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gender, RANKED

a reinterpretation of an inner-ciy taxi rank

an architectural thesis by nikara naidoo **320508**





(Imperial College London, 2013)

I, Mikara Naidoo 320508, am a student registered for the course ARPL7003 in the year 2013. I hereby declare the following:

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Mikara Naidoo
28 November 2013

This document is submitted in partial fulfilment for the degree:
Master of Architecture [Prof] at the University of the Witwaterstrand, South Africa, in the year 2013.

DECLARation

This big dream could not have been realised without my parents; Thank you both for ingraining your hands and hearts into every project I have embarked on over the past 6 years. You do not need to be an architect to design with soul, logic and humanity in mind- and both of you have played an integral part in teaching me this valuable lesson.

Soul-mate sister, Jo-ball, thank you for always providing the 'ying' to my design and to my life. The sleepless nights you cut triplex to perfection will never be forgotten and the smile you had while doing so makes you my 'Honey in the Sun'.

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To the few special friends in my life who held me and this project together from beginning to end; no words adequately express my gratitude for your selflessness. Chad, B, Mush - I'm talking to you. Love.

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02. DESIGN

DE-CONSTRUCTING AND RE-CONNECTING THE INNER CITY INSTITUTION finding equality in the city through reconstructing the existing mtn taxi rank

DOCUMENT STRUCTURE




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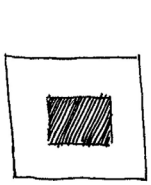
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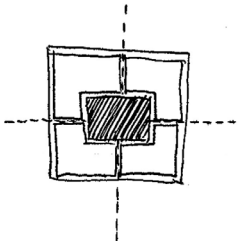
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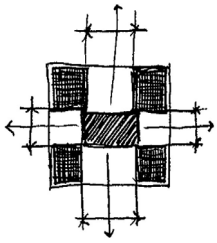
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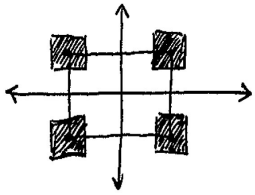
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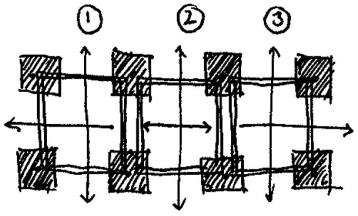
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ABstract

Driving to Johannesburg Art Gallery one afternoon, I was stopped, held at gunpoint, verbally abused and robbed. Just before leaving with my belongings, one of the two young gentleman looked at me square on and said "Consider yourself lucky; You shouldn't be here at all, Bitch!"

To this day, I'm still uncertain if that statement was directed towards the colour of my skin, my sex, or simply because I was driving my own car.

Either way, after the initial anger subsided, the reason was no longer relevant; As an educated woman who lives in a democratic society, I was not going shy away from the city I love so deeply!

But to be truthfully told, the experience taught me that the city runs on its own rules of equality and as a result, reality stole my fearless nature:

Since then, each trip into the city has been accompanied by a male, an awareness of my physical vulnerability has been pronounced and a mental restriction has been placed on my independence as a woman, when in the city.

That is all. No big deal.

As I have matured, and gotten to know my city, through experiences like the one mentioned above, it becomes more and more apparent to me that there is a certain gender inequality which has been engraved into the city's social fabric. This engraving has been done over centuries of patriarchy and has been further embedded through the rise of capitalism (with the centralisation of labour and wealth within the masculine domain). For this reason it may be deduced that cities were developed with 'men in mind,'

One of the most significant remnants of this male dominated past has been the construction of our physical city; Though we have accepted the city at face value and tried to make it as equal as best we can, the truth remains that these environments were not designed with women in mind at all.

And so while we now have laws and regulations professing our freedom and equality as women, the truth is that we now live in an age of gender brutality, within a physical environment which perpetuates the old patriarchal norms.

But no one is to blame for this inequality. I also do not believe that it could have been avoided, for the same reason, I do not hold resentment towards my attackers: The city and its history is what it is.

The more important and productive question is how do we go about breaking old norms in a truly sustainable way, to better achieve equality for all?

The basis of this thesis has stemmed from the exploration of the above question. What does a truly equal city look like, and how may we go about creating one?

To try and answer this question, I tackled various theories on female integration into the city, basically concluding that now is the time we stop isolating women in institutions in the city, and rather try and deconstruct and adapt existing environments to better cater to the needs of all users, instead.

To try and achieve this, the project focuses on the deconstruction and adaptation of the male dominated taxi rank, situated within the larger transport industry, in order to more successfully accommodate the female user.



INTROduction

Exploring A New Paradigm Of Equality

To me, the city could really just be simplified into a series of institutions, one within another; Protecting and rejecting each other simultaneously, creating a closed system within an even tighter one.

Life is good to those within the silos, but to the person on the street - to the men, women and children caught in spaces of transition - the city is not as forgiving. The word equality begins to melt in transition, and the city again assumes its natural hierarchy.

It is in transition that the city bares it's wrath and it is through framing and tempering a city's wrath that architecture holds it's worth... Well to me at least.

The Spark; The Spark for this thesis came from witnessing a woman in all her voluptuous glory cart both baby and baggage into a taxi one rainy afternoon. Its seeds were then sown witnessing a prostitute publicly assaulted by a police officer, on a street corner in Hillbrow. And its root was embedded in the inexplicable fear I have of walking the city street alone. The root. The route.

As a result, the initial topic which caught my interest, was gender equality in the city- with particular focus aimed towards a fairer integration of women into the public realm.

A natural progression of the feminist approach I had adopted to try and "fix" this unequal gender situation, led me to believe that this thesis should centre around a monumental safe-house and institution, marking women's place in the city.

Instinctively, the project jumped from being a brothel to a nunnery to a YWCA, and adopted a feminist and institutional approach.

It was only when I began dissecting and understanding the dynamics involved within existing, single-sex institutions in the inner-city, as part of my research, that the magnitude of the problem of inequality I had set out to tackle, became clear:

Single-sex institutions exist by the dozen, and are embraced by their users, here in Johannesburg's CBD; These institutions vehemently protect their users... So much so, that they isolate and dissociate themselves from their surroundings.

The more I researched, the more it became clear that women in YWCA's were only able to stand strong behind the walls of a secured multi- story building; Tear down the walls, and the city's brutality will engulf them whole.

Why? Because these women in cocoons are only equal through their isolation.

This approach is not to be unexpected: to mediate through the existing and immediate brutality and hierarchy the city poses, naturally people have taken to instant and severe measures such as high walls, security gates and guards.

But on the greater scale of equality, it is not enough to be equal within a cocoon. It is time we as people of all kinds are accommodated within the city, because, after all it is our city to have.

Needless to say, the outcome of this discovery steered me away from designing a building for women, and instead lead me to focus on the design of a space for everyone, within the harsh existing city fabric.

The Route; Of all the research conducted, what really resonated with me was the unanimous and evident shift which took place in feminine morale, confidence and power as soon as they set foot out of their cocooned environment, and became victims to the anonymity of the city street.

This idea of 'the route' through the city; this transitional space which facilitates the movement between one institution to the next; caught my attention.

Derrida advocated that the only way to really break down existing hierarchies of power was through deconstructivism (Caputo, 1997). Similarly, feminism had been using principles of deconstructivism for centuries in trying to carve out their role within existing, masculine societies (Khezerloo, 2010).

My question was how could deconstructivism be applied to uplift the inverted (negative) space which formed as a result of institution formations? And how could we passively secure public space/ 'the route' in order to create street culture *outside* an institution, which still could make users feel as secure as being *inside* one?

The Process; In order to answer this question I had to go through the history and theory of it all:

Part One and Two of the essay inspects how gender equality was dealt with throughout history. The analysis is broken down into two categories which I refer to as "Forced Integration" and "Isolation." Both theories stem from feminist and theorist, Rosaldo's, theory on female integration into the city, in the 1970's.

Through the first two parts of the essay, I discuss the pros and cons of both methods towards equality, ending with a succinct personal conclusion: That a combination (of both integrative and isolation principles) need be applied instead.

What could the outcome be if we were able to passively secure

public transitional space, based on principles abstracted from those responsible for the success of an institution?

Part Three of the essay then solidifies my conclusion through analysing how this could be done,identifying Derrida's deconstructivism as an integral role- player in the re-creation of equal physical space.

Part Three also prompted me to write a list: A list of what made me feel safe. A list of what made my interviewees feel secure, when taking their sewing classes in the CBD. A list of what made my new friend Ruth feel safe in letting her 4 year old daughter attend an all-girls school in Hillbrow. A list of what made women in the maternity building, adjacent to a drug dealers paradise, feel untouchable, despite their blatant vulnerability.

The list of principles I conjured up felt obvious, but on closer inspection, it became clear that things like visibility, sense of ownership and thresholds didn't actually exist in our urban fabric. And so it became my mission (and thesis basis) to implement them.

The Site; The language of this thesis quickly developed an aggressive tone towards change, and the implementation of sustainable equality within the city, through a deconstructivist approach.

With this in mind, the site of choice needed to provide an aggressive tug in the opposing direction in order to emphasis the argument.

As a result, it was only natural that the taxi industry became of great interest to me: Gender inequality and taxi-ranks have always held a certain tension between them and the MTN taxi-rank has been of no exception. In addition to the historical tension, I eventually settled on the MTN taxi rank as my choice of site for two specific reasons.

1) It provided an example of a male-dominated inner-city 'institution' in the most unconventional form, forcing us to question the presence and role of the smaller 'institution' within the city fabric.

The site was also chosen to show how such harsh physical environments within the existing city fabric may be deconstructed in order to generate a 'clean-slate' city, from which equality may gradually evolve.

2) The second reason for choosing the site speaks to the larger issues around women and the transport industry:

The MTN Taxi Rank is situated within the greater Johannesburg City Transport Hub, which has been expanding since the late 1800's (Chipkin, 1993). Given the long-standing debate around the flexibility of public transport systems, in adequately providing equal access to both men and women, to the city, the larger context of the site has proven very appropriate. This context also provides an opportunity to explore alternative routes and access to the city for women, within a greater network of thinking and planning.

The Brief; In order to tackle these large issues, both the building and the possibility of an alternate route not only had to challenge the existing physical environment, but also the existing mental environment of the users, through formal and informal means of education.

The project had to provide services and facilities any transport hub would require (Building), while simultaneously allowing itself to become part of a greater network which aided the most vulnerable users in accessing it (Route).

The Building and Route were informed by the same set of principles developed from analysing the institutions, so despite the public nature of both Building and Route (by programme and access) both inadvertently remain biased towards female safety, security and comfort, proving to tackle large scale issues all the way down to detailed comfort, in one single project.

The Result; From where I began, to where the thesis has led itself has been beyond my control, and has far outreached my expectations:

This project is real, do-able and sustainable, and from the feedback received, could really address gender inequality in a way never done before.

May you devour this thesis and revel in the possibilities of greater change it presents - The way I did.

There is no argument; Women have come a long way since the days of Simone de Beauvoir's protests or the bra burners of the 1960's.

Feminism is a force to be reckoned with on its own, no doubt! But it is also hard to ignore that the progression of the woman in society has been directly proportional to and explicitly representative of the progression of all those considered 'other than men' in society (Wilson, 1992).

With this stated, even though the below essay speaks of ways to more successfully integrate women into existing cities, the unstated insinuation is that of integrating all 'other' members of society as well.

Feminist and theorist, E Freedman once said that the most obvious method to bring about equality between men and women in society boils down to the integration of the private and public sphere users, in order to break down gendered norms (Freedman, 1979).

In most Western and Eastern societies, the equalizing of cities has been approached just as Freedman suggested above, and over time, two methods of integration have proven most successful:

The first method of acknowledging the feminine role in the public realm was by simply letting women use the city as they please, This is a method I call 'Forced Integration'. This method made no infrastructural changes to better accommodate women in the city, nor did it provide any method of preparing the existing users for the change; Women were just thrown in, and left to survive (Rosaldo, 1974).

The second method used, which still achieves great successes within cities, today, is the 'Strategy of Separatism' (1974). This method created walled communities, grouping women and protecting them from the harshness of their surrounds and this method gave women a collective voice and a building to 'pee on' and mark as their own.

Though separatism/isolation has proven far more successful in theory, this method does not solve the street level issues on inequality.

In her 1974 collection of essays entitled 'Women, Culture and Society,' feminist and theorist Rosaldo, highlighted the above two methods, and argued that these were the most effective ways to implement feminist theories. Thirty-Nine years on, however, I don't believe we need to adopt such a severe approach any longer.

Time has changed and our society has matured. We are now ready to address the more complex issues around inequality, which we had not been prepared for before.

Massive social divides exist within our society, which can no longer be ignored. Elements like tradition, education limitations and existing infrastructure play a vital role in creating a more equal city, and through addressing these issues, I believe we may finally discover a sustainable equality to carry into the future.

To prove this, this essay is broken down into 3 parts:

PART 1 looks at why we consider ourselves an unequal society in the first place, and why the efforts of 'Forced Integration" has failed us through history.

I will explain this by firstly identifying how women and men assumed their positions within their private and public spheres respectively (looking at the theory on female biology and space by Rosaldo, Lugo and Spain).

I will then look at how these divisions in space have emotionally and mentally impacted on the two separate sexes over history, looking particularly into Spain's work on the 'Gendered City'.

Lastly I will look at what the repercussions of such tightly gendered spaces mean for women with regards to accessibility (both spatially and mentally, today), looking into the work done by Weisman, Agrest and Smith-Rosenberg.

Through this dissection, I will argue that based on our historical decline, forced integrative space-making is clearly ineffective, particularly to impoverished, ill-educated users.

PART 2 of this essay looks at the alternative approach of 'Isolation' (or 'Strategy of Separatism' according to Rosaldo, in 1974). This part outlines why 'Separatism' has proven to be so successful, particularly within impoverished cities.

I will do this by first analysing how, women have historically gained a sense of power, looking into the theory behind the Victorian 'sisterhood', as analysed by Smith-Rosenberg.

I will then draw a literary comparative between the 'sisterhoods' within the Victorian era and those within South Africa today, with the intention being to highlight the differences and commonalities between them.

