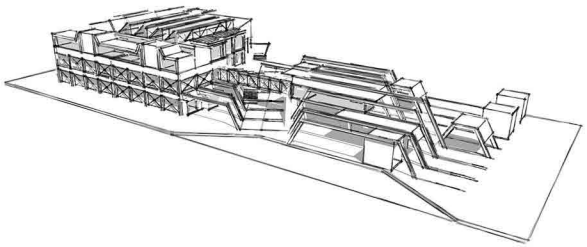
finding the place of the artisan in developing woodstock

Christos Simos

Associate Professor Matteo Fraschini
Melinda Silverman
Kevin Fellingham



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Argument-
The relationship between Cape Town and its socio-economic change has resulted in developments often disassociated with immediate context ,but rather following capitalist ideals with very little to no variation. This results in social alienation of existing communities with the new developments. These new developments are internalized enclave models with no engagement to their edge conditions but in the case of Woodstock, are selected solely for their proximity to the city center and their low start-up cost. These developments are also restricted to the measures of the urban scale and take a place in the morphology of the city by creating a new dialogue and place. However they do add value to the city and initiate a flurry of similar developments around them using the basic model of the enclave.

In this dissertation I propose the existence of a hybrid model that lies between syntactic values learnt from enclaves of malls and the armatures of the main street/s. By engaging with examples like the biscuit mill and Woodstock exchange and looking into their syntactic structure in comparison to the structure of dedicated malls (such as canal walk), I will be able to construct a set of design characteristics from which I can propose a new spatial model. This together with a critical look at the two main roads (Victoria road and Albert road) that run through Woodstock there will be enough local research into the overall form of the two contrasting models.

Question -
Dealing with an existing urban fabric which has undergone many infrastructural changes over the past 40 years, the new model of the enclave takes on a new form in Woodstock yet is bound by the spatial parameters of the existing morphology. The question of how much how much can we change something without losing its original value whilst working within its limitations?

Locating the design intervention -
Based on the theoretical research into enclaves and armatures, I isolate “anchors” which facilitate the function of an enclave and act as the main attractors of people. Naturally spaces form around these “anchors” and a series of linear paths leading up to them. In the case of Woodstock I have chosen the Woodstock station, and its adjacent site. The main intervention is this site and its structures climaxing at the stations entrance.
The initial diagrams are a series of models and sketches which explore the path/s and structures supporting this movement. The programme itself builds off the tradition of artisans and craftsmen of the area which manufacture, market and sell in the same space.

Tectonics are derived from the typology of the buildings found on site and are tailored related to the artisans who will use these spaces. The existing structure contributes to the overall expression and is explored as an adaptable spatial model.

Conclusion -
Describing a new model is context dependant and the theory serves as a guiding set of rules which are used to establish the argument. Breaking of these rules creates the new but must be critically analysed for is values or its shortcomings.

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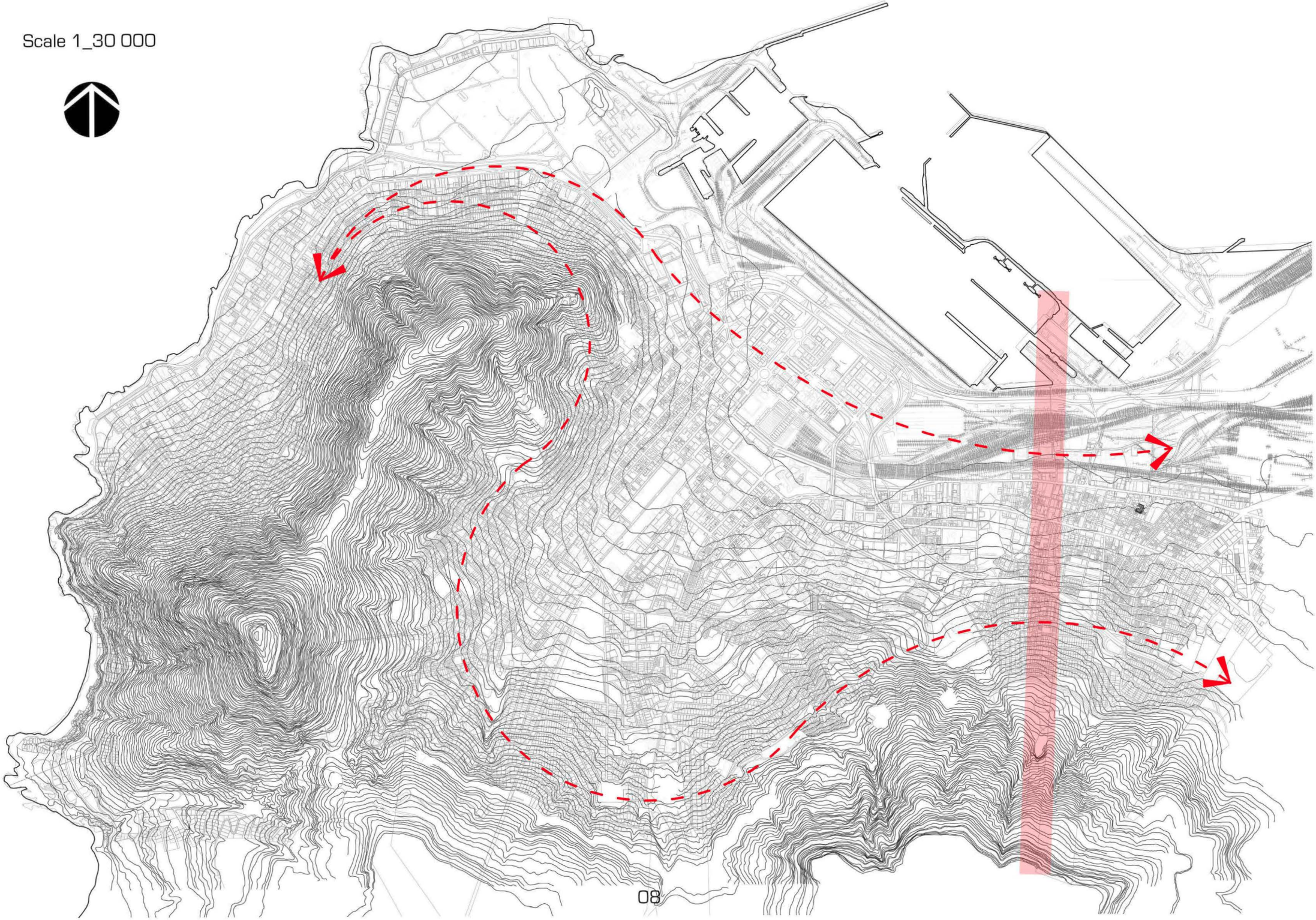


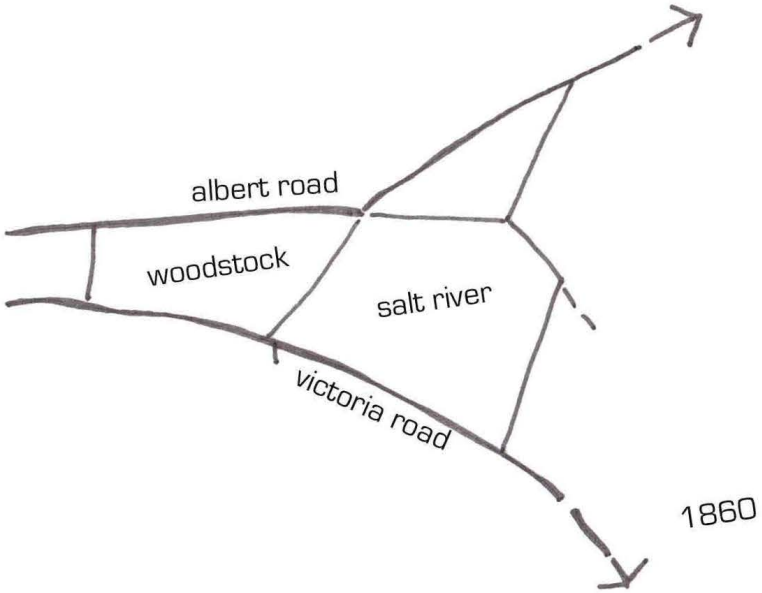
urban sprawl in cape town

Cape Town city is unique and beautiful in both its rich historical heritage and its geographical location. As the city's population grows and competition for limited land in the central business district amounts however, there is very little possibility for horizontal growth. Zoning plays its part from an institutional level but the simple geography of Cape Town city squeezes it between the mountain and the sea.

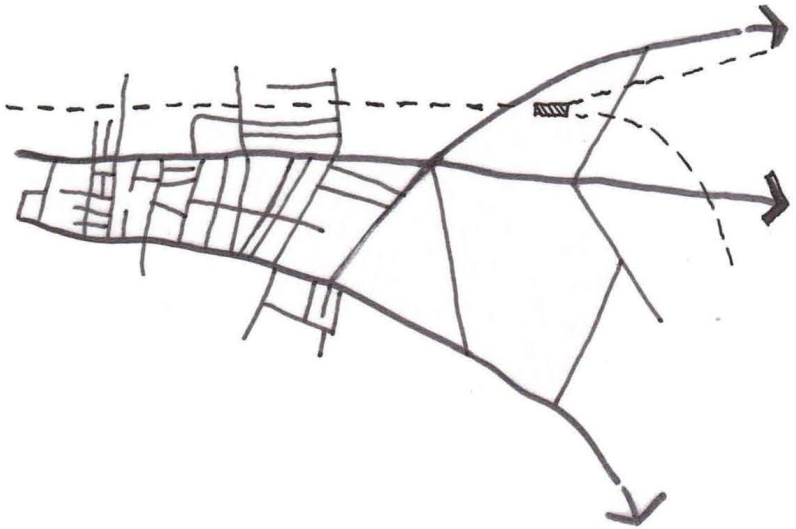
Cape Town's city sprawl has taken a very unique form along its main roads and access routes that feed it with everyday life. Commercial ribbon development is the result of this expansion which stretches across many distinct districts of the city. Some of these district have been subject to rapid urban renewal as a result of the city's growth.

In recent years Cape Town city has been the focus of many design experiments showcasing the various ways design and industry are used to renew and become the jointing factor in bridging the divide between cultural, social and economic differences within the city.

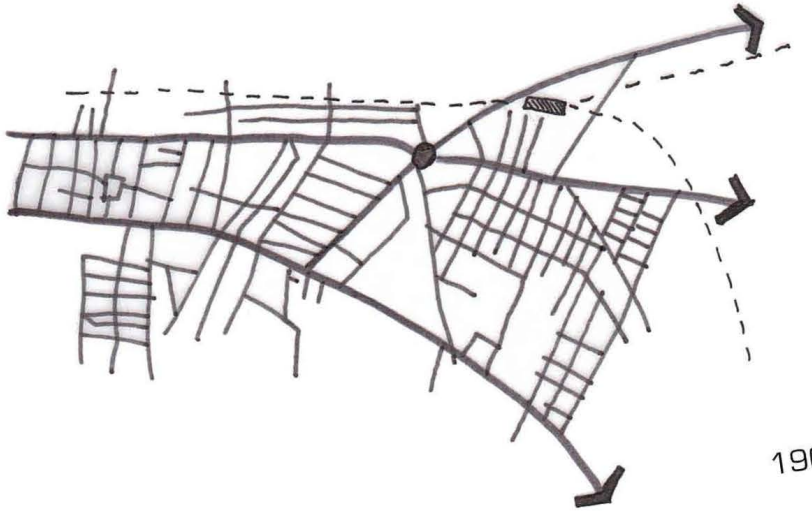
One of the key districts which held industry for Cape Town is the district of Woodstock. No district has seen as much change in the past 21 years as Woodstock, especially in its development as the new bohemia of the city.



1860



1885



1901

1930

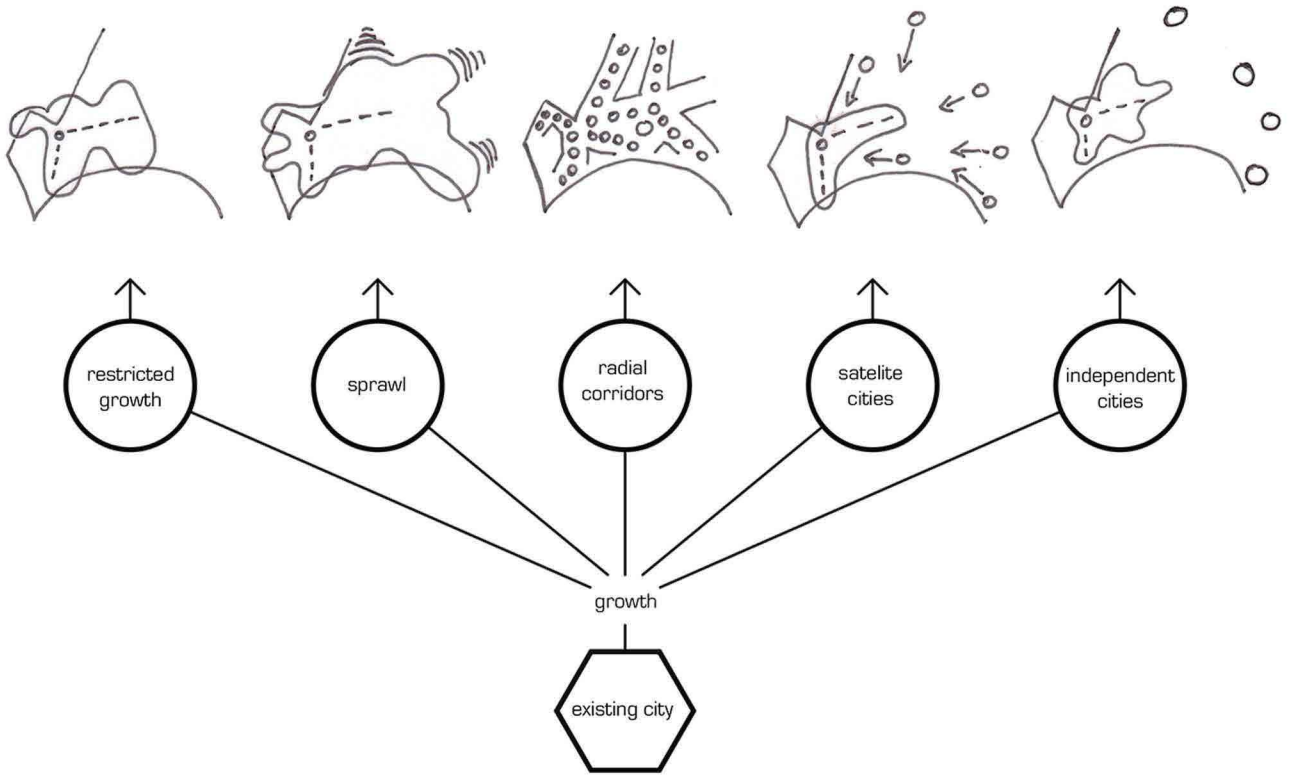
woodstock, a transformation

In this dissertation my focus evlolved from the love of Woodstock, and its rich history to its future development. In recent years Woodstock has seen its ascension from an urban slum to becoming one of the trendier, sought after districts in which to live and work. The diverse inhabitants of Woodstock have been on the forefront of this change and have either adapted with it or been left behind and replaced by new inhabitants who embraced this change.

Woodstock has two main roads, namely Albert Road (lower main road) and Victoria Road (upper main road). Along these linear passages into the city we observe a diversity of retail, commercial and industrial programmes which give the main streets their distinct nature and life. Woodstock's urban morphology reflects both its history and its development, but its zoning scheme reflects the city's intention to densify its adjacent districts in response to the rapid urbanisation of the city.

Woodstock Station, Grey street at 7am.

Store owners who have settled on Victoria Road use its linear commercial spaces for the manufacture and sale of their products. Windows are filled with display cases in an attempt to catch the eyes of a passing patron. Food stalls flood their entrances with their aromas enticing hungry customers to order more. These main roads share the vibrant life that any homogenous community has. The nature of Albert road however, is more industrial and shares its city blocks with the railway which had previously given rise to the strong industrial nature of the buildings that line its streets.



Shops on Victoria Road, Woodstock.

Main road life-

Growing up in Woodstock in the 90's was an experience I can proudly say I was a part of. Every day after school I left the quieter southern suburbs and entered a completely new realm of the city which was vastly more populated and animated then the leafy lonely streets of Newlands.
My father was an electrician with an electrical repair and sales store on the corner of Victoria road (Woodstock main road) and Mountain road. The nature of the street was defined by the multitudes of people doing their weekly shopping along its broad pavements. I have fond memories of greeting all the shop owners and patrons on my way to Altona fisheries for my daily lunch of fish and chips. The main road itself was a composition of bus stops and stationary taxies continuously feeding the street with life giving feet. My dad's store was a tribute to this organised mess which made-up the main road.
Family owned shops and takeaways, each with their specials, alluring the public inside. One of my favourite slogans written on the stores glazed façade was, "Whatever we don't have we can get at for the lowest prices!"
This to me summed up the confidence and pride that shop keepers had in themselves and their stores.

Roodebloem road

Roberts road

Fairview avenue

Victoria road (upper main)-

The upper main had undergone many infrastructural changes to accommodate the type of life around it. Broad pavements on the north facing side of the street were sheltered by large awnings from adjacent buildings giving shelter and shade to pedestrians. In some cases public benches were made available outside takeaways and around bus stops and the post office. The public park was not fenced but was instead a seamless carpet from street to park to Woodstock library. This syntactic freedom between spaces activated all edges and allowed visual continuity along its cross section.

The transitions of the main road were governed by its linear progression to and from life giving nodes. Landmarks were in the form of institutional and infrastructural nodes. Woodstock Police Station and post office, were synonymously known and one could navigate from there. The second set of referencing points along the main road were the vehicular links to the M3 or N2. These links further propagated shops and services around where they linked with the main road. The tertiary points of reference were the larger stores, namely the Shoprite and Joshua Dore. Each node defining the street and giving grain to its form.

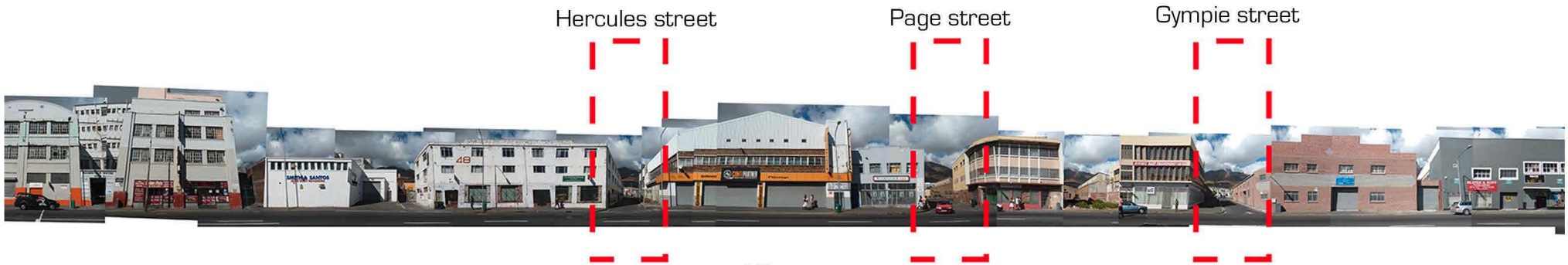

Frere street
Sussex street
Station road

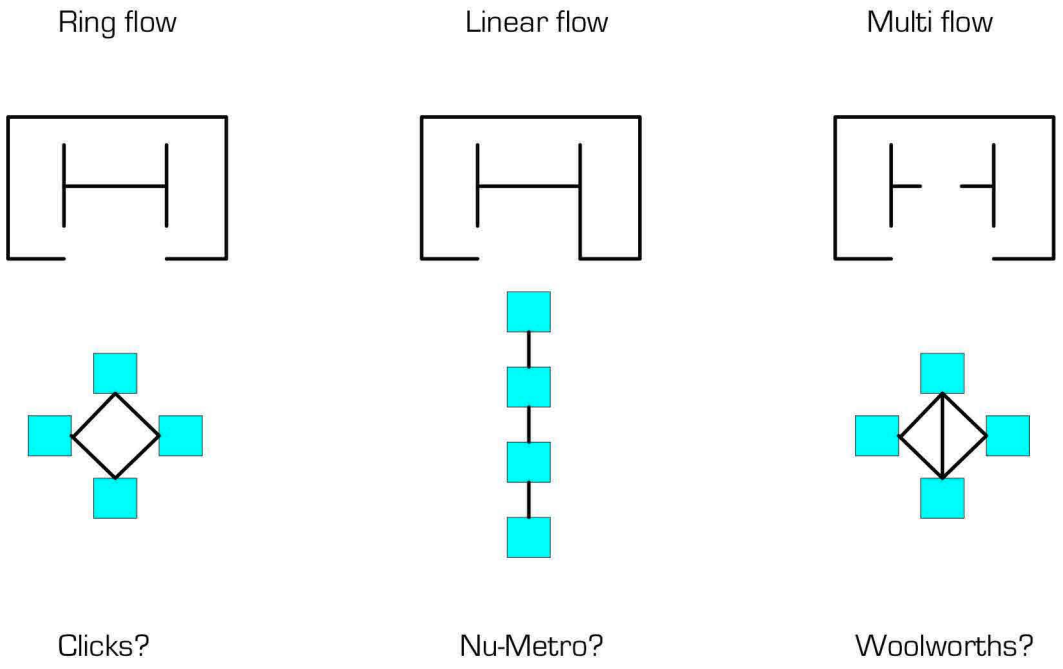
Albert road (lower main)-

Lower main had a different character to upper, possibly owing to the fact that it was the older of the two and had a direct link to Cape Town's Voortrekker Road. Yet its diverse building typology reflects the different stages of evolution and development that it has undergone.

