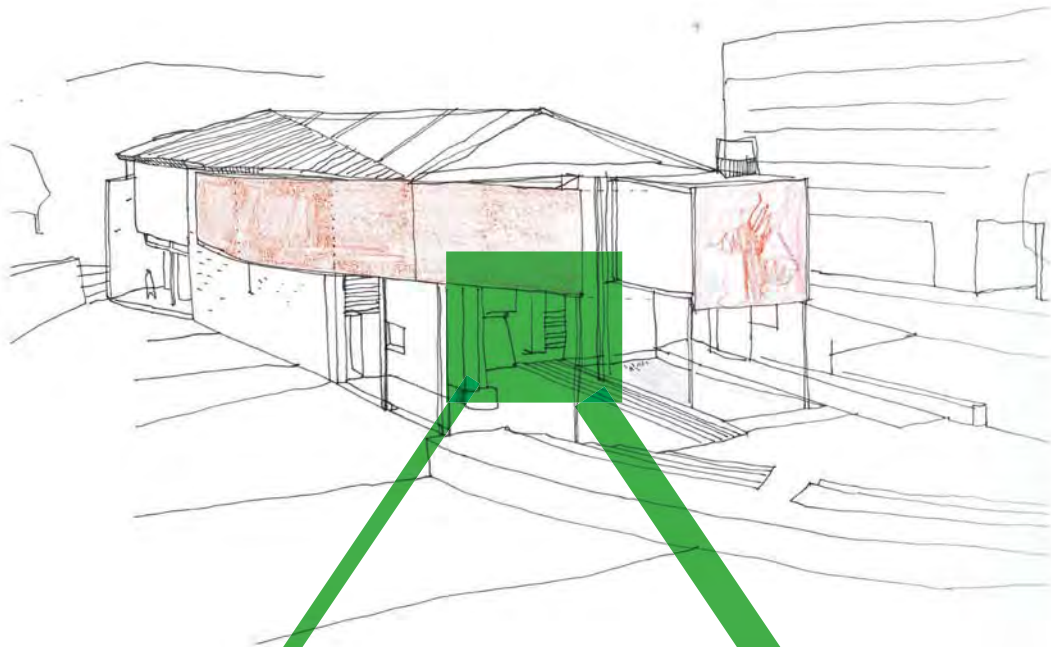
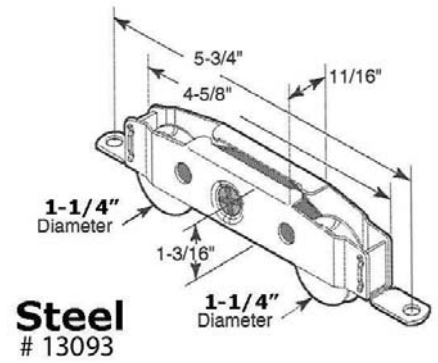
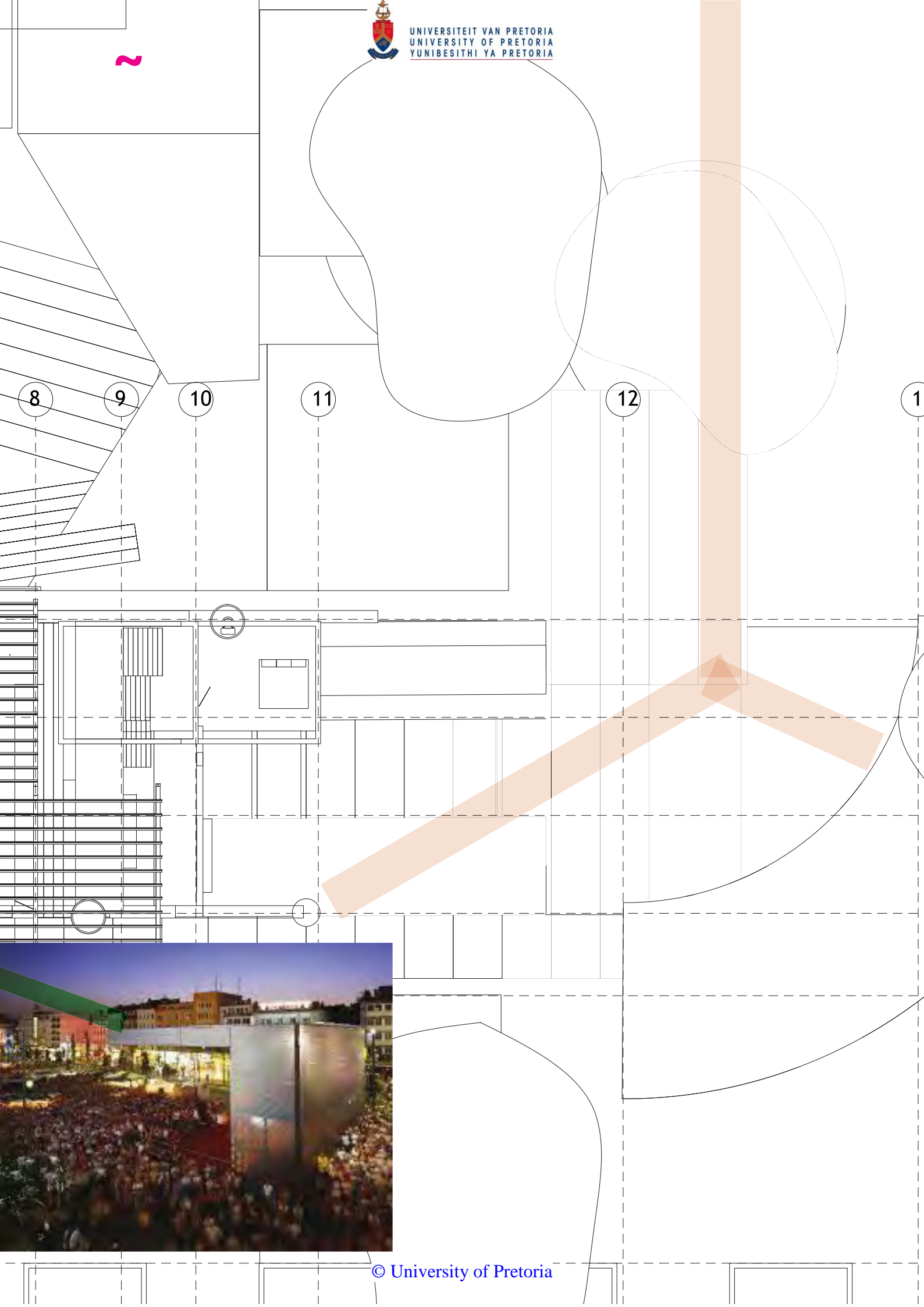


FIGURE 196 Perspective of the eastern entrance for waste delivery. Images making reference to the suburban garage door, to the right a plan displaying movement of waste from waste entry and finally a precedent of movement with the SpielbudenPlatz project by NL Architects/  
<http://www.gkdmalfabrics.com/files/news/big/da7ab74cb3a1a7163fd98d2f9223b228.gif>



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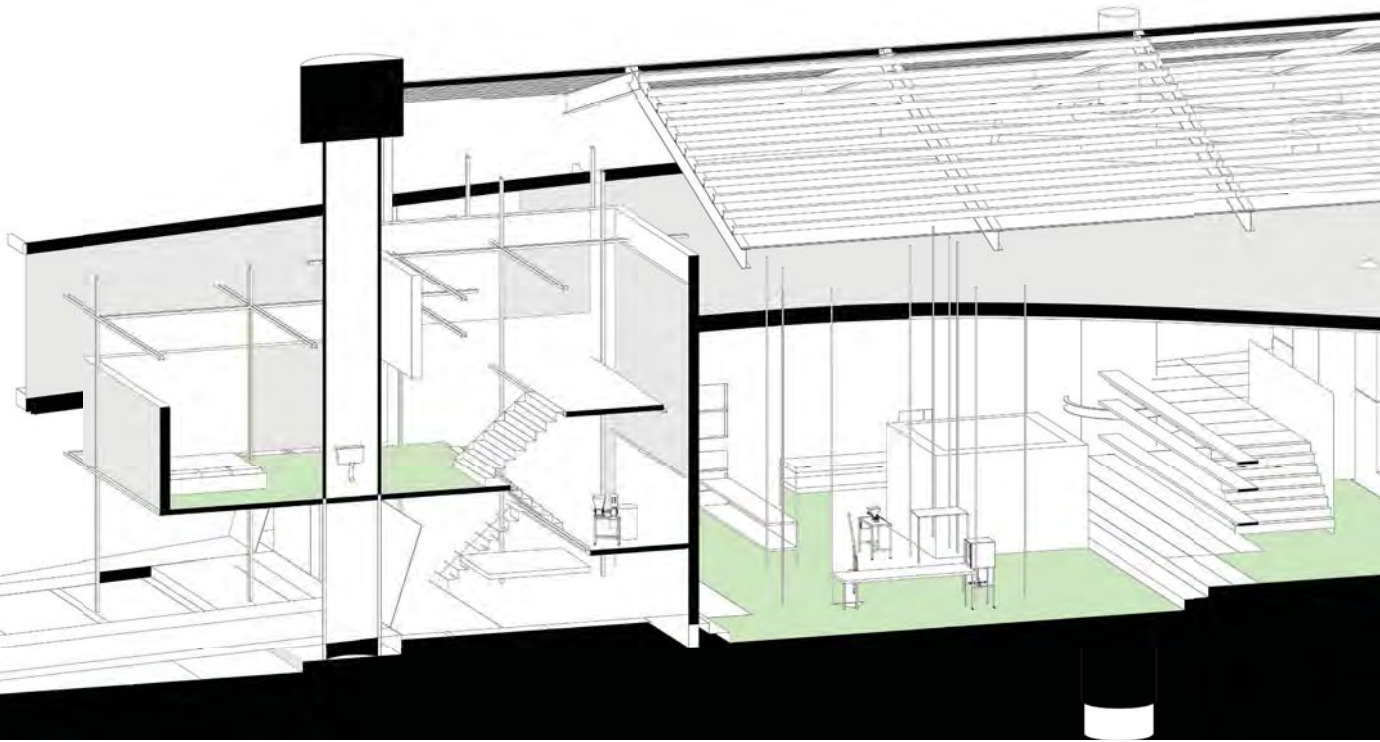
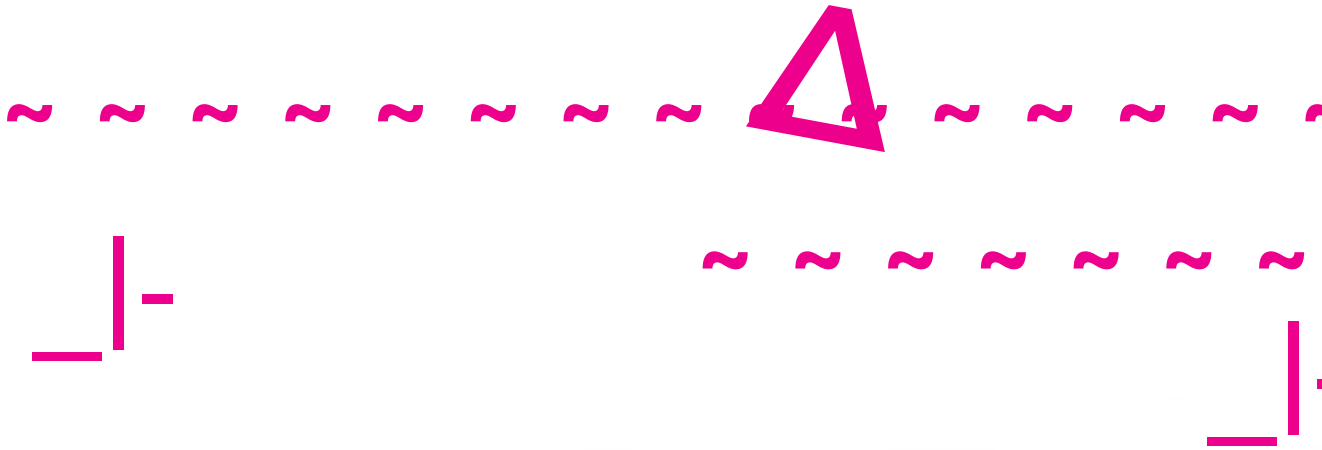
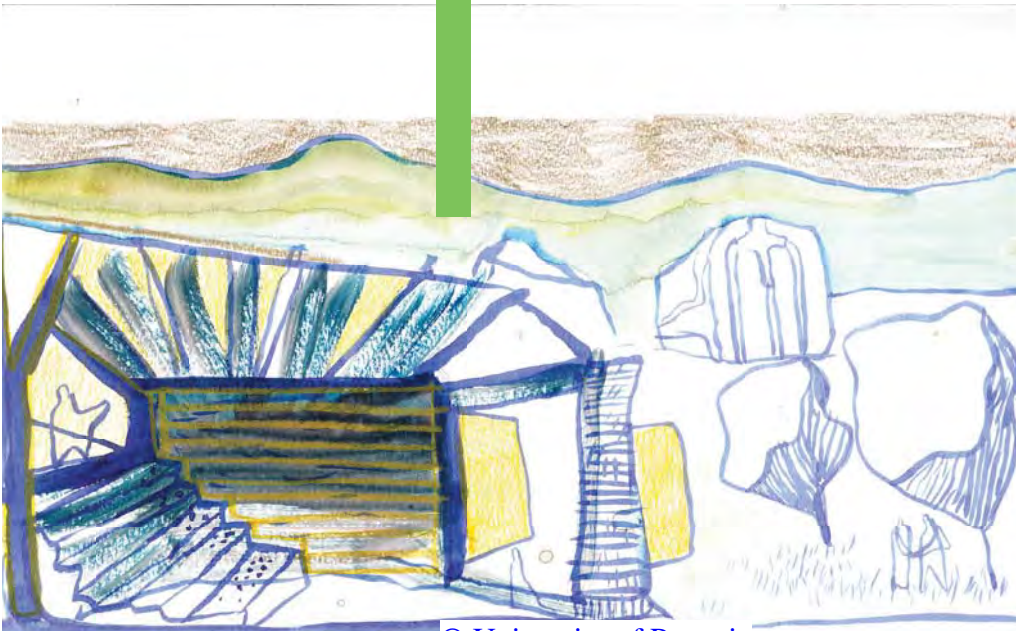
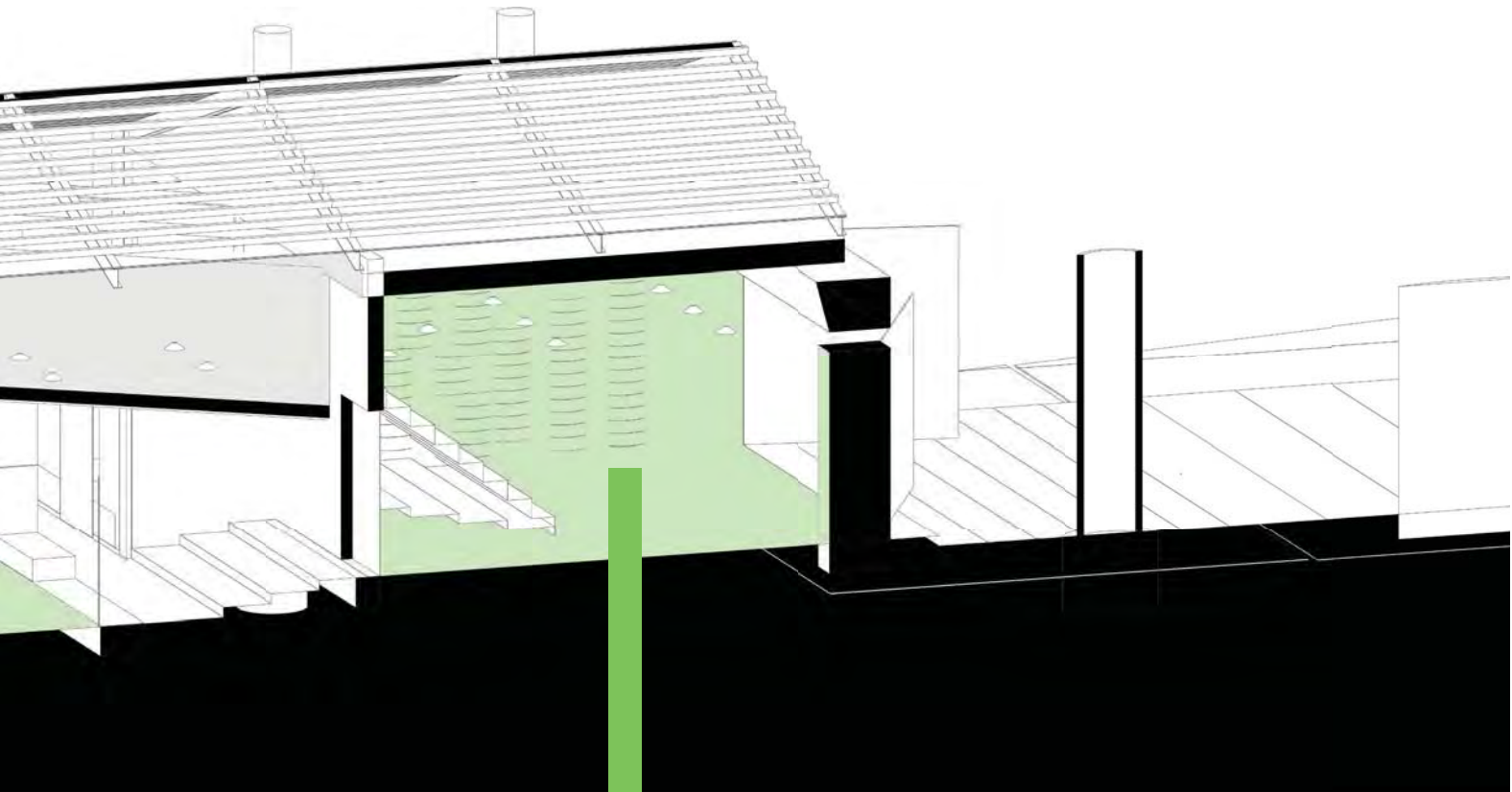