Taking the sisterhood a step further, I will highlight the difference between a 'sisterhood' and a formalised institution for women, indicating how the transformation from the former to the later, gave rise to a revolutionary feminist movement during the civil war (theory by both Cott and Faust).

PART 3 of this essay looks at the probability of a hybrid approach and questions what possibilities may arise from combining principles which are responsible for the success of institutions, to public space in order to achieve a more successful form of integration.

This will be done through deconstructing 4 female institutions I have studied in Hillbrow and extracting a set of common principles, which run through them, defining 'the institution'.

Lastly, through referencing Derrida on Deconstructivism, Feminism and City Space, I wish to finally propose the validity and possibility of applying the set of found principles to public space, in order to create longevity of equality.

'In most societies, the world of the domestic and familial is the world of women, and that of the public and political, the world of the men'

Michelle Zimbalist Rosaldo

PART III

'Forced Integration'

The first strategy, which we have used in order to try and reach some level of gender equality, has been what I call 'Forced Integration.' This strategy basically proposes the integration of the private and public realm users, without any adjustment to the existing infrastructure to better accommodate change.

Although this method is still used today, and can be seen in our very own Johannesburg City, I believe that it is this exact strategy which is responsible for the increase in gender brutality which has exposed itself since the end of Apartheid.

Thus, through analysing a series of historical events, the below article briefly breaks down how women have come to be considered the lesser sex and then goes on to prove why 'forced integration' fails to work within our society, as a direct result of this history.

HISTORICAL OVERVIEW

NATURE vs CULTURE

Cross culturally, biologically and historically, women have been exiled to the private sphere, in fear of endangering one of their only worthy skills: that of childbearing (Spain, 1992, np). Due to the submissive nature of the female, throughout history, with women being "creatures of care and sympathy, they became devalued for the same characteristics" (Nussbaum, 1999: 13).

Worship of the female became one-tracked very quickly, and the value of the women was heavily placed on her childbearing ability. As a result, it was believed that she needed shielding from the world, to guard and nurture her innate and unfathomable ability. (Spain, 1992).

A historical example reiterating this can be seen in the Greek Sarakatsani tribe.

In John Campbell's account of the Sheepherding tribe of the Sarakatsani in 1964, he observed that the men ritualistically spent their days on the hills - doing that which gained the tribe status and prestige- herding sheep. The men would serve as being the

face of the nuclear family and represent the status of the family; Men had public personalities and were involved with the economic activities, which kept the community growing. It was also on the hilltops, or within the public arena, where men would meet, in order to discuss social engagements and politics (Rosaldo, 1974: 36).

Women, on the other hand, were strictly confined to the home and were restricted both spatially and mentally. A girl were taught from an early age to "limit her movements, to walk modestly and never run" (Rosaldo, 1974: 36). Her sex and body were revered fervently, and as a result she was to be confined in order to guard and preserve her purity and confine her sexuality, so as not to taunt men.

[Though this is an account of a specific tribe, this role played by both males and females within the Sarakatsani tribes has held true, cross culturally, and though milder, still exists in many societies today (Rosaldo, 1974)].

Confined to the home, and saddled with the 'messy' act of childbearing, female status and power became derived a) by the stages of her life and biological cycle, or b) by the status of the men she had sexual or biological affiliations with (Rosaldo, 1974: 30, Lugo, 2000).

As a result of female bodily function and cyclical body clock, women, became strongly associated with Nature and the chaos, which comes with it; they were seen as unstable and unfit to partake in decision-making involving society (Rosaldo, 1974: 31, MacCormack, 1980: 10).

On the other hand, due to the public nature of the male, the masculine status was 'defined in terms of achievement in socially elaborated institutions' instead, and became closely associated with Culture (Rosaldo, 1074: 30); Men assumed characteristics of structure, order and righteousness, enabling them to adequately make levelheaded and influential decisions.

This distinction made between men and women, due to their biology and subsequent roles, no longer just excluded women physically, but even excluded their 'unreliable and chaotic' opinions as well.

INACCESSIBILITY TO KNOWLEDGE

With both physical isolation and 'unworthy thoughts', naturally, the education of females was considered irrelevant all the way up to the 1900's: "Colleges were closed to women until the late nineteenth century because physicians believed that school attendance endangered women's health and jeopardised their ability to bear children." (Smith-Rosenberg, 1982: 5). So when education did become available to females, "Women and men [were] spatially segregated in ways [which reduced] female access to knowledge, reinforcing women's lower status relative to men's" (Spain, 1992: 3).

Women were placed in single-sex convents, were assigned an inferior curriculum to men and were geographically situated on the periphery of the city, in order to perpetuate their segregation and powerlessness, while 'pacifying' their demands to be educated (Spain, 1992: 5).

Even though they were allowed a formal education, very little of their skill and knowledge was applicable within the social realm, as they were not afforded an opportunity to implement change, due to their locality and inaccessibility to current affairs.

This gendering of space was thus used in order to reproduce "what can only be defined as male power and privilege amongst themselves," (Spain, 1992: 3)

ANONYMITY IN SOCIETY

Women continued to be nameless, voiceless and faceless within society… And continued to became powerless as a result. But this powerlessness was not restricted to the public sphere; as housing developed, women were 'shown their place' within the private realms as well: In Weisman's "Discrimination by Design," she describes how humans inherently associate space with cardinal points- and the inequality of the value of the points has a clear social distinction, as seen in the diagram, below.

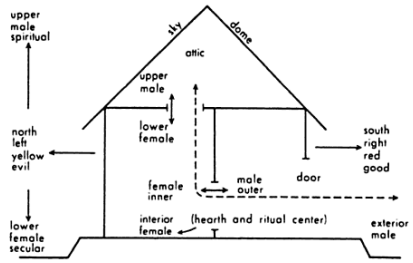


Diagram showing the Atoni Tribe's belief on gender and the home (Weisman, 1994).

In the Indonesian Atoni tribe, for instance, the house was set up such that the male had access to the front, top and mountainside of the home, indicating his might. The male represented the face of the home and family, and thus assumed the most visible position in the home.

Women on the other hand were confined to the bottom, left and seaside of the home, accentuating her affiliation with nature, but more so emphasising her subsidiary role in the space (Weisman, 1994: 11).

This spatial power-play meant that, both in the private and public realm, women were never afforded an opportunity to identify a space as their own. Subsequently women were not able to fully engage with their surrounding environments and this hindered their ability to gain a greater understanding of themselves, within space, according to Weisman (Weisman,1994: 2).

Weisman said, "It is easy to accept, unthinkingly, the man-made landscape as a neutral background. It is not so easy to understand the environment as an active shaper of human identity and life's events" (1994: 2). She reiterates that unless we can relate to our surroundings, we are incapable of knowing ourselves or acknowledging our capabilities (1994: 9).

INFRASTRUCTURE

"Architecture defined, is a record of deeds done by those who had the power to build [because] the act of creating buildings involves moral choices subject to moral judgment" (1994: 2).

This act of building and controlling space has largely come from a male prerogative throughout our history and cities have developed naturally reflecting the masculine psyche (1994: np), yet our physical surroundings set the stage for a reality for all.

This raises an important question:
Is it even possible for women to reach an equal status to men, in a city, which has not catered for them?

This disjunction between the man-made world and the female identity within it has been a plight faced by women for centuries, and it is this disjunction, which has enabled men to perpetuate dominance within the professional realm as well.

Even as women attained an equal status and began infiltrating into the professional sphere, physical infrastructure was already in place, leaving the female professional always on her back foot (1994: 4-9).

This issue may also be reflected in how women have taken to the built environment. Where women have excelled in most professional careers, the built environment, still remains heavily dominated by men. Over the past 10 years, the number of female architects in the UK remains at 17% with only an increase of 7 % (Why are there so few women in Architecture, 2010). Another example can be seen among the Pritzker Prize winners; in a 35-year history, only two Laureates have been female. In Africa, the numbers are obviously significantly lower.

What this proves is that the built environment will not reflect female ideals equally to men, for a long time to come. And as a result, women will remain more vulnerable and disjunct from their environment, for as long as they don't have a say in it's design.

WHY DOESN'T FORCED INTEGRATION WORK?

Forced Integration is ineffective as it puts women in an unfair and vulnerable position. The above argument proves that women cannot achieve equal status to men, within a city which has fundamentally been set up for inequality.

Throwing women into existing environments and expecting them to survive has proven a sure way to generate violence and conflict in the city. And this can be seen blatantly in our rape and gender violence statistics: Since we have attained democratic status, rape and gender brutality within the inner city alone has gone up by over 60%.

In hindsight, these statistics cannot be a massive shock. Taking into consideration the demographic of the inner-city users, combined with their education level and traditional beliefs, of course men have a right to feel threatened by the female infiltration to the city, and apply force instead.

But forced integration has hurt us, and I believe is taking us backwards; In order to apply integration, we first need to apply structured interventions. A significant change in attitude needs to be addressed as well: The inner city population needs to be primed for the change.

In addition to this, infrastructural changes need to be made to the existing landscape, in order to prevent female vulnerability… And until then, integration will not work.

"Women gain power and a sense of value when they are able to transcend domestic limits, either by entering the men's world or by creating a society unto themselves"

Michelle Zimbalist Rosaldo

PART Two

'Separatism As A Strategy'

In Rosaldo's essay on Women, Culture and Society, she briefly highlighted the, underplayed but highly implemented, 'Strategy of Separatism' among the genders, in order to achieve an equality, through an inversion of power (Rosaldo, 1974: 41).

The strategy of isolating women, in order to empower them, has proven very successful through history, but has simultaneously created a different kind of divide between men and women as well.

This portion of the essay dissects the ideas around separatism, first highlighting the roots of separatism and then dissecting the success of this approach, both historically and today, speaking particularly to ideas on single-sex institutions within the public realm and single sex educational institutions.

The argument then goes on to highlight the failures, which this strategy has bought about, finally concluding that the method, (though largely successful) requires an intervention of sorts to achieve sustainable change.

HISTORICAL OVERVIEW OF THE 'SISTERHOOD'

BIOLOGICAL DIFFERENCE

Evidence shows that the relationships fostered by women were very different from those founded by men within a similar time frame and geographical region: Whilst men maintained a formal relationship with their peers, because of their affiliation with society, the inherent nature and circumstance of women allowed for them to develop much deeper informal friendships. And it was these friendships, which provided a much-needed support system around them (Freedman, 1979: 515).

These friendships formed were what theorist, Smith-Rosenberg called a 'Sisterhood,' In Smith-Rosenberg's book on Love and Ritual within the female network, she explored the 'Sisterhoods', which developed during the 18th and 19th century, concluding that women were able to "transcend the alienation of domestic life" through the formation of these candid friendships (1979: 515).

Due to the severity of the societal divide between the genders (spatially, educationally, politically, biologically and otherwise), members of the two genders shared very little common space, in mind and in environment (Smith-Rosenberg, 1975: 9). As a result, the separation and grouping of the sexes became pinned heavily on religion; "Most 18th and 19th Century-women lived within a world bound by home, church and the institution of visiting" (1975: 10), whereas men found solace in attaining power and prestige outside the home.

Along with Religion also came elements of Ritual. "The biological realities of frequent pregnancies, childbirth, nursing and menopause bound women together in physical and emotional intimacy" (1975: 9). Inevitably a supportive community of women commemorated every milestone in the female life; this further bound women to one another and continued to exclude men.

Interestingly, centuries on, this emotional break based on values, expectations, and biology is still very prevalent, particularly within the previously disadvantaged demographic.

From a survey conducted by myself, within Hillbrow, what became clear was that, women are still segregated as a result of their biology. An example of this can be seen in The Hillbrow Health Precinct (HHP), which caters to a majority of female clients and their children.

Less than 10% of the entire HHP is used or run by males (HHP statistic) and ironically most of the males within that figure constitute the security guards or professional doctors (who fulfil the professional or protective male gendered stereotype). As a result, the Department of Health bumped up the security within the HHP and so women now have formed a closed sisterhood there based on safety (a 21st century issue) and biological differences to men, subsequently reinforcing a language of commonality between women, and a perpetuated air of disinterest and emotional detachment from men.

LACK OF INTIMACY

In addition to emotional disinterest between genders, "severe social restrictions on intimacy between young males and females" existed during the Victorian Era (Smith-Rosenberg, 1975: 9) and still exist very strongly within traditional African communities today.

Even within the realm of the married couple, during the 18th and 19th Centuries, the gender distinction was so pronounced that the physical act of intimacy often became reduced to a "filthy secret" and was seen as an act of duty to reproduce, by both sexes (Smith-Rosenberg, 1975).

Relations between men and women were very formal due to the private and public association with gender (as previously mentioned). This issue of formality and lack of emotional intimacy between opposite sexes often renders true within a Traditional African context as well.

Due to many people living within the inner-city, coming from traditionalist backgrounds, interaction between genders remain very formal within the public realm, and it has become common knowledge that women who disrespect men (and taunt their sexuality), through dressing provocatively within the city, often become victimized and are 'taught a lesson,' through the horrific acts of physical violence we hear about on the news.

The physical divide remains as it did in the Victorian era, based on misunderstanding each other, and bringing rural gender norms into the city, thus women are forced to draw their strength from one another and find solace from a shared view and shared understanding of where they actually fit in within the city realm.

ABSENCE OF MEN

Another analysis Smith-Rosenberg conducted was to see how gender relations were affected through the social norm of men spending weeks at a time away from home, in the public realm, and what this meant for the women they left at home. What Smith-Rosenberg discovered was that women would spend most of their time surrounded by other women-encouraging their female family members and friends to live with them (Smith-Rosenberg, 1975:10).

This sharing of intimate space, and subsequent daily life activities, with other women, emulated a marriage of sorts between groups of women. But unlike in their relationships with men, females granted each other the opportunity for an unselfconscious relationship, which in turn allowed women to express themselves more freely, knitting the bond between women tighter (1975:10).

Children growing up within these female-driven, communities indirectly became the responsibility of the group, as opposed to just the biological mother; Communal upbringing was rife and a culture of communal love and discipline developed (1975: 10). Adolescent girls were able to wean off their mothers and enter the real world, with her mother's female network of friends and family, forming an integral moral, safety net, which linked the mother and child. (1975: 18).