For the larger part Albert road was the industrial spine which connected large scaled industry with the railway and harbour. It also runs parallel to the National Road one (N1) furthering its importance as an infrastructural link.

All of these linkages made Albert Road a prime location for industry and trade. Yet as industry grew and moved away from Woodstock Albert Road became a part of Cape Town's urban rot and it was not until recent years that its industrial scale and urban morphology became a benefit once more.





Basic syntactic flow diagrams.

A syntactic armature-

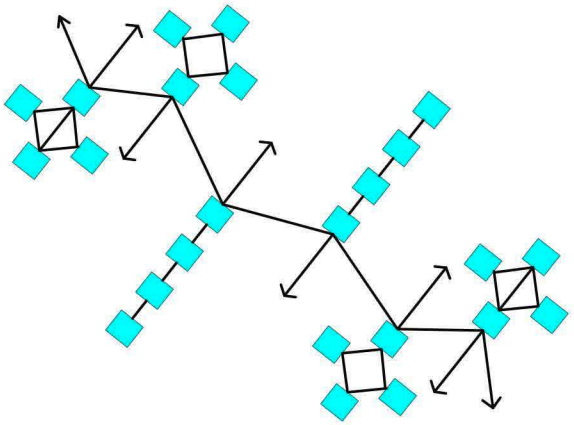
The strength of both main roads is their infrastructural adaptability to the change over time. Their armature guaranteed them a place for the consumer and hence retail stores, financial institutions and services still desired a place on their linear belt.

Syntactic spatial diagrams, in singularity, can briefly describe spatial relationships each entrance has onto the main street. The three basic types of spatial diagrams are categorized by their interconnectivity or lack there off.

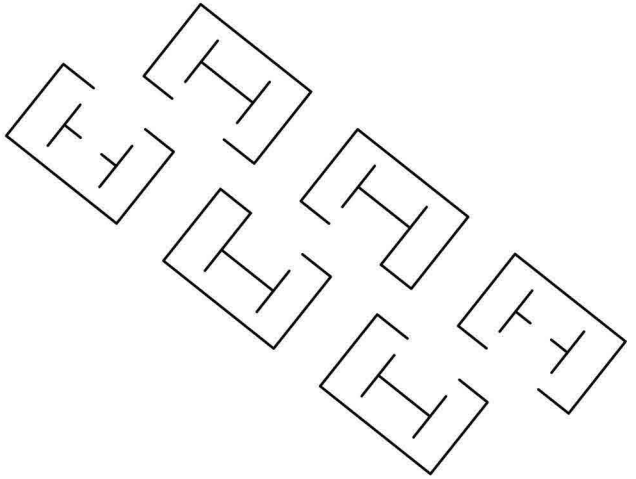
The first is categorized by its linearly sequencing of spaces where one has to go through the different chambers upon entry and exit, leaving no room for variation in movement sequence. This is the character of many smaller retail shops, post offices and banks, because it can enforce different degrees of security and privacy the further you venture inward.

The second is characterized by a ring of spaces which interlink, lead away from the point of entry and loop back to its starting point. This series of spatial sequencing allows for smooth forward movement without the need to back-track to exit. Its shortcomings are that it is not as secure as the first linear category and surveillance gives way to better circulation. This is common among larger grocery stores, museums and art galleries, among others.

Complex spatial syntax



Main street



Long steet, Cape Town.

The third is characterized by its multi-directional link of spaces where spatial chambers interconnect with each other giving freedom of movement. This type allows for greater internal permeability and is not bound by any rules of movement thus becoming a labyrinth of the three types, losing all sense of privacy and security but gaining many other desirable characteristics.
This is perhaps the master spatial scheme for many malls and large department stores which seek to represent the illusion of freedom within a confined space. This is not however an ideal spatial scheme for small artisan owned stores as it becomes unmanageable for one or two persons. (Kim Dovey, 1999. pg.: 123)

These three types constitute the basis from which we will be looking at both the main street and, later in the paper, the mall. The use of these syntax types in different combinations gives us an analytical basis from which conclusions can be made.

In the case of Cape Town the spatial ordering of the city followed the formation of the main roads. Thus the city grid along these main roads is tilted and placed perpedicular to the mountain and the sea. If the city centre is considered the end point in a syntactic flow diagram the mainroads act as the linking passages. The use of syntactic analysis types is hence transferable on every scale.

Lessons learnt from the street-

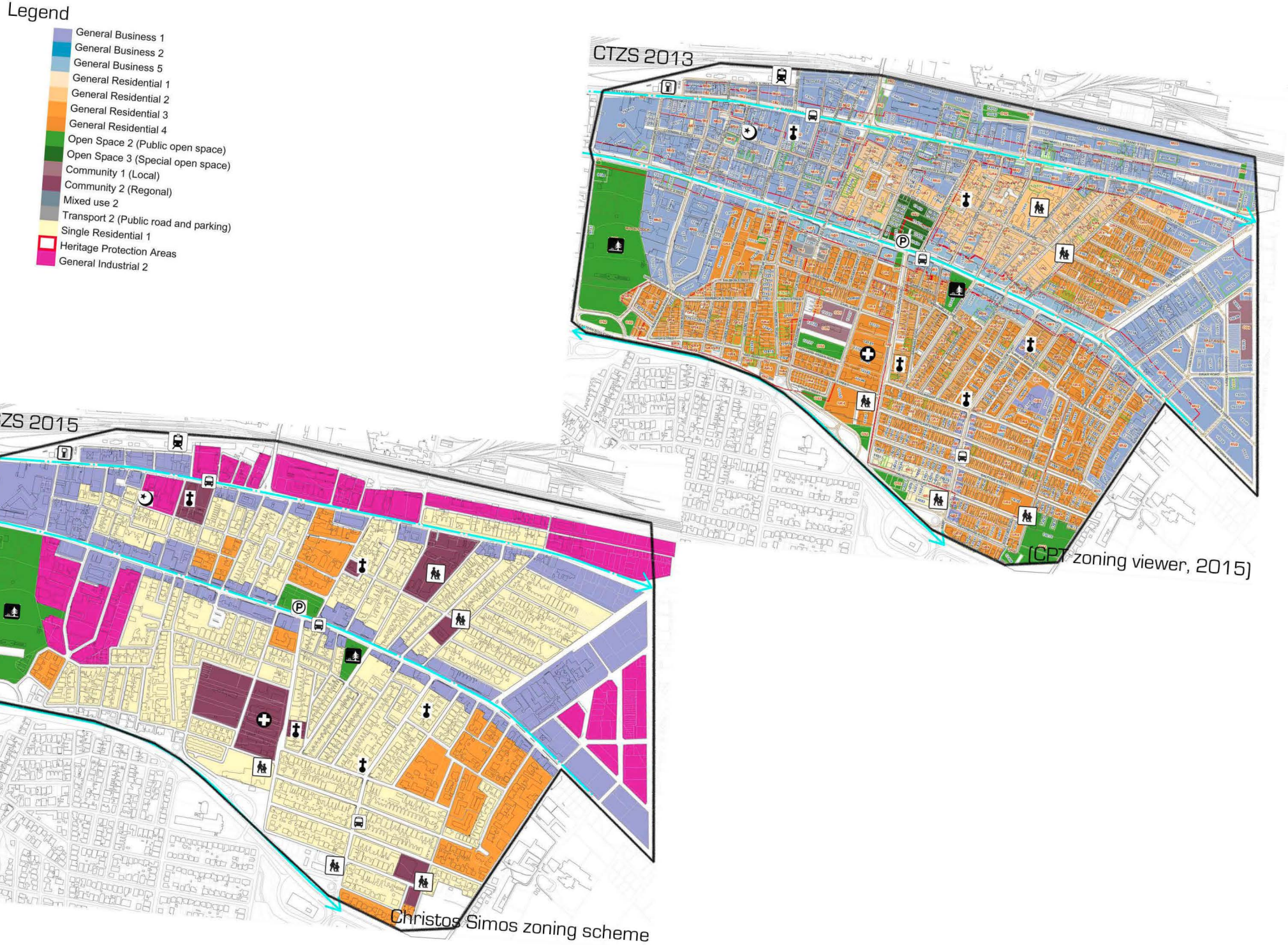
There are some key points to be learned from looking at the main streets of Woodstock and the types of syntactic diagrams that exist there, which can be summarised and transferred to my design intervention.

A street creates a path between two points but a path has value along it edges. An active street is a street which has entrances and thresholds which propagate more life around them.
This feeds more energy back into the street.

A street is not simply animated, its facades have depth and contribute more than just an aesthetic value back to the street edge.
Public foyers or courtyards add a more complex system of spaces to the street by adding to the surface area of its edge.

A street has a changing character depending on what is placed on each point. A good example of this is the placement of a civic function which adds gravitas to a street with its position.

The syntactic complexity of a single store on a street is subject to its size but in the case of my intervention it would be best to keep a smaller variation of syntactic types to prevent a single sore from becoming a mini mall.



[CPT zoning viewer, 2015]

Christos Simos zoning scheme

Policy vs heritage-

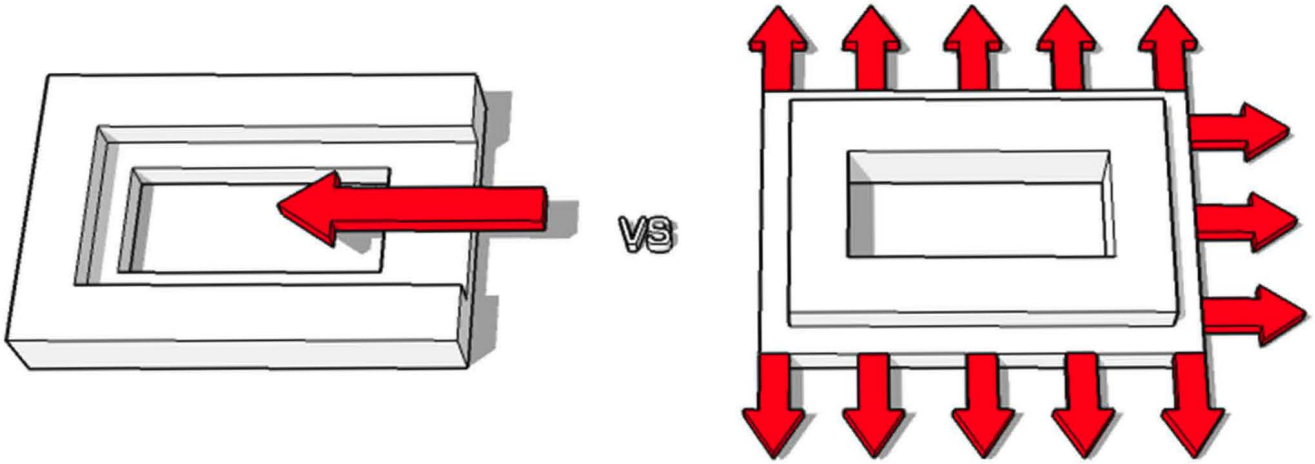
In recent years the city of Cape Town has adjusted its zoning scheme to accommodate the need for higher density urban development. The result of which has seen the city slowly taking on a new character in the form of high rise buildings on reclaimed land as well as the demolition of low density sites of little heritage significance. This is no different in the case of Woodstock. The new Cape Town zoning scheme (CTZS) has indicated that most sites along the main road have been rezoned for mixed use (MU1). What this means is that it is permissible to build up to 7stories high with no boundary offsets. But this zoning scheme does not take into account the existing morphology of Woodstock and the heritable significance of some of its sites.

In my analysis of the different building typologies I have come up with my own version of the zoning scheme taking into account the different building typologies in the area which make up the unique morphology of Woodstock. The use of industrial scaled buildings are boarders between the lower main road and the railway, yet as we move towards Salt River station, the single story residential buildings give way to the larger industrial typologies.

The result of this new zoning scheme and the developer driven upliftment of the area, these larger industrial sites are bought over and converted into offices or flats depending on their location and accessibility.

internalized operations
of enclave model

external dependence
on street facing model



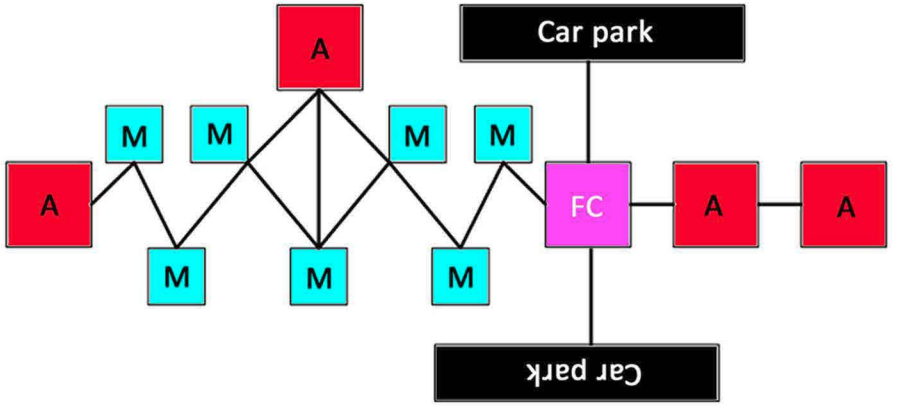
The strategic model-

This thesis topic has developed due to its context and the ever growing nature of the city of Cape Town. Although Woodstock owes its existence to factories and the artisans who worked there, its trajectory has changed as a result of the rapid urbanisation of the city.

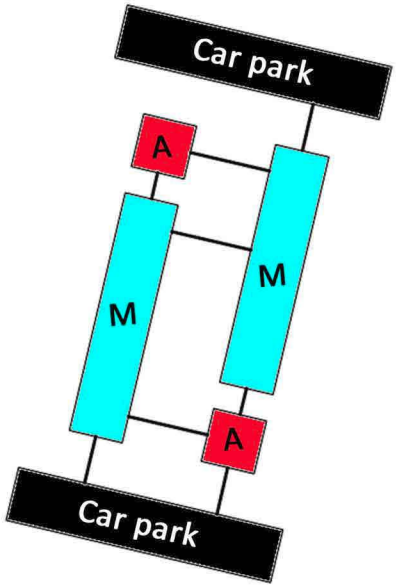
As city sprawl continues, reactivating and renewing the old city slums, investors search for a strategic typology which can safely be placed as a pressure point in an otherwise hostile environment. Enclaves give security and autonomy to their programmes and act as islands within the city's morphology. They have become the strategic model for developing outside the CBD and safeguarding the owner's investment by not relying on any syntactic infrastructure from the street. Yet in the framework of Woodstock, these models take on new forms as gentrified industrial shells, retrofitted for their new programmes.

My initial investigations into artisanal place lead me to key precedents which used artisans as baseline tenants together with commercial programmes in creating enclave models of dense business activities. By observation it was discovered that developers search for very specific requirements which they can apply this model too. Like the city center is populated with banks, shops, offices, take-away's and all the other commercial and institutional activities, the investments just outside of the city bowl need to function on their own. The value placed on location, initiates the investment but other factors also play a role in the selection of site.

The Old Biscuit Mill



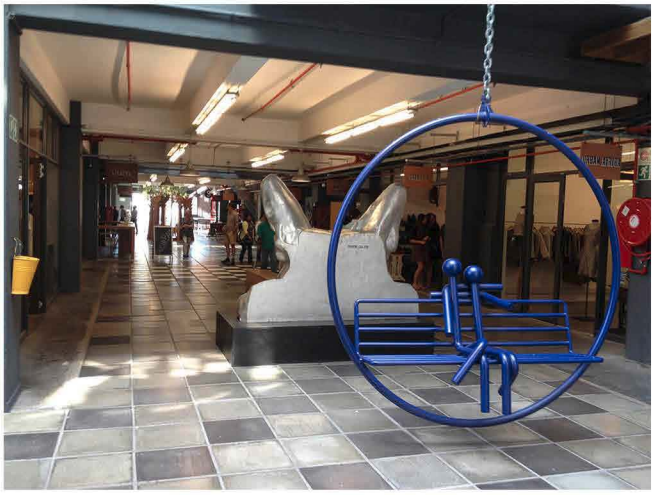
Woodstock Exchange



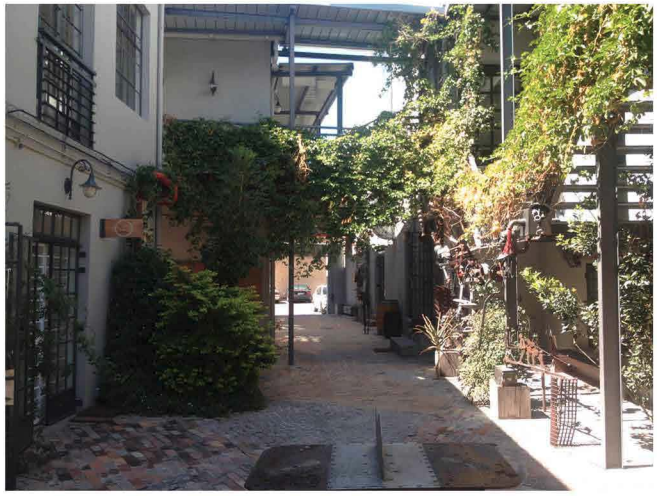
Key:

FC = food court
A = anchor
M = mall

Precedent along Albert Road Woodstock indicates that developments such as Woodstock Exchange and The Old Biscuit Mill were large industrial spaces which had fallen into disrepair as industry moved away from the city limits and left these large scale buildings largely, unused becoming part of a growing urban rot. But as property values grew in the city the investors searched for cost effective replacements in districts nearest to the city which hadn't been affected by this price boom. This resulted in large scale gentrification with relatively small capital investment. Because of the urban slums surrounding these sites however, developers took a critical stance on their intended typological responses.



Woodstock Exchange, internal street



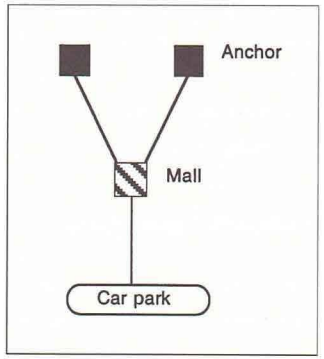
The Foundry, internal street

The Old Biscuit Mill, internal street

The self-regulating organism-

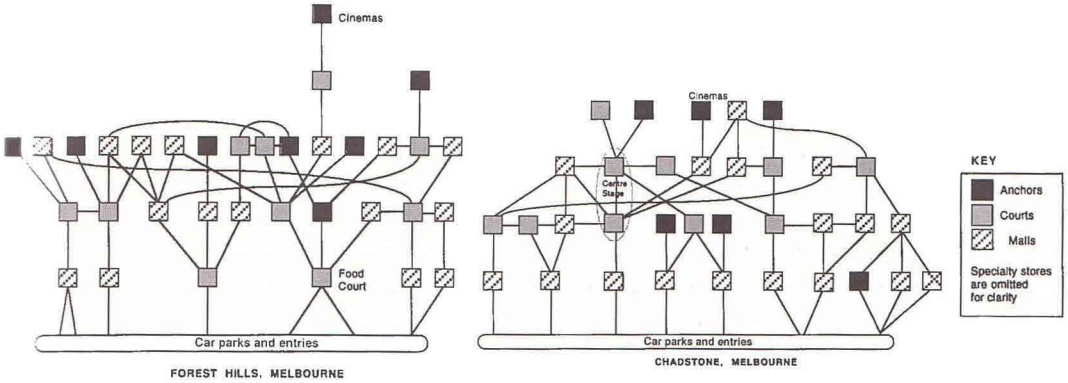
Unlike the malls of Canal Walk and Somerset West, the enclaves along the main roads, are surrounded by functioning urban life which is actively ignored by the enclaves own internal programmes. These sites under go almost utopian level changes to ensure their survival as self-sustaining organisms. Developer's set up infrastructure which in-turn attracts tenants. Infrastructure such as, sizable stores, onsite parking, singular security access and cross programming (ie: offices, workshops and retail stores) allows for a homogenous internal function. Tenants are carefully selected on the basis of attractiveness and performance value. Yet enclaves by their own natures have restricting qualities. A stores ability to grow is spatially limited to allow for the diversity required within the enclave as a whole. There are also performance concerns, which means that when rentals increase within the centre underperforming tenants are quickly replaced. Hence to retain and grow value tenants are forced to innovate and adapt within the confines of the enclave. Control is not limited to space. Developers steer away from any internal competition between tenants hence diversifying a stores service or product range is restricted. This is a direct contrast to the open market nature of a main street where competitiveness between stores is used to enrich rather than to supress.

The street has permeability and acts as an enforced path towards the city. In the case of Woodstock main roads, shop owners can be both tenants and owners and don't suffer the performance anxiety, unlike tenants within the centers, yet still have the ability to grow.