FIGURE 198: 3d perimeter section of the building with its legends and connected sketch of a 3d perspective of the role theatre on the right bottom.



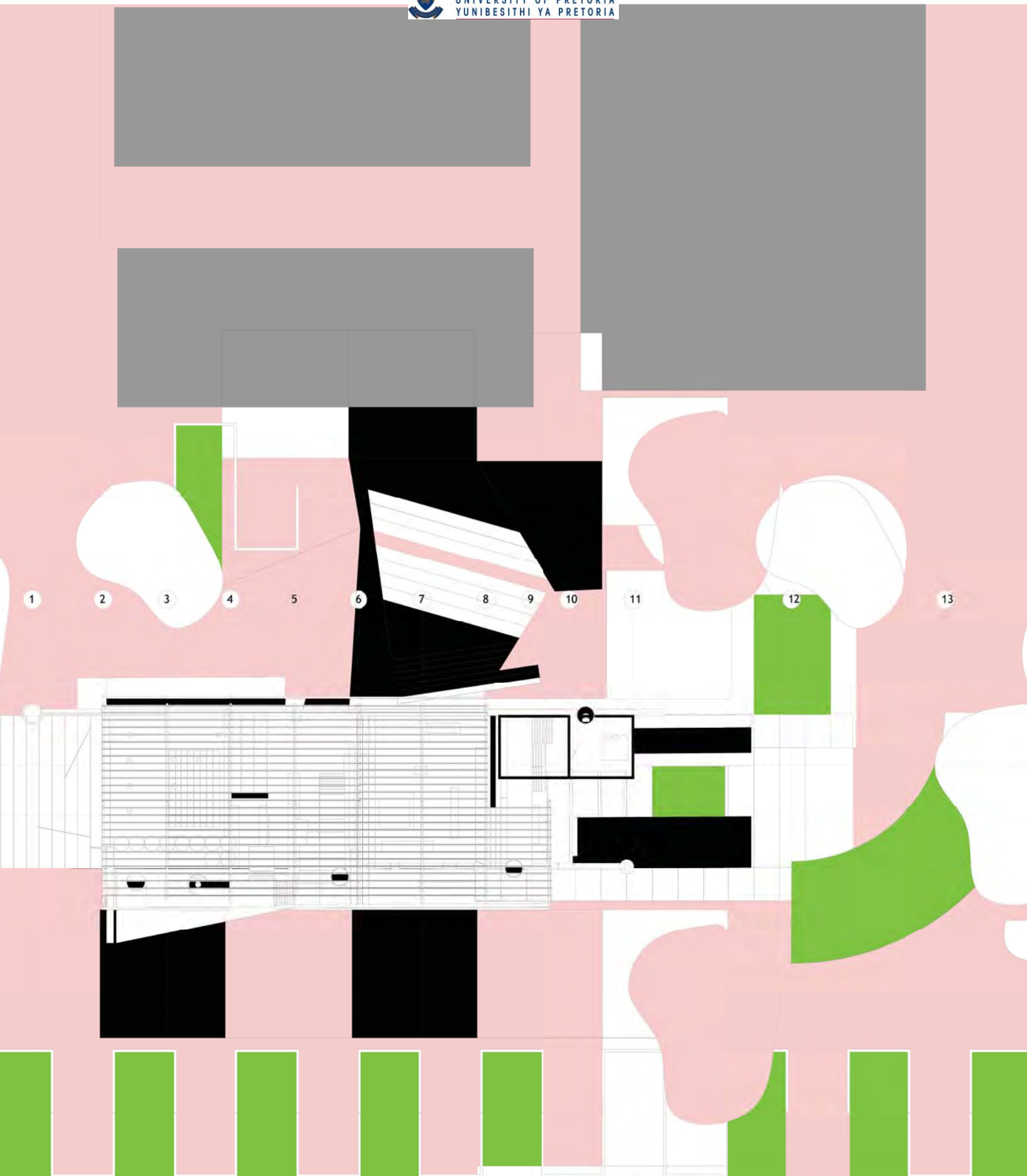
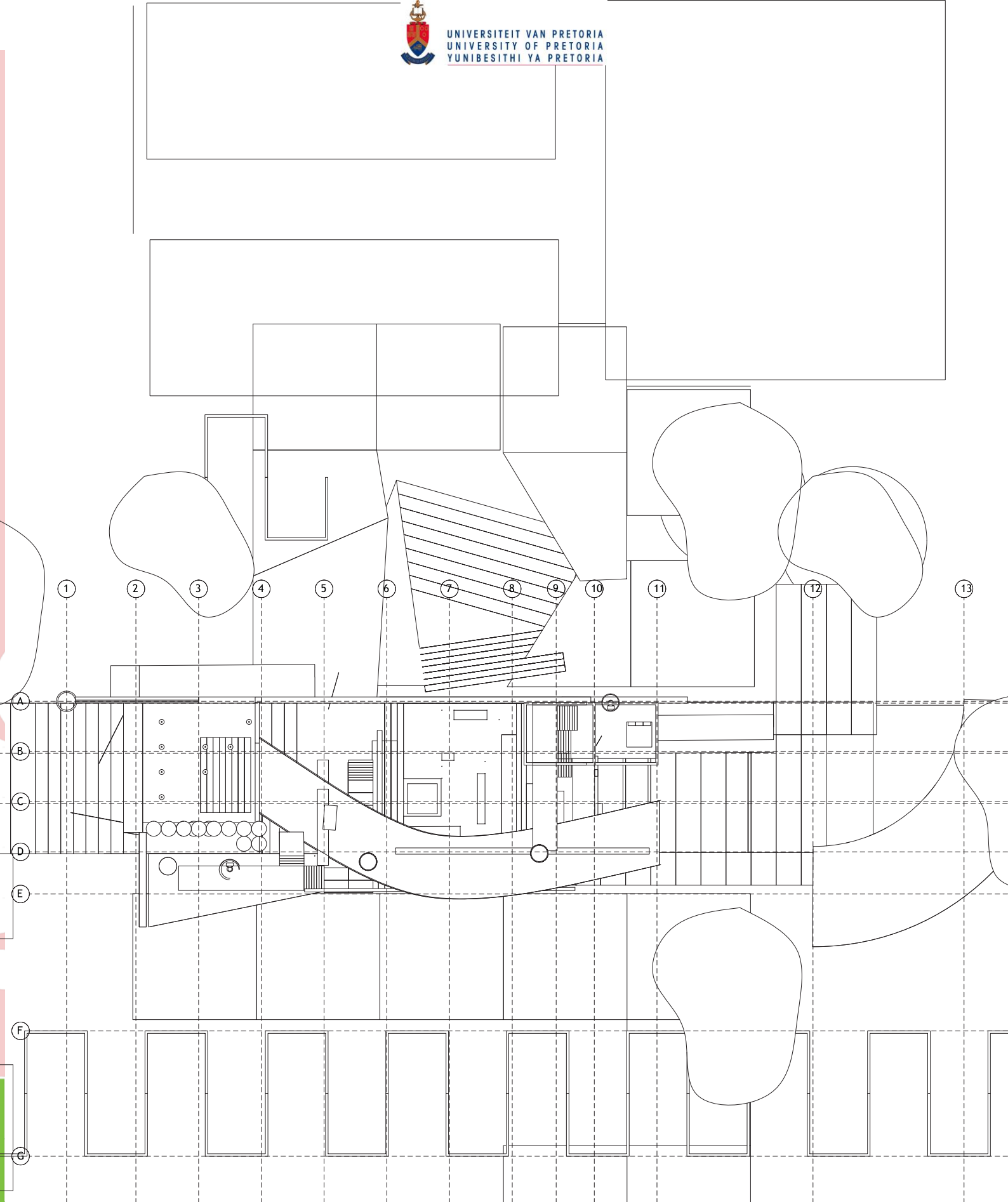


FIGURE 200 Plans of site and plans of the top floor of hte building, in progress.