Interestingly, this culture of a communal upbringing is still very prevalent within the South African context.

Migrant labour has been a long-standing part of South African history. Often men would spend months away from home, making a living, leaving their wives and mothers in the townships. In Bell Hook's book on African identity and feminism, she makes clear that in addition to men leaving home, women encouraged other women to live with them for not only companionship, but as a safety mechanism within rural, racially marginalised communities (Hooks, 2000).

Women bound together during the Victorian era to band against oppression; Women within rural South Africa sought to do the same thing, but often for more life threatening reasons, such as safety and racial violence. Inevitably though, their bond became strengthened as a result (Hooks, 2000)

The rearing of children however has and continues to resemble the model adopted by the Victorians. Once women began moving from rural South Africa to the city as well, the female networks, which had been developed, were often used to rear children in the mother's absence

PROS OF THE FORMALISED SISTERHOOD

HISTORICAL SUCCESS

With all this said, and with all-female networks in place, what really marked a catalytic shift in thinking and action, during the Victorian Era came as the Civil War did, in the early 1900's.

With the beginning of the war in 1912, men were summoned to leave home and join the military. As a result, women were thrust into assuming responsibilities and power, which they had not been exposed to before (Faust, 2004). Suddenly women had to take charge of slaves and land, while still continuing their regular duties.

It was here that the strength of the female sisterhood, already in existence, came in handy: In Faust's analysis of women during the war, she points out that woman were only fit to take on the challenge they were faced with, because of the support structures which they had involuntarily created around them. Nancy Cott elaborated on Faust's statement, saying that had women not had a common voice and purpose, the odds of them succeeding in assuming the males' roles, would have been far more difficult, as it was only through banding together and having a common voice, that women were taken seriously by the remaining men left in the villages (Cott, 1987, Faust, 2004).

What also enabled change however was that the landscape was almost completely void of men during this time; Having a male-free environment provided a ground from which to nurture a true sense of uninterrupted power, and a 'formalised institution' amongst themselves.

In the journal article "Institutionalised Organisation: Formal Structure as Myth and Ceremony", J. Meyer and B. Rowan, explicitly explain the merit, demerit, myth and ceremony which become associated with a formalised institution, highlighting how the insinuation of the institution is able to catapult an organisation to a 'respectable' and legitimate position (Meyer, Rowan, 1977).

Though both Meyer and Rowan argued that this legitimacy is not always justifiable, the point remains that female organisations carry with them certain stereotypes and baggage rendering then unreliable and chaotic in nature (as discussed in part 1), which inherently hinders progress and structure, causing them to fight a much harder battle to gain respect than a male-driven organisation (Meyer, Rowan, 1977).

In addition to legitimacy however, the structure of the formality allowed the opportunity for self-growth within the organisation. Through ranking and role-assignment, women were incentivised to take initiative and have confidence, which ultimately strengthened and grew the organisation. This was able to mark the female role in the public realm, through a collective strategy (Sandberg, 2013).

This shift from informal sisterhood to a formal one was thus essential for women, as it provided skills, structure and legitimacy, which they had not been accustomed to.

CURRENT SUCCESS

This success of the female institution is not only part of our history; Proof of the success has been evident within educational facilities for centuries.

All-female educational institutions have marketed themselves for centuries, as being able to exhilarate female success through affording women the opportunity to create life-long networks, within an unself-conscious environment (Sandberg, 2013).

The marketing has worked; Female colleges have long outlasted male ones.

In the U.S. alone, for every 3 female colleges still in existence there remains only one male college. An example can be seen in Massachusetts where Smith, Mt. Holyoke and Wellesley are three very prestigious colleges, which have been in existence since the late 1800's. Their brother-school was Amerherst, but the male-

only school was not surviving and so was recently converted into a co-ed institution (taken from conversation with Randell Bird)

Another example a little closer to home can be seen in Hillbrow. Johannesburg Girls Preparatory School (JGPS) is one of the only single sex public schools left in the inner city of Johannesburg, yet it has a waiting list spanning over one year.

What is interesting about this South African example is that Hillbrow caters to the lower income bracket, yet parents have identified merit enough in the school to transport their daughters daily from as far as Springs and Soweto, in order to afford them 'the best' education (Interview done at JGPS).

CONS OF THE FORMALISED SISTERHOOD

DISRUPTED BALANCE HISTORICALLY

As previously mentioned, the civil war was the turning point for women and the rise of the female institution, however, what is seldom spoken of through feminist accounts, is the disadvantages which accompanied the rise of feminism.

As soon as the war ended and women were expected to revert back to their submissive roles, a 'disruption of natural balance' took place (Faust, 2004). Women, having realised their potential in the absence of men, were no longer content with going back to a purely domestic role.

In general, women began to challenge their predetermined roles and began raising their voices. Many men, surprised by the changes, obviously challenged the movement and provided an opposing force. (Faust, 2004)

A tension developed between men and women and in Cott's analysis, she believes it is this tension, which really sparked the revolutionary feminist movement into action (Cott, 1987).

Some men accepted the feminine institution graciously, but on the whole, most felt threatened by the power struggle.

In retaliation men began exerting their physical strength; The era saw a drastic increase in gender brutality as a result of the shock, and individual women suffered at home and on the street, as a result of the collective voice they represented. (Cott, 1987); Behind the walled communities women were revolutionary, but once exposed to the street and to their homes, men continued to rule and women always came out second best.

Some 60 years on, we have witnessed the same process all over again. Gender based violence has reached its all-time high within inner-city Johannesburg in particular, within the last 10 years (ISS: The worst crime stats in 10 years, 2013).

But this should not have come as a surprise given the historical precedent above: Just as in the Victorian era, men became emasculated by the exclusionism they faced, this process has happened all over again in downtown Johannesburg with the result being that women are 'put in their place,' daily by traditionalist African, men using the space.

As a further result of separatism and exclusionism , the social dynamic between the sexes becomes even more divided and estranged than before:

With little culture of understanding from the beginning, an already fragile relationship and tolerance becomes pronounced as the differences instead of the commonalities become highlighted (Single Sex Education: the pros and cons, 2010)

A culture of duality becomes nurtured as opposed to a culture of oneness... And it is this gender duality which has proven to be one of our greatest societal downfalls.

DISRUPTED BALANCE CURRENTLY

An example of the severity of this duality can be seen in the current education system today.

From a study done on single-sex institutions, the most significant downfall of the single-sex schools has been the limitation put on the "opportunity to work cooperatively and coexist successfully with members of the opposite sex" (Single Sex Education: the pros and cons, 2010).

In addition to this it was proven that although women have proven to thrive collectively in isolation, the opposite has been found true of men.

Conducted in the same study, it was found that when the female neutralizing agent was removed from co-ed classes, the now all-boys schools proved to be significantly less productive and ill-disciplined (Single Sex Education: the pros and cons, 2010).

In addition, when integrated back together in the working world, or at a university level, after having been separated,it has been found that the interaction between both genders becomes far more unnatural; This is said from personal experience.

Having come through 12 years of an all-girls education myself,

and coming from a family without many male relatives, the isolation and affiliation with women, made mixed-gender socialising far more uncomfortable.

Initially, I was intolerant of the male difference, far quicker than girls around me who had come from co-ed schools. They were accustomed to the stark difference; I was not.

Problems emerged when these intolerances filtered through into the relationship and professional realms, and had to be addressed.

Going through an all-girls education system has played a vital role in making me strong and vocal. I would not have had it any other way, but i will not deny that in order to neutralise the 'indoctrination' which accompanies female interaction, in order to live a healthy and fulfilled life, I have had to make a few personal adjustments over the last 6 years in university, to better integrate into the 'real world.'

WHY DOESN'T SEPARATISM WORK?

Regardless of feminist rants, it is ignorant to ignore that women and men do assume certain roles in society, and through this, maintain a certain biological balance, naturally.

In order to bring about radical change and gender equality, the institutionalisation of women was imperative for their voice to be heard and taken seriously.

But the truth remains that separatism disrupted natural order to a certain extent, and provided an even greater divide between men and women.

Even more importantly, the approach is unsustainable, in a world moving towards globalization.

This divide has provoked traditionalists into violent retaliation over the years, and has further prevented women from utilizing previously man-owned space, effectively; Despite the wars and laws, the city is still a dangerous space for women and will continue to be so unless we begin addressing the issues separatism has left in its wake.

It is now time to play a more passive role and begin addressing the more invisible issues around gender inequality; The time for such harsh exclusionism is over. For women to finally become equal citizens, both men and women need to believe in and strive towards the value it may bring.









"I do not wish [women] to have power over men; but over themselves."

Mary Wollstonecraft

PART three

'Hybrid' And Neutralisation Strategy'

EQUALITY THROUGH DECONSTRUCTION

NEW STRATEGY

Part one and part two of this essay have proven that 'Forced Integration' and Separatism, respectively, have failed us, in the 21st century:

While 'Forced Integration' is based on strong principles towards a oneness in society, the existing infrastructure, coupled with a lack of awareness and education, allows for unsavory pockets to emerge in the city, which make women vulnerable.

On the other hand, Separatism has been successful in creating safe and holistically designed environments, but has simultaneously created a greater divide between genders due to exclusionism.

In my opinion, it is the time for a new strategy. A hybrid one.

The last decade has seen a massive transformation in our inner city. Developers are trying to develop a greater culture of use and safety in the city. Nike has sponsored runs through the CBD claiming that we should 'take back our cities.' Change is upon us and so I believe now is the time to jump on the bandwagon of this change, and begin reconstructing the city, in a strategic way, which will be able to sustain equality, not just for women, but for all.

To generate this neutralization strategy however, there first needs to be an understanding of how hierarchies of power have been dealt with before; This is done through looking at work on Deconstructivism and the Binary Opposition, by Derrida, and the feminists who followed.

Bringing Derrida's theory back to architecture, what emerges is a method, which pulls apart the existing institution, and inverts it, discarding the exclusionism, but holding onto basic principles of equality, which have proven effective. These principles are then applied to the greater scheme of the city, instead of only to singular buildings.

To do this, I have dissected 4 case studies of successful, existing female institutions in Hillbrow and developed a set of principles to design by, with the end result being a new strategy addressing the city institutional building as well as the route between.

NEUTRALISE

In Derrida's theory of Deconstructivism, he highlights the binary opposition as being a fundamental catalyst responsible for the "violent hierarchies" we experience in society (Derrida, 1981: 41).

The binary opposition basically highlights related pairs of terms that are opposite in meaning and in most instances, emphasizes the presence-absence dichotomy between all comparatives, rendering one side of the comparative as lesser than the other. (Khezerloo, 2010, 127)

An example of this can be seen in:

- White / Black

- Civilised /Uncivilised

- Culture / Nature

- Male / Female

The above dichotomies have played a vital role in how Western societal hierarchy has been formed and perpetuated through our history: Racially, white has always been considered superior to nonwhite, Western society has always been considered superior to the uncivilised Eastern society, culture has always held preference over the natural, and men have always been perceived as superior to women (Khezerloo, 2010: 125)

According to Derrida, "The privileged term is the one most associated with the phallus and logos." (2010: 126) He further explains that the first term gains its privileged position from being perceived as the "original, authentic, central and superior," while the other is always considered" peripheral, secondary or derivative" (2010; 126). In addition to this, the secondary comparative is always seen as lacking something from the derivative (presence-absence dichotomy): The African lacked melanin, the uncivilised lacked structure, nature lacked the man-made and the vagina lacked the phallus.

A natural outcome was that the white, civilized male took preference in a western society, with everything cascading in a hierarchy below him.

THE BINARY OPPOSITION

In a nutshell, this dichotomy and dualism, which existed as a result of the hierarchical comparison, is what Derrida (and subsequently many feminists) pinned the origin of gender inequality on. Derrida proposed that these "oppositions are unstable, reversible and mutually dependent on one another," (2010:127) and are unnatural, man-made ideas which we have accepted as the norm. He also argues that in a natural society, there should be no binary opposition at play. (2010: 127)

As a result, Derrida's Deconstructivism was hinged heavily on trying to understand and deconstruct this long standing norm, in order to level out the playing field between the superior and subordinate categories, "demonstrating that there can be no universal and privileged meanings and values" between them. (Derrida, 1981)

Thus, through Deconstructivism, Derrida did not aim to invert existing hierarchies to favour feminine over masculine. Instead, he aimed to "erase the boundaries between oppositions," indicating that the value the oppositions hold independently is not rigid (Khezerloo, 2010: 127).

For this reason, Derrida's theories on the equalisation of existing binaries resonated with Feminist theorists.

DECONSTRUCTING THE BINARY OPPOSITION

Derrida suggested that the only way for the deconstruction of existing binary-oppositions and "violent hierarchies" was through deconstructing the superior element by temporarily inverting the power play, placing the inferior in power for a short, shocking time; ultimately creating a neutralized platform. (Derrida, 1981: 41)

He then suggested a 3-phase process of this inversion, to achieve maximum results as documented by Khezerloo in her essay on Feminism and Deconstructivism:

"…First locate the determining infrastructure, second, reverse the hierarchical binary which keeps the infrastructure in place, and finally replace the binary by introducing a new hinge term" (Khezerloo, 2010: 126)

Dissecting this a bit further, what Derrida suggests is a) to identify the superior element, b) to reverse the hierarchy through deconstructing the supporting infrastructure keeping the superior element in place and lastly, c) replace the superior with the inferior opposition, in order to overthrow the hierarchy entirely and create a neutralized space of engagement. (Khezerloo, 2010)

DECONSTRUCTIVISM AND ARCHITECTURE

Bringing this theory back into an architectural context, The city has proved to be a large all-boys club, with many masculine institutions still operating and ruling within it, as discussed in part one of this essay.

In addition to this, part 2 of this essay spoke of how, even though women have successfully filtered into the city in smaller and more sparse institutions of their own, the binary-opposition theory and hierarchy still remains prevalent; Women in the city are grossly inferior citizens.

As a result, the rigidity of the masculine domain and the subsequent idea of the institution, which has developed to further divide genders, need be overturned and deconstructed in order to alleviate the existing hierarchies and place women in a privileged position temporarily in order to neutralize the gender landscape as suggested by Derrida (Khezerloo, 2010: 126)

DECONSTRUCTING THE INSTITUTION

In order to achieve the successful deconstruction, what need be extracted from the deconstruction of the institution is the core elements, which have proven to provide the success of the institution for women in the first place.