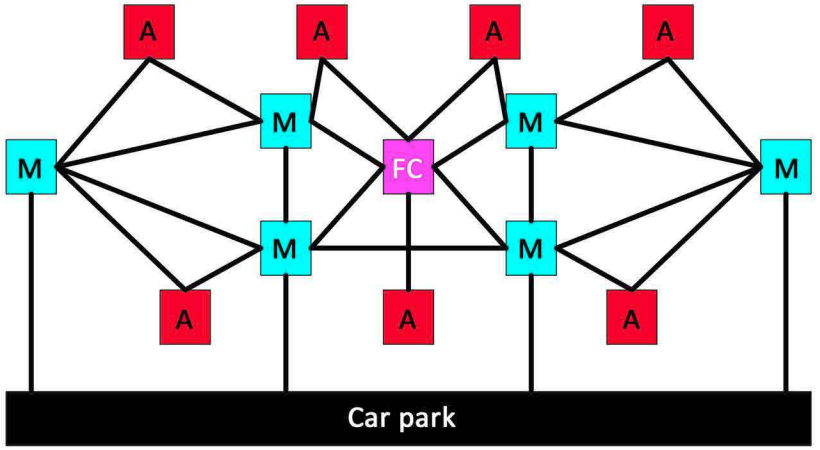


Dumb bell diagram, basic (Kim Dovey, 1999 pg.: 126)

Food court as an anchor.



Complex syntactic diagram (Kim Dovey, 1999 pg.: 127)

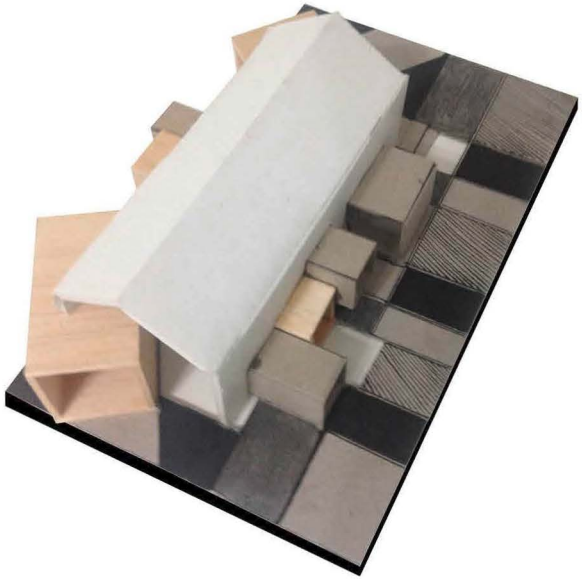


Canal Walk syntactic diagram.

Theory of the mall-

The structure of any enclave is based on a linear system of spaces which take you deeper and deeper into its heart. The greater the size of the mall the more ring or multi spatial it becomes but it must always start from a linear diagram, ensuring the transition into the utopias. The basic diagram of the mall starts as an inverted bell composed of three basic elements starting from the car park leading in to the mall and ending at the anchor. Between these primary elements exists the spatial labyrinth which are the food courts and speciality stores. The anchor tenant/s (usually a large department stores) act as a pole of attraction ensuring the movement from the car park across the mall.

The linear syntactic flow starts from the most infrastructural base of entry: the parking level. The parking level is the most functional of spaces. Usually based on a grid structure and, aesthetically, the inverse of what the mall reflects inside. Low ceilings riddled with pipes, poor lighting and ventilation and a forest of columns create the place for the car. Yet in the distance the entrance is well articulated and illuminated. The obscure codes on the columns are the only other reference as to where you had parked on this level. All this makes up the threshold before entering the world of the mall. In between the car park and the anchor lies the speciality stores that make up the rest of the mall. A journey begins along an arcade, breaks are made in the form of food courts and coffee houses. Along the route there is a myriad of benches and trees mimicking familiar elements of the outside promenade by more symbolic value than embodiment. The anchor becomes a mini-mall within itself using similar syntactic spatial diagrams to lose the consumer in the act of shopping.



En-loge exploration on malls.

Collectively these three elements make the mall genotype (Victor Gruen, 1960. Pg.: 6). There are many variations to this syntactic diagram but all keep anchors and the car parks away from each other mixing in food courts and speciality stores. The larger the shopping mall becomes the more complex and inter connected the spatial diagram grows, ensuring patrons are refreshed and well fed to continue shopping.

Lessons learnt from the Mall-

Malls are self-regulatory and stabilize their own economic functions. The also control their own climates. The role of façades change between street and a mall as façades don't need to compete with orientation or weather.
There is a strict control over roles in a mall structure, where tenants must be strategically placed.
The secure nature of a mall allows tenants certain freedoms where the street constantly was at risk.
Anchors are the key stores or places of attraction arround which the mall bases all its surrounding interactions and are placed at the heart of the mall.
Anchor tenants dictate movement within a mall and are key stabilizers of its economic functions. The malls divorced nature from the street alienates it from its context.

Woodstock Beach 1860 (Gabriel Athiros, 2007)

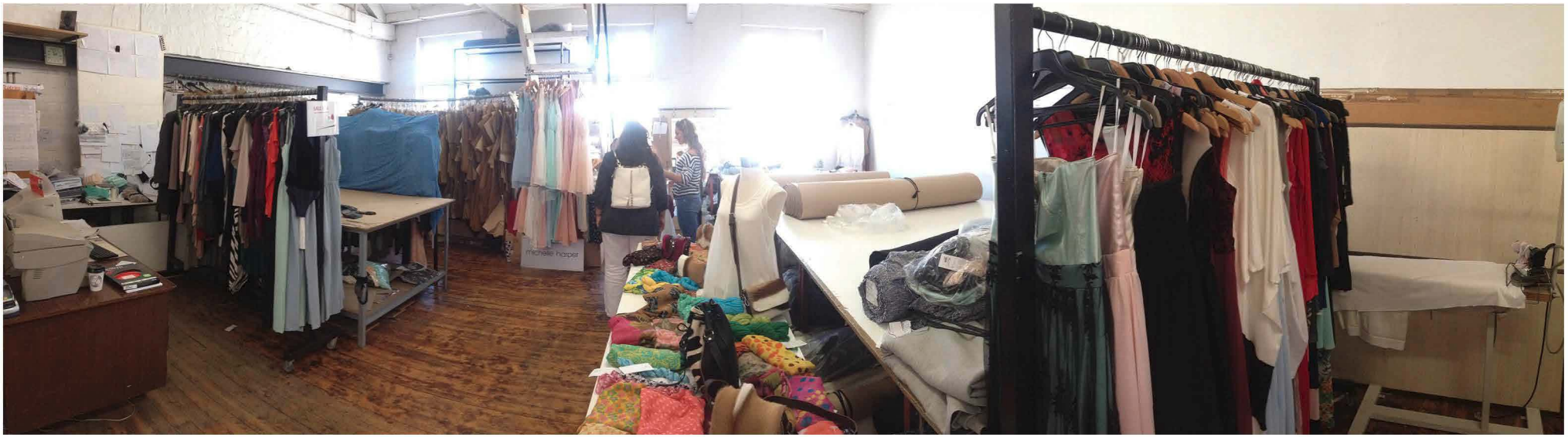
The artisanal place-

Cape Town has a history that supports craftsmen and artisans, as it was the trade port for all merchant ships that made the long journey across the Atlantic Ocean on their way to the east. Also being a port city it had a growing ship building and repair industry which could service long distance vessels. This made Cape Town a key settling point for carpenters and steel smiths.

Workshops and making in the area-

There is a rich history of artisans and craftsmen in Woodstock who have generations of experience in their respective industries. On Albert Road there was always light industrial building which supported the boat building and textiles industries. Both timber and steel suppliers were also to be found along this main road which reinforced its attractiveness to artisans and their workshops.

In this dissertation, I seek to create a place for artisans to educate youthful apprentices in the process of making whilst also giving them a place to create. I would also like to accommodate the migrant craftsman-who supplies the tourism industries with African artefacts out of wire, stone and various woods. In turn I hope this programme will reinforce an identity within this new typological exploration between the industrial scale of the mall and the syntactic connectivity of the singular store.

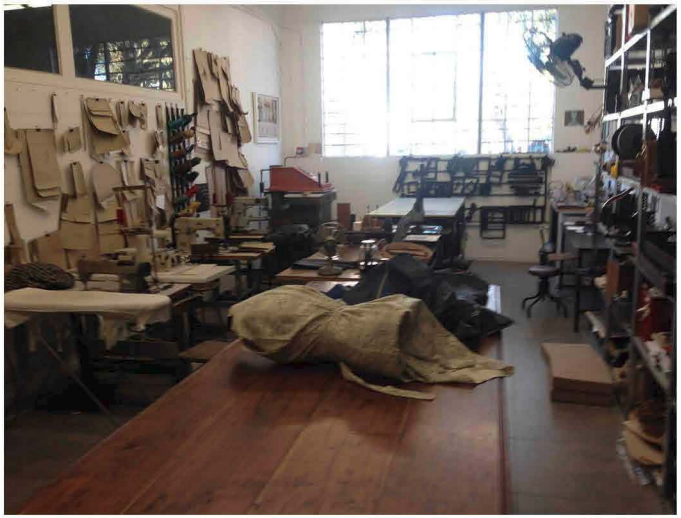


Michelle Harper Design Studio
Where she designs, manufactures and sells
her products, at The Old Biscuit Mill.

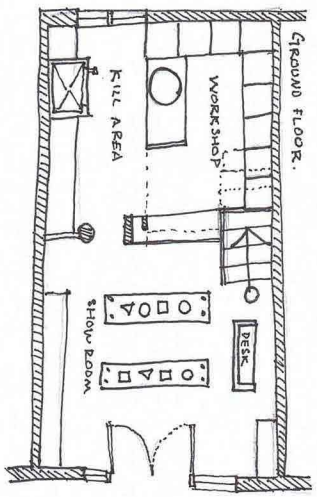
The four artisan types below were looked at for their adjusted means of production in spaces that were never intended for them. Their ability to adept and retrofit these spaces to their needs defined their productivity and overall success or failure.

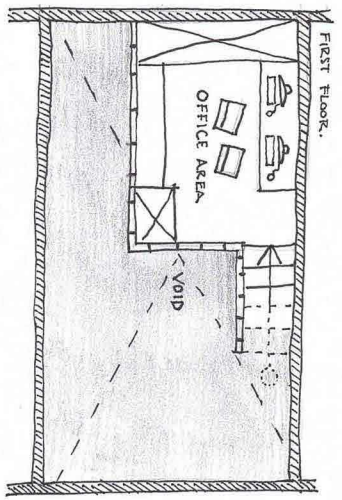
Clothing-

1. Michelle Harper design studio: Michelle has been one of Biscuits Mill's first tenants who originally rented a larger space for sewing/cutting and sales. She has had to adapt spatially and compact her operation as the success of Biscuit Mill has caused the rentals to increase. She is also one of the only artisans on the first floor hence acting as an anchor store for the first floor allowing store around her to benefit from her location. The spatial limitations on her workshop space has cause her to limit the type of work she does on site and outsource the larger orders. She has mixed her production with her showroom floor and shifts there clothing stands as needed. She primarily designs and cut the dresses here with some minor sewing on site. The requirements of production, in this case, are large table tops to lay the materials on which are then measured and cut. The sewing machine area is more compact hence being hidden away in-between stands of clothes.



Charlie Clothing
Where she designs, manufactures and sells
her garments, at The Woodstock Exchange.





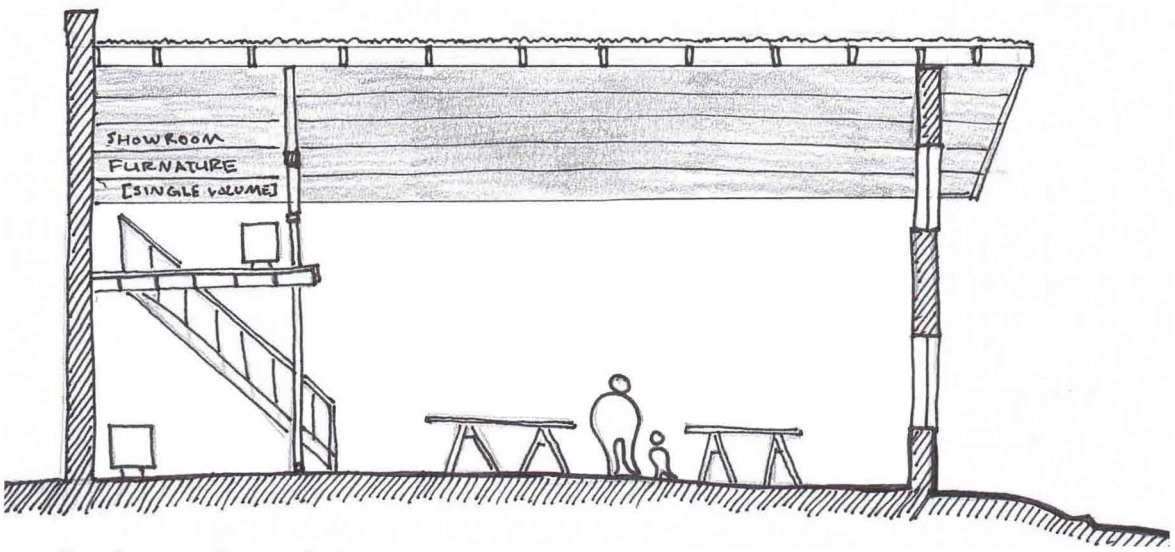
Imiso: Zizipho Poswa
Where she designs, manufactures and sells
her ceramics, at The Old Biscuit Mill.

2. Charlie Clothing: Charlie is a clothing designer/seamstress from Belgium who immigrated to Cape Town to be part of the textile industry. She solely works out of her narrow workshop in Woodstock Exchange. She has had to partner up with Vincent Urbain of Urban Africa (a designer and manufacturer of leather wallets, bags, etc.) to share rental costs and equipment. This marriage of crafts reinforces the idea of a shared workshop between trades.

Ceramics-

1. IMISO: Zizipho Poswa is a ceramic sculptor who designs and creates bespoke pots and plates. Her compact space in the Biscuit Mill accommodates an office, showroom, storage, front desk and workshop with kiln. There is much to be said here about the diversity of uses in one compact space made possible by an exposed industrial aesthetic and an "illegally erected" mezzanine floor. (SANS10400, pg:51 CC3.1)

2. Clementina Ceramics: This is another ceramic studio in the Biscuit Mill which has outgrown the constraints of its space and has chosen to move the workshop to another location in Woodstock but keep it presence at the Biscuit Mill I purely for showroom purposes.



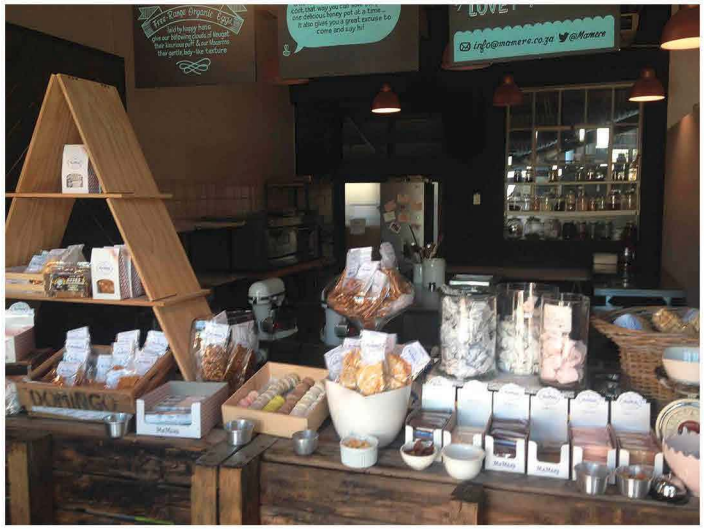
Continuum: Bevon Solms
Show room at The Old Biscuit Mill.

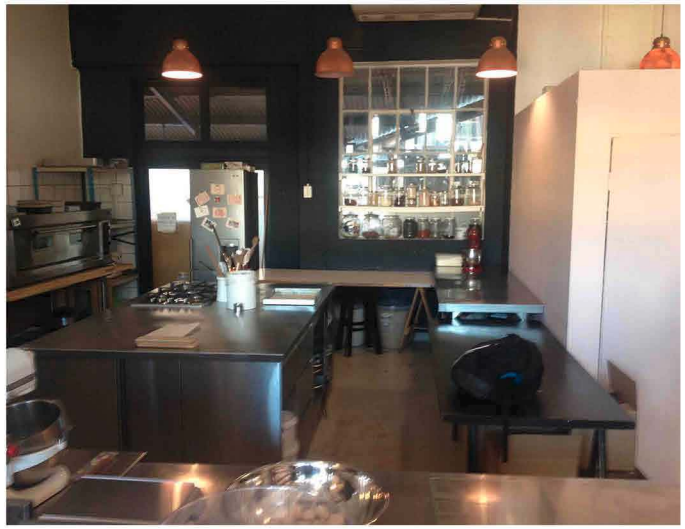
Rustic frames: Victor Da Silva
Where he manufactures and sells his products, on Albert road.

Timber furniture/ frames-

1. Continuum: Bevon Solms custom-makes solid wood furniture from exotic woods and has his showroom at the Biscuit Mill. The bulk nature of timber work prevents him from having his workshop and showroom in the same space. Also the noise would disrupt the other tenants in the area.
Image 13: Left, stacked showroom areas.Image 14: Right, Sketch plan and section, with explanation. (Christos Simos, 2015)

2. Rustic frames: Victor Da Silva – Mr Da Silva grew up in Woodstock, and was one of the main owners of Madera cash and carry opposite the now gentrified Woodstock Exchange. His workshop Started by making purely rustic frames from salvaged wood architraves and floor boards but later expanded into shelving and furniture. It is not as bulky as tables but does cause a lot of sawdust and having a clean showroom next to the workshop every day is a disruption.





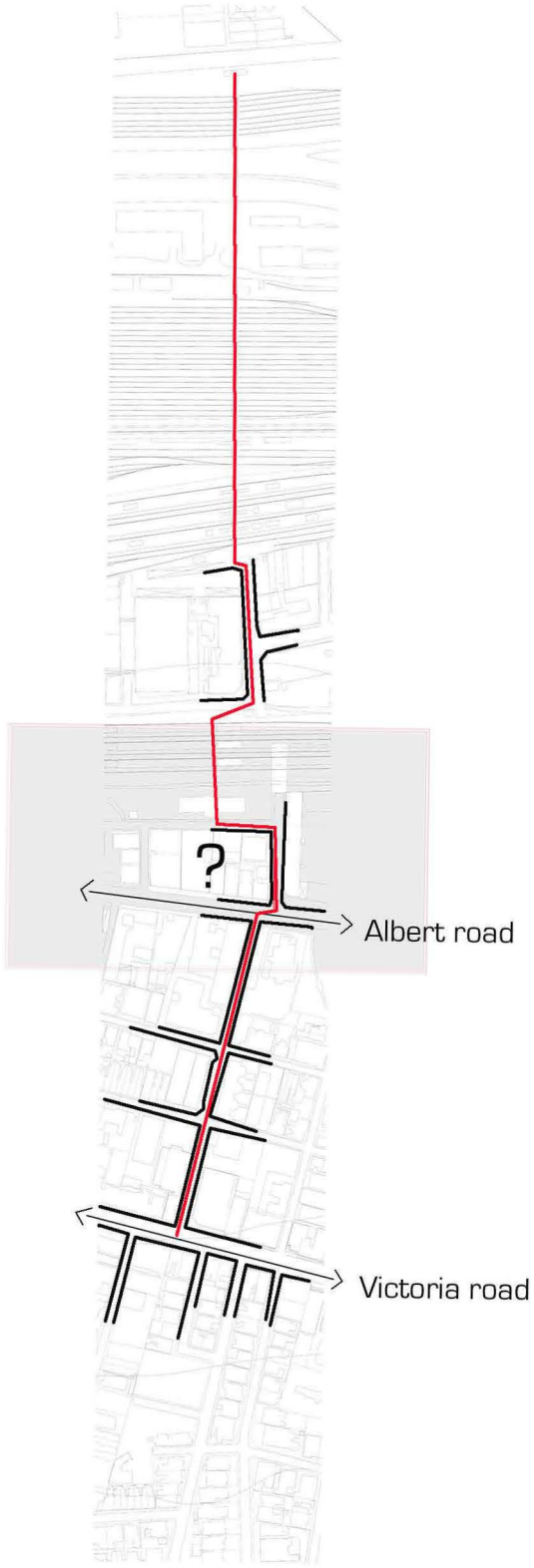
MaMere: Lexi Bechet
Manufacture and sale at The Old Biscuit Mill.