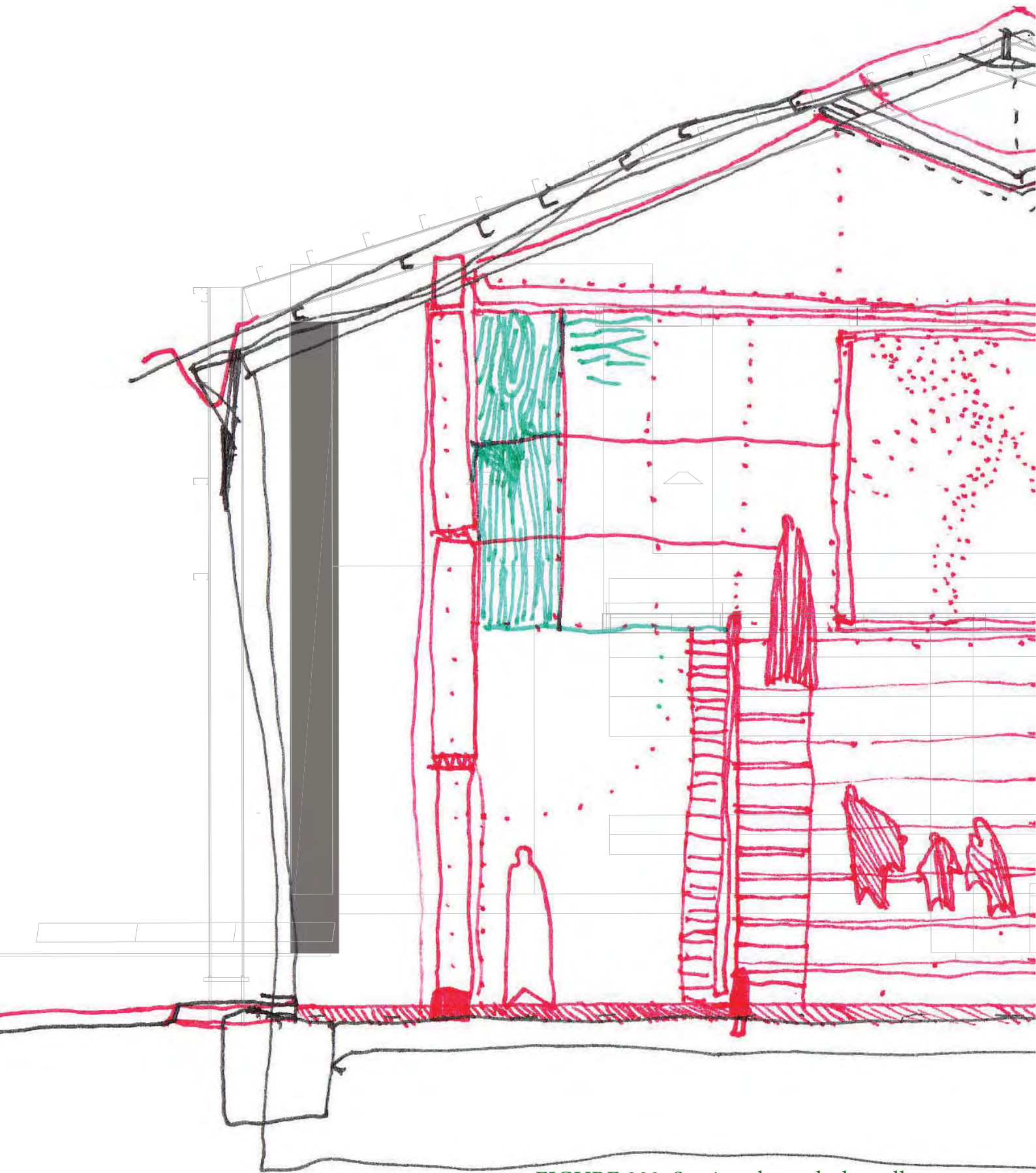
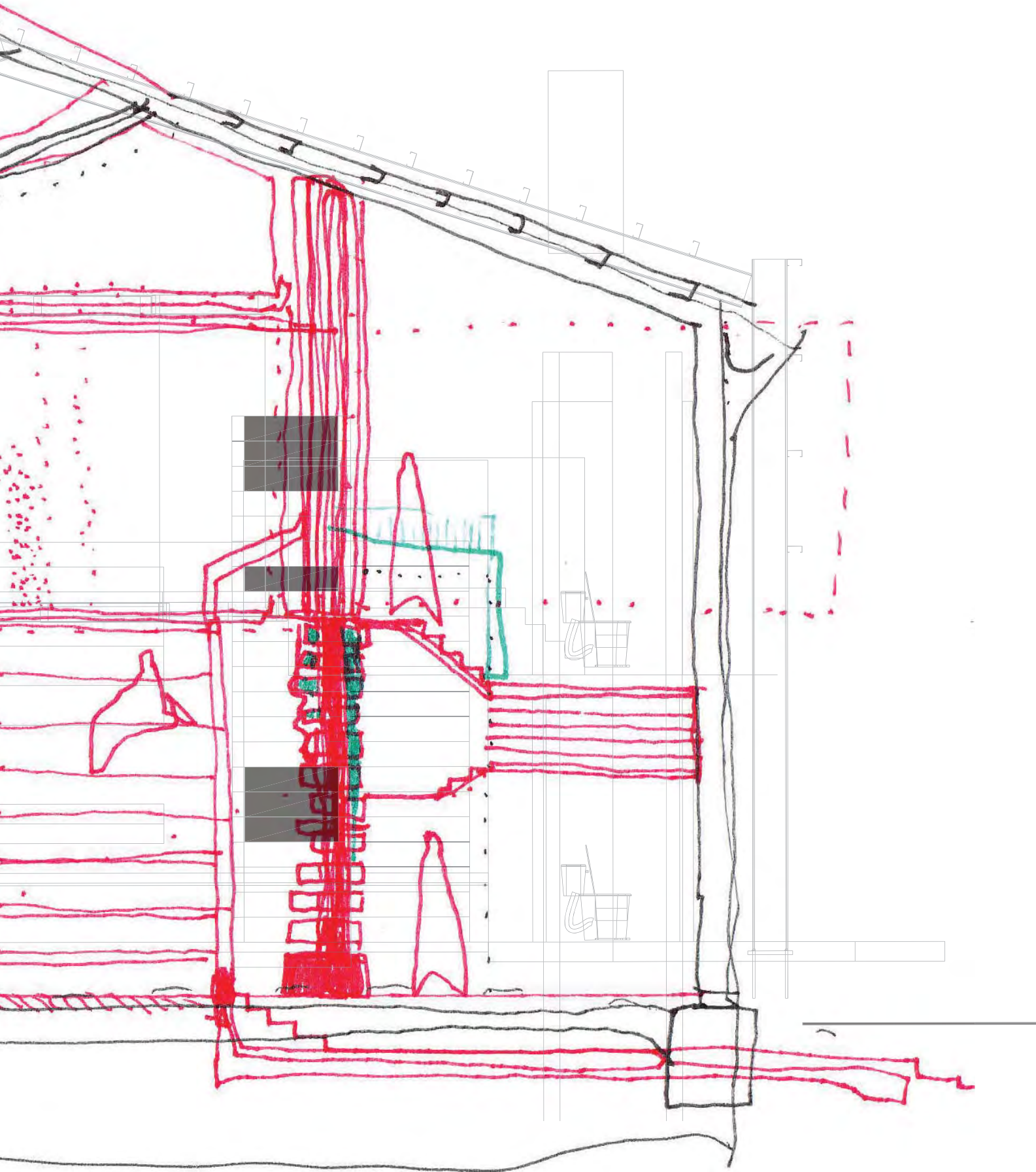


FIGURE 202: Section through the gallery and the role theatre space with tire wall construction and spolia brick.





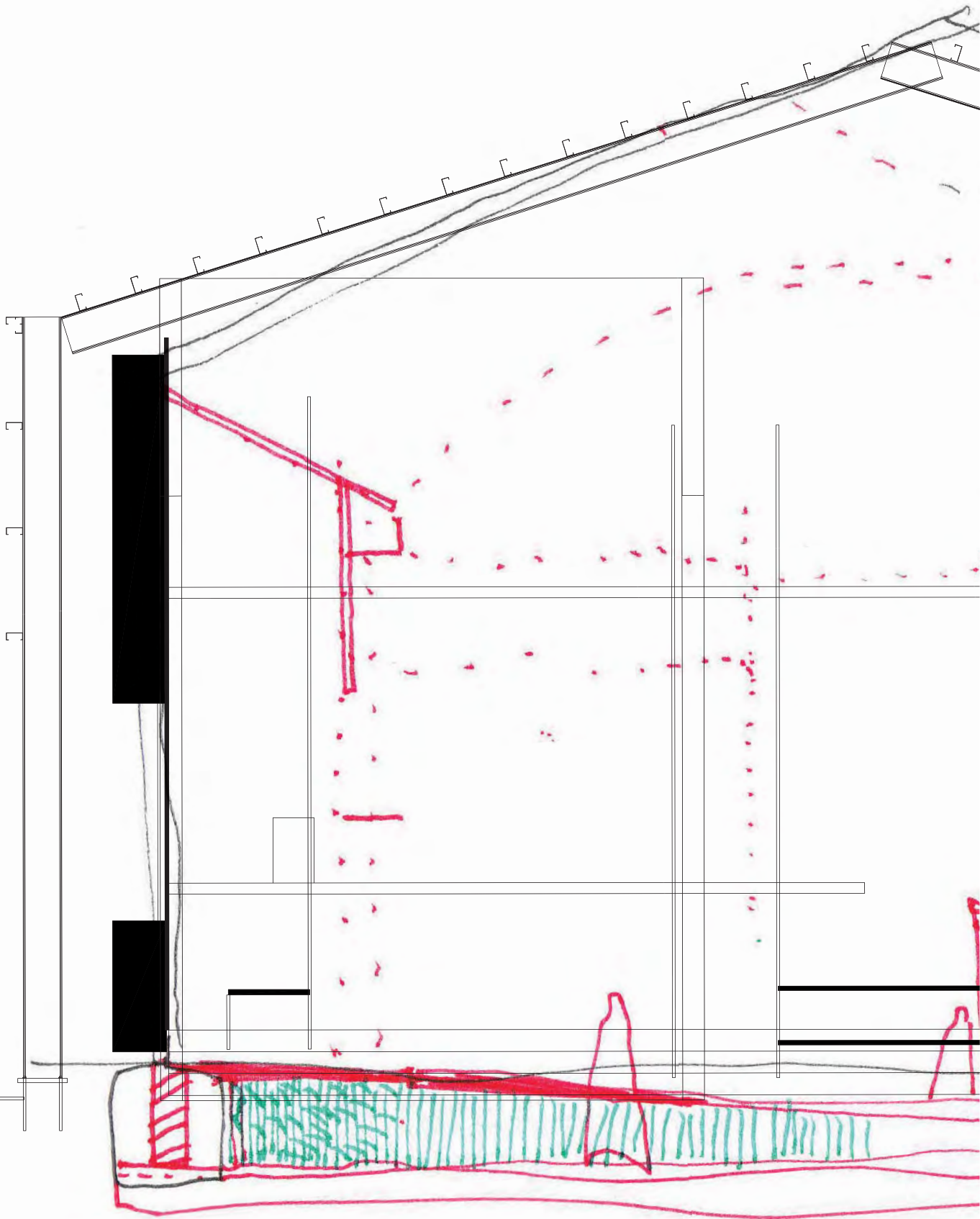
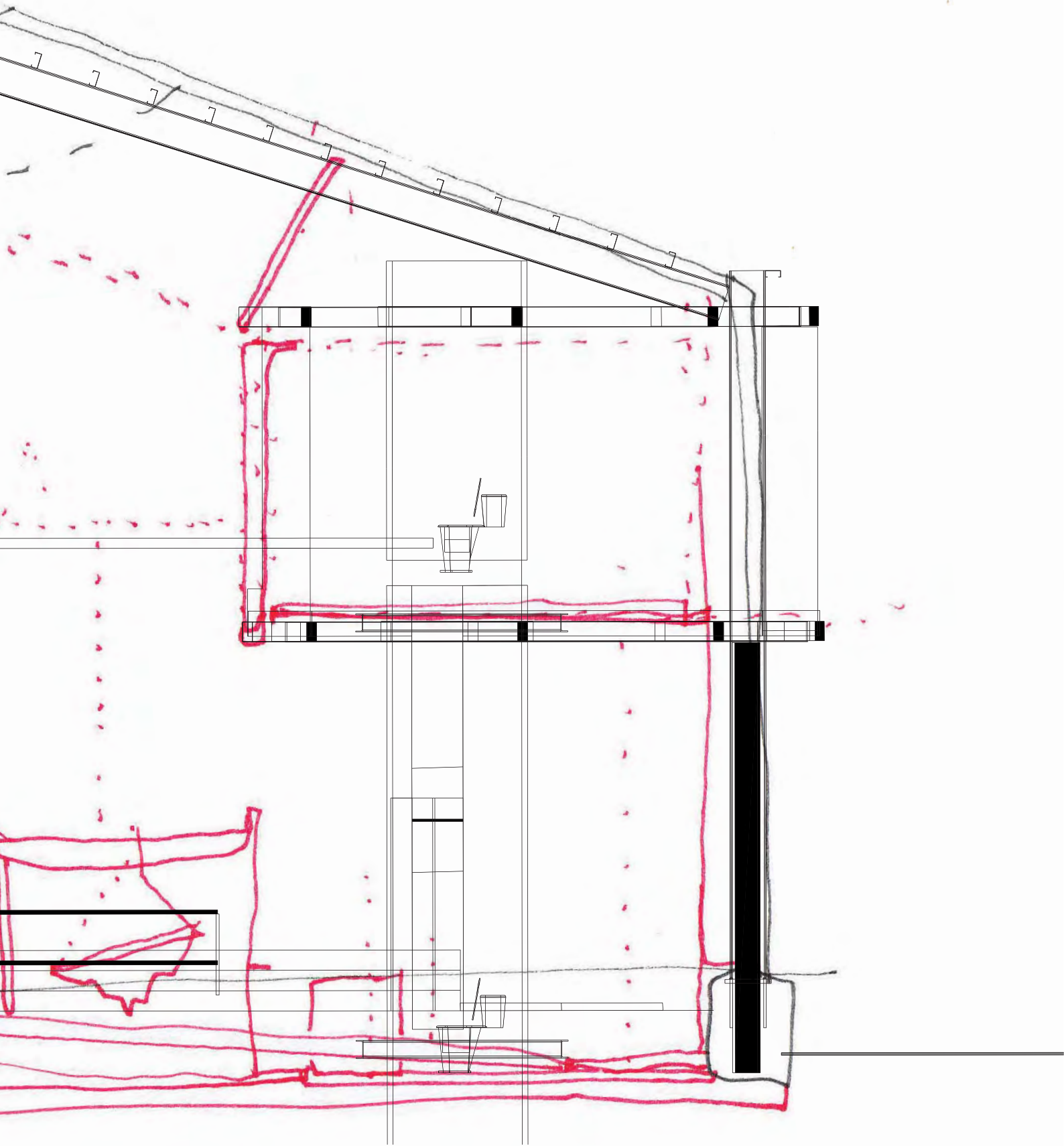


FIGURE 204 : Section through maker space and gallery with the beacon in the distance. and 3d printer on maker space floor.