The four institutions investigated were established women's only institutions which each protected and represented a different grouping of women within the CBD.

- The first institution was Johannesburg Girls Preparatory School, representing EDUCATION

-The second institution was the Shangukani Maternity Clinic, representing HEALTH CARE

- The third institution was the Boitumelo Church Project, representing RELIGION and

- The fourth institution was a Brothel situated in the Moulin Rouge Hotel, representing SEX

These institutions were accessed according to the same four parameters, in order to try and understand the overall challenges and successes these single-sex organisations experience in inner city Johannesburg. The parameters set were:

- Safety

- Accessibility to the site

-Demographic of users

- Operating hours

From this assessment, a list of both hard and soft principles were drawn up which represented the most integral elements to these institutions.

The grounding and basis for this thesis has been based on the found principles below, applying the principles not only to a single building scale, but to an urban route scale as well.



EDUCATION

JOHANNESBURG GIRLS' PREPARATORY SCHOOL

MAPPING

SIZE AND PERMANANCY OF GENDERED GROUPS IN REGION
FEMALE
MALE

DIRECTION OF VISIBILITY

OTHER EXISTING EDUCATIONAL FACILITIES
JHB GIRLS' PREPARATORY SCHOOL
OTHER

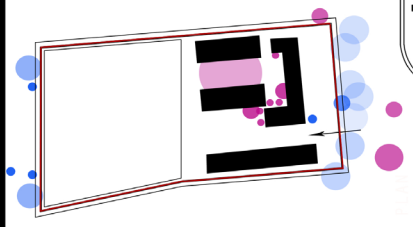
MAIN ROUTES OUT OF AREA
TO BEREA (BY FOOT)
TO JOE SLOVO (PUBLIC TRANSPORT)
TO EMPIRE (BY CAR)

SITE CONTEXT

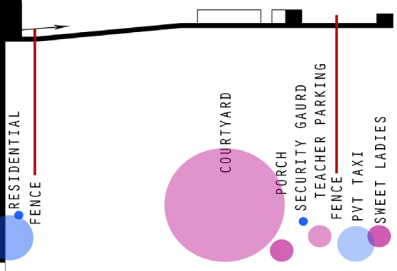


1. SITE SURROUNDED BY TAXI DRIVERS AT PICK-UP TIME, PROVIDING A TEMPORAL SAFETY BARRIER
2. FEMALE SWEET SELLERS ON PERIPHERY OF SITE
3. ACCESS ROUTES USED BY OCCUPANTS WALKING AVOID HEART OF HILLBROW
4. CAR AND PUBLIC TRANSPORT ROUTES AVOID HEART OF HILLBROW

PLAN

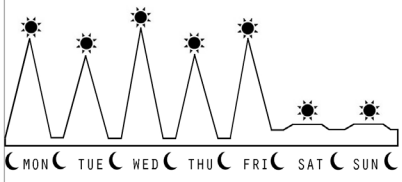


SECTION



ANALYSIS

BUILDING ACTIVITY



1. NO EXTRA-CURRICULAR ACTIVITY ON TUESDAYS AND THURSDAYS, LESS ACTIVE
2. BUILDING BECOMES COMPLETELY INACTIVE AFTER 5PM
3. THERE IS NO ACTIVITY IN SCHOOL OVER WEEKEND, MAKING BUILDING UNSAFE

	RANK	GENDER	RACE	TRANSPORT	SAFETY
TEACHER		92% FEMALE	35% AFRICAN 65% NON-AFRICAN	70% CAR 30% PUBLIC	99% INSIDE 10% OUTSIDE
STUDENT		100% FEMALE	95% AFRICAN	10% CAR 70% PUBLIC 20% WALK	100% INSIDE 5% OUTSIDE

1. MOST OCCUPANS AREA FEMALE
2. GOOD RACIAL MIX ON HIGHER LEVEL
3. SAFETY IS NOT AN ISSUE FOR OCCUPANTS WHEN INSIDE BUILDING
4. STUDENTS TRAVEL FROM ALL OVER JOHANNESBURG TO COME TO THIS SCHOOL
5. MOST STUDENTS TRAVELLING A DISTANCE ARE FETCHED BY A PRIVATE TAXI

JHB PREPARATORY GIRLS SCHOOL DESCRIPTION

JHB GIRLS IS THE ONLY REMAINING PRIMARY SCHOOL, FOR GIRLS, WITHIN HILLBORW, AND IS SOUGHT OUT YEARS IN ADVANCE BY PARENTS FROM ACROSS JOHANNESBURG. IT IS AN ALL GIRLS SCHOOL, RUN BY MAINLY FEMALE STAFF, AND HAS BEEN THIS WAY FOR AROUND 50 YEARS.

INSTITUTION

SITE AND DEMOGRAPHIC

CASE STUDY III

Education: Johannesburg Girls Preparatory School

SAFETY

On a building scale, what was found is that the building is layered with thresholds: first a security guard and gate, then parking facility, followed by a series of thresholds from the outside of the building to the inner, marking a shift from the public realm to the private.

USER DEMOGRAPHIC

The majority of users of the site are female, including the teacher population. In addition to that, it was found that although most students were of African origin, the teacher demographic had an almost even mix of race, including white, indian and black. As a result, most users came from varying income-brackets. Most teachers lived in suburban areas outside of Hillbrow, while most children lived in surrounding areas or travelled from townships. The overall perception of the school and culture was very positive. And despite varying perceptions on safety, both teachers and students agreed that while in the facility, during operational hours, they felt completely safe.

ACCESSIBILITY

Most of the users of the school came in by car (both teachers and students), and drove from the main connecting routes, always avoiding the heart of Hillbrow, as it is considered very dangerous. On the main pedestrian route, used by students, towards Berea, groupings of women have formed gatherings along the strip, with much informal trade. Informal traders usually set up stalls around the schools' operational hours, providing temporary trade and surveillance along the route.

OPERATING HOURS

The school is fully functional daily from 7am to 3pm, and subsequently is considered most safe during those hours. Monday, Wednesday and Friday accommodate for extra-curricular activities for the girls to partake in, however young girls say they have felt a little less safe during those times due to the decrease in numbers. After 5pm and on weekends, the site is completely vacant and is considered too unsafe to walk alone.

2 HEALTH

SHANDUKANI MATERNITY FACILITY

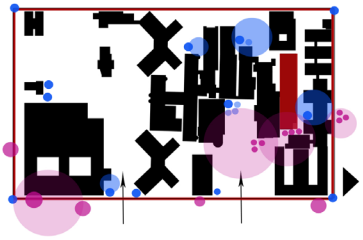
MAPPING

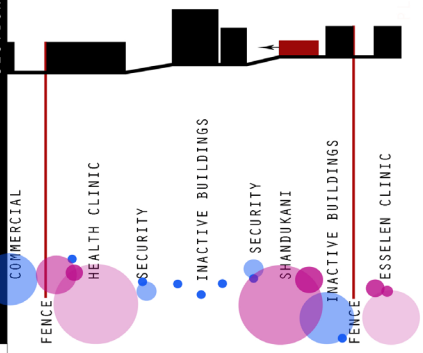
SIZE AND PERMANANCY OF GENDERED GROUPS IN REGION
FEMALE
MALE

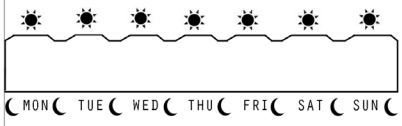
DIRECTION OF VISIBILITY

OTHER EXISTING HEALTH FACILITIES
SHANDUKANI
OTHER

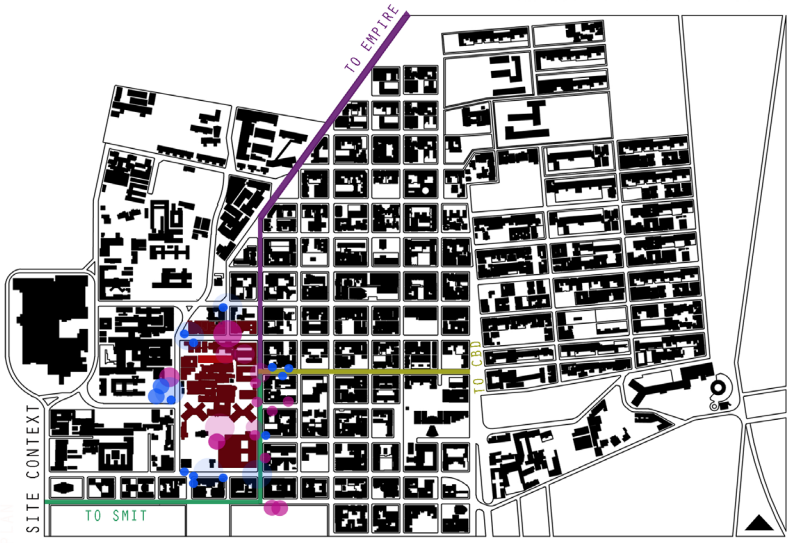
MAIN ROUTES OUT OF AREA
TO KAPTEIN (BY FOOT)
TO SMIT (PUBLIC TRANSPORT)
TO EMPIRE (BY CAR)







1. BUILDING OPERATES 24HOURS A DAY
2. AFTERNOONS ARE SLIGHTLY MORE ACTIVE DUE TO INACCESSIBILITY TO HILLBROW LATE AT NIGHT
3. HIGH ACTIVITY LEVEL IN HEALTH PRECINCT CREATES A SAFER ENVIRONMENT



1. SITE IS DOMINATED BY FENALE ACTIVITY
2. MALES OCCUPY PERPENDICULAR STREETS AND THE BACK OF THE SITE
3. ACCESS ROUTES USED BY OCCUPANTS WALKING, GO THROUGH HEART OF HILLBROW (USED BY RESIDENTS OF AREA)
4. CAR AND PUBLIC TRANSPORT ROUTES AVOID HEART OF HILLBROW
5. PRECINCT IS WELL-LIT AND CONTINUALLY PATROLLED

RANK		GENDER	RACE	TRANSPORT	SAFETY
NURSE		99% FEMALE	95% AFRICAN 5% NON-AFRICAN	20% CAR 80% PUBLIC	99% INSIDE 10% OUTSIDE
PATIENT		100% FEMALE	95% AFRICAN	5% CAR 80% PUBLIC 20% WALK	100% INSIDE 5% OUTSIDE

1. ALL USERS AND MOST STAFF ARE FEMALE
2. MOST STAFF ARE AFRICAN
3. SAFETY IS NOT AN ISSUE TO USERS AND STAFF, SAFETY FELT WITHIN PRECINCT
4. MOST (PREGNANT) USERS TRAVEL ALONE, ON PUBLIC TRANSPORT, TO ACCESS THE BUILDING

SHANDUKANI DESCRIPTION

SHANDUKANI IS HILLBROW'S FIRST MATERNITY CLINIC, SITUATED IN THE OLD SURGERY BUILDING WITHIN THE HEALTH PRECINCT. IT IS ONE OF THE FIRST BUILDINGS TO RECEIVE A 'FACE-LIFT' WITHIN THE HEALTH PRECINT, AND ONE OF THE ONLY BUILDINGS TO EMPLOY ALMOST 100% FEMALES: THE CLINIC HAS PROVIDED JOBS FOR OVER 30 MIDWIVES AND DELIVERS UP TO 20 BABIES A DAY.

PLAN
SECTION
ANALYSIS
BUILDNG ACTIVITY

INSTITUTION

SITE AND DEMOGRAPHIC

CASE STUDY *two*

Health: Shandukani Maternity Clinic

SAFETY

Because the Shandukani Maternity Clinic is situated within an already existing Health Precinct within Hillbrow, Users did not find safety to be an issue, because of the various security thresholds which needed to be bypassed, before users were able to access the site. In addition to this, with a constant hive of activity in surrounding health care buildings, users felt as if the presence of others was a great crime prevention method.

USER DEMOGRAPHIC

Most users of the building, save for a handful of doctors, are black female, and live and work in surrounding buildings in the CBD and Hillbrow.

Many of the women have come from low income backgrounds and it was found that many of them had only a secondary school education at most. 60% of women questioned were also single mothers-to-be and found great solace from being in an all-female environment during their time of greatest vulnerability.

ACCESSIBILITY

It was found that the majority of users either walked or used public transport to reach the clinic. Women were quick to point out that they felt most vulnerable being pregnant on street level and taxis, as men were verbally abusive, and the street environment didn't provide any safe refuge space to sit or avoid being bumped.

OPERATING HOURS

The Clinic proved to be the space perceived as most safe, despite having the largest scale, because the facility is open and well-lit for 24 hours, 7 days a week. The hive of consistent activity, coupled with the knowledge that the building is populated by formal attendants, gave women a sense of solace.

This 24 hour activity hub proved so successful, that the Urban Design Framework for the Health Precinct, suggested cutting a route through the precinct, instead of around it, in order to 'filter' some of the natural surveillance and safety culture created in the precinct, on to the street level.