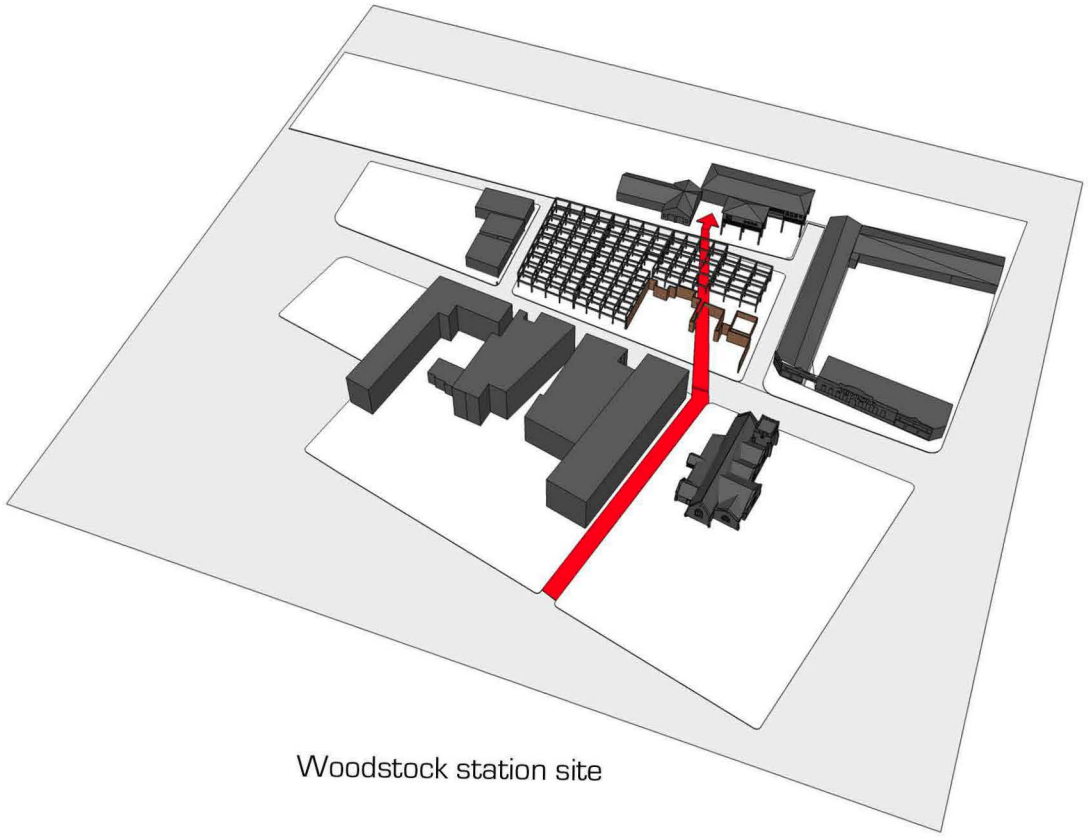
Woodstock Bakery: Paul Cremer
Paul has a bakery in Woodstock but chooses to market his products in The Old Biscuit Mill on Sundays and Saturdays

Baking / confections-

1. MaMere: Lexi Bechet is the owner and head baker. She has a large open kitchen and a small sale space allowing patrons to view the creation process. Yet it is also a compact space which has to deal with added factors of heat from the ovens and circulation space for the different bakers.

2. Woodstock Bakery: Paul Cremer is the owner and head baker, but does not have a rented space at the Biscuit Mill. He simply chooses to set up a stall at the mill which displays all his products. His bakery which is in Argyle road, Woodstock, has large enough ovens and work space to produce daily batches of breads and confections, although he admits to the downfall of not being able to accommodate his bakery in the mill itself.





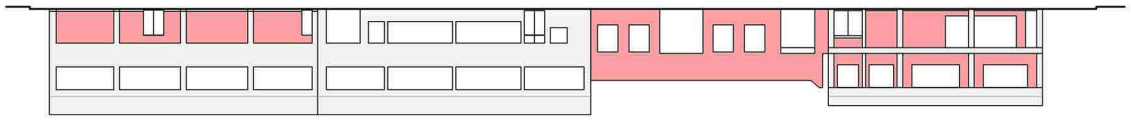
Woodstock station site

Selecting site-

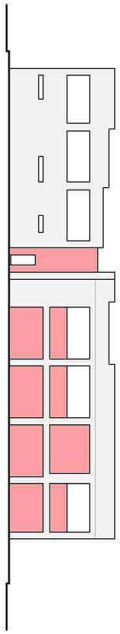
For this dissertation I have talked about the strategic nature of development of the existing urban morphology and how developers have chosen to make large scale interventions that function as mall like enclaves that work off an internal street. I have also noted the typological and scale similarities between industrial buildings, warehouses and malls structures. I have used these observations as informants for selecting site with the right set of infrastructure and built form as the basis for my intervention.

Based on the earlier theoretical research into enclaves and armatures, I isolate “anchors” which facilitate the function of an enclave and act as the main attractors of people. Naturally spaces form around these “anchors” and a series of linear paths leading up to them. In the case of Woodstock I have chosen the site adjacent to the Woodstock station. The Station acts as an anchor to the entire district attracting all the people in the area towards it. Woodstock station is currently left with limited space both on its ground floor and first floor, which calls for the need of a threshold space. The streets around the station are filled with life that otherwise would not exist in these side streets.

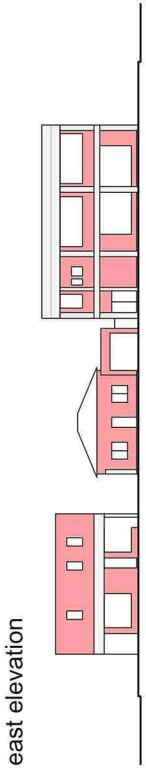
The site adjacent to this station is a missed opportunity which does not harvest the energies the station has around it. It is on this site that I will be appling the knowledge i have gained from looking at enclves and armatures into a hybrid model which will terminate at the station.



north elevation

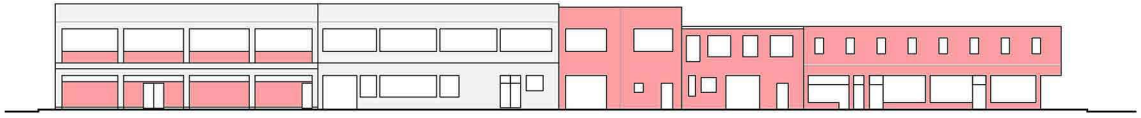


west elevation



east elevation

south elevation



brick
concrete

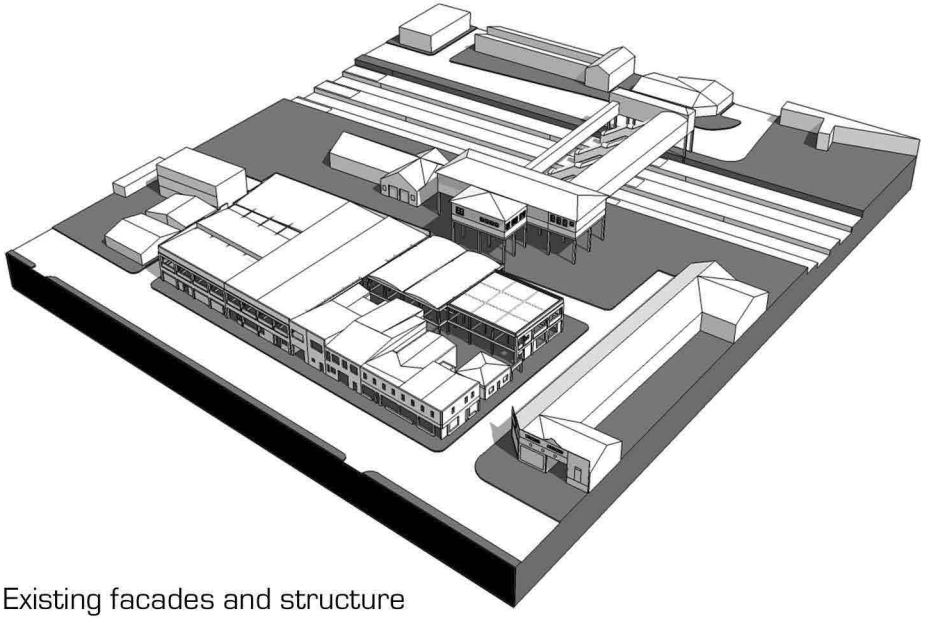
Mapping of facades and plans-

The block is composed of four large industrial building; two of which share a tangent with the main road, and five thin retail buildings, all on the main road. The industrial buildings are concrete column and beam structures which have an approximate 5x5 meter grid, where the grid adjusts itself to each road. The retail buildings are a composite of load bearing brick structures with some concrete beams. There is no heritage value to any of the existing structures as they have been retro fitted to serve new purposes over their lifetime.

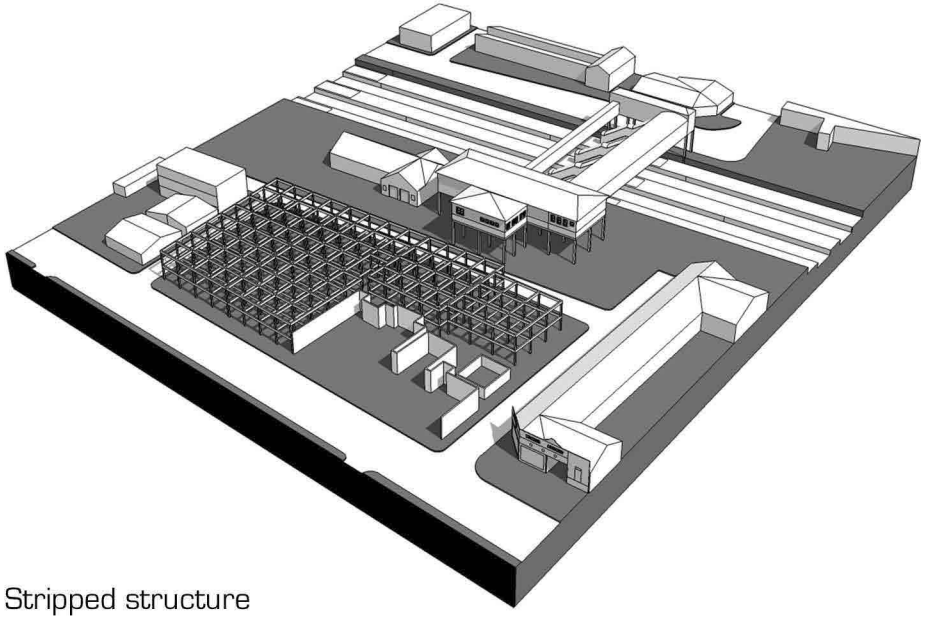
As I had no access to their existing plans, I extracted base infomation from measuring their facades and coming up with reasonable asumptions as to their plan and structure. I also used the CAD maps of the area to determine the spacing of the existing grid lies that sets u their overall form.

A word on ownership-

In total the block consists of 9 separate erven which share a central service passage. My intervention uses the site in its entirety and consolidates the erven. It has become commonplace for developers to slowly buy up erven individually until they own the entire block and develop it. This is especially common for valuable erven in previous city slum areas.
After completion of the project there is the opportunity for sectional title ownership over parts of the intervention.



Existing facades and structure



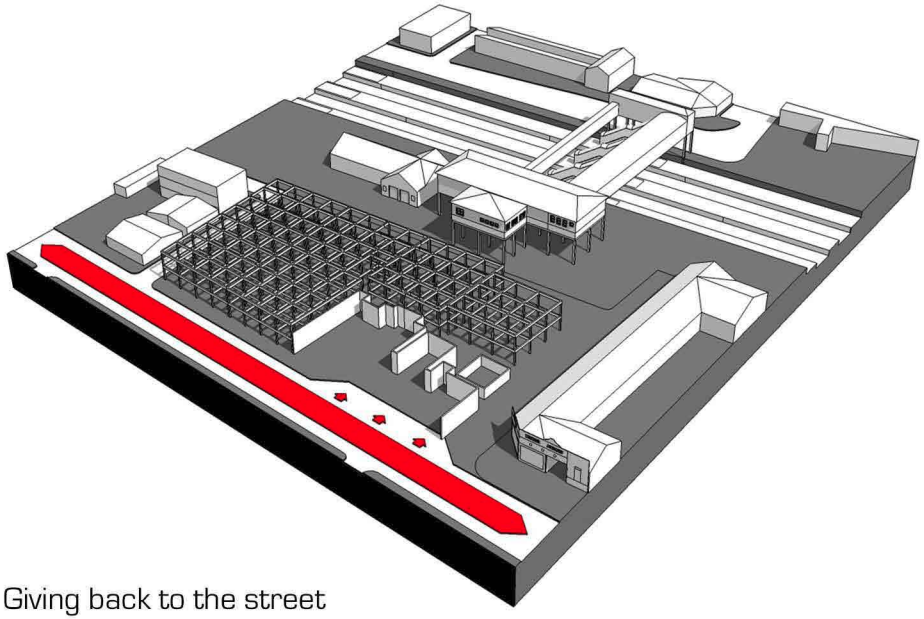
Stripped structure

Retaining the infrastructure of the old-

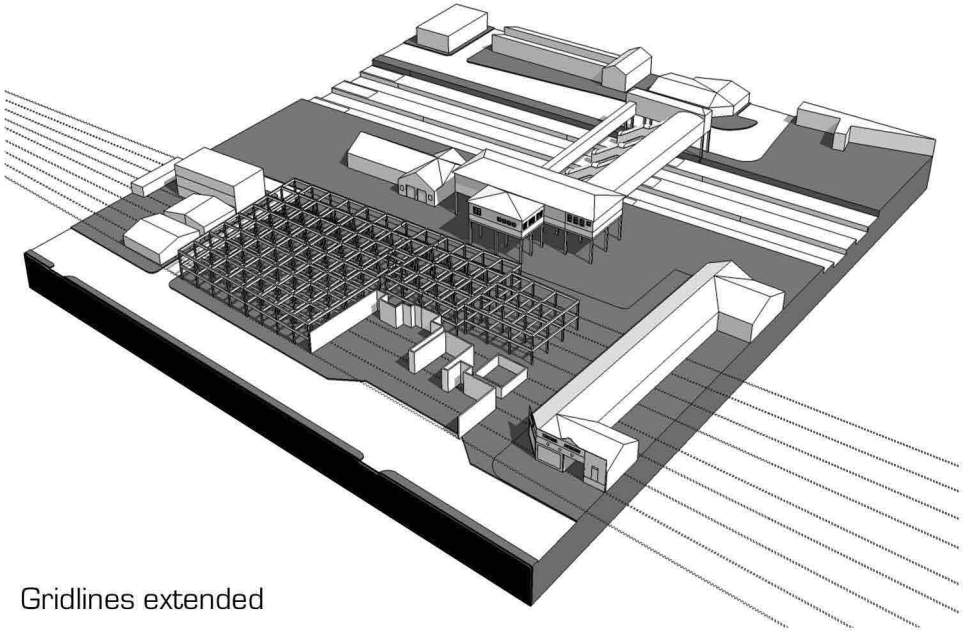
One of the key questions this dissertation tries to answer is much how much can we change something without losing its original value whilst working within its limitations?
On a site that evokes no cultural value or offers no significance because of decades of retrofitting and unregulated change, it is difficult to justify retaining windows, doors or any other identity defining elements. Hence taking the structures to their bare bones gives us a framework from which we can gather finer tectonics and an organisational grid that can allude to the past. What we are left with is the memory of industry on the site and a framework from which a contrasting intervention can sit within.

The five retail buildings are all load bearing brick structures and had taken a unique form, on the back ends, due to the subdivision of the erven. This fluid shape was taken as an opportunity to preserve the material nature of its brick walls. The four industrial buildings gave a very different infrastructural and programmatic scale. They offer the scale of the industrial building and its rigid organisation qualities.

As the site develops the north facing side of the site will need to open up and give light and life to a new type of public courtyard but this will be explored in later sections.



Giving back to the street



Gridlines extended

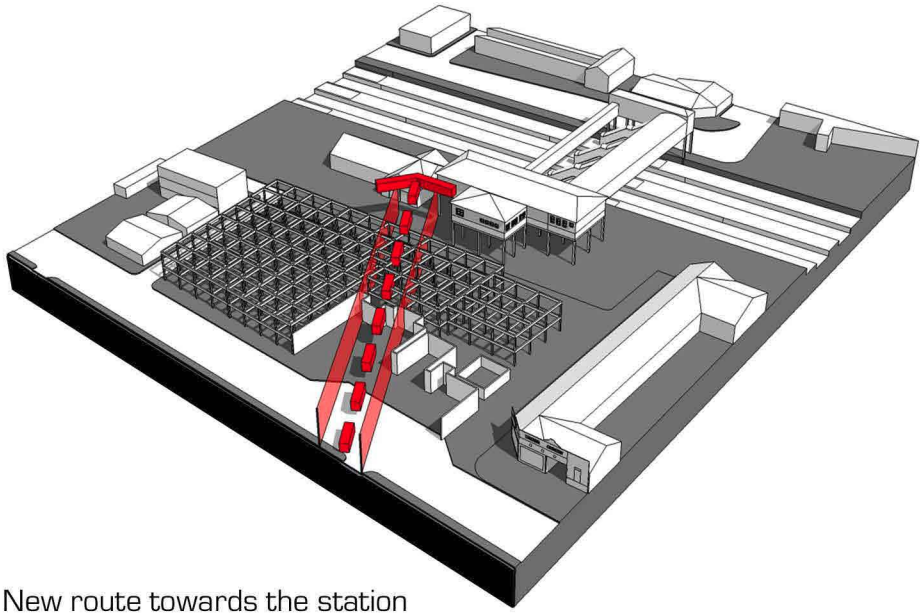
Revealing the hidden station-

As many districts with train stations have a dedicated street called Station Road, starting from the main road and terminating at the station, but it is only in the case of Woodstock that the Station Road terminates just before the station itself. The road fragments and takes on a different name which then leads us to the station. This adds to the hidden nature of the station. The station itself begins on the first floor and has a series of bridges onto the different lines. The station is not visible from Albert Road and disappears behind the buildings.

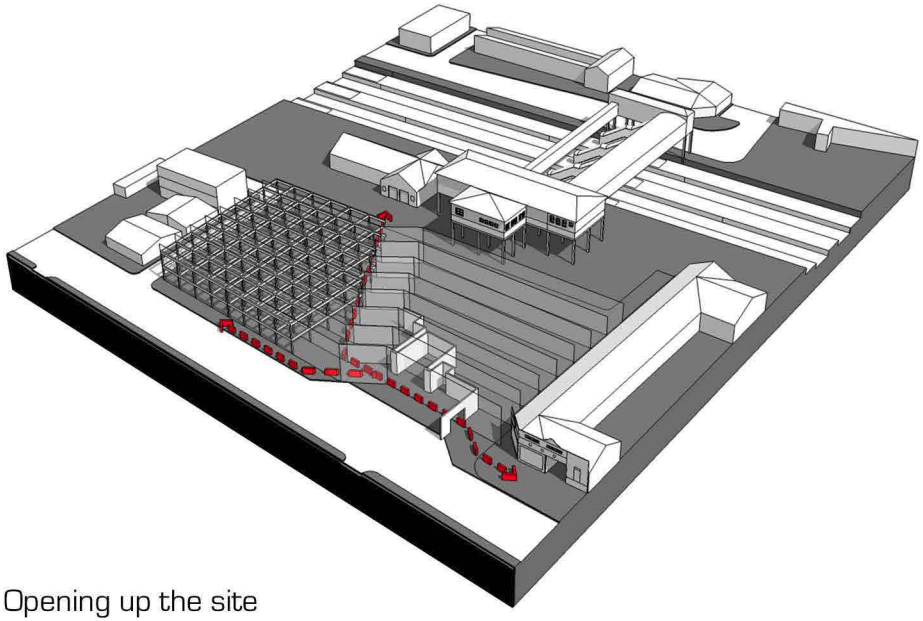
In a series of urban diagrams (diagrams and models 1- 4) I try to unlock the potential of linking into the station whilst creating a north facing courtyard that could also give more emphasis to the entrance of the station. An infrastructural node such as the station needs some sort of defining path to increase its visibility.

When doing this the relationship between the street, city block and station become visable and can hint towards a genetic change in the urban morphology at this place of significance.

I explore the possible diagrams of a civic street which links into the station whilst dealing with the issues of the street and the mall. This new pedestrian street can be an extension of the ill ended Station Road.



New route towards the station



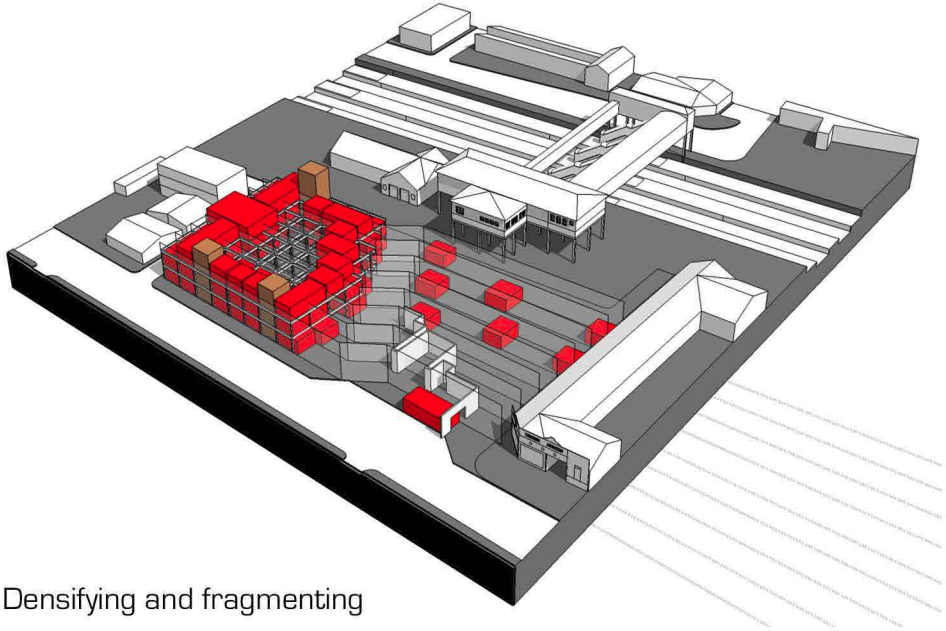
Opening up the site

Dealing with the divide-

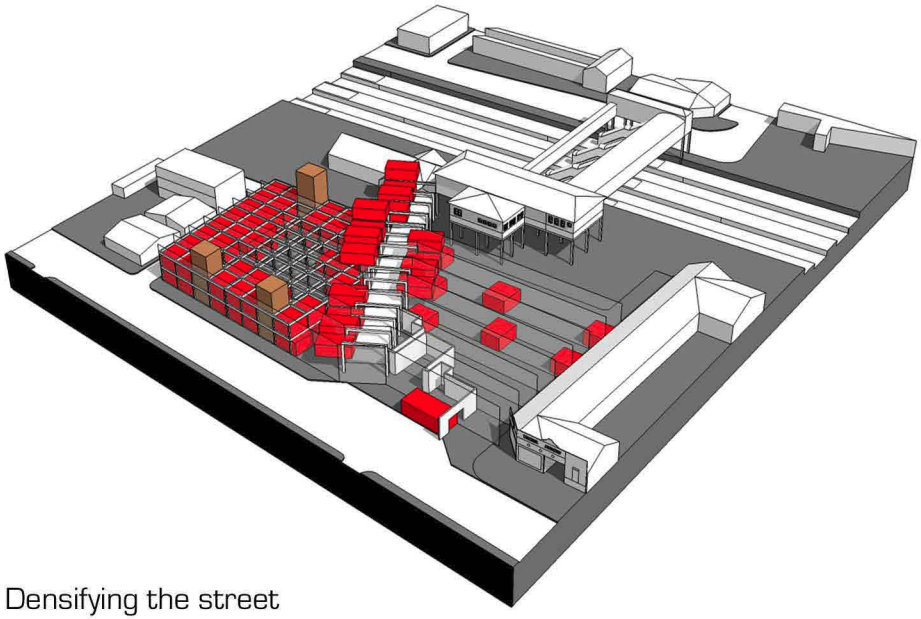
When choosing to create a path between the main road and the train station across the block there becomes a divide which represents the programmatic divide of the project. What is left is the south west potion with the concrete column and beam structure, become the formal artisanal places of learning and work. The north east portion remains with the load bearing brick structures and a possible courtyard opening itself up to north sunlight.