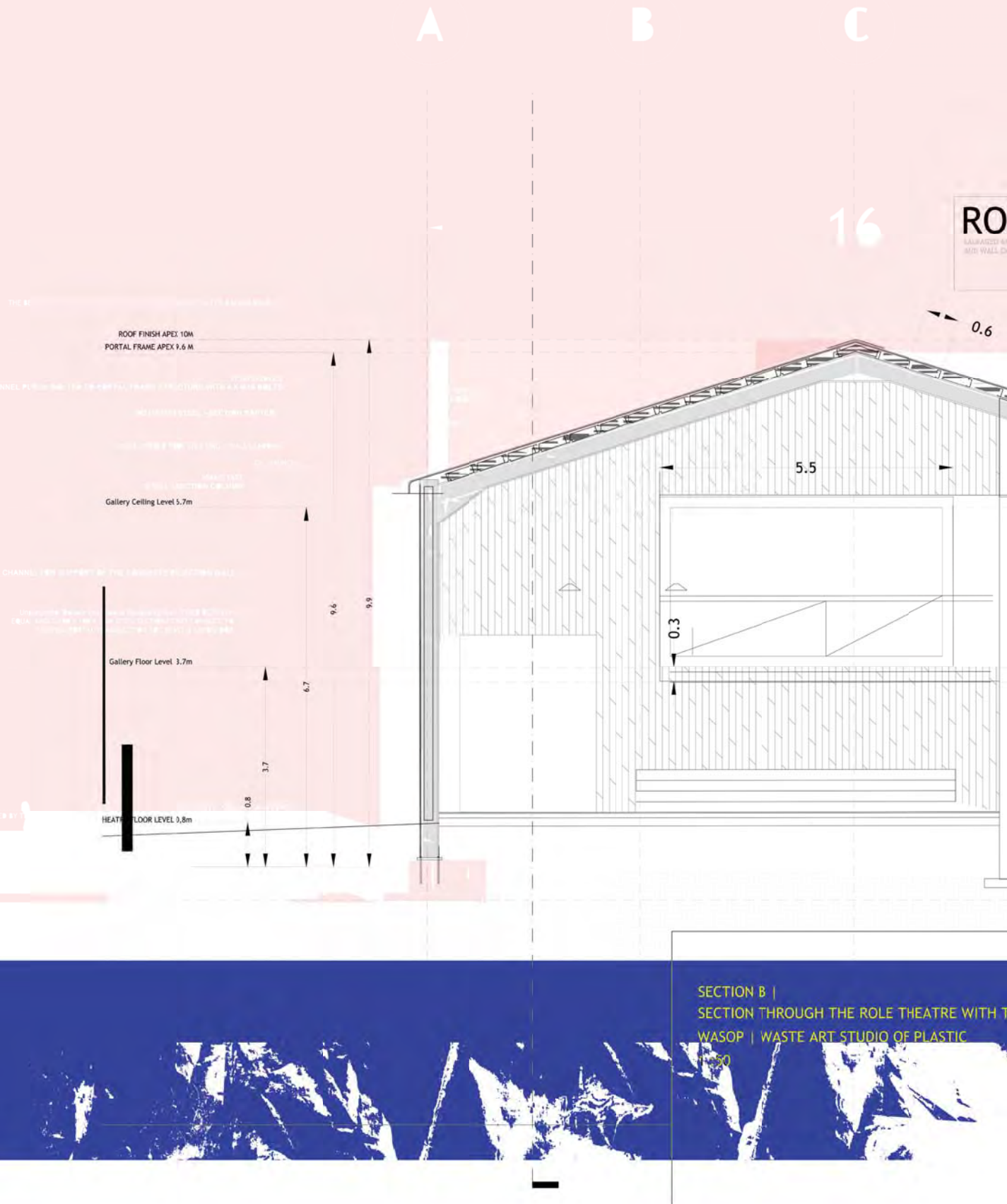


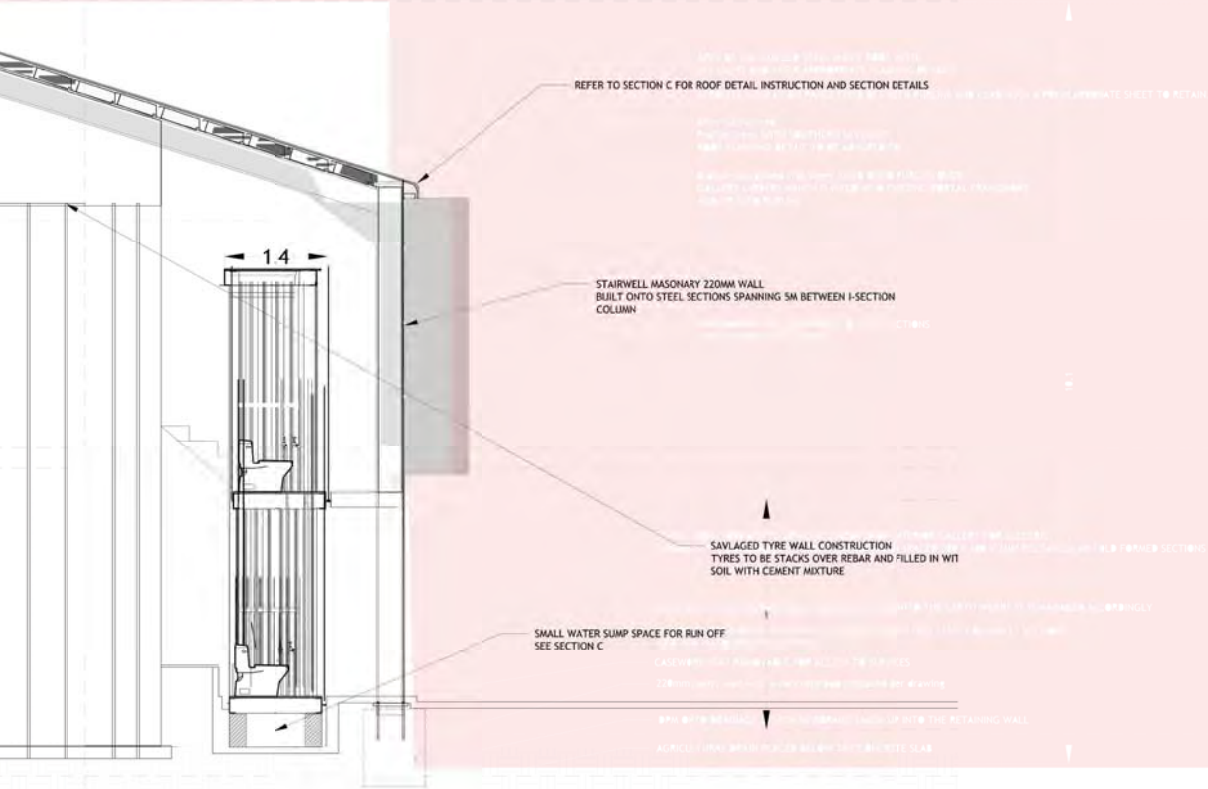
FIGURE 206 Section B with role theatre space cut through and toilet /plastic column



# D E

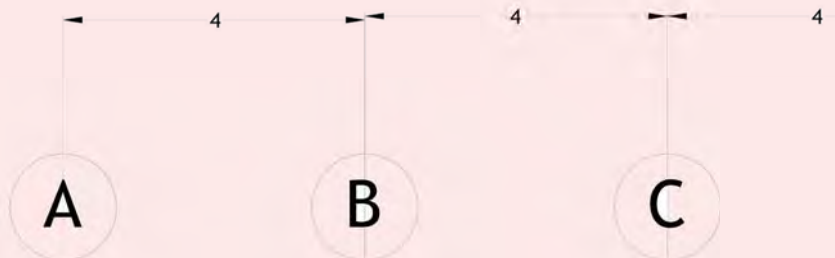
## LE THEATRE

RECYCLED WOOD CLADDING ONTO CONCRETE FLOOR  
TO WHICH THE GALLERY TYP WILL THEN REST



THE FREQUENCY GALLERY IN EACH





16

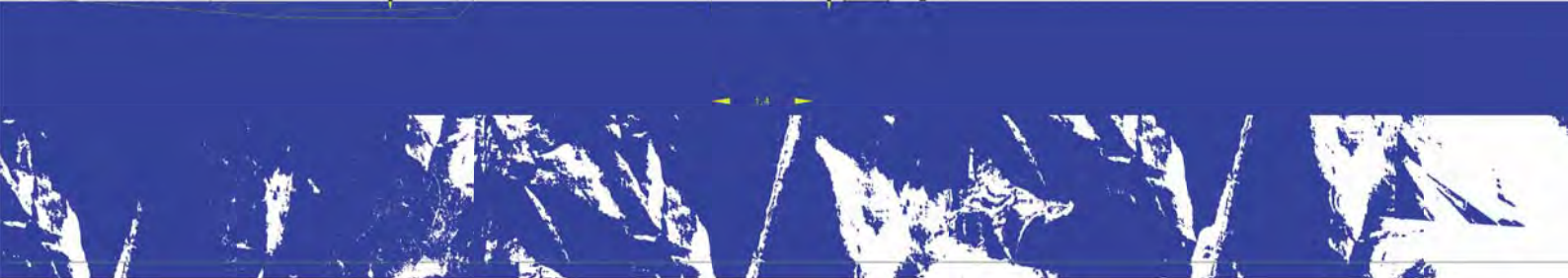
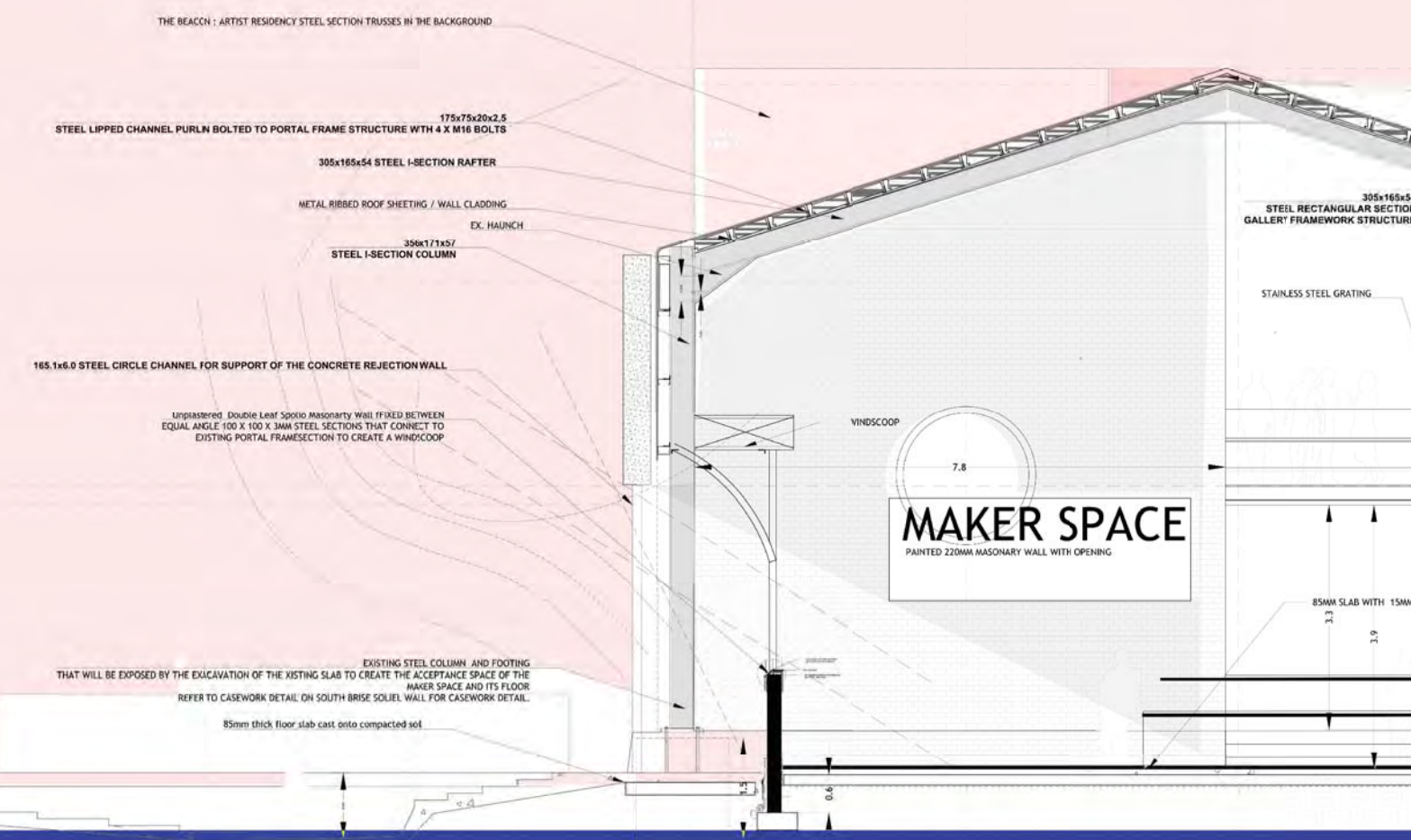