RELIGION

LUTHERAN CHURCH BOITUMELO PROJECT

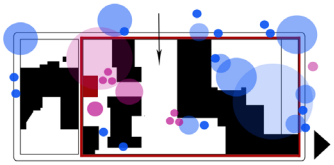
MAPPING

SIZE AND PERMANANCY OF GENDERED GROUPS IN REGION
FEMALE
MALE

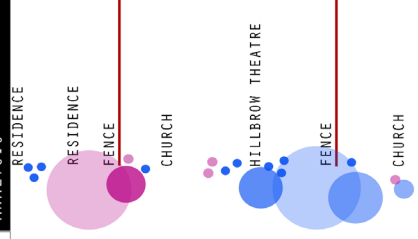
DIRECTION OF VISIBILITY

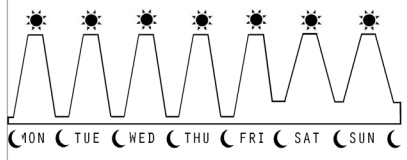
OTHER EXISTING RELIGIOUS FACILITIES
LUTHERAN CHURCH BOITUMELO PROJECT
OTHER

MAIN ROUTES OUT OF AREA
TO KAPTEIN (BY FOOT)
TO SMIT (PUBLIC TRANSPORT)
TO EMPIRE AND JOE SLOVO (BY CAR)

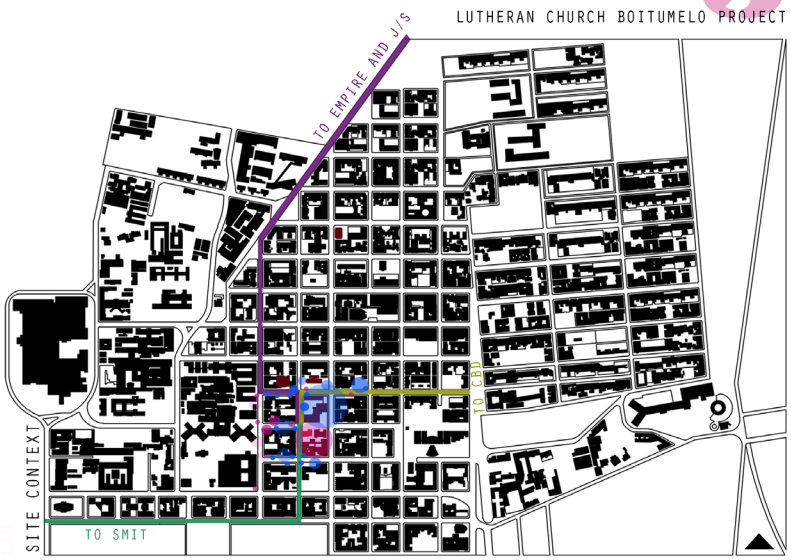








1. OCCUPANTS COME AND LEAVE BUILDING GRADUALLY THROUGHOUT DAY
2. BUILDING BECOMES INACTIVE AFTER 4PM, UNSAFE
3. BUILDING IS VERY ACTIVE OVER THE WEEKEND



SITE CONTEXT

1. SITE SURROUNDED BY MALE ACTIVITY IN GROUPS. PERMANENT GROUPS USUALLY CONSIST OF LOITERERS OR YOUNG MEN
2. FEMALES SURROUNDING SITE ARE SCARCE. BUT DO OCCUPY PEDESTRIAN STREET (OCKERSE). SELLING SWEETS
3. ACCESS ROUTES USED BY OCCUPANTS WALKING. GO THROUGH HEART OF HILLBROW (USED BY RESIDENTS OF AREA)
4. CAR AND PUBLIC TRANSPORT ROUTES AVOID HEART OF HILLBROW
5. YOUNG MALES OCCUPY THEATRE ENTRANCE ON KAPTEIN. FEMALES OCCUPY CHURCH PORTION OF BUILDING

RANK		GENDER	RACE	TRANSPORT	SAFETY
NUN		100% FEMALE	50% AFRICAN 50% NON-AFRICAN	80% CAR 20% PUBLIC	80% INSIDE 5% OUTSIDE
STUDENT		98% FEMALE	100% AFRICAN	0% CAR 80% PUBLIC 20% WALK	90% INSIDE 60% OUTSIDE

1. MAJORITY OF USERS ARE FEMALE
2. GOOD RACIAL MIX ON HIGHER LEVEL
3. SAFETY IS SOMETIMES AN ISSUE INSIDE THE PRECINT AS BUILDING IS SECLUDED ON SITE, POOR VISIBILITY
4. FACILITY CATERS FOR DISABLED PEOPLE (SEE STUDENT ABOVE)
5. MAJORITY OF STUDENTS TRAVEL WITH PUBLIC TRANSPORT

BOITUMELO DESCRIPTION

BOITUMELO PROJECT IS A NON-PROFIT, FEMALE-RUN ORGANISATION ,FUNDED BY THE LUTHERAN CHURCH.

THE PROJECT PROVIDES FREE TRAINING IN NEEDLE-WORK AND COMPUTER LITERACY SKILLS TO WOMEN WITHIN THE HILLBROW AREA.

MANY STUDENTS WHO HAVE GRADUATED FROM BOITUMELO HAVE LEFT SEX WORK AND ARE FULL TIME ARTISTS. TODAY

PLAN
SECTION
ANALYSIS
BUILDNG ACTIVITY

INSTITUTION

SITE AND DEMOGRAPHIC

CASE STUDY *three*

Religion: Boitumelo Church Project

SAFETY

The Boitumelo project is situated within the Lutheran Church Complex. In addition to religious gatherings, the complex carries out many community and youth projects in conjunction with the Hillbrow theatre, situated adjacent to it.

Women from the Boitumelo project say that they feel relatively secure, being surrounded by a hive of activity. The Project is also located on the first floor of the building, further enhancing a feeling of security, through being able to surveil the area. But safety is still an issue for the women, as much of the community activity which takes place gathers clusters of men. In addition, The Boitumelo Building is also situated on the periphery of the complex, with few layers of privacy to the outside, rendering some spaces more vulnerable than others.

USER DEMOGRAPHIC

The majority of the users of the site are women, with all students being African, from low income backgrounds from surrounding areas. The nuns who teach on the premises are of a mixed demographic, and travel distances into the city, daily.

ACCESSIBILITY

Most students walk or take public transport, while most teachers use private vehicles. The students who walk say that they feel vulnerable only after dark. During the day, they feel secure on street level, as they have developed relationships with the informal traders along the route, and feel secure in their presence. Users who travel by car and public transport surprisingly feel more vulnerable, as they feel no-one on street-level would assist them, if they were in trouble.

OPERATING HOURS

The Church and surrounding facilities are only active from 7 am - 5 pm every day of the week. This provides weekend activity and surveillance to he area. All users agreed however, that after hour activity on the premises is not safe.

4 SEX

MOULIN ROUGE HOTEL

MAPPING

SIZE AND PERMANANCY OF GENDERED GROUPS IN REGION
FEMALE
MALE

DIRECTION OF VISIBILITY

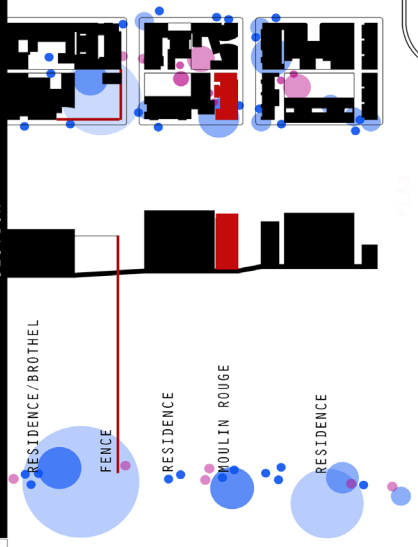
OTHER EXISTING BROTHELS
MOULIN ROUGE HOTEL
OTHER

MAIN ROUTES OUT OF AREA
ALONG CLAIM (BY FOOT)
TO SMIT (PUBLIC TRANSPORT)
TO EMPIRE AND JOE SLOVO (BY CAR)

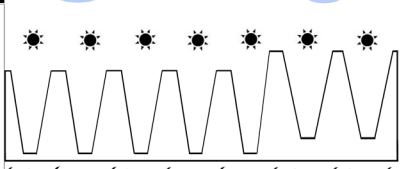
PLAN

SECTION

ANALYSIS



BUILDING ACTIVITY



1. ACTIVITY PEAKS AT NIGHT
2. BULDING DURING THE DAY USUALLY USED FOR THE BAR. MAINLY
3. BUILDING IS MOST ACTIVE OVER THE WEEKEND

SITE CONTEXT



1. CLUSTERS OF 'HOTELS' ARE LOCATED IN THE HEART OF HILLBROW
2. FEMALES SURROUNDING SITE ARE SCARCE, BUT DO OCCUPY ESSLEN STREET AS IT IS AN EXPOSED STREET
3. ACCESS ROUTES USED BY OCCUPANTS WALKING, GO THROUGH HEART OF HILLBROW (USED BY RESIDENTS OF AREA)
4. MOSTLY MALES OCCUPY THE SURROUNDING AREAS OF THE BROTHELS, LOITERING

	RANK	GENDER	RACE	TRANSPORT	SAFETY
'UMAMA'	?	98% FEMALE	95% AFRICAN 5% NON-AFRICAN	70% CAR 30% PUBLIC	100% INSIDE 80% OUTSIDE
SEX WORKER	?	90% FEMALE	99% AFRICAN	10% CAR 10% PUBLIC 80% WALK	80% INSIDE 80% OUTSIDE

1. FACES ARE NOT EXPOSED, REQUESTED BY WOMEN.
2. 'UMAMA,' LIKE MOST ELDERS AT SISONKE SEX WORKERS ALLIANCE ARE FEMALE
3. THERE IS AN INCREASING MARKET FOR TRANSGENDER PROSTITURES, MAKNG UP 10% OF GENDER
4. MOST ELDERS OWN CARS, MOST SEX WORKERS LIVE IN HILLBROW AND WALK. PUBLIC TRANSPORT IS NOT OFTEN AN OPTION FOR SEX WORKERS, GIVEN THEIR ERRATIC HOURS.
5. SEX WORKERS FEEL ALMOST EQUALLY SAFE INSIDE THE BROTHEL AS THEY DO ON THE STREET

MOULIN ROUGE HOTEL (AS PART OF BROTHEL NETWORK)

THE NETWORK OF BROTHELS WITHIN THE AREA SERVE AS A FEMALE INSTITUTE OF A DIFFERENT KIND. THOUGH THE BUILDINGS ARE NOT SAFE-HAVENS FOR THE WOMEN. THE HOTEL IN ITSELF PROVIDES A PLACE OF FAMILIARITY FOR WOMEN OF THE SAME SITUATION. THE BUILDINGS ALSO PROVIDE A PLACE FOR THE SEX-WORKERS TO GROUND THEMSELVES IN THEIR NOMADIC LIVES, PROVIDING A SPACE TO BE FOUND (BY HEALTH UNIT ETC)

(I WAS UNABLE TO ACCESS A BROTHEL YET FOR SAFETY REASONS, ACCOUNT IS FROM INTERVIEWS, ONLY)

INSTITUTION

SITE AND DEMOGRAPHIC

CASE STUDY four

Sex: Moulin Rouge Hotel

SAFETY

Of all the female institutions, the brothel environment is considered most unsafe. Directly proportional to this break in safety is the lack of security thresholds between the street and the brothel itself. As a result, there is very slight barrier between public and private space. Sex -workers waiting in brothels for clients, said they felt safe being in the company of other women in their situation; Women also seemed to gain some solace from being raised above ground level. Contrary to this however, was the fear of being confined or trapped on the higher floors, without a way to escape, which seemed to be a fear faced by most sex-workers in question.

USER DEMOGRAPHIC

The brothel environment is populated largely by men, most of whom are South African. Most sex-workers are African, with a large portion being from North Africa. The more temporal users of the brothel are the Sisonke 'Umamas' who assist the sex workers with legal and health issues.

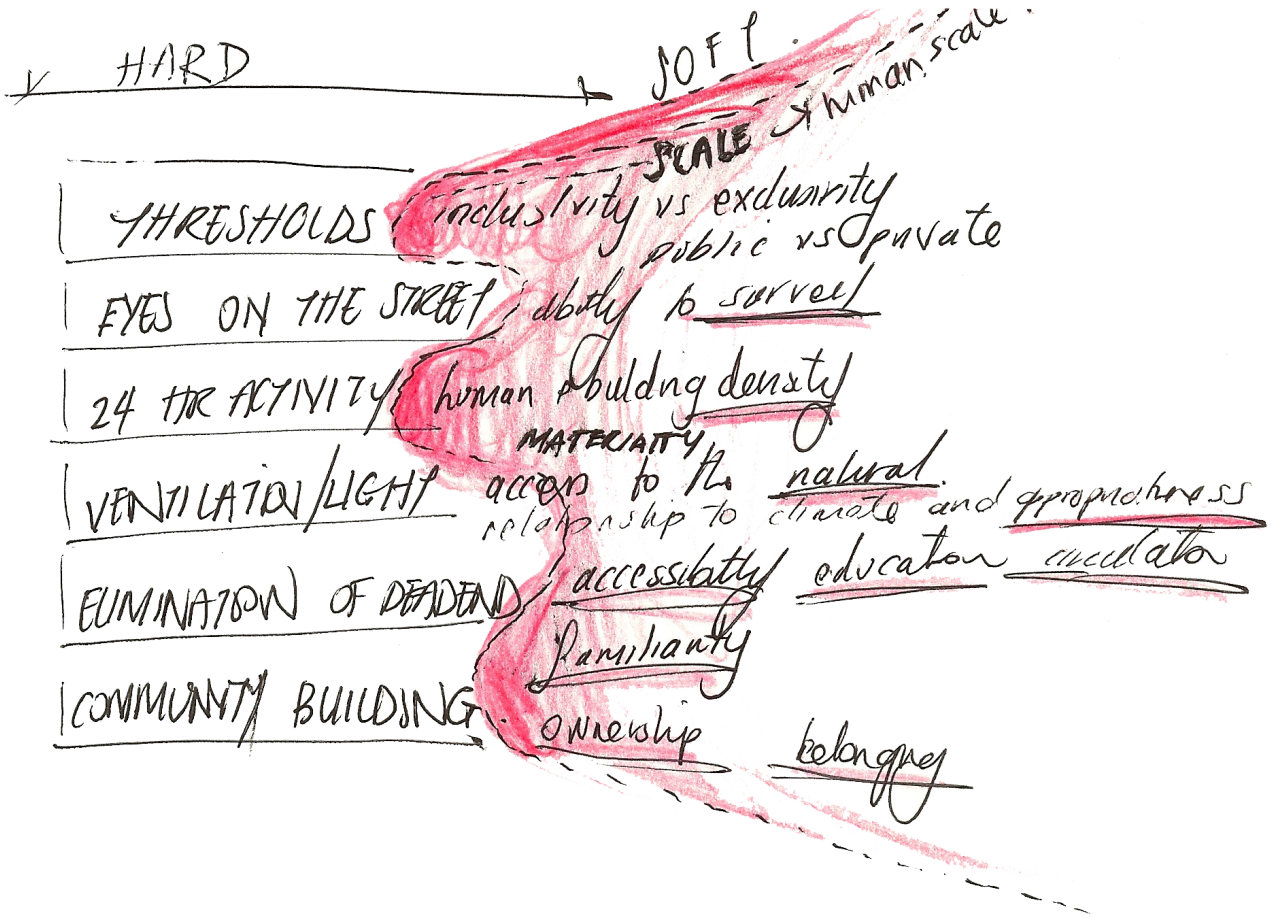
ACCESSIBILITY

It was found that almost all regular users of the brothel access it through public transport or on foot. Many clients and sex-workers work in the area, which makes this easier. Given the type of vocation however, sex-workers on street level say they feel slightly threatened due to the large clustering of males in pubs in, surrounding areas.