The path is explored as a built void and as a solid. The decision taken to make the path a void was to continue the notion of the street which would cut through the built form and become an infrastructural armature itself from which ramps and facades can connect to.

The organisational grid was worked out from using the existing column grid and extending it onto the rest of the site. The introduction of the path gave the opportunity to make the gridlines jump up one segment.



Densifying and fragmenting



Densifying the street

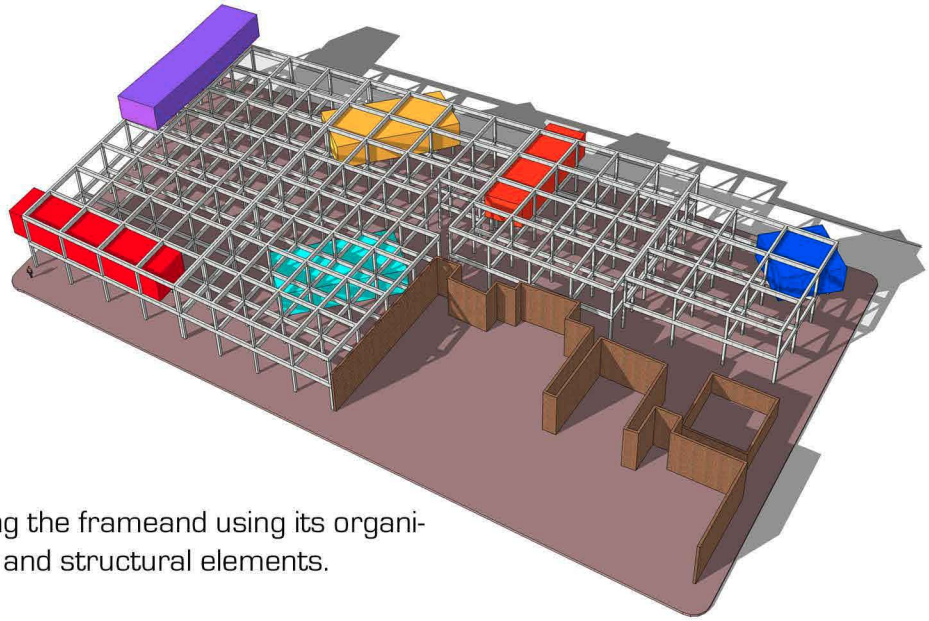
Densifying and fragmenting-

Recognising the value of the erven, yet having the need for an open public space brings the need to densify the built forms on the south western side of the site. The programme of the artisanal school together with a hybrid shopping mall and office block is used to intensify uses on the one side of the divide. The north eastern side is fragmented with informal workshops and market spaces which are spread-out within the proposed public space.

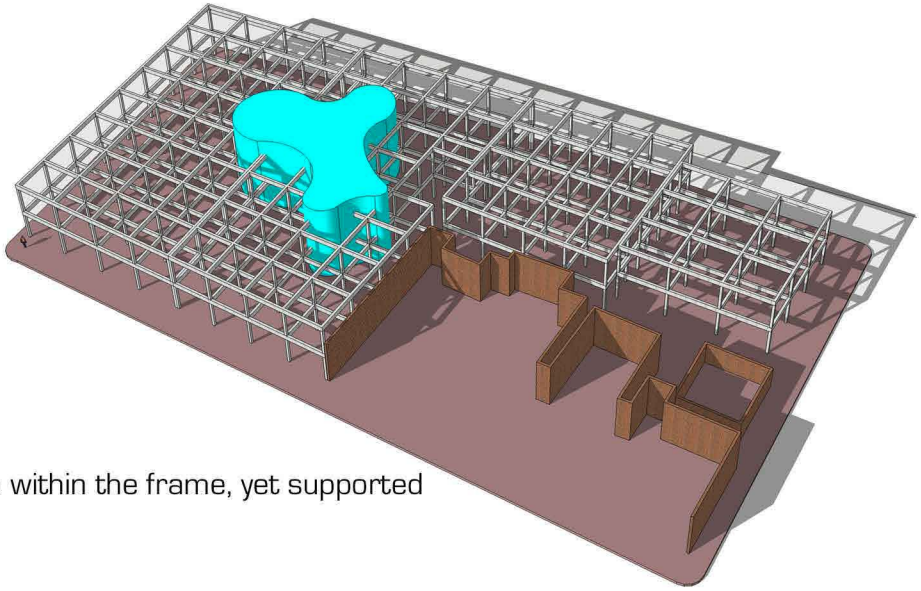
Another model was explored where the path to the station is built into a ramp which is populated with informal store/retail spaces, both above it and under it which would further activate the route. But this model failed as it blocked off valuable north easterly sunlight and created unusable spaces under the ramp. The model which opened up the street and treats it as an open pavilion onto which spaces (formal and informal) could be attatched was chosen.

Values of an urban block-

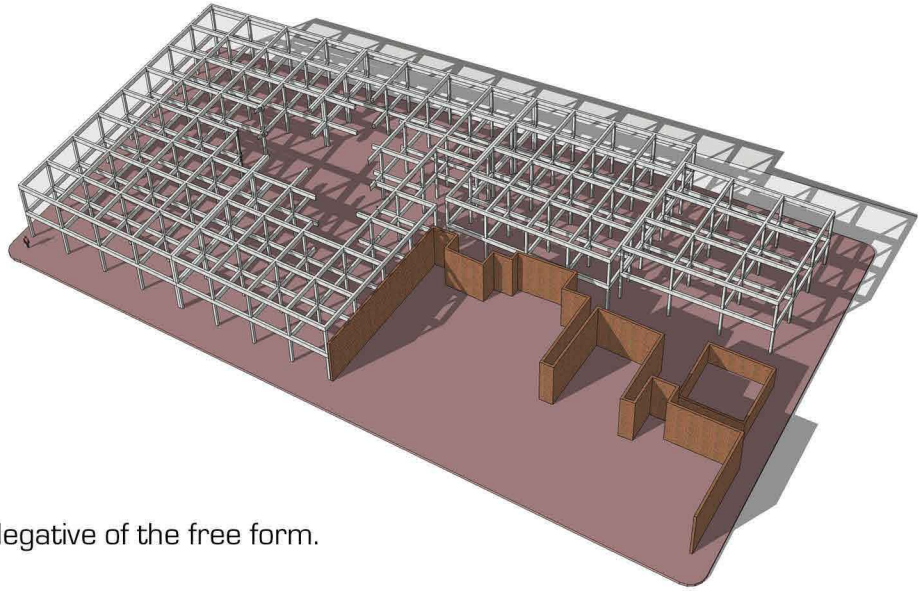
When choosing to develop an urban block the opertunity arises to speak to the city scale and its precincts, morphological make up. In this case developing a block outside the woodstock station sets the tone for development in the rest of the district and deals with the established typological responses to the newly gentrified sites.



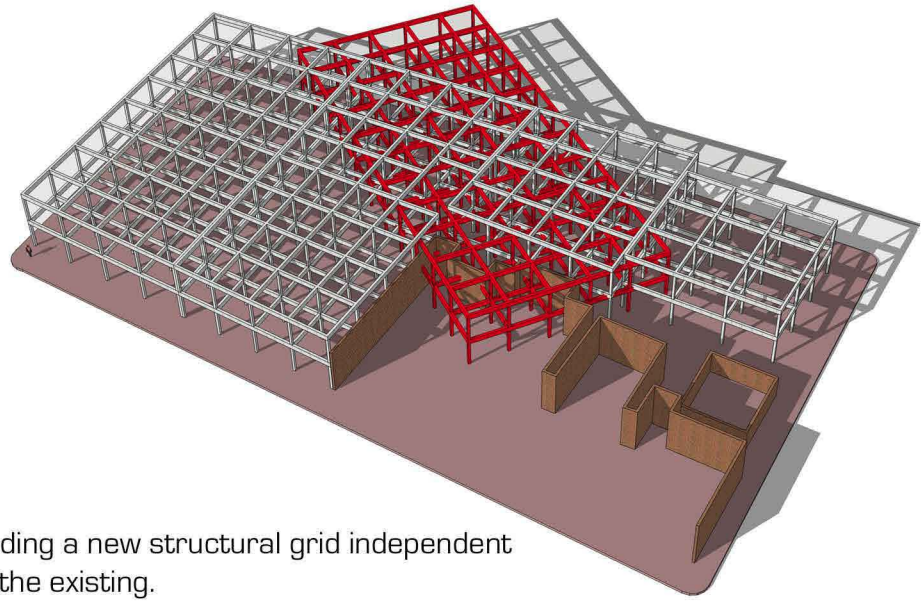
Inhabiting the frameand using its organisational and structural elements.



Free form within the frame, yet supported by frame.



Negative of the free form.



Adding a new structural grid independent to the existing.

Developing a method of working with the structure-

When confronted with such a rigid existing structure the intuitive response is to work in between the columns and beams and only demolish strategic elements which will give a spatial fluidity. There were four ways this was explored in 3d modeling software.

The first was looking at the lattice structure as structural elements which could be inhabited hence purposefully capturing “rooms” within the greater structure. These rooms can float in the structure independently and can be placed inside, on top and even under this structure.

The second is to use the structural framework as a scaffold of elements supporting a free form. The free form would capture volumes within the existing structure.

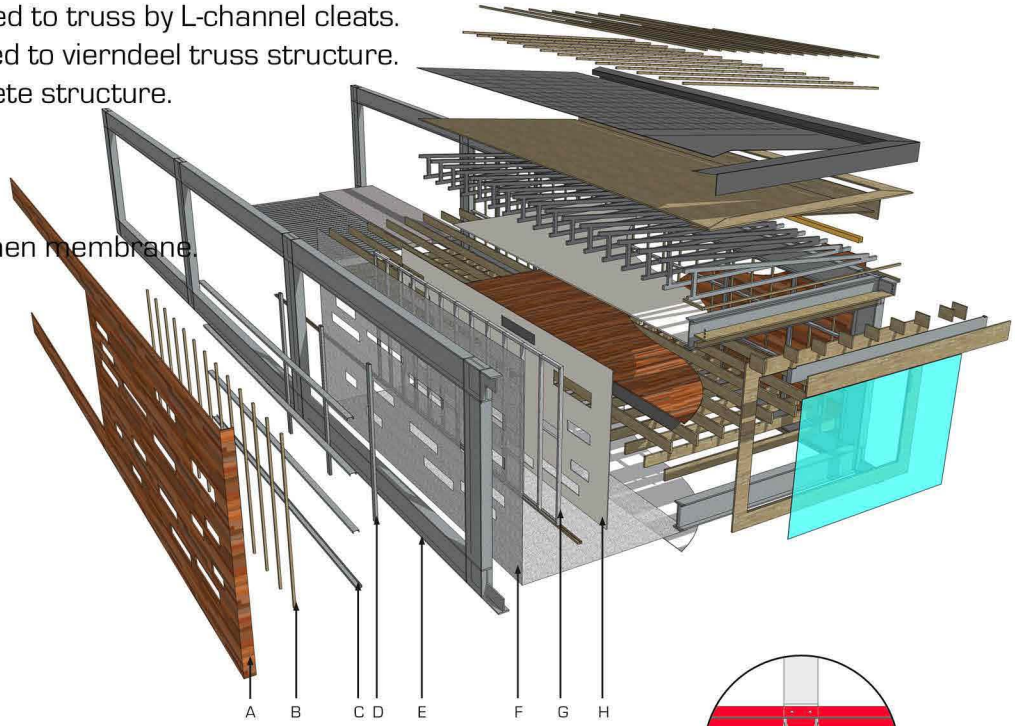
The third is to subtract from the existing, resulting in a negative form within the greater structure.

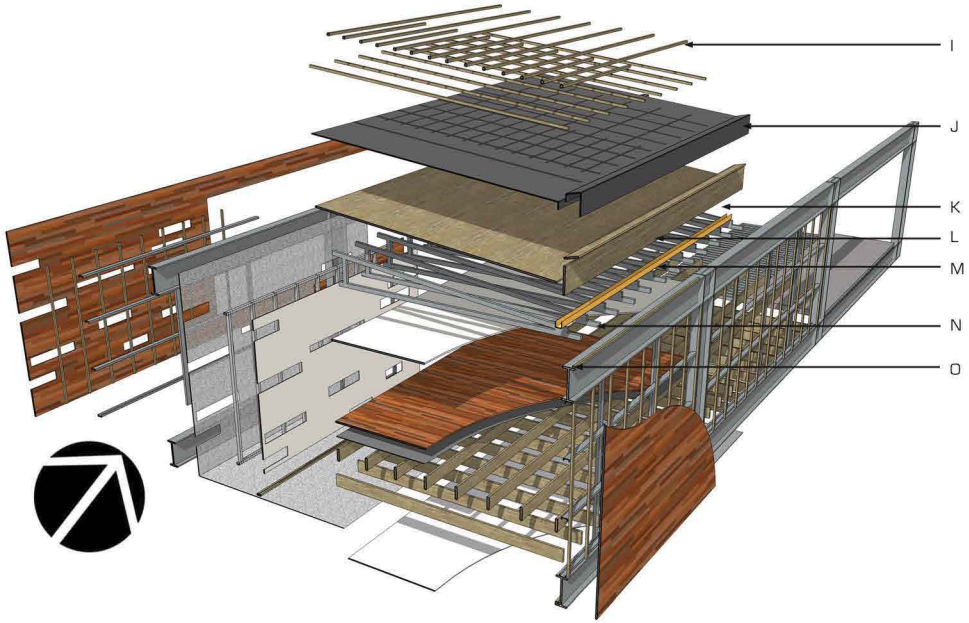
The fourth exploration is to overlay a new grid system at a different angle. This new structural grid would be the contrasting function or route through and could house common spaces.

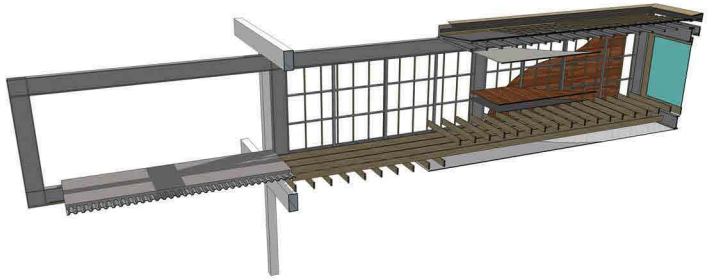
The extension of the existing structure serves as an ordering device for spaces which can take on new forms in response to their purpose.

Key:

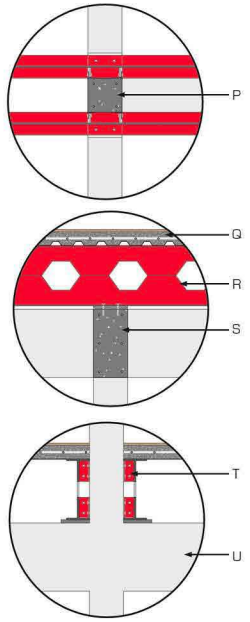
A- 155mm x22mm x220mm, meranti t&g slats running horizontally. Fixed to battens using steel nails.
B- 38mm x38mm battens spanning vertically and fixed to rafter.
C- 100mm x40mm x3mm cold form profile C-channel, supporting battens fixed to truss by L-channel cleats.
D- 100mm x50mm x4mm rectangular hollow hot rolled steel supports, welded to vierndeel truss structure.
E- 533mm x201mm x12mm I-section, vierndeel truss fixed to existing concrete structure.
F- Tyvec semi permeable perforated membrane, acting as damp proof layer.
G- 50mm x30mm x1mm gal. steel studwork
H- 12mm nutec boards.
I- 38mm x38mm battens in prefab grid installation covering derbi-gum bitumen membrane.
J- Derbi-gum bituous membrane (6mm),
K- 25mm cross weaved plywood used to box in steel structure.
L- Aluminium box gutter (100mm x100mm)
M- Condensation layer.
N- Custom steel truss.
O- Battens giving slight fall to parapet.
P- 300mm x300mm Existing concrete column
Q- Insitue cast slab with 30mm screed finish.
R- Castellated beam (Possible)
S- 600mm x300mm Existing beam
T- Steel L-channel brackets
U- Existing concrete structure in elevation







Room within existing concrete frame.



Technical exploration of “rooms” within an existing structure-

One of the main technical explorations in this project was to consider how rooms could be supported within an existing set of structural elements. In this study it was approached that each room was to become a layered series of elements which gave enclosure.
Also considered was the connection to the existing structure. In this case it was explored that each independent unit could sit inside the existing grid structure attaching by means of steel fixings ontop of the existing concrete beams.

Part s the rooms that extended outside the existing envelope would beed to be cladded and waterproofed, whilst the parts that sat inside the overall structure would become far lesslayered and possibly even movable.

Although this concept was not carried forward to the final building, these model explorations initiated an attitude towards joining new elements with existing structure and how it was represented in the end.

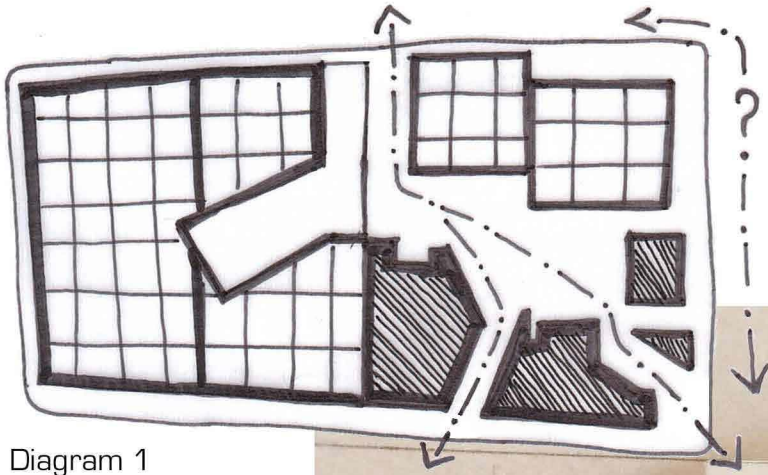
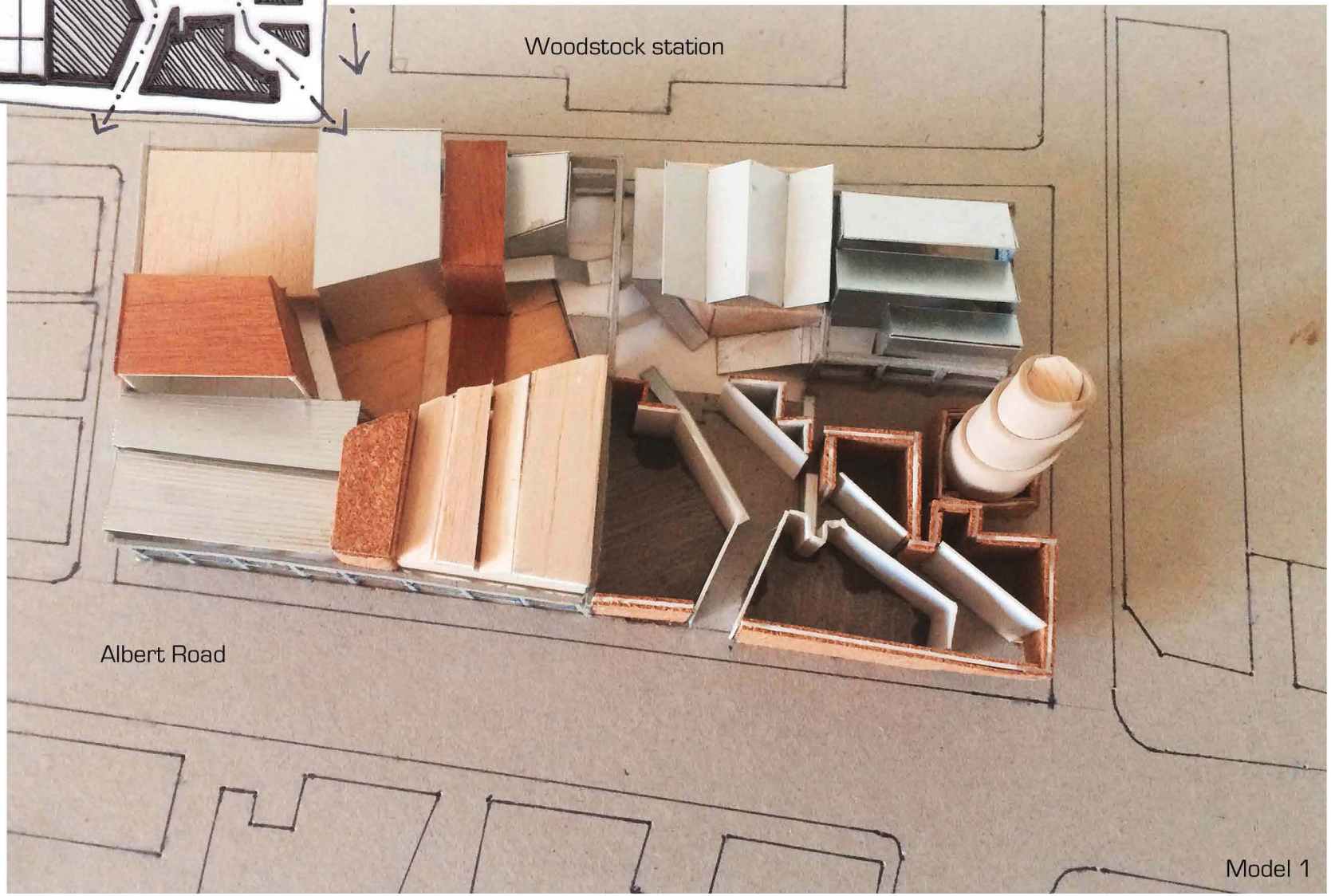


Diagram 1



Model 1

Diagram and model explorations-

These are a series of studies which start as diagram explorations of movement towards the station and connections to the main road. Each model is generated from one of these diagrams and is based on spatial and material relationships, but continues the man theme of working within the existing concrete and brick framework. Please note that this was an ongoing process but ultimately produced the model of the final, being the internal street leading to the station.