FIGURE 208 Section C of maker space with residency in the background

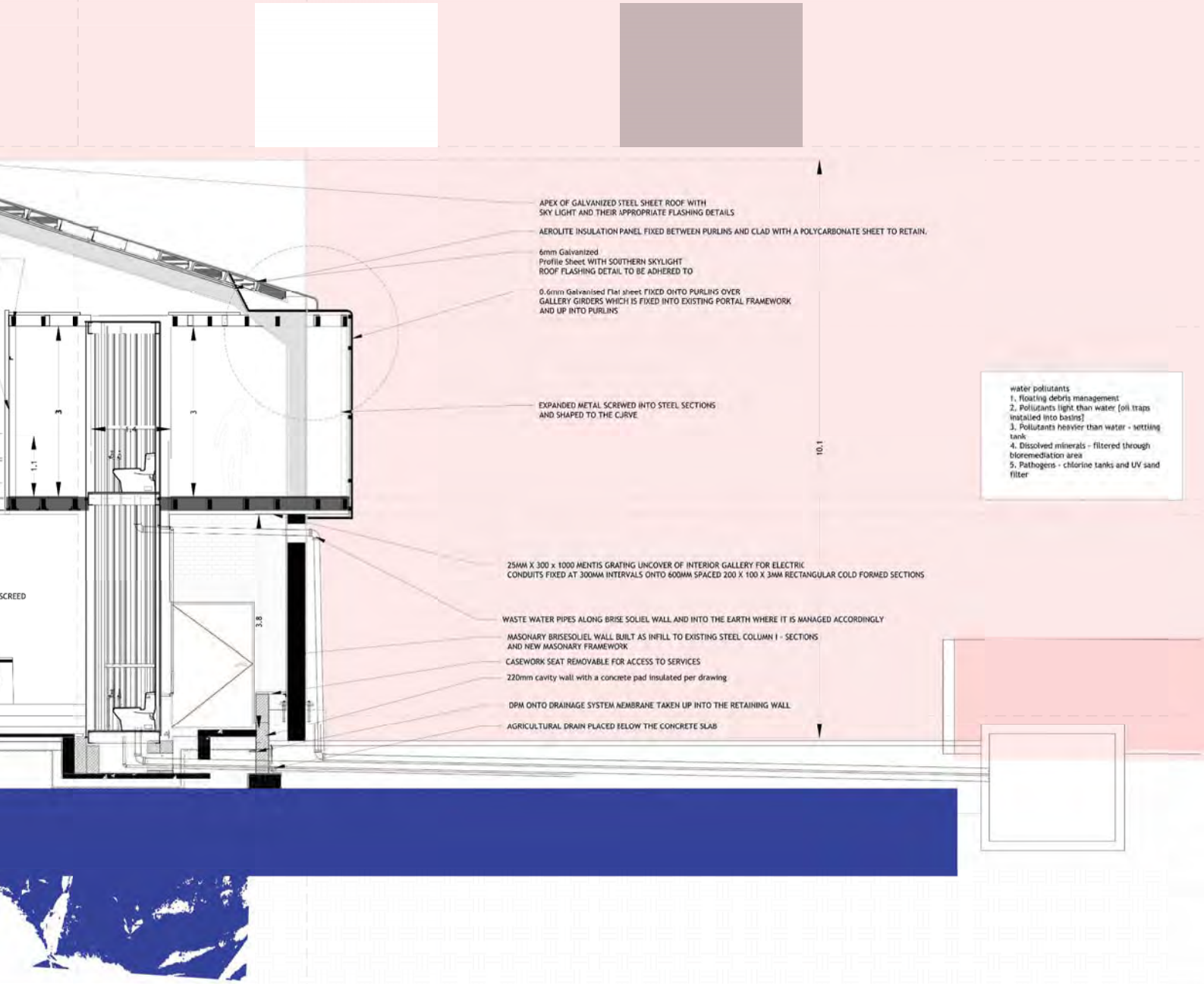
SECTION C | SECTION OF MAKER SPACE WITH RESIDENCY  
WASOP  
1 : 50



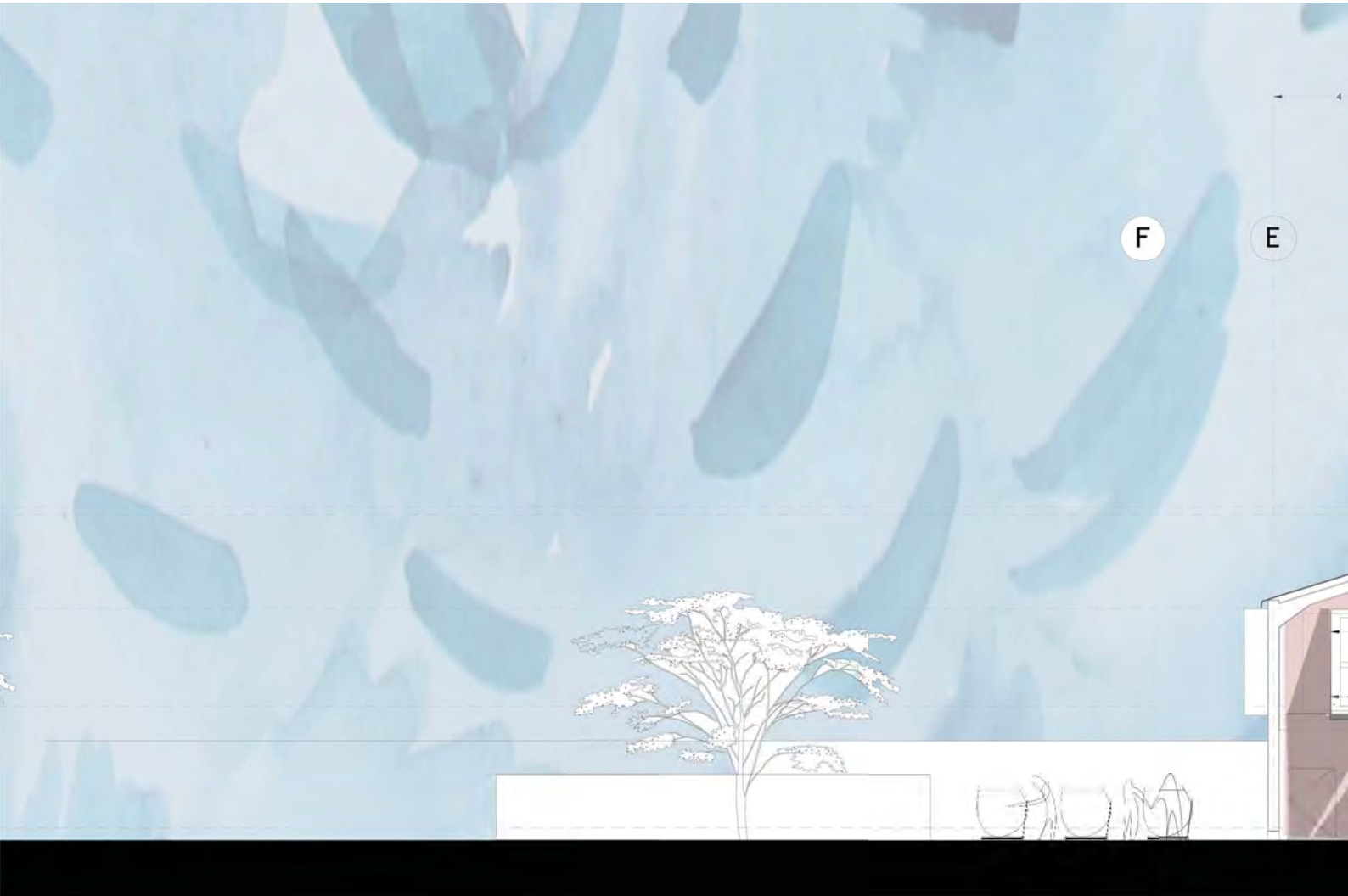
4

D

E



ENCY IN BACKGROUND AND GALLERY TO THE RIGHT

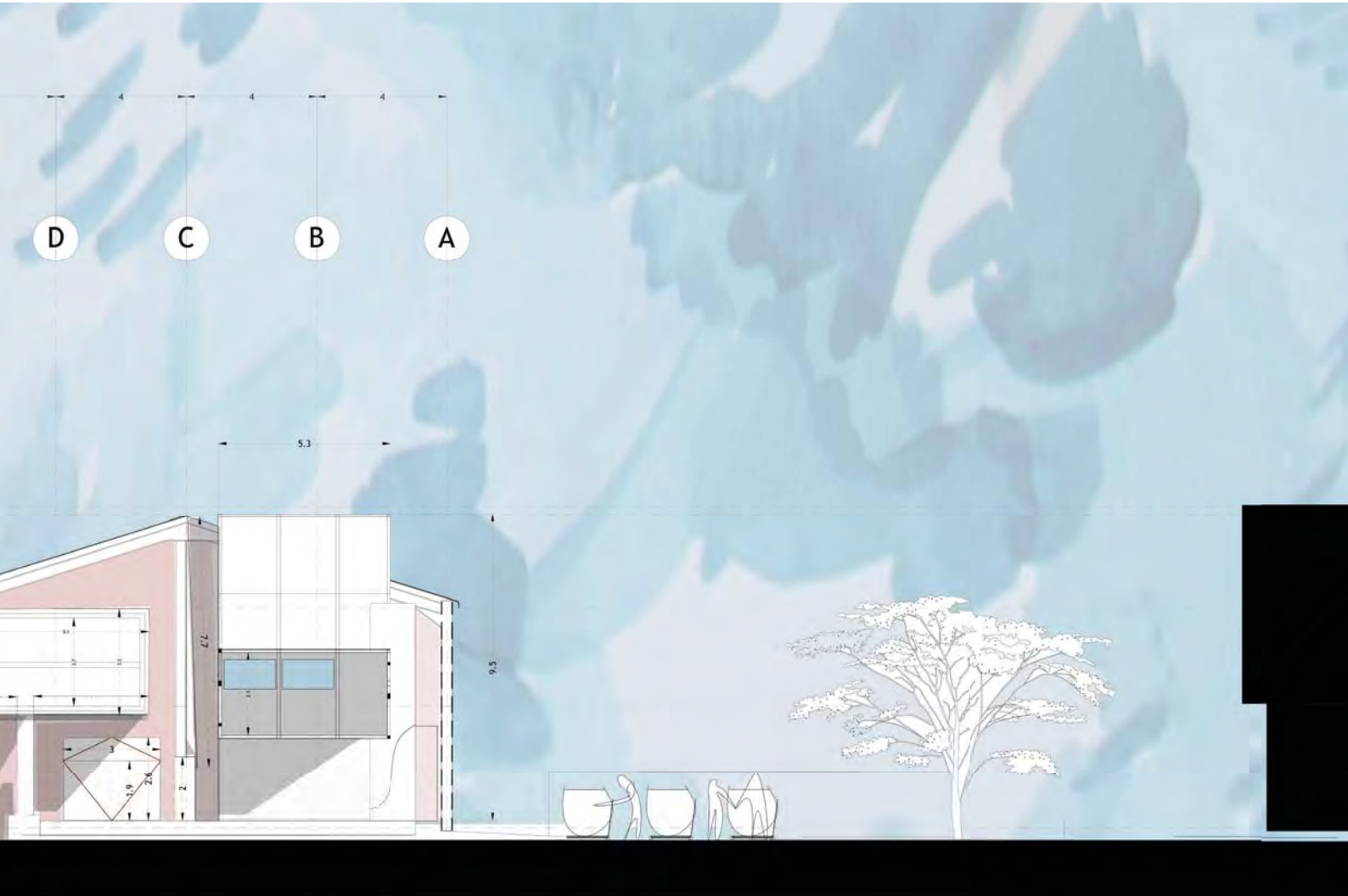


e

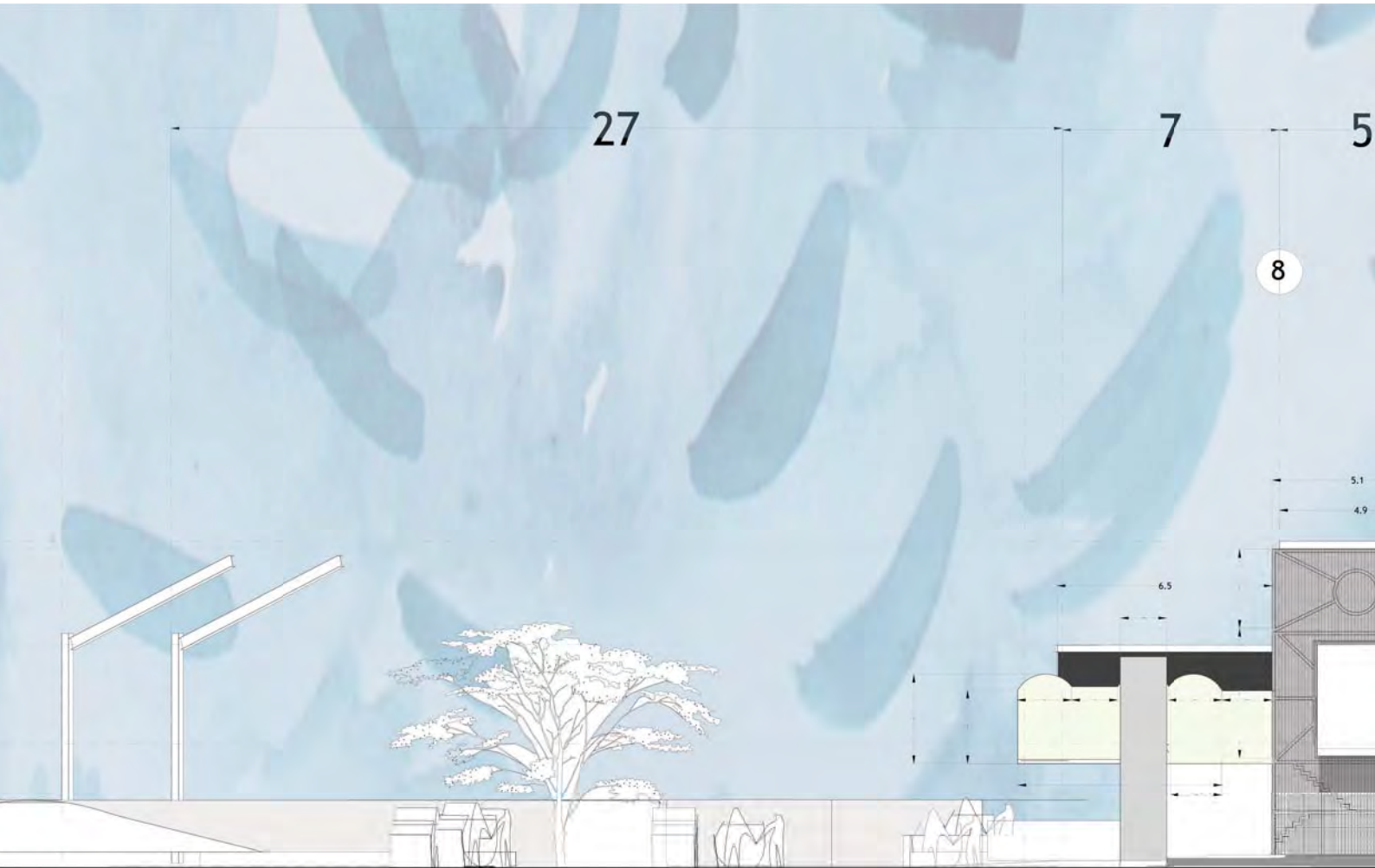
ACCEPTOR | EASTERN ELEVATION  
1:100

FIGURE 210 Eastern elevation





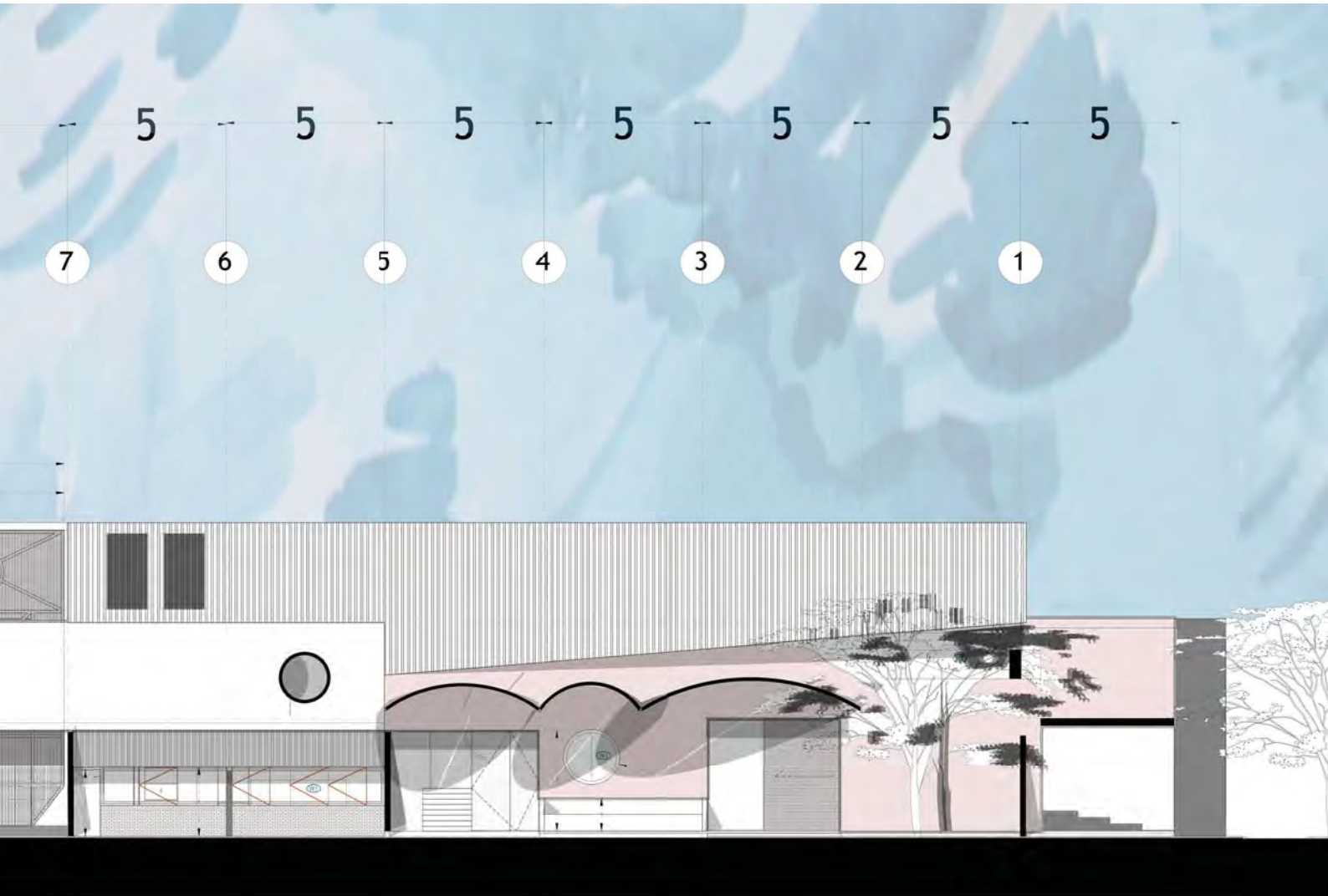
## SECTION OF RESIDENCY AND GALLERY ENDS