Uneducated men either use the sex-service, or often act out violently in protest.

OPERATING HOURS

The brothel is active 24 hours a day, with peaks occurring after hours and over weekends. Although consistent activity has proven well for women within the brothel, their combined strength is counteracted by the consistent male presence. As a result, the female network within the brothel is overpowered by men and requires external intervention.


HARD
SOFT
SCALE
human scale
THRESHOLDS
industrivity vs exclusivity
public vs private
EYES ON THE STREET
ability to surveil
24 HR ACTIVITY
human building density
MATERIALITY
VENTILATION/LIGHT
access to
relationship to
natural
climate and appropriateness
ELIMINATION OF DEADEND
accessibility
education
circulation
familiarity
COMMUNITY BUILDING
ownership
belonging

THE List

Hard and Soft Principles

The dissection of the institutions provided a concise analysis which was broken into two parts; Quantitative and Qualitative principles.

The Quantitative outcome of the study provided me with a set of Hard Principles. This set of principled were relatively easy to identify, were elements incorporated into the success of all the institutions analysed, and proved to form the “safety basis” from which freedom of spatial use within the institutions, had stemmed. This set of principles could also be listed in a checklist manor, as can be seen on the following page.

The Qualitative outcomes, on the other hand, measured the Soft and Intangible Principles which contributed to the heightened success of one institution from another. In other words, the Soft Principles proved to be an instinctive design extension of the tangible, Hard Principles. Truthfully, equality of space may be achieved without soft principles being applied, however what was found was that the lack of such humane principles often produced ‘heartless design’. These Soft Principles will be further explored through design, later in the book.



01. Thresholds

Providing a distinct private-public differentiation through the use of a series of thresholds



02. Consistent ‘Eyes on the Street’

Having the subconscious knowledge that groupings of people may be able to witness any wrong doings at any time, puts users at ease, and has seemed to deter criminals

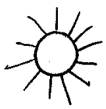


03. 24-hour Activities

Spaces, which accommodate consistent activity in and around the facility, are considered the safest

SIX HARD PRINCiples

The Commonalities Seen In Successful Female Institutions In The Inner City



04. Well-lit and Ventilated Space

It was found in most institutions well-lit space makes women feel less confined or scared



05. Elimination of Dead-end Space

Women in question said that alley-ways and long corridors without accessibility to the outside made them feel insecure in space



06. Familiarity and Community, with both me and women on site

Community-sense is vital in creating a long-term symbiotic and respectful relationship between genders



CONCLUsion

Where To Now

The issue of equality is at the top of my agenda; my only question is what method is implemented, to bring about this change.

Living in a South African context, I have been exposed to a vast number of women in the inner city during my academic career, My concern - has stemmed from my observation of these women who are faced with far more challenges than the average educated, suburban female, such as myself.

Not only have many of them been indoctrinated by tradition and subsequent gender inequality, but they have often grown up in the outskirts of the city, with little or no access to education, further disabling them.

Throwing these women into the city, with the assumption that old methods of integration will work without repercussion, is ignorant, and yet it has been done.

As a result, 'forced integration' has seen a rise in gender violence statistics and separatism has ignored the burning issues at the root of gender inequality within the city.

Both of these methods are unsustainable.

We now have laws and regulations protecting women, and a city scape, which is ripe for change; the time is now, to introduce a new strategy of equality.

This strategy must be different from those used in the past, as it needs to play a more passive, intuitive role in addressing issues of gender through tackling tradition, poverty and education, at the root of the cause.

Applying this philosophy to existing infrastructure, a new culture of architecture needs to develop. This culture should not only address and deconstruct existing institutions in the city, but also pay greater attention to street level change (and the public gender relationship as a result).

Gone are the days of aggressive intervention. Women have made their point. It is now time to adequately carve out space for them to better assert their rights, in an equal city.





The Design Brief

The Site

Site Selection
Site Analysis
Historical Transport Context
Gender and Transport
Formal Institutions
Women and the Site
Site Selection, Refined

Site Response

Existing Structure
Existing User Conditions
Institutions
Institution Connectors
Movement Connectors
Scale connectors

Design Response Two

Design Response One

Programme Response

Trans-Hub Programme
User Programme
Programme Analysis
Refined Programme

Design Development

Summary
Soft Principles
circulation, programme, levels, framing, deconstruction

Technical Study

Facade Study
Material Study

Gender, ranked: a reinterpreted MTN taxi rank

Final Drawings
Final Renders

Bibliography

.02 **DESIGN**

DESIGN Brief

From Theory To Design

Though the temptation to design a single safe house for women, has been a strong one, I have fought it, and instead focused on the intermediate and transitional ground level space women are faced with on a daily basis.

To do this, the design is briefed in 3 ways:

The first part of the brief was to locate a **site** which already inadequately deals with gender within the city.

The site had to feed into part of an existing masculine institution, which further re-iterated gender inequality in the city- and this institution needed to be a good example of a deconstructed institution, on project completion.

In addition, the site needed to address the erratic nature of the female route, and provide an all-encompassing solution, better catering to the communal needs of as many women as possible.

The second part of the brief needed to address the **theoretical argument:** How could an existing masculine institution be deconstructed.

Taking into consideration the erratic female route combined with the found principles which make feminine institutions, safe houses, the theoretical argument has lead the design to explore ideas of alternative routes.

How could principles used to create community safe houses, be applied to public spaces along defined routes? In addition to this, how could these routes potentially work as a network in creating alternative connections to other surrounding institutions, particularly making better use of ground level city space?

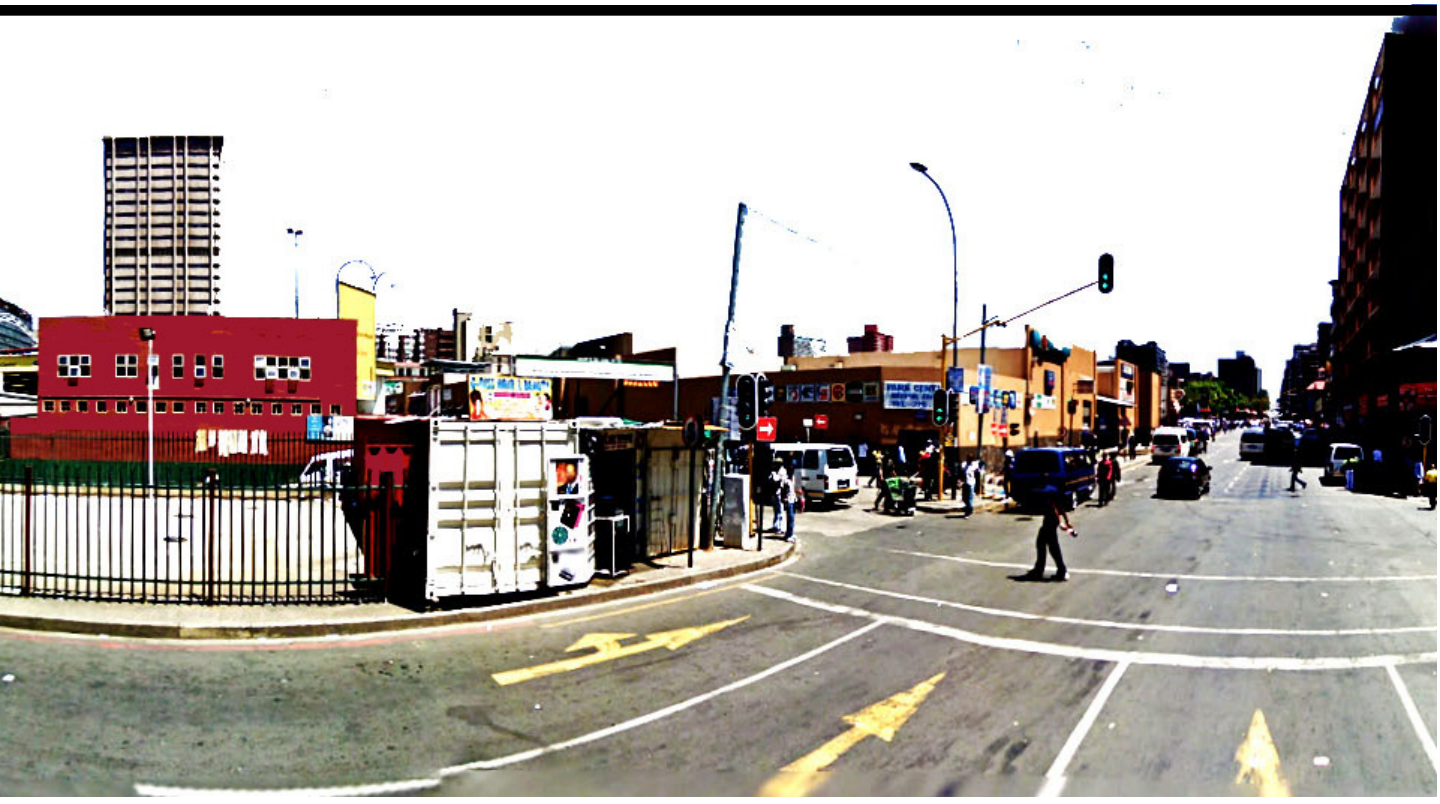
The third and final design factor needing to be met was through an appropriate **programme.**

The processes of gender mainstreaming does not aim to flip hierarchies of gender or exclude one gender from the other. Gender mainstreaming aims to look more carefully at how space may be appropriately adjusted to incorporate both genders as holistically as possible.

With this said, the priority of the building programme is to meet the site and user requirements first and fore-most. The programme of the building does not aim to exclude or isolate anyone; Instead the design needs to show how everyday space may be better appropriated and ergonomically designed with women in mind, to meet the needs of the city and all its users.



Site





01. MTN TAXI RANK
MTN Taxi Rank, also known as the old Noord Street Taxi Rank.

02. DRILL HALL
Drill hall, built in 1904, is a restored heritage building, now used as a exhibition space and child-welfare centre.

03. RAILWAY
The route runs East West and defines a Transportation Hub which has developed since the 1800's.

04. JAG
Johannesburg Art Gallery opened in 1910, is Johannesburg's national gallery.

05. JOUBERT PARK
Joubert Park is the largest public green space situated in the inner-city. The park is well-used daily and has a close relationship with JAG.

06. TRANSPORT HUB
The main transport hub for the inner city consists of park station, the new Gautrain Station and the Wanderers taxi-rank, which all feed into Noord Street.

07. JHB CBD
The central business district is situated to the South of the city and consists largely of a series of mixed used and commercial, high rise-buildings,

08. HHP
The Hillbrow health Precinct, caters to most inner-city medical needs.

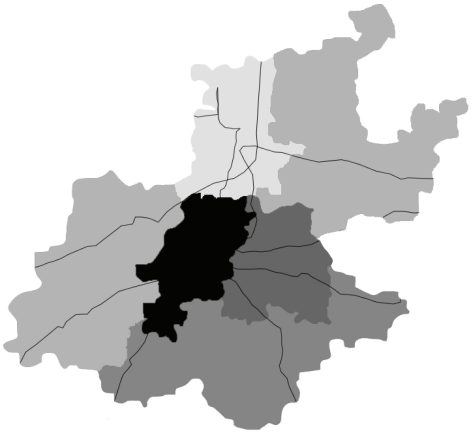
09. RESIDENTIAL
Hillbrow has a large residential zone, which houses many brothels and illegal trade as well.

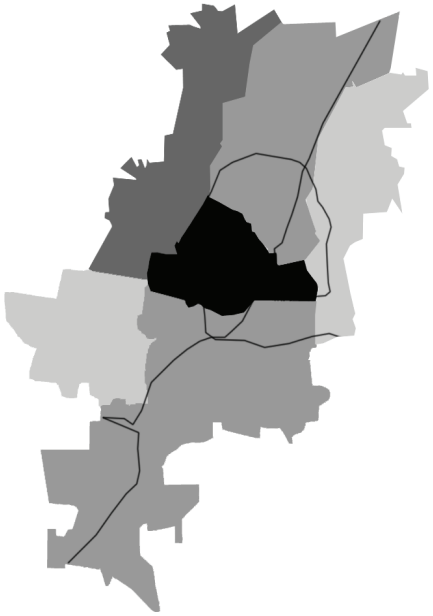
10. POLICE STATION
Hillbrow Police Station is the closest station within the region.

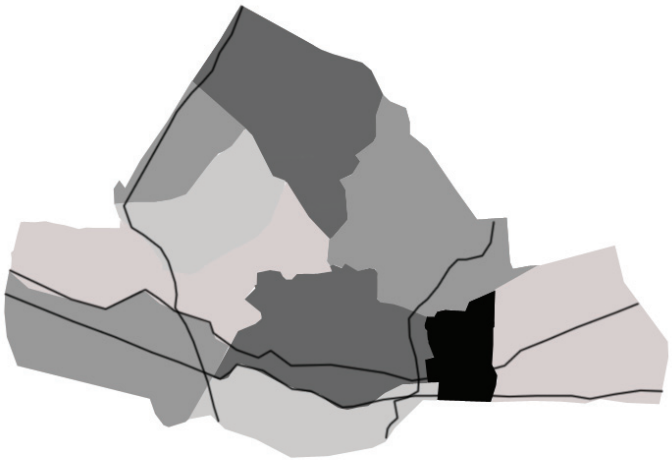
11. JHB CIVIC DISTRICT
The Precinct houses Constitutional Hill and Johannesburg Theatre along with many other institutional buildings.

12. COUNCIL BUILDING
One of the largest institutional buildings in the inner city.

13. BRAAMFONTEIN
Braamfontein is a hive of mixed use activity, housing a majority of university students who attend the two surrounding universities.