Diagram and model 1-

This diagram came from the formation of a single route towards the station which was used as an organising element in the deliberate fracture of the buildings through the site. It also questioned the facades of the existing north eastern street, asking if the edge was to remain active or simply animated (enclave theory).

The model that spawned out of this diagram was based on previous explorations on the creation of a heterotopia. These explorations were brief and caused more problems than solutions. The “tower element” was to be a panopticon (type of heterotopic element) which would be used as a vertical restaurant element which had the duality of surveillance and panoramic views. This model also internalized its function not dealing with the main road or the station hence the need to develop both the diagram and the model further.

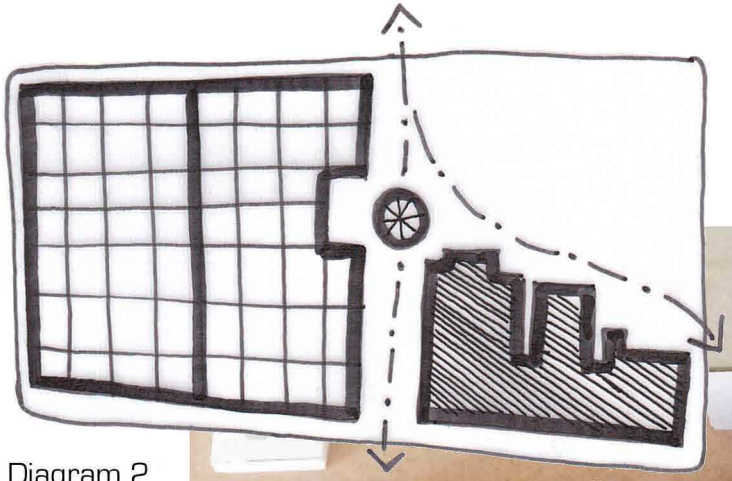
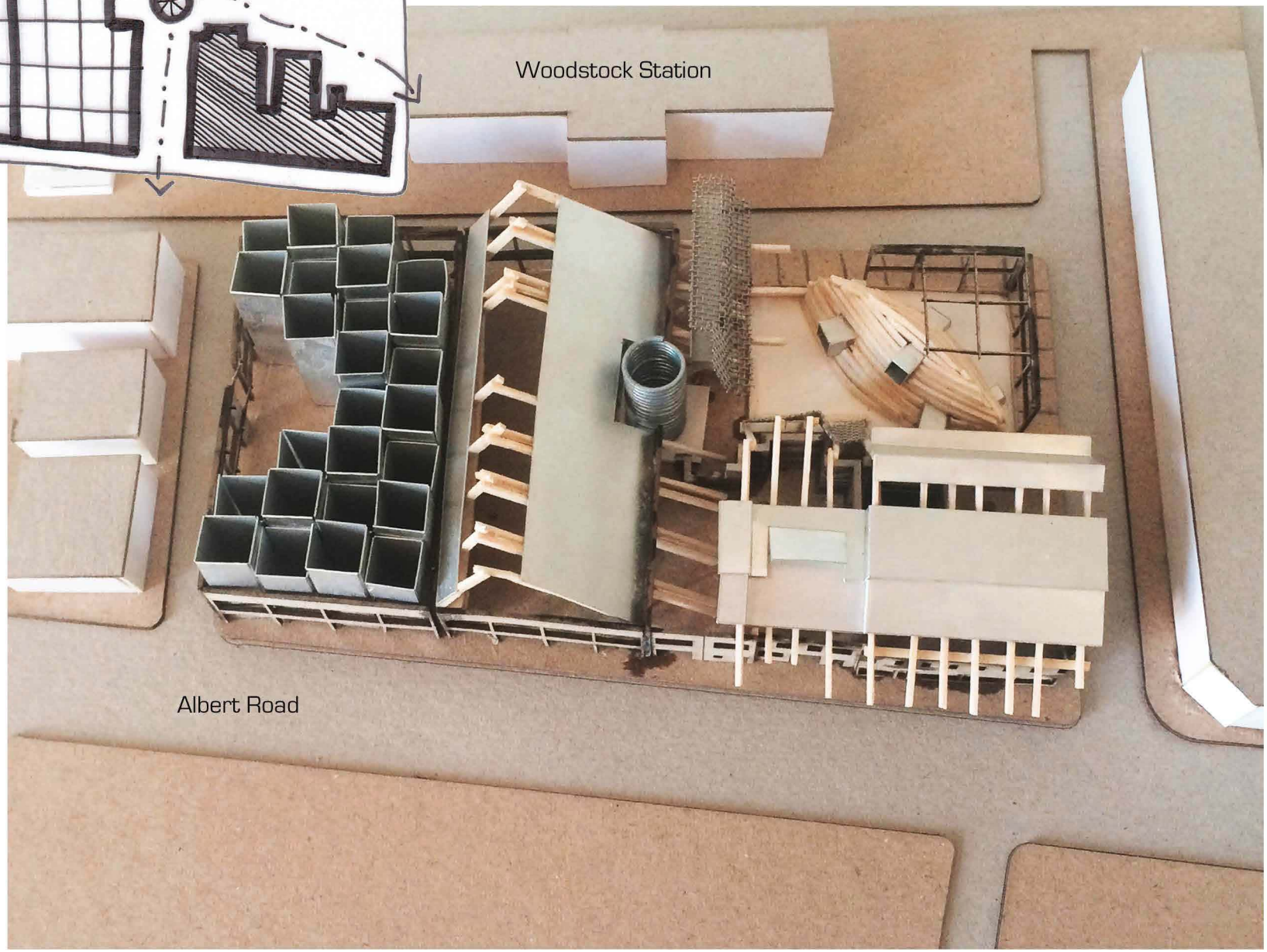


Diagram 2



Model 2

Diagram and model 2-

This diagram deals with the station and main road individually creating two route to the station. The first route runs perpendicular to the main road, through an internalized mall arcade and up a large spiral stair which joins with the station on the first floor.
The second route passes through the open public space and terminates at the stations ground floor. These routes are independent and have two different natures.

The model which explored this diagram resulted in a highly ordered and separate set of forms and programmes. From west to east the building has the workshops, mall spaces, route towards the station and terminated in the restaurant and smaller retail spaces.
The public space was more open resulting in a perfect forecourt receiving the station, but once again the station was hidden from the main road. Keeping the size of the public space and the simpler material nature of the buildings was key to develop the next model and diagram.

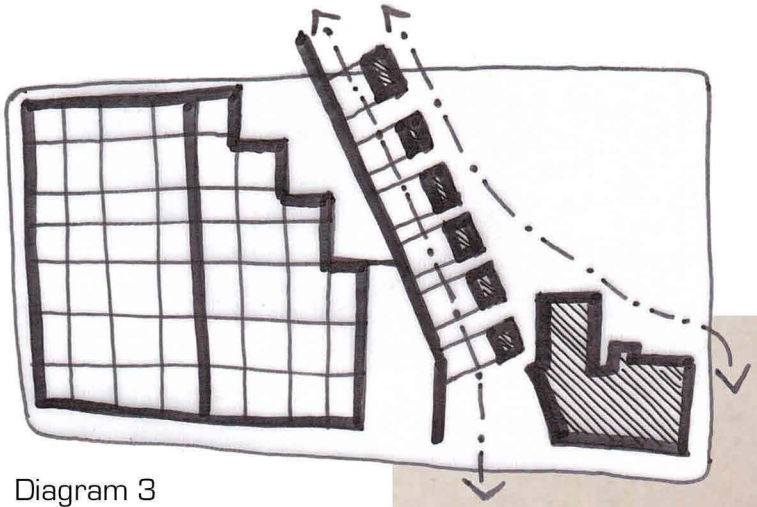


Diagram 3

Model 3

Diagram and Model 3-

This diagram was getting close to the final resolution between the enclave and the street. It established a large ramped route through the site which terminated at the station, whilst creating a new open space on the main road. The open public space on the north east was broken up into a less dense feathering of structures for informal uses whilst the south west side was higher and densified.

The model expressed this new route as a built form which ramped all the way up to the station level. Retail spaces were attached on to the ramp and were to inhabit the space under the ramp.
The south west was built as a series of ribbons which inter flowed with the established structure below. Unfortunately this built up path is blocking valuable north easterly light from reaching the rest of the site. Learning from his model took me to my final diagram and model which became the selected scheme.

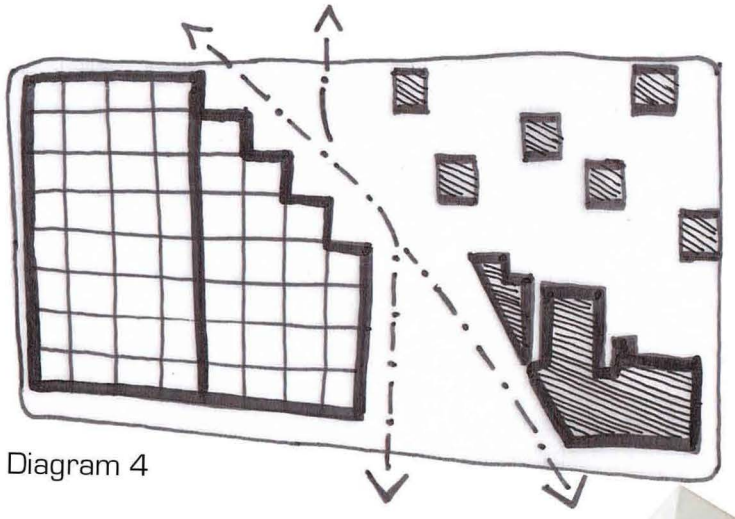
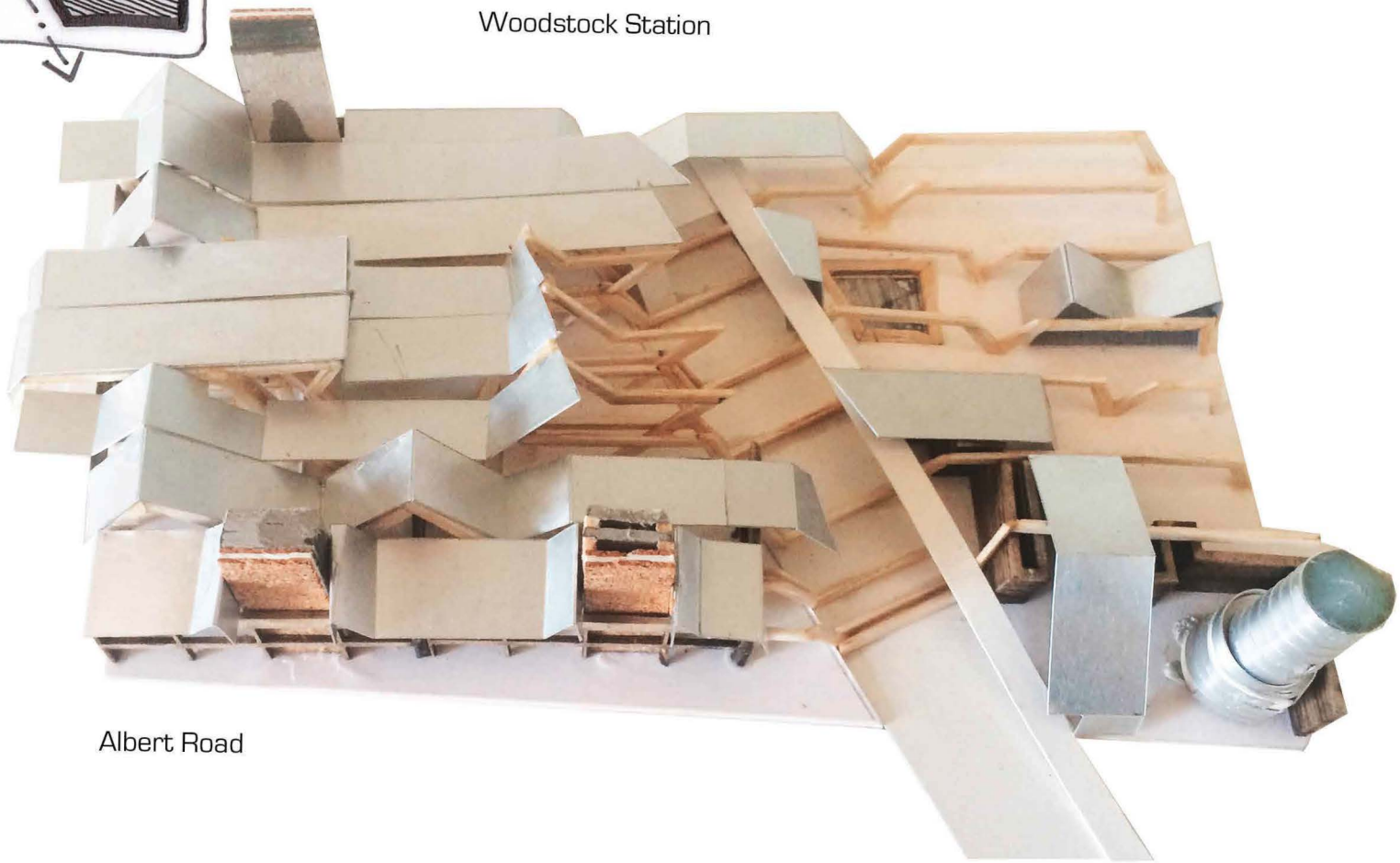


Diagram 4

Woodstock Station



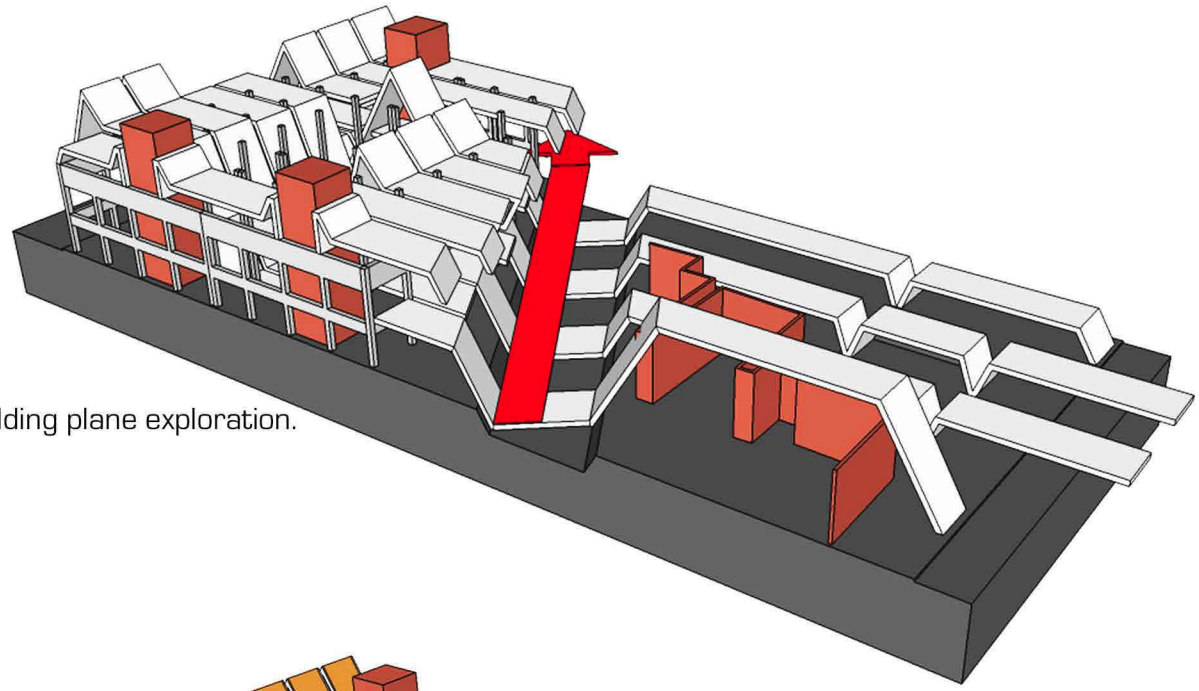
Albert Road

Model 4

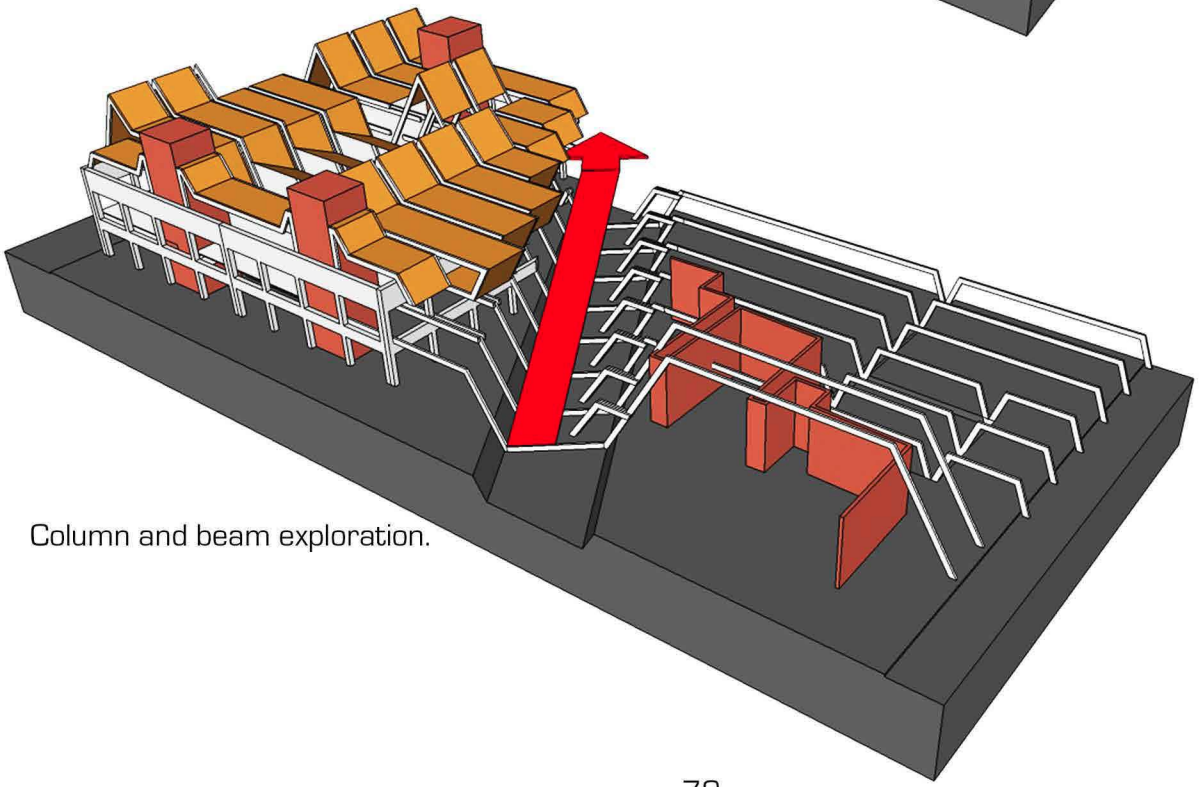
Diagram and model 4-

This diagram was the final stage of development and helped generate the narrative in the previous chapter. As mentioned in the previous model the built ramp was a tax on sunlight and space which detracted from the scheme. In this simplified diagram there is an open flow from open public spaces and the denser mall/school spaces. The street here is treated as a spine onto which the stores (formal and informal) can attach. The introduction of a My Citi bus stop is a reinforcing node which would make the street work.