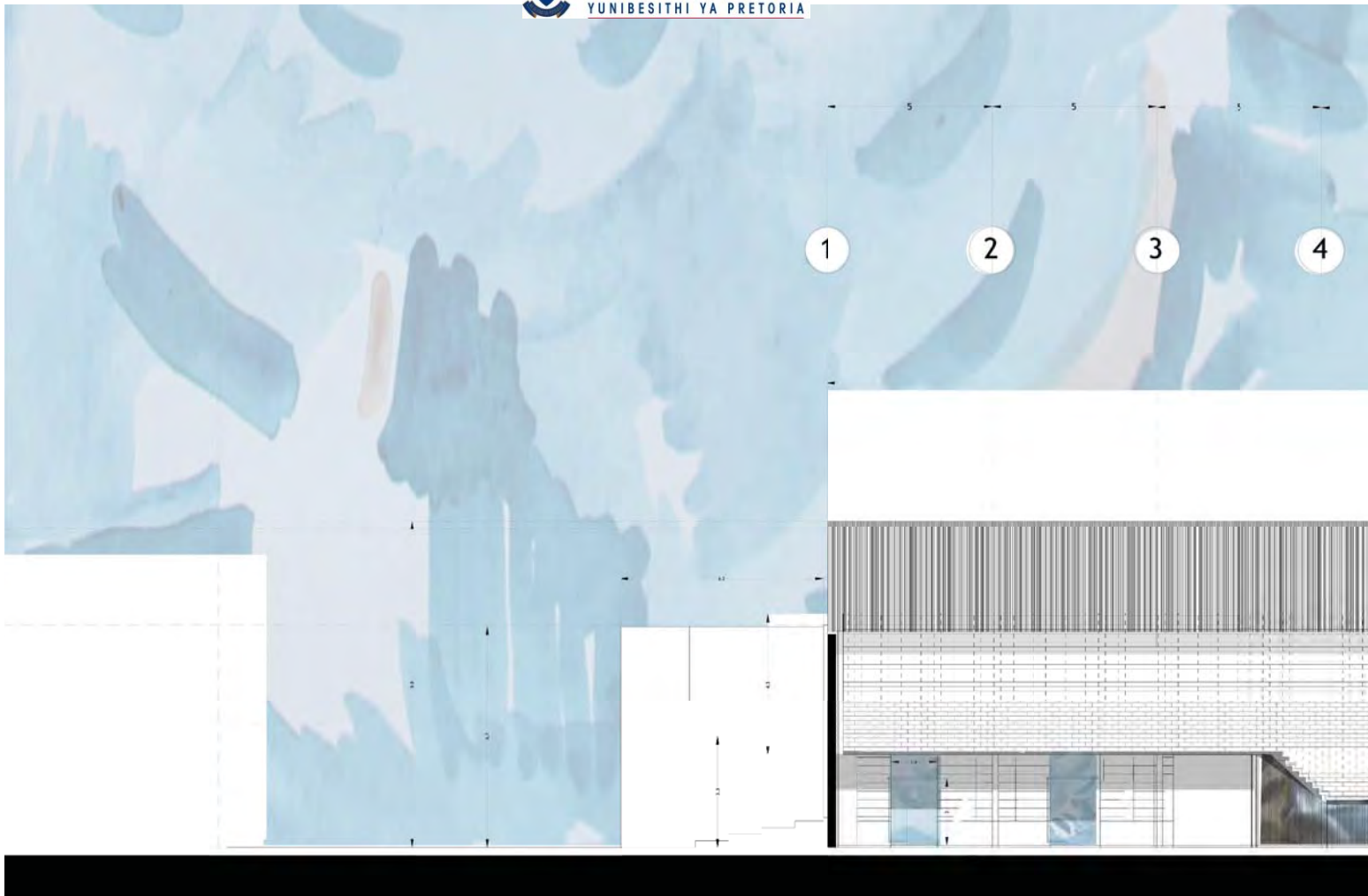
n

REFLECTOR | NORTHERN ELEVATION  
1:100

FIGURE 212 Northern elevation



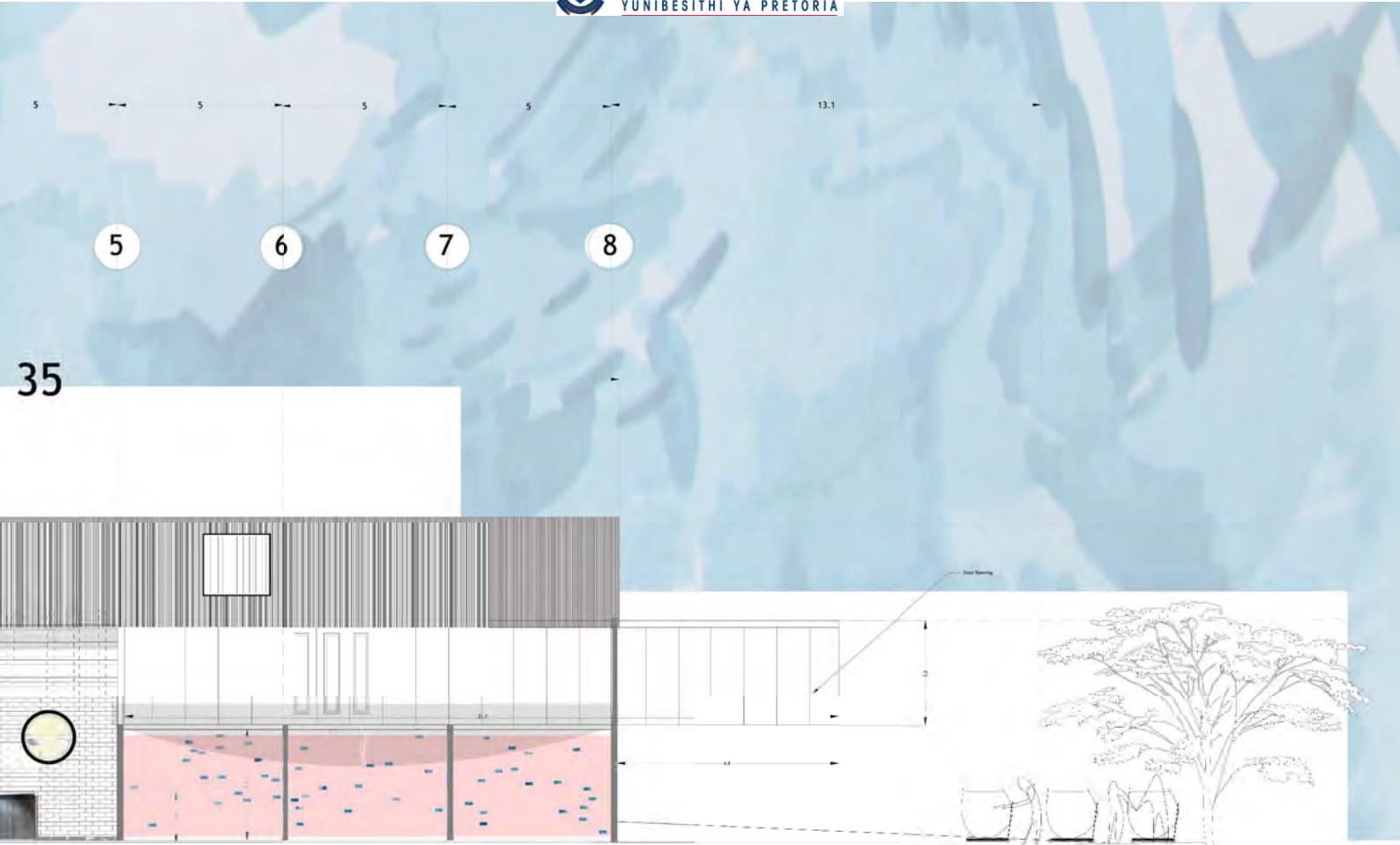
## ELEVATION OF BEACON



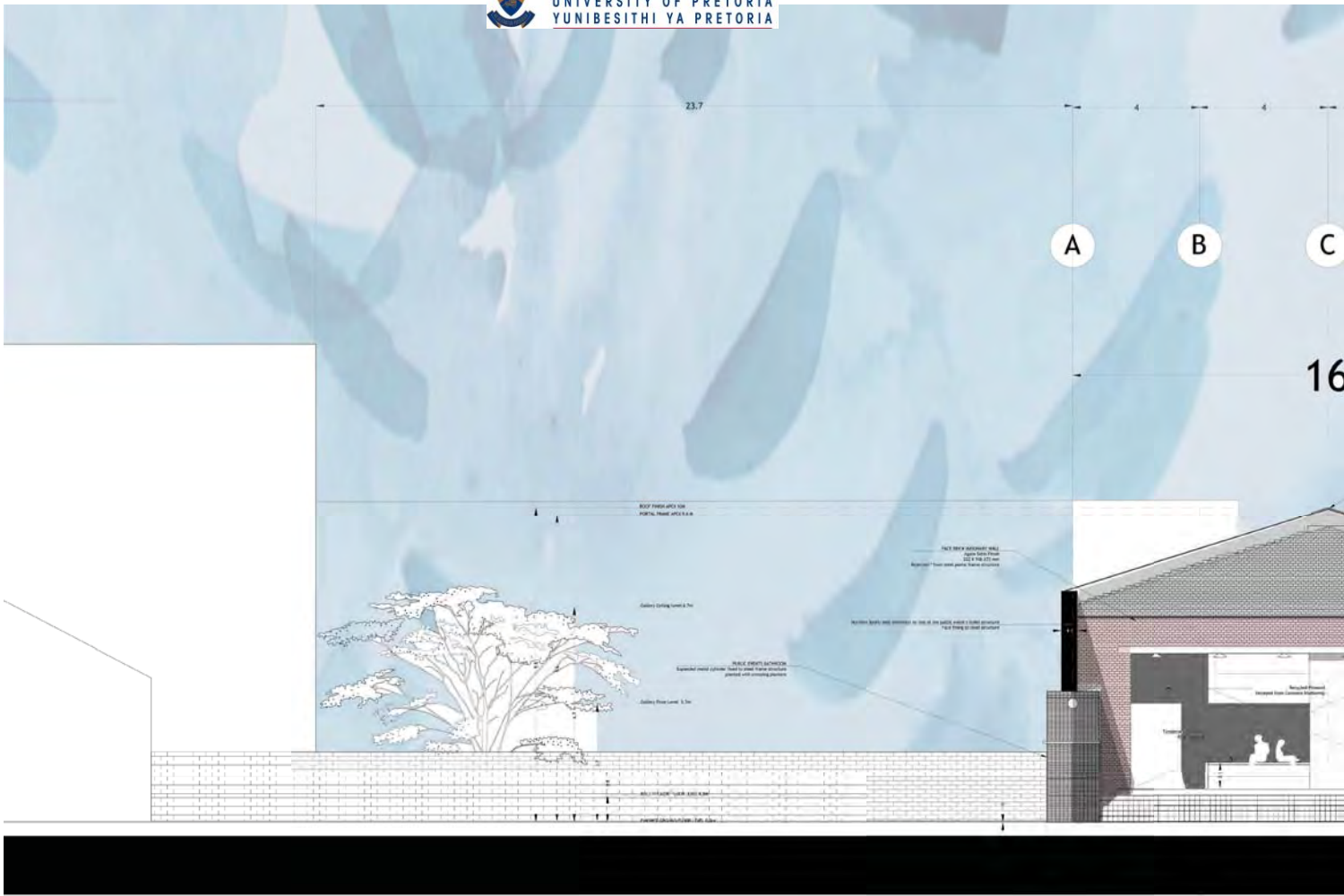
W

REFLECTOR | SOUTHERN ELEVATION  
1:100

FIGURE 214 Southern Elevation



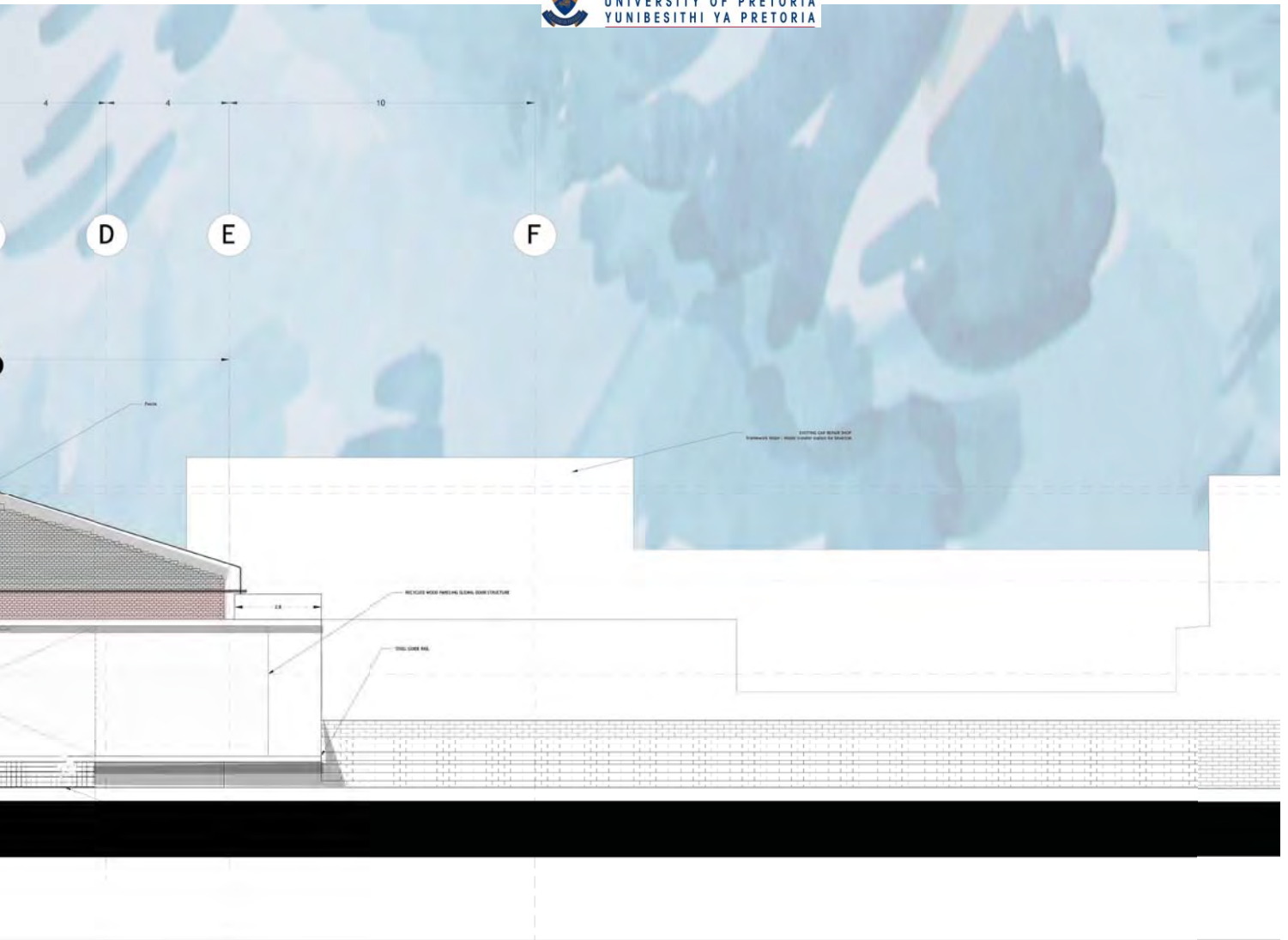
## SECTION OF GALLERY PIERCING



W

REJECTOR | WESTERN ELEVATION OF  
1:100

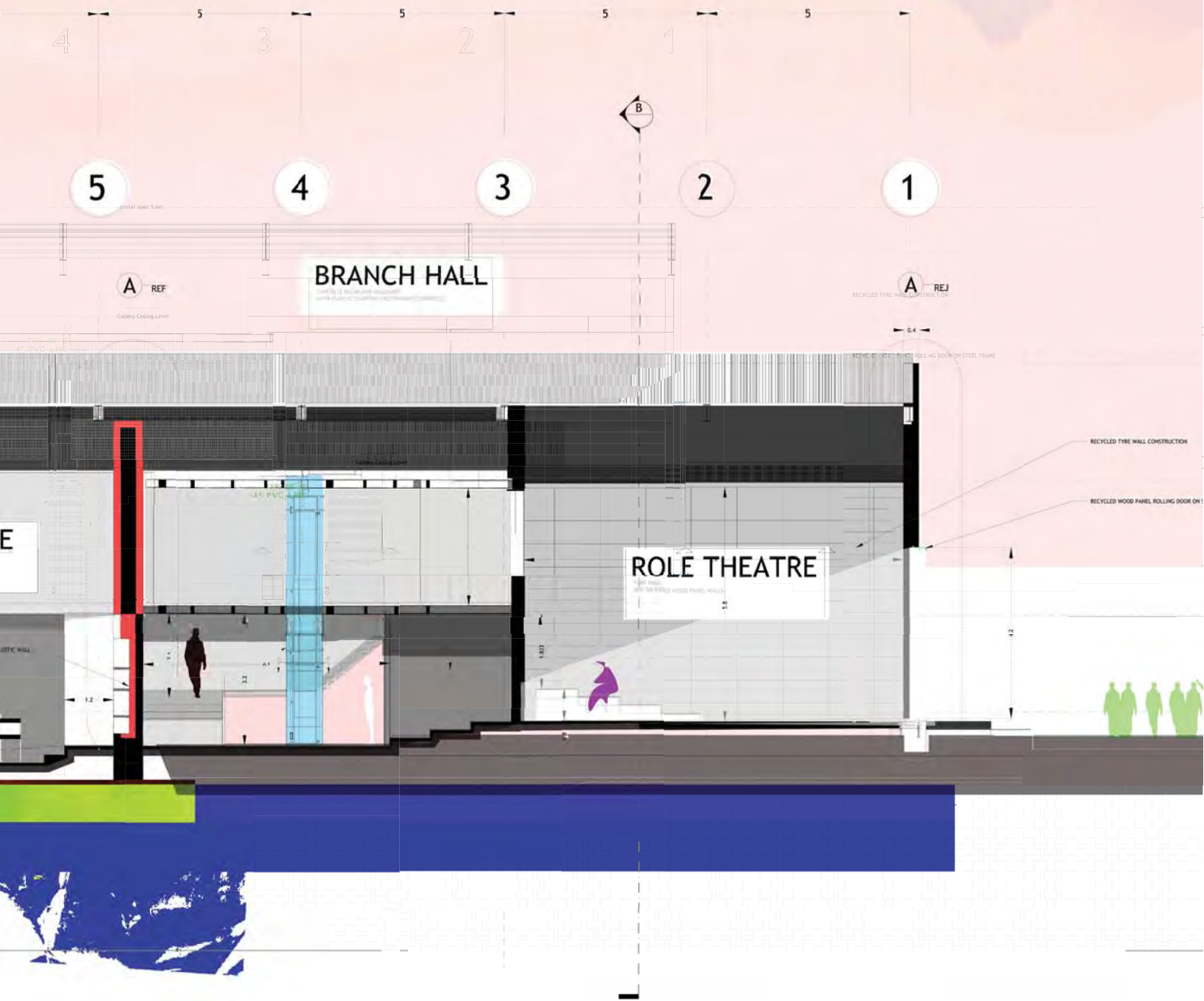
FIGURE 216 Western Elevation



## THE ROLE THEATRE DOORWAY







ING : BEACON AND THE ROLE THEATRES FOR FACILITATOIN OF FREQUENCY



*reflecting on rejection*

FIGURE 220



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA



# 10: REFLECTION

A CONCLUSION

Waste is more than matter discarded or the 'dissipative' - [disposable excess] , rather waste is a place, a realm of values of perception.

Waste this dissertation attempted to unpack was the language of waste - so that the dialogue of solutions can begin to extend beyond environmental strategies into sustainable solutions to issues of wastes of space and social potentials.

Social waste is if anything the aspect of architecture which is defines it - because architecture is dwelling, and architecture is place and architecture is space for society.

Of all the values defined [ rejection, accepting and reflection ] this dissertation concludes itself with the value it believes architecture must forever align itself with - and that is an attitude of reflection - and as a reference to the attitudinal wall - reflection is a construction of all parts of the debate - reflection is the collection of materials, gravity, passage, labour, function and finally of a way forward.