SITE SELECTion

Gauteng, Johannesburg Central, Transport Hub

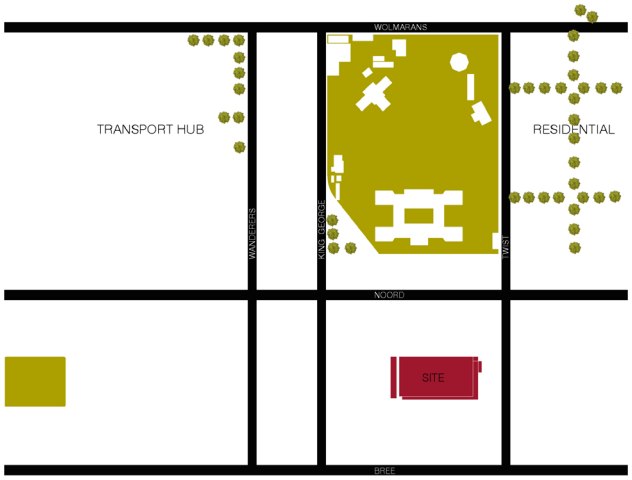
The site selected is the MTN Taxi rank, situated within the Greater Johannesburg Transport Hub. To understand the choice of site, however, the larger context need be explained first.

The Johannesburg Transport Hub sits snugly between Hillbrow Central and Marshalltown, providing a buffer between a residential hub, to the North and the Commercial Business District of Johannesburg, located directly to the South.

The activities along the east-west axis of this buffer zone predominately cater to the transportation network which has developed along the railway line and as a result, the entire area is defined as a mixed-use, transport node in the city, sporting buildings which range from residential blocks all the way through to commercial buildings.

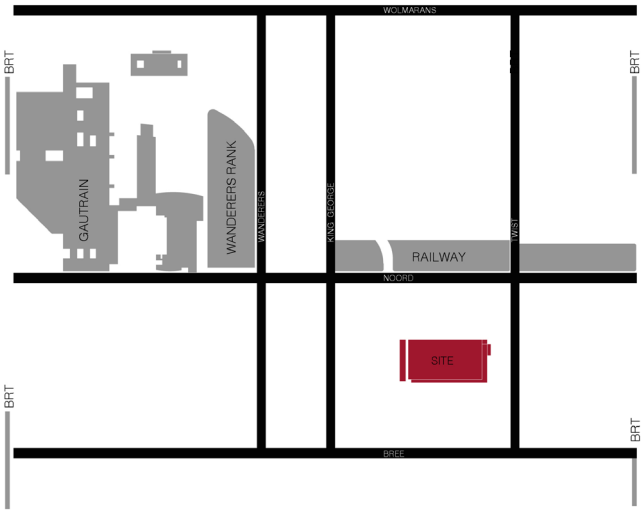
Due to the transport activities occurring along this strip, bringing people into the CBD, the demographic of users is vast. From interviews conducted, it was found that, on average, most users of the site are African, and earn less than the minimum wage. In addition, almost half of these users are foreign citizens, from neighbouring African countries like Zimbabwe, Swaziland, Congo, Ethiopia and Nigeria.

Most users of the site use the space as a transitional zone. Commuters travel from as far as Soweto and Edenvale daily, in order to go to work or shop in the CBD- and all of them end up in this zone of transition before moving on to their next destination.



01. GREEN SPACE

Joubert Park is the largest and oldest public green space within the Johannesburg CBD and has played a fundamental role in how the city has developed around it. The park provides a buffer between the residential Northern Hillbrow and commercial South.



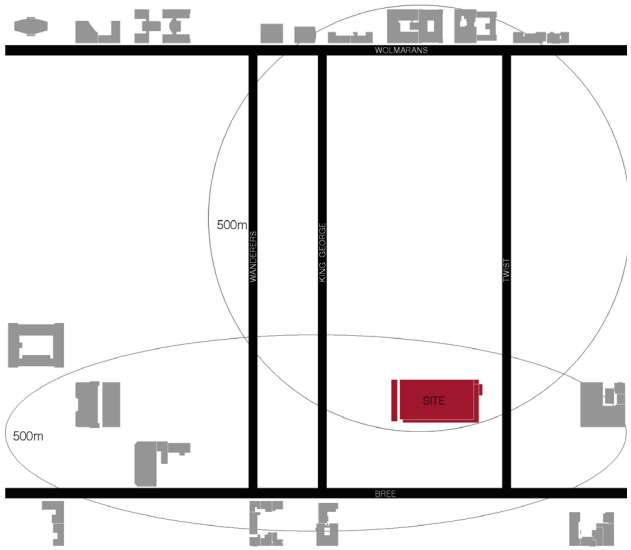
02. TRANSPORTATION

Since the railway development began in the 1880's, many other transport hubs have been prompted to develop within the vicinity, feeding into the railway system as well as providing subsidiary transportation. As a result, and as mentioned previously, the taxi rank and BRT has a strong presence in the area, and the site is a constant hive of activity.



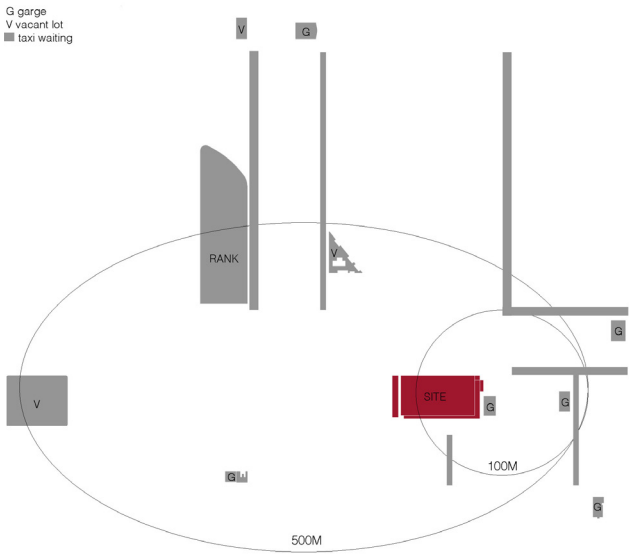
04. MIXED USE RESIDENTIAL

Transportational hubs require much trade to support the masses in transition. As a result, many of the ground level spaces have been converted into retail space. The higher floors of these buildings are most often residential blocks (many illegally occupied).



05. COMMERCIAL

Very little commercial activity takes place within a 500 m radius of the transportational hub. This implies that many people who commute to work using public transport are subjected to walk at least half a kilometre to reach their work destinations in the surrounding areas.



03. TAXI STOPS

Due to the transitional nature of this transportational strip, informal taxi waiting spots have usurped much of the area surrounding the MTN Taxi Rank and the Wanderers Taxi-Rank, and have inhibited pedestrian flow along these waiting routes.

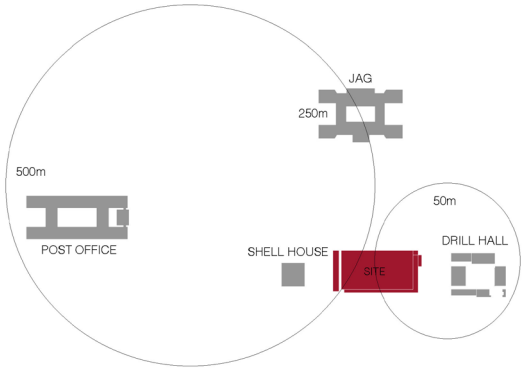
SITE ANALYSIS

General Use

The most important element established from my finding has been that the entire area can be considered a transport hub and a transitional zone; Most of the functions surrounding the site feed into the existing transport network.

Due to the informal nature of much of the trade and the taxi culture, the area boasts very little visible order, and the transitional space, between one building to the next, becomes a chaotic mixture of fumes, noise and people; The differentiation in scale between human and vehicle is negligible as well.

None the less, the area is full of liveliness and heritage due to the transport hub; This liveliness need be appropriately harnessed through the implementation of an ordered design strategy, differentiating the three scales catered for in the area: The human scale, the, vehicular scale and the building scale.



0.6 HERITAGE

There are four main heritage buildings which are in very close proximity to the site, with Drill hall and Shell House bordering the rank on its Western and Eastern sides respectively. Shell house, the old ANC headquarters now stands monumental and vacant, while Drill Hall has been re-appropriated and is well-used daily.



HISTORICAL TRANSPORT CONTEXT

Understanding The Relevance Of The Site Context

As mentioned, the site selected is situated within one of the largest and most active transport nodes in South Africa, with this entire area having been moulded in response to the railway development which began in the late 1880's.

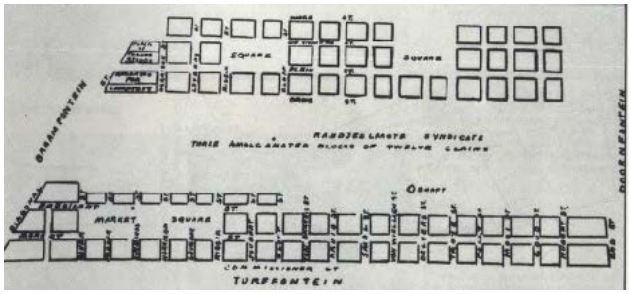
My decision in choosing this particular site location was a very strategic one; The relationship between gender equality and public transport remains at the forefront of feminist theories on equality.

Without addressing gender equality issues based on movement within the public realm, there is very little hope of achieving true inner city equality.

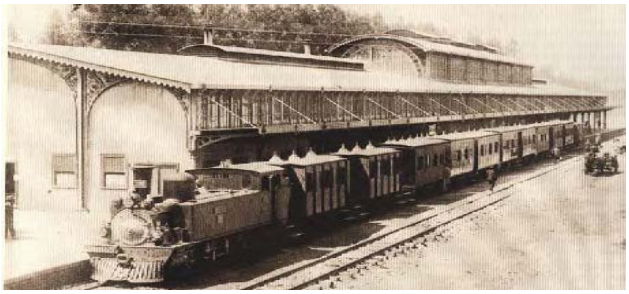
Later in this chapter, ideas on gender and public transportation will be explored more indepthly, but for the mean time, what remains most important is to acknowledge the important role public transportation networks play, towards the process of mainstreaming equality within the public realm (due to their ability to connect people and place).

It is for this reason that I have located a site within this transport hub in Johannesburg, to work with.

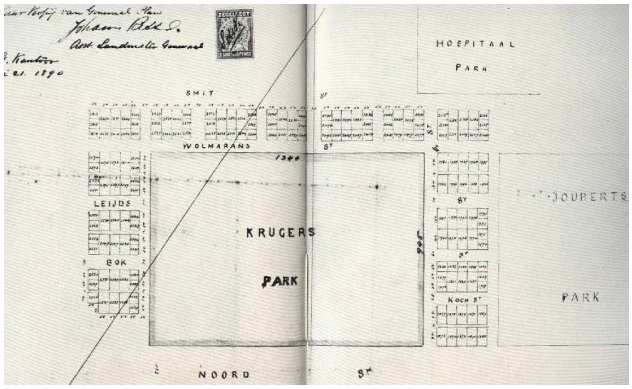
In order to better understand this choice of site and its role within the greater context, it is imperative to grasp the historical progression which has led to the site being the transport hub it is today.



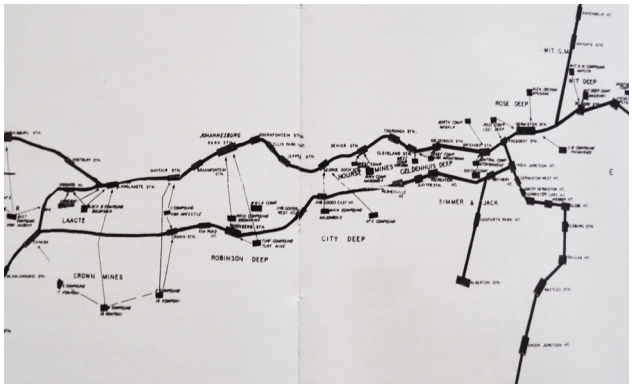
A) **1880** - Initial map of Strip, prior to the erection of Park Halt or the Wanderers Grounds
(Heritage Management Framework of Park Station, 2008: pp 103)



C) **1897** - The Steel and Glass Park Station
(Heritage Management Framework of Park Station, 2008: pp 104)



B) **1887** - The implementation of Kruger Park/ Wanderers in relation to Noord St.
(Heritage Management Framework of Park Station, 2008: pp 104)



D) **1904** - Map of miners' compounds in relation to the rail network and Park Stati
(Chipkin, 2008)

1880's

1890's/ 1900's

01. The Beginnings of Park Halt

The year just after gold was discovered in the Witwaterstrand, the ZAR Government decided it best to implement a rail system which could better connect Johannesburg and Pretoria in order to better support the city through its inevitable boom.

As a result, land, the size of a square block, located just north of the Northern-most street (Noord Street) in the Johannesburg City centre, was allocated for the implementation of a railway station, in 1887.

Around the same time, president Paul Kruger, decided it best to allocate a large portion of land to the sports industry. As a result, a sports ground, Kruger Park (later renamed Wanderers Park) was erected,on vacant land just North of the Hancock Street. Hancock Street ran parallel to Noord Street and was located just north of Noord Street, where the newly conceived Railway station was to be built. The intended extent of the then Kruger Park extended to the parallel Wolmarans Street. (See Figure B)

Park Station was originally a simple shed which served as a stop on the early railway line, to Boksburg. The station became known as Park Halt in the late 1880's, when the Rand Tram began carrying passengers as well as coal through the stop.

02. Park Halt becomes an elegant Park Station

A dramatic increase in the number of train users, occurred in 1892, when the first Tram trip was made between Park Halt and Capetown. Three short years after that, the number of users peaked even higher with the introduction of a rail route via Park Halt to Natal.

Being connected to both Indian an Atlantic Oceans, Johannesburg was now ripe for international exposure, with Park Halt being at the centre of it all. As a result, the existing station required immediate expansion, while simultaneously making a bold and fashionable statement to the world.

Being the age of steel and glass, The ZAR government commissioned an elegant 174m x 17m glass and steel station to be built in Amsterdam, and shipped to South Africa. The new station replaced the tin roof station in existence, and was erected in 1897. This structure has since been relocated to Brickfields, in Newtown.