The model reflects the open nature of the overall design. The decisions in the model are controlled by the established gridlines which were in turn based on the existing structures. In this concept model there is a slight tribute to the old panopticon, which is later lost in the final project, as its nature has changed from its pure meaning hence keeping it becomes a programmatic nightmare. The three service cores are also too string in this model but have continued into the final scheme as more modest elements.



Folding plane exploration.



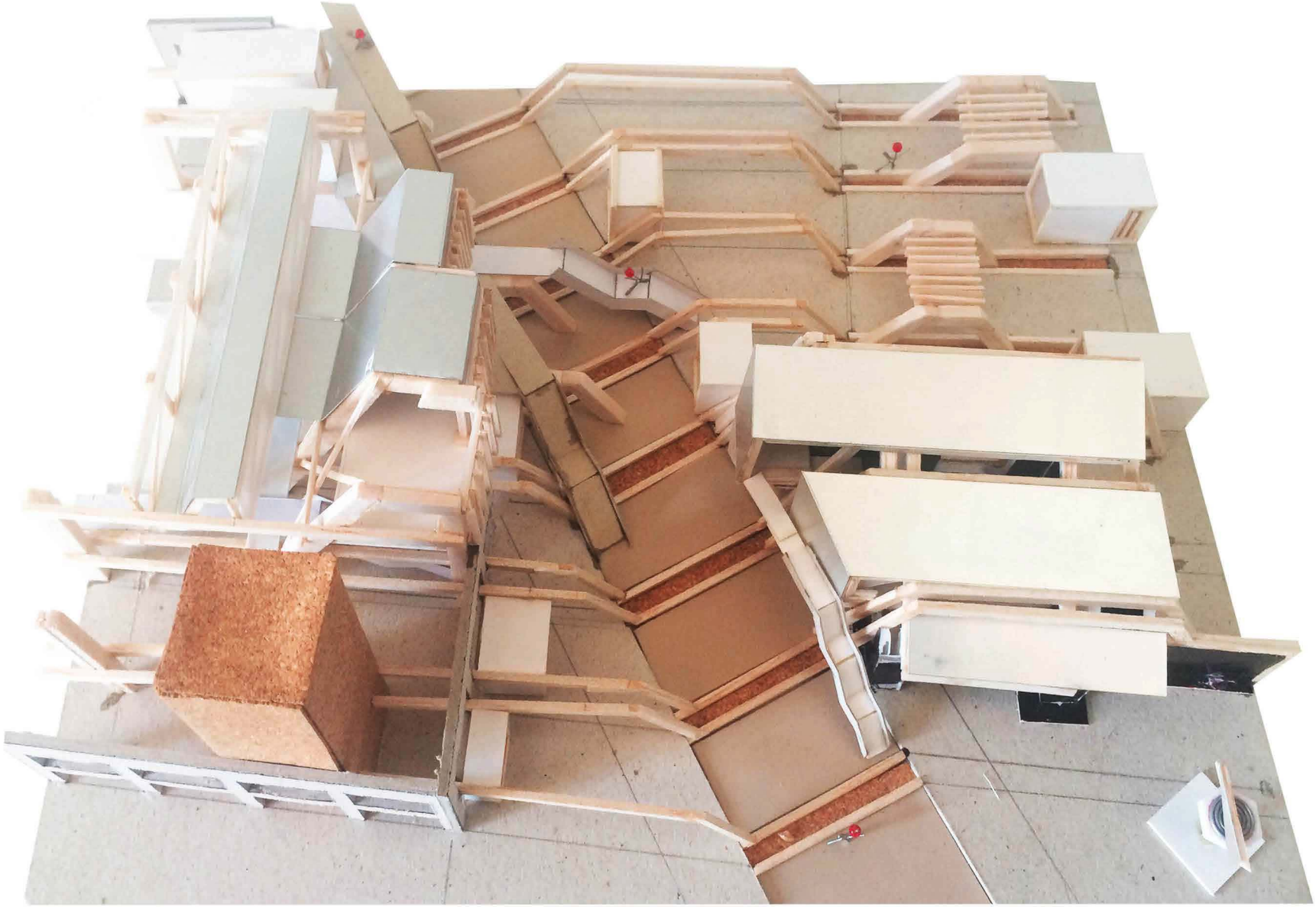
Column and beam exploration.

Exploring the continuity of the grid through digital modelling-

The continuity of the existing grid gave the opportunity to have the entire site read as one cohesive campus through this one structural element. Although the grid was established by the existing column and beam structure, the extended lines were to become the extended structure and was explored in two different ways, namely as planes and as steel I-beams.

The exploration of the extended structural grid as a folding plane merged the floor and roof surfaces into one element. The folded planes became floors and ramps in the densified mall on the South western side whilst enclosing space in the north eastern public space for informal traders. The less desirable aspect of this scheme was that it fractured the ground floor spaces and got in the way of visual continuity across the site.

The model of Structural I-beams provided an opportunity to insert sliding planes in a new framework, hence enclosing space where necessary. This flexibility allowed for different arrangements in the pen public space as well as a more fluid space within the mall.



Street exploration 1_200

Exploring the street and its structures in physical modelling-

The next step, in model exploration, was to build and assess the different possibilities that a street towards the station could become. In a scale of 1:200 the exploration of the street and its elements became an exercise of assembling units of space onto an armature, which would need to both activate and animate the intended route.

This new street also needed to integrate both sides of the site with intersecting pathways and staircases which could cross it or simply work above it. The public space adjacent to the street was meant to become an extension of the activities of the street and allow diffused flow across it towards the street.

This model also explored the nature of the north east facing shops, both on the ground floor and the first floor. The resultant roof structure started to express the ideals of the research where the enclave of the mall engaged with an external armature of a street.

Legend:

1 retail store
2 office
3 textile workshop
4 textile classroom
5 steel workshop
6 steel classroom
7 timber workshop
8 timber classroom
9 shared lecture room
10 storage
11 raked floor theatre
12 foyer
13 kitchenette
14 toilets
15 showers/ change rooms
16 take-aways
17 coffee shop
18 bus bench
19 informal market kiosk
20 woodstock station
21 restaurant
22 small department store
23 connection to station

Ground floor.

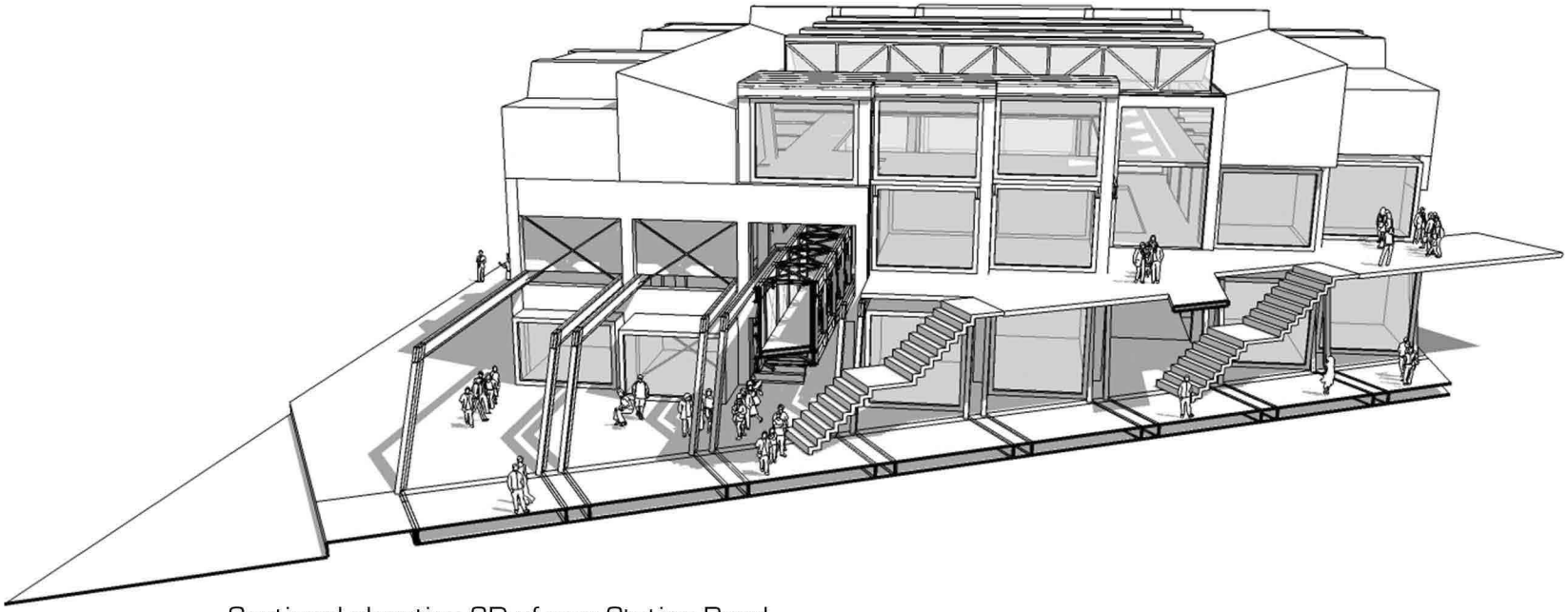
First floor.

Mock review, final adjustments-

The key drawings to this project are meant to express the movement towards the station and in particular how the theory of the enclave and armature became one cohesive built resolution of architectural elements. Although this will be expressed in plan the need for a supplementary axonometric section will be necessary to reveal the depth and flow of this movement.

In an attempt to express the existing vs the new, sections indicating cutting though the building will indicate the new structures in red and the existing as colourless and void of hatching. This relationship is also evident in plan but a final decision will be made on other means of indicating, post this design report.

The elevations are also a good indication on how the building integrates itself into the existing fabric and how it responds to the scale on both the station and Albert road sides. The sectional elevation which runs through the new street across the site, is key to unlocking the potential of the street and its attachments of retail stores along it. It also express the extension of the street on to the first floor (station level).

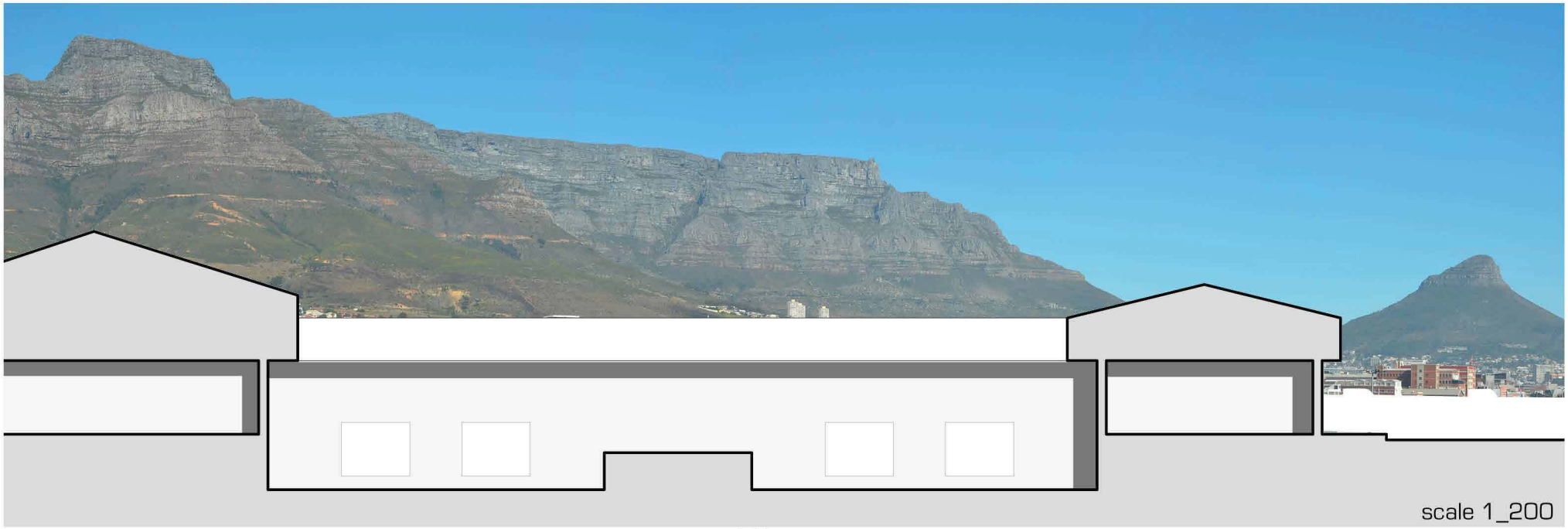


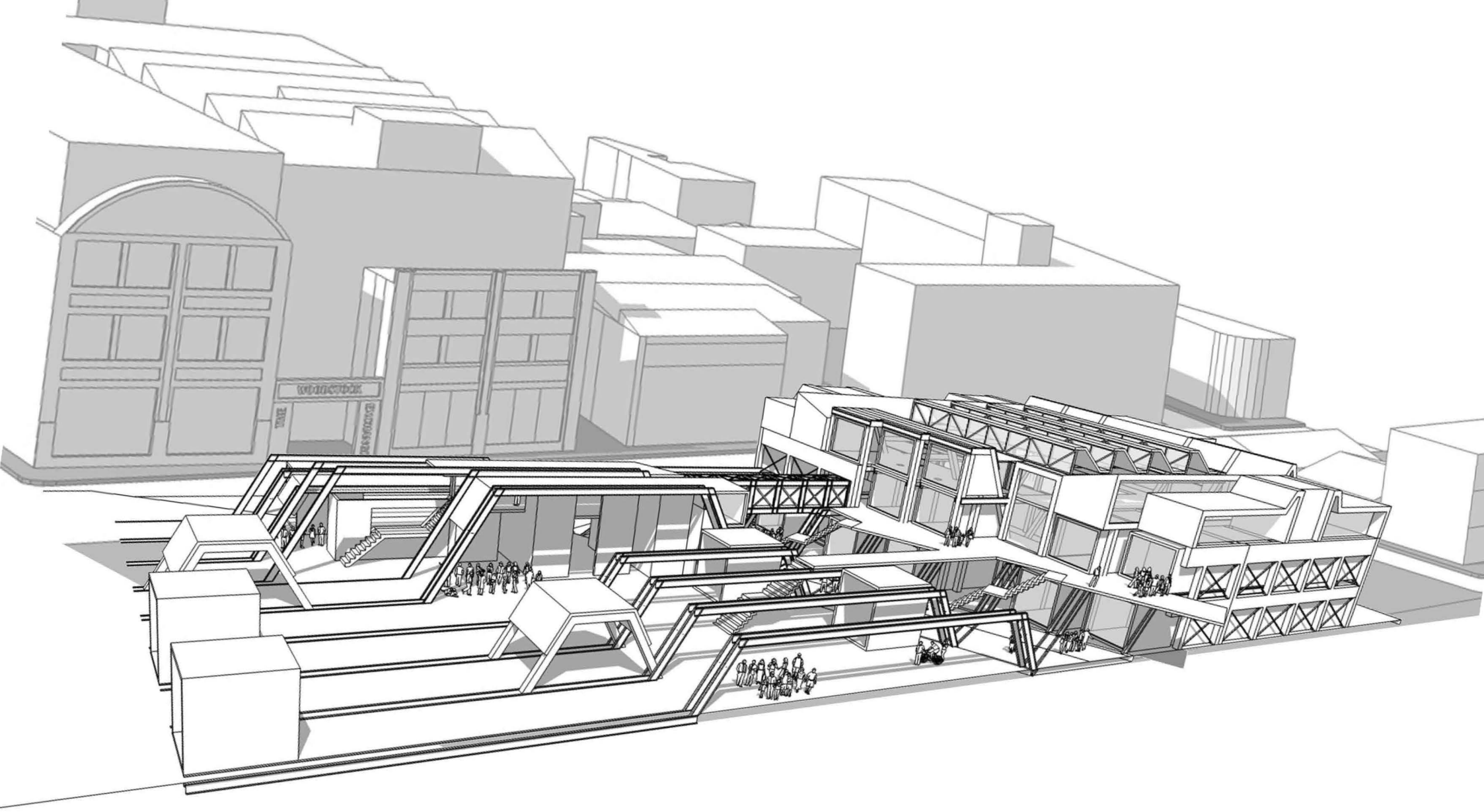
Sectional elevation 3D of new Station Road

Sectional elevation of street

Overall criticism of the project is that there are some redundant elements which detract from the overall resolution and understanding of the project. The main decision to be changed is the raking columns which were once considered as folds in the design.

It has been suggested that these columns are simple 90-degree joints in which the lightweight roof structures and staircases can flow whilst being supported.





Building in context (Mock review)

Investigations and design explorations-

This dissertation began the year with a keen interest in artisans and the places they work. The initial data collected started the design in a finer scale looking at workshops and work spaces but it was only when engaging in architectural theory that the project started to find scale and an argument which later took form.
This was contrary to my linear process of design development which could have been more sequential, and could have been reflected in this dissertation report as a more chronological process. But as the investigations into the context and theory developed the dissertation evolved into a search for a hybrid model between the lessons learnt between the enclave of the mall and the armature of the main street.

The next evolution was to be discovered in the making of models which could capture the typological essence of what was required whilst remaining true to the initial diagram sketches linking the main road with the station. Settling on design divers was especially difficult and made the design process loop until finally finding on a way of working.

Looking ways of making a new hybrid model often starts from searching for an illusive precedent which, although ironic and stands to comprimise the purity of the resultant project. In this case the core ideals harvested from looking at pre-cededts of typology and different syntactic models (offered by malls and streets) allowed for the development of the hybrid to take-on its own character.

Albert Road existing elevation

Davison Road existing elevation

Grey Street exisitng elevation

The recombination/collage approach-

In a design project which tries to preserve some memory of the past on a site, architecture should work within the existing structures limitations and only break the rules at the point of juncture, hence crafting the joint between old and new. This forces the architect to think with great sensitivity to how walls are made and how structural elements function with each other. The resultant building becomes one of a kind, not necessarily iconic, but rather integrated. Consequently a way of working is created and we are given a new way of looking at heritage sensitive projects.

In the case of this project, the existing site had very little to be excited about but was studied as a memory of industry, and as a comment on the industrious period that Woodstock had gone through. No more was needed to be preserved and the new intervention would bring the contrast between the old and the new to life.

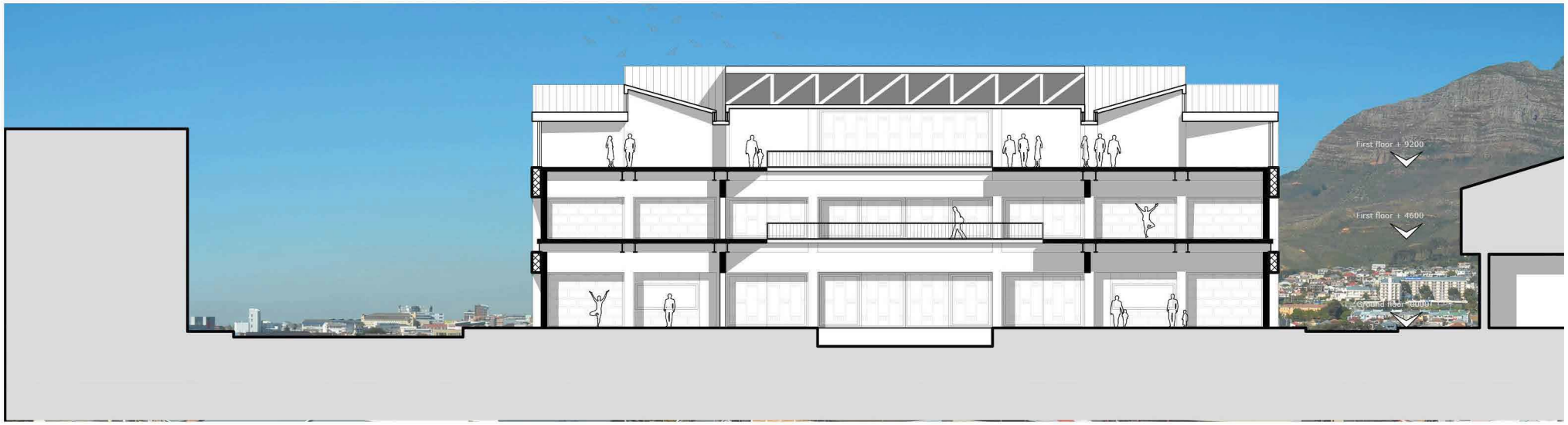

Albert Road
Victoria Road
Nelson Mandela Boulevard
BRODWELL
OUTIQUE MALL
THE OLD BISCUIT MILL
84

Theory, analysis and precedent-

This dissertation started as a series of questions which came from having grown-up in Woodstock in the early 90's. Looking at current developments which don't integrate themselves into an already living and thriving community expresses the negative values of gentrification. By breaking down the methods of development within the area I tried to unpack the fixed needs for an investment to occur, and tried to reimagine a new method of intervening whilst staying true to both the developer and the existing context.

It has proven difficult to access the problem from a sociological point of view, and as an architectural student, I have opted for rudimentary architectural theory to find the links which could solve this problem. But in a capitalist society where municipal policy aids the private investor, poorer communities are left out and often don't benefit directly, if at all. Exact lines of similarity, can be drawn from establishments such as The Old Biscuit Mill and Woodstock Exchange.