The conceptual responses of this dissertation of the pin/beacon/artist residency - role theatre/floor/surface/movement/ dialogue hall and -frequency/gallery/art/making/people/time and waste spaces - generated an architecture of components, folly and parts - and as a reflection on this end product of a building - it created an inner complexity - which if we are to take this back into a social setting is what happens to us as individuals when we attempt to embody all perceptions of value - we must form and develop our own perception of value - and perhaps this architect should have sooner claimed her biases for an attitude of relection - which in her opinion is not only a vital attitude necessary in architecture - but is also the value which does make room for rejecting and accepting - however never too directly rather - one should imagine the spectrum of which the author writes about [pg 42]

to have now developed itself into a large field of values - developing a gradient of attitudes and values in which all are relevant because of their presence in this world.

Waste is our art because waste is a part of us - it defines us whether we like it or not because it describes our way of living at this point in time - waste is a part of our Vitruvian legacy - and therefore we must continue to make it our art - an at this point a very autonomous kind of art -with more potential than ever before - for transformation of space laid waste and social issues wasting away good futures.

Architecture is the mirror of all waste not just the machine that disposes of it and carries it through its motions in reference to Peter Guthries - ' architecture is waste in transit' quote - architecture is also the mechanism that reveals potential - for people to look into and walk away with an inner reflection of the magnificent wierdness that is humanity and continue to find ways of being inlove with our nature, even if it is a wasteful and destructive one - it is one that can adapt, grow and realise all potentials.

-

FIGURE 222 Final model with roof removed showing the role theatre at the top, the gallery in yellow 3d printed plastic and the waste spaces and residency at the bottom.



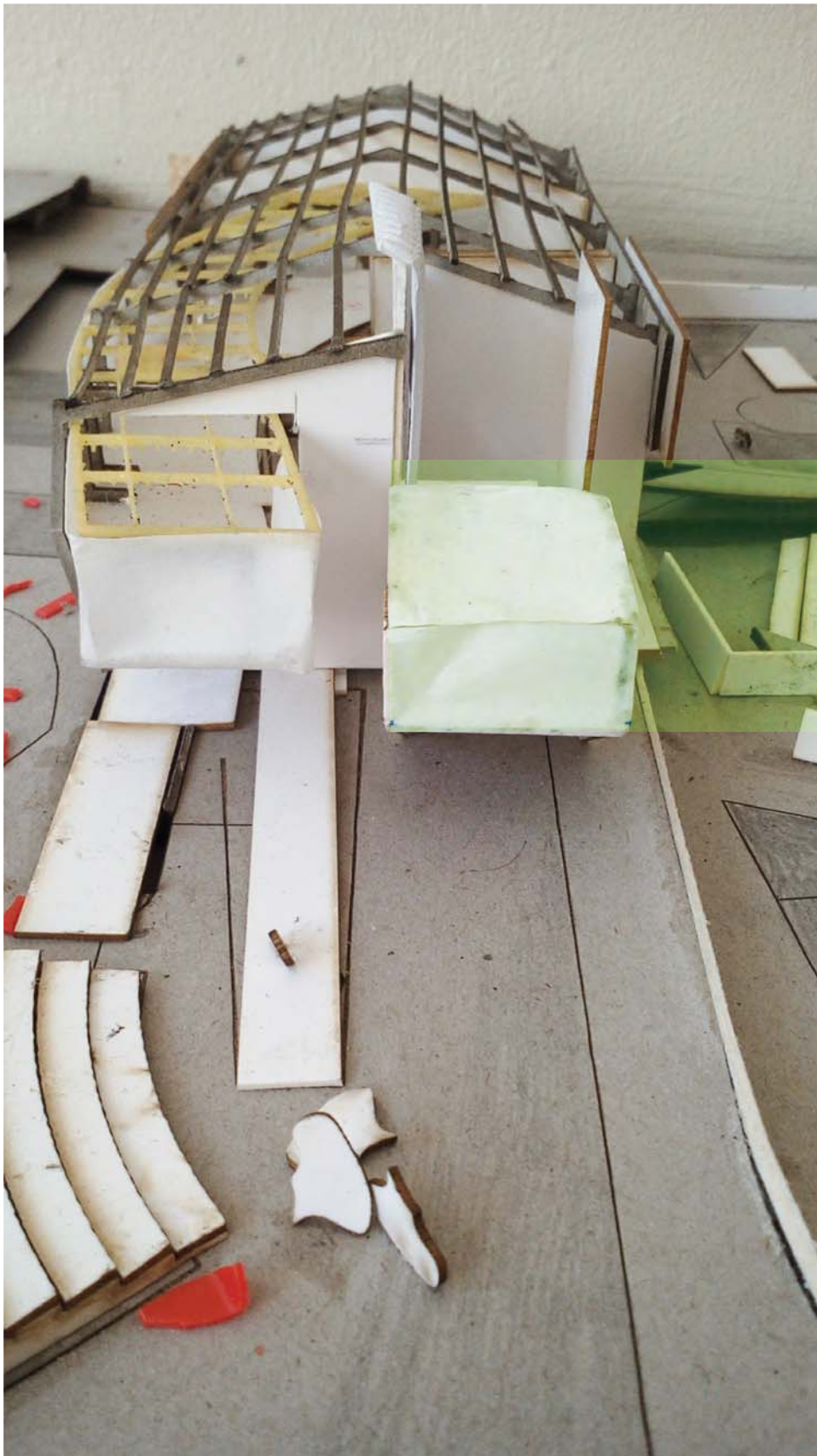


FIGURE 224 The Beacon at scale 1: 100 and to the left at 1:200 showing the steel structure that connects materials, motion and people.

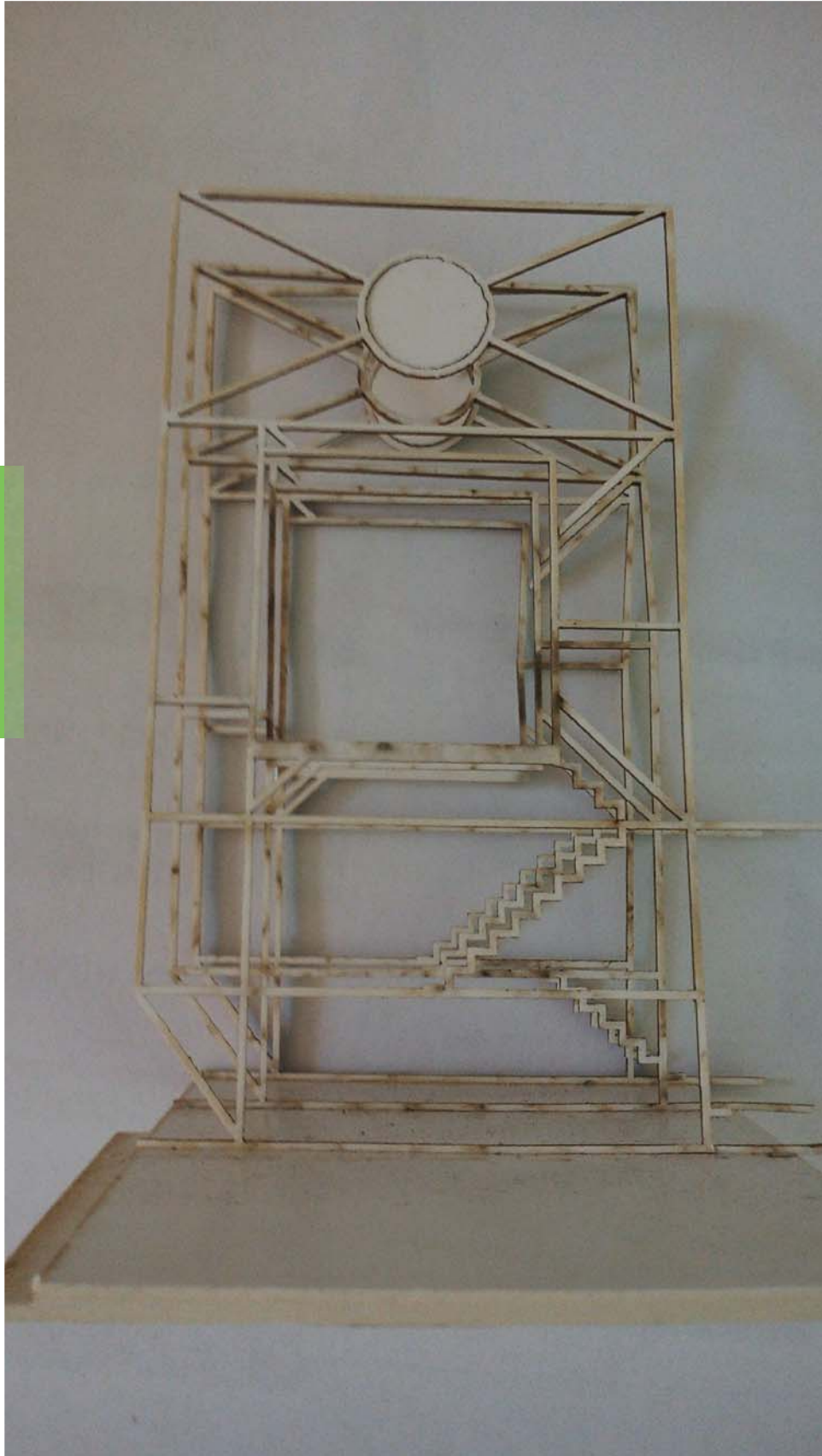




FIGURE 226 Detail model photographs - highlighted in green is the gallery, top left - over the maker space - top right and bottom - rejection of existing waste.



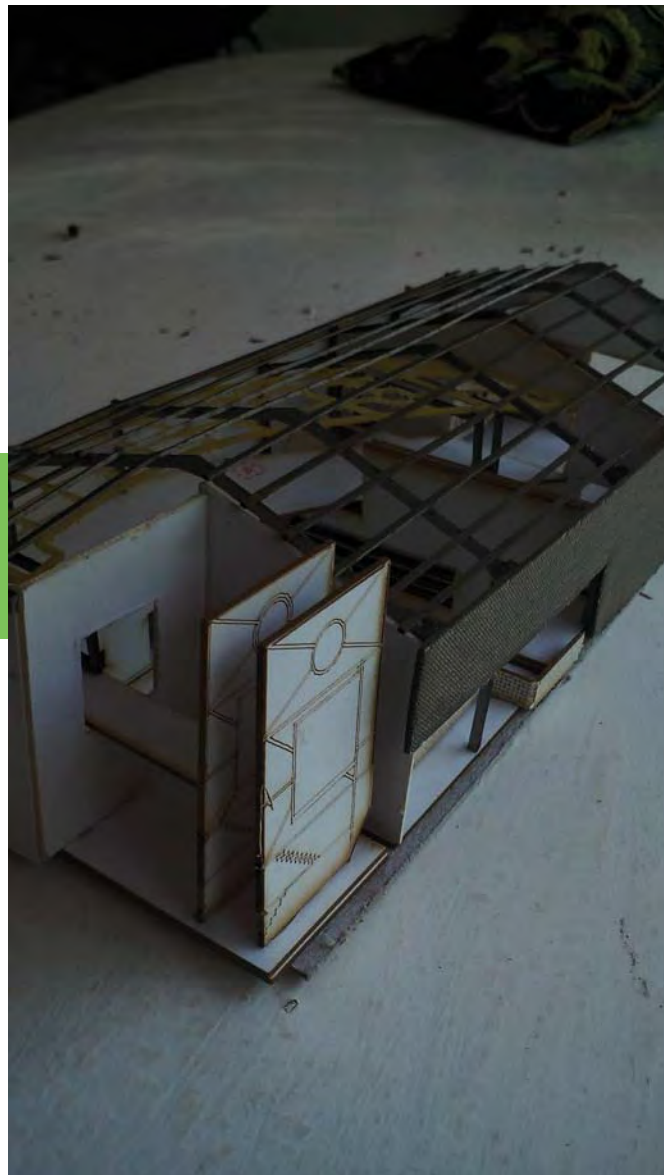




FIGURE 228 Table of models - from left to right: Technical concept model [blue and red and yellow] , beacon model , detail model, site model with conceptual pink foam form making experiments and below that 1: 100 site model within urban framework, first model of the year in brown card - from masters class exercises.





*The above photographs were taken in and around the industrial suburban edges surrounding Sandvlei. The context surrounding this transit area of the airport experiences an urban variety of suburban contexts and their low density developments to the low density developments of factory spaces that are used as mini factories for a variety of industries.*

*The architectures of brick and zinc and glass exist as small venturi sheds with their signage and their logos sealed poster boards - however in the town of Silverton there is a shed with walls filled in by the crater of an engine. In his room full of engines, the engineer decides to drink a glass of water.*

FIGURE 230: A set of narratives created by the author to allude to the mystery and beauty of industrial spaces which here serves as a happy ending.



*And, so he turns away from his engineroom, and approaches the wide zinc sink and turns the rusty tap twice to the left and again until it turns no more and as the tap reaches the end of its ribbon a soft tremor, of a cold shift occurs within the being of the engineer.*

*The water has finally ceased to run from the taps, the lines have all run dry and the raptures of beer halls begins, and all kind men are mankided. The warnings were not heeded, the signs were none obeyed and now the city dries and parched must carry itself away.*

*The above is a short story written by the author, imagining the context of a future apocalypse in response to four photographs taken in industrial areas within Gauteng.*

*The narrative elicited hopes to set only an abstract scene, to evoke a scenario where architecture has failed but why even the author cannot say, although this dissertation hopes to provide an exploration into how architecture can inspire a narrative of growth and freedom.*

*reflecting on rejection*



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FIGURE 234: 'Sad man in the gold town' an illustration by IMW 2016,





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FIGURE 236: 'The Arcadian', section of a painting by IMW, 2016



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