The enclave within the city becomes a restricted heterotopia which gets masked by the narrative of new bohemia. All aspects of these places become controlled and ultimately alienating both to the communities they are surrounded by and eventually the tenants which populate their internal streets. These places become exercises of interiority and façadism masking the true character of a district whilst displacing local identity.



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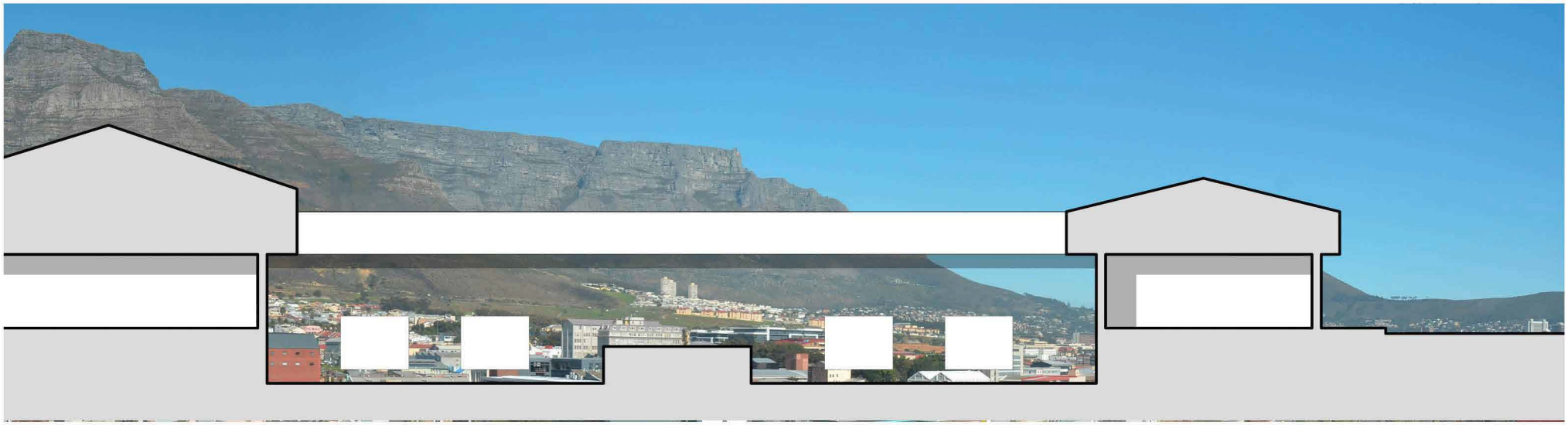
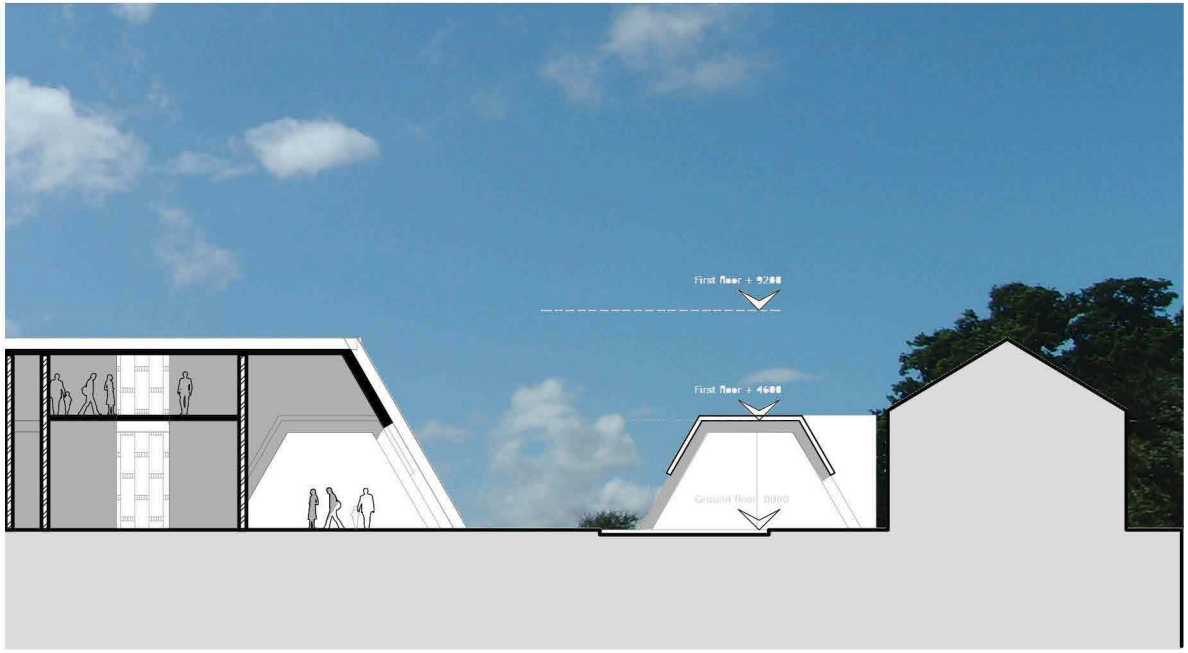
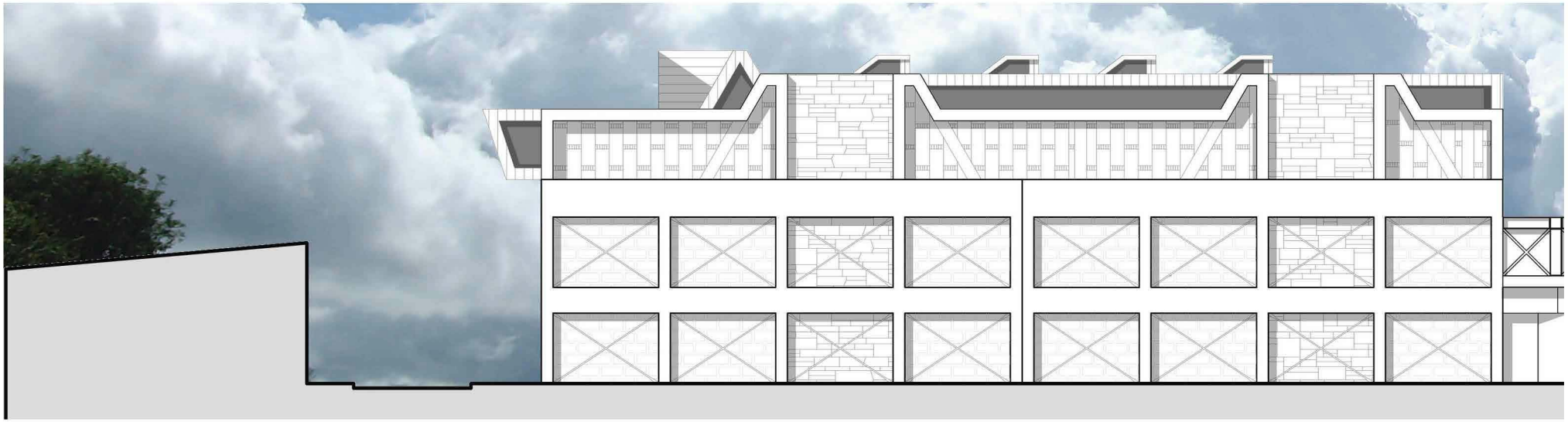
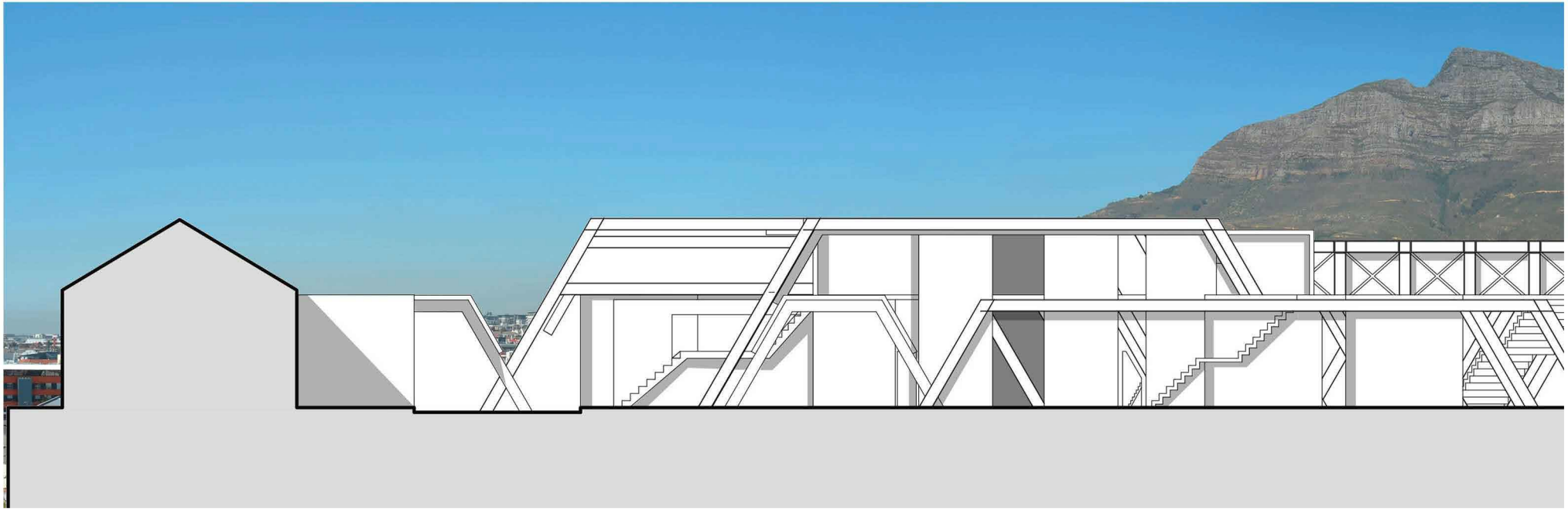




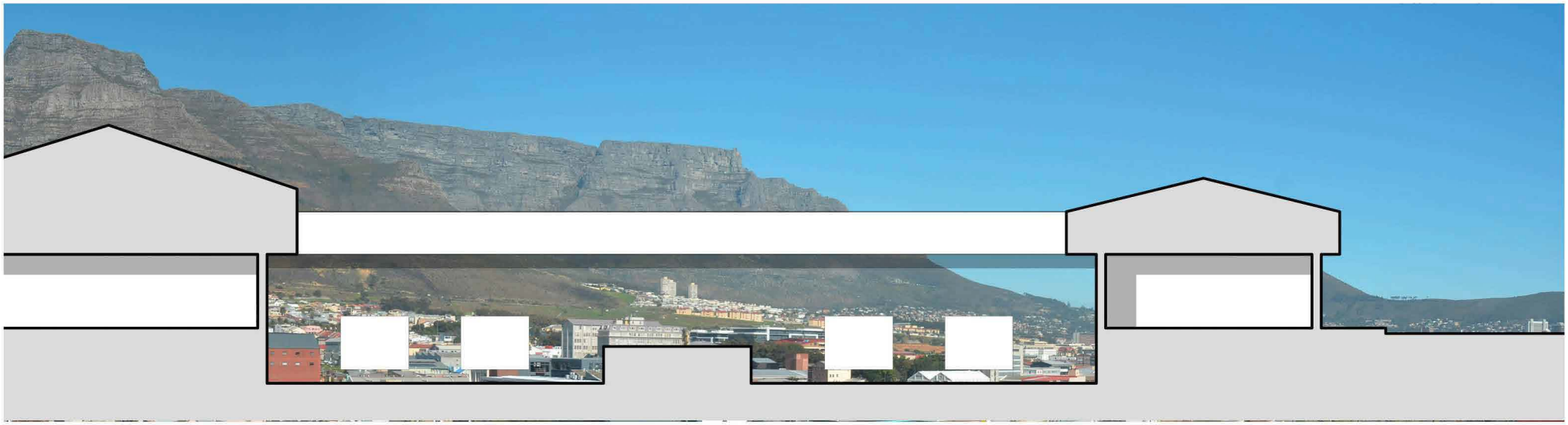
scale 1_200

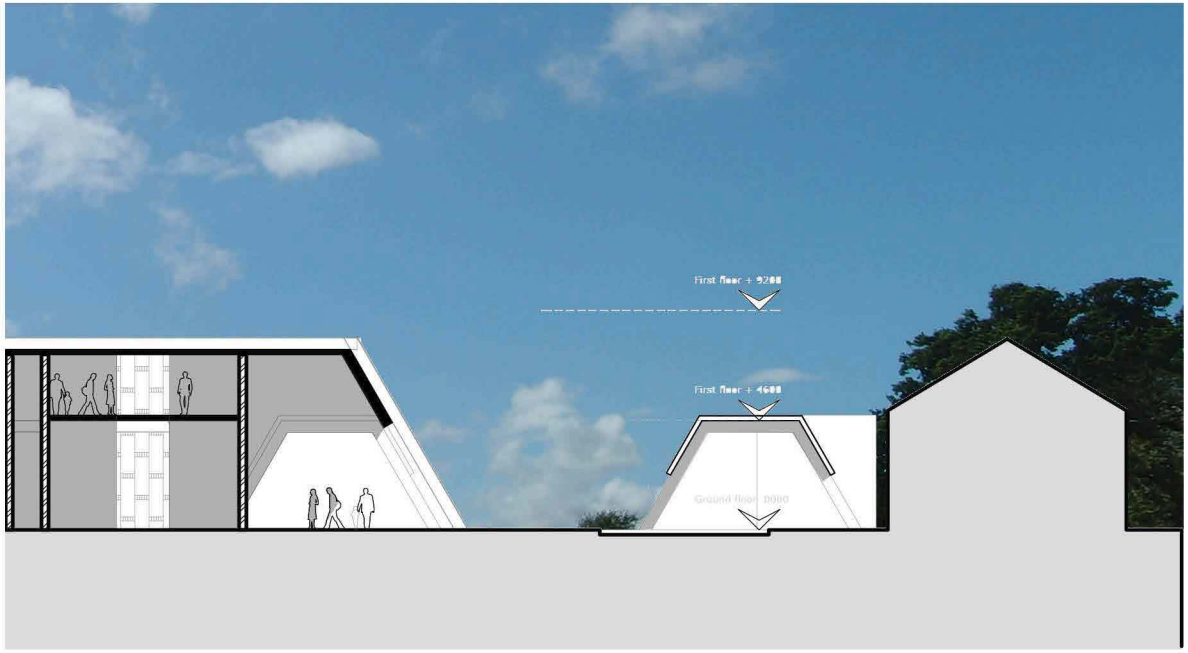


Albert Road elevation



Grey Street elevation





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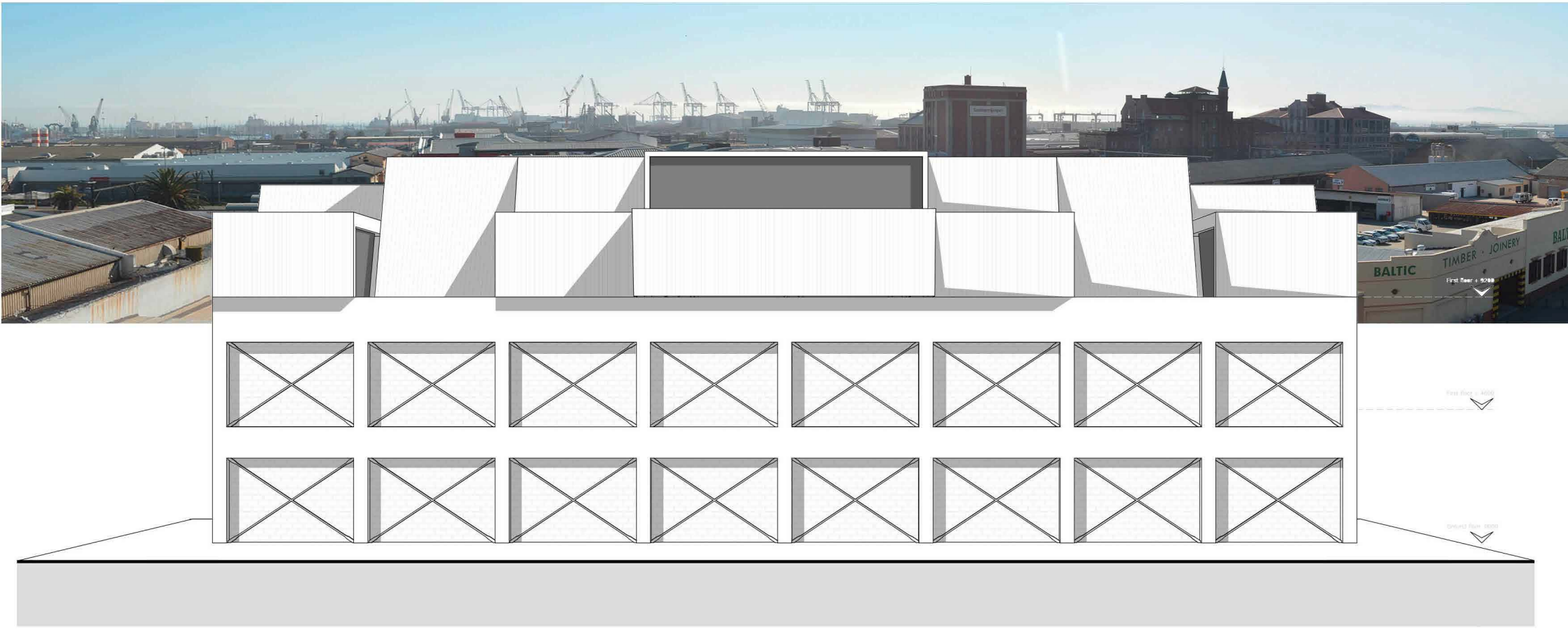
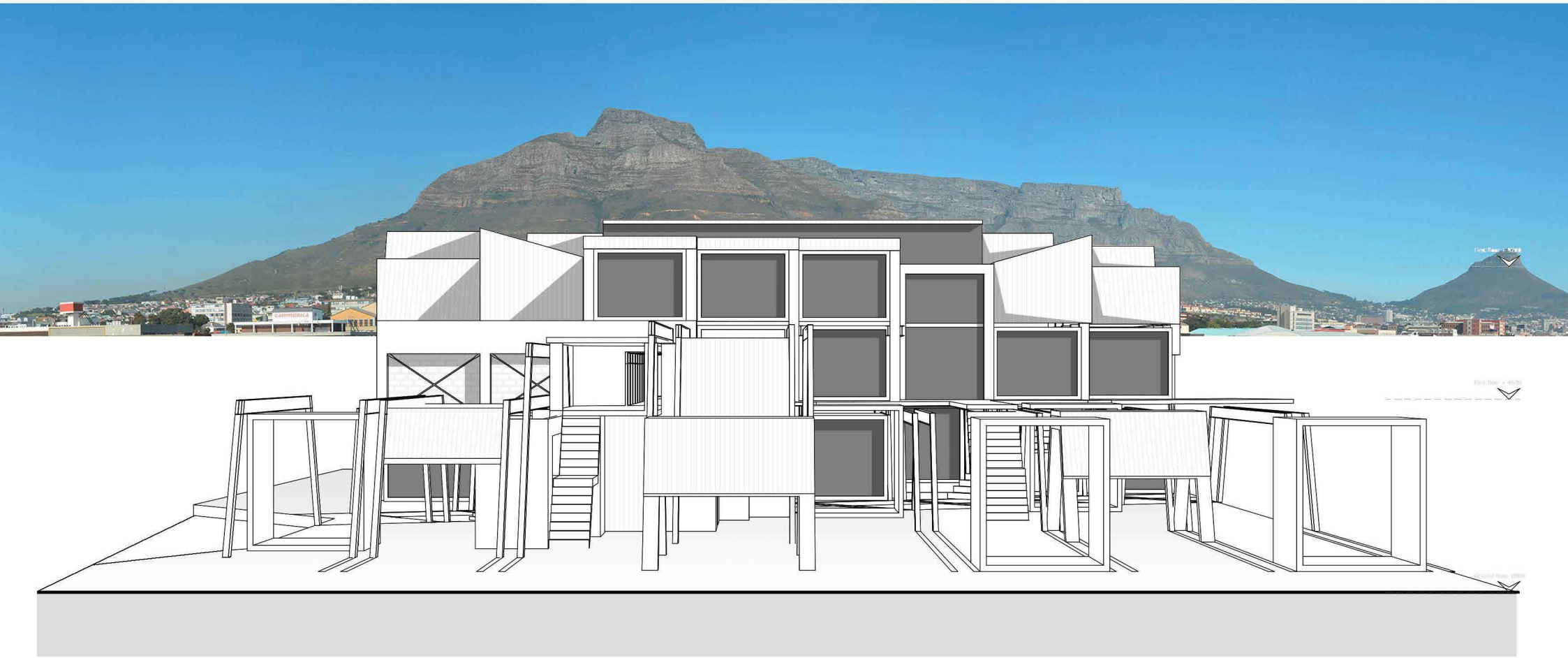


Alexander Street elevation



Davison Road elevation

scale 1_200

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Note: additional references are included as they guided ideology and design principals but did not necessarily form part of the text in this document. All the direct references and citations follow the Harvard referencing system.

Photos, diagrams and images-

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3. No author, 2009. Somerset Mall, Helderburg, viewed 20/04/15 < http://www.xcapetown.co.za/somerset_west.php>

4. Google maps,2015. Viewed 11/10/15

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Note: all images not refered to in this section are the author's own images.