The late 1800's was an important time in the history of the South African railway, as not only was there an international boom, but this was also the period that Johannesburg leapt from a mining camp to a mining town quite rapidly. The result of this was an even greater influx of people into the city centre via Park Station.

As a result, a decision was made to lower the existing tracks 4m below, in order to avoid pedestrians crossing the tracks. Instead, a pedestrian bridge was introduced along Twist Street, while a vehicular bridge was introduced along King George Street.



E) **1909** - Image of the dropped lowered rail in relation to the new CSAR building
(Heritage Management Framework of Park Station, 2008: pp 107)



G) **1926** - White stripe showing Wanderers' Ground land to be to be used by railway.
(Heritage Management Framework of Park Station, 2008: pp 109)



F) **1914** - Wanderers Grounds and Gymnasium before its reappropriation for military.
(Heritage Management Framework of Park Station, 2008: pp 104)



H) **1932** - New Park Station designed by Gordon Leith
(Heritage Management Framework of Park Station, 2008: pp 109)

1900's / 1910's

1920's / 1930's

03. Permanent additions to formalise the transport presence

In the early 1900's two of the most significant additions made to Park Station was the erection of two formalised buildings. One was the Witwaterstrand Technical College and the other was the administrative headquarters for the CSAR (Central South African Railway), which was completed in 1909.

04. Reappropriating Wanderers

In 1914, Gauteng was on the verge of civil war. As a result, there was a need for the Wanderers Grounds to become temporarily reappropriated into training grounds for the military.

By the end of the same year, WWI had broken out. Troops continued to train on the grounds and the existing gymnasium was transformed into a convalescent home and later into a hospital for military patients.

This reappropriation of the Wanderers Grounds was a pivotal point in the railway history as it indicated that times and surroundings were changing at a very rapid pace. There had been a time when large grounds were appropriate on the edge of the city, but as the city had expanded rapidly in both northerly and southerly directions, the grounds' appropriateness was weening.

05. Crossing over into Wanderers

By the mid-1920's it had become clear that the Park Station building had outgrown its surroundings. The station's facilities could no longer support the masses of people who were using the station daily. As a result, the railway authorities had no choice but to extend the Station and its platform. This meant that by 1926, the new station had to partially encroach on a portion of the Wanderers Grounds more permanently.

Understandably there was an uproar about the "Rape of Wanderers" but eventually the club was relocated to Illovo (where it stands today) and the shareholders were compensated.

The new Park Station building was designed by architect, Gordon Leith, and was said to be his 'magnum opus'.

His aim for the building was 'Herbert Baker-esque' and majestic. He wished to design a gateway into the city, through this building- and he held back from nothing. The original design included bronze elephants and towering archways on entry.

Unfortunately, his big dreams were never fully realised in the final design. Construction for the new Station went underway in 1928.



I) **1932** - Perspective of Johannesburg High Street, Eloff Street
(Chipkin, 2008)

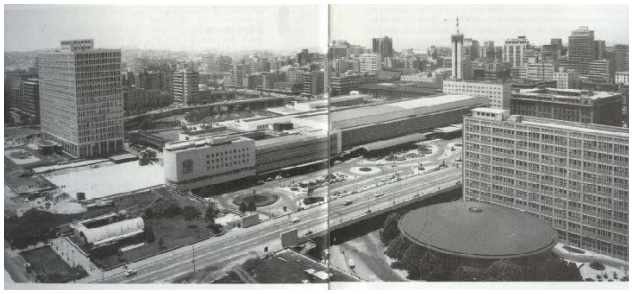


J) **1935** - African Commuter and Musician at Park Station
(Chipkin, 2008)

1930 's / 1940's



K) **1946** - Wanderers Grounds, just before its take-over by the Railway
(Heritage Management Framework of Park Station, 2008: pp 111)



L) **1965** - The Park Station Complex after the demolition of Wanderers Grounds
(Heritage Management Framework of Park Station, 2008: pp 113)

1950's / 1960's

06. Eloff Street Connection

By 1932, when the new Park Station was finally erected, Eloff Street was fast becoming known as the high street and mecca of shopping in Africa.

The new Park Station had an axial relationship with Eloff Street and was designed and treated as an extension and punctuation mark along the strip.

This relationship was an important one because by the 1930's Eloff Street had fast established itself as the 'shopping mecca of Africa'.

The relationship also marked the relationship with public transport and the living inner city.

07. Racial Segregation

With the design of the new Park Station Concourse however, racial segregation become formalised and highlighted within the Station.

Only whites were allowed to use the "Blue Room" and experience the majestic new Station, while blacks were relegated to a separate entrance and had to use very basic amenities instead.

The new Station was marked as a 'textbook example' of racial segregation in South Africa at the time.

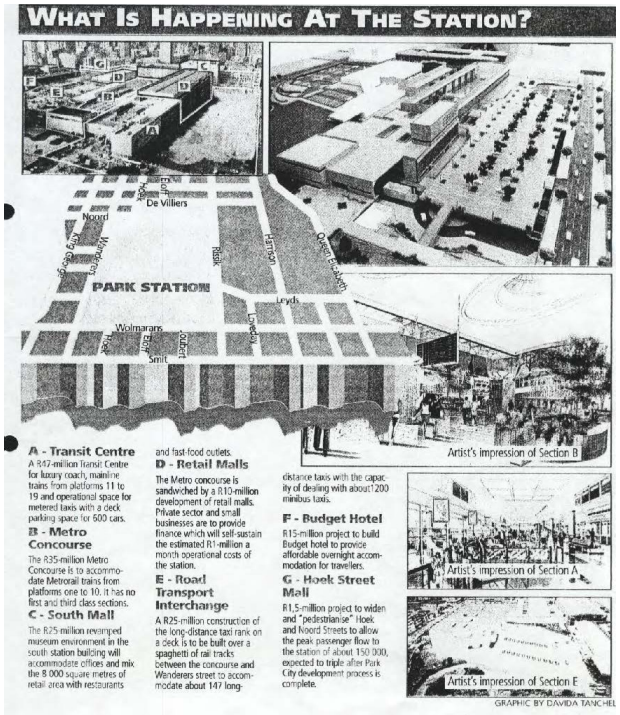
08. Complete Gradual Takeover of Wanderers Grounds

By 1932 when the station was completed, it had become clear that Johannesburg had established itself as a metropolis, with the rail system situated in the CBD, playing a major role in its rapid development. Numbers of daily commuters had doubled since the 1920's and before the end of the 1930's it was clear that the Station needed to be drastically expanded. To do this, required the remaining Wanderers Ground's and so by the early 1940's, all sporting activity had relocated to Illovo, leaving the now vacant lot, to gradually be developed into the transport hub we know today. The process of development was broken into 3 phases, and was done over a 20 year period.

The First Phase was completed in 1951 and consisted of creating a replicated ' old station' located further north and 4m deeper than the original. What this did was redirect the town access to the rail further west, aligning with Joubert street instead of Eloff, creating a new north south axis, and subsequently sidelining the old concourse.

The Second and Third Phases of development were completed in 1954 and 1965 respectively. They consisted of the construction of more platforms and tracks along the old Wanderers Ground, and the construction of concrete covers over the platforms and concourses.

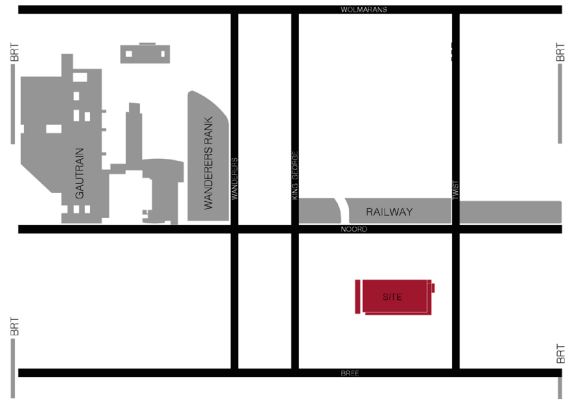
The complex was finally complete in 1965, with the new concourse serving mainline travel while the old concourse served suburban travel.



M) **1996** - Article in 'The Star' Newspaper on the Park Station Renovation
(Heritage Management Framework of Park Station, 2008: pp 116)



N) **Present** - Transport hub today
(Lucid Architecture, 2013)



O) **Present** - Mapping of Inter-modal transport systems in Transport Node today

1980's / 1990's

09. Political Influence

By the late 1980's the need for change had come about again. Political activism was at its peak against the Apartheid regime, and the number of city users increased dramatically again. This increase sparked a demand for subsidiary facilities which could be used by train users. These included alternative modes of transport, leisure space and retail space, for both black and white users.

It was only after the Apartheid Government was overturned in 1994 that these complaints and requests were addressed; Finally, the Park Station Interchange was to become a real transport Intersection and hub.

Construction for the changes and additions began in 1996 and were outlined to the public in the newspaper article seen in 'The Star' in 1996 (seen in Figure L above). The additions included a new Metro concourse to the Suburbs, an inter-city long distance travel concourse, a new mainline train and the development of two major retail hubs in the area (The bridge Mall and Smal Street Mall).

The most significant political change, however, was made in the reappropriation of Old Park Station, originally designed by Leith. The Southern Station which had once epitomised white supremacy had been left derelict for years, and so was poetically transformed into a public meeting space comprising of fast food outlets and retail space, to signify a deconstruction of old power.

1990's / 2000's

10. Inter-modal Transport System to Present

The final design interventions made to the station also, for the first time, took into consideration the interchangeable relationship between the railway and alternative modes of transport.

Provisions were made to accommodate 1200 mini-bus taxis with parking, to avoid congestion along he arterial routes. Wanderers taxi rank was born from this intervention, and later Noord Street taxi Rank (which was replaced by the MTN Taxi Rank) had its seeds sown from the same train of thought.

In more recent years, the BRT Station has had four stops located within the immediate vicinity (Figure O) and the development of the Gautrain has further enhanced the already bustling transportation hub.

The journey to becoming the rich transport hub we have today has been a layered one, wrapped up completely in the country's political and historical progression.

As a result, this palimpsest needs to be respected, through the design and interpretation of the entire area as a whole.



(Times Live, 27 February 2012)

GENDER & TRANSport

Gender , Public Transport And Taxis

There has always been a certain tension between the transport industry and gender inequality. With public transport nodes and hubs catering to many diverse groupings of people all at once, the shortcomings of these nodes have been subject to criticism most frequently.

In a study done in Vienna in 1999, it was discovered that women, on average, assume an equal role of responsibility in the home as they do at work, whereas men very seldomly assume responsibilities outside of work ('How to Design a City for Women').

Bringing this back to the transport sector, what this means is that while the route for men was a straightforward one, running between work and home, the route for women was found to vary a lot more, in order to juggle the larger scope of responsibilities women took on. From catering to medical matters, to grocery shopping, to child care facilities, it was found that women also tended to spend more time as pedestrians than men did. ('How to Design a City for Women'). In this particular article, it argued that the rigidity of the public transportation system did not adequately cater to the flexibility needed by women, and as a result, proved that the transportation systems which govern most city centres, have played a major role in the unequal role gender has played within cities.

It is for this reason that I chose a public transport interchange as the site for my thesis. Not only has the relationship between gender and transport been long-standing, it has also been universal.

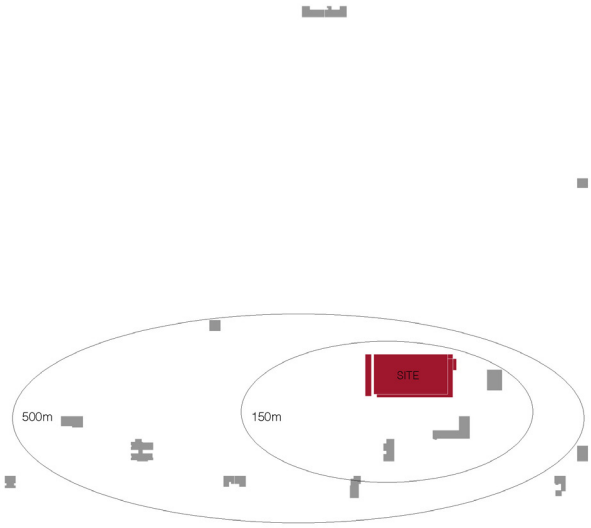
Ingraining this issue of inequality within a South African context however, the element of informality and traditionalism could not be ignored. As a result, an additional layer was added to the issue of gender inequality and transportation, when i finally settled on a taxi rank as the site for the thesis.

Unlike other formalised transportation systems in the country, the taxi industry has been built on informal power and tradition and has remained a masculine dominated domain ruled by Zulu-taxi-lords, to this day. In many instances, the taxi-industry has taken the law unto itself, and it has not yet been adequately tamed, despite an often large security presence.

Articles in recent years have exposed that women have been harassed for wearing mini-skirts and raped for admitting to being lesbian; And this has all been done, within the public inner-city realm, by gangs who believe women should be 'shown their traditional place.'

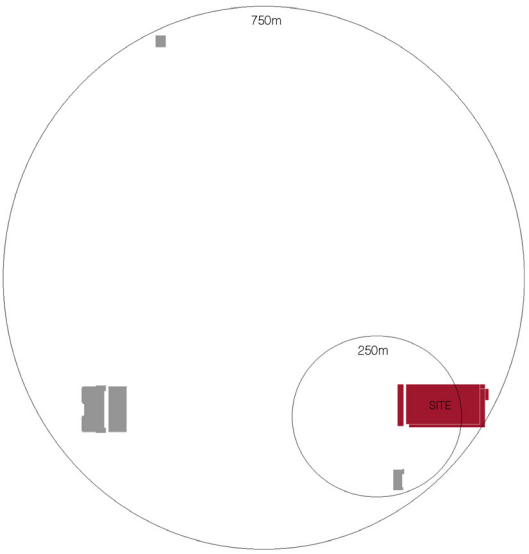
What this shows is that in addition to already strong gender inequalities caused by the universal culture of public transport, an additional layer is added in impoverished and informal communities who instinctively rely on tradition more than education.

Thus, in order to address these greater urban issues on gender, inequality in a South African context, education and the traditionalist mind-set need be addressed, in both men and women, as well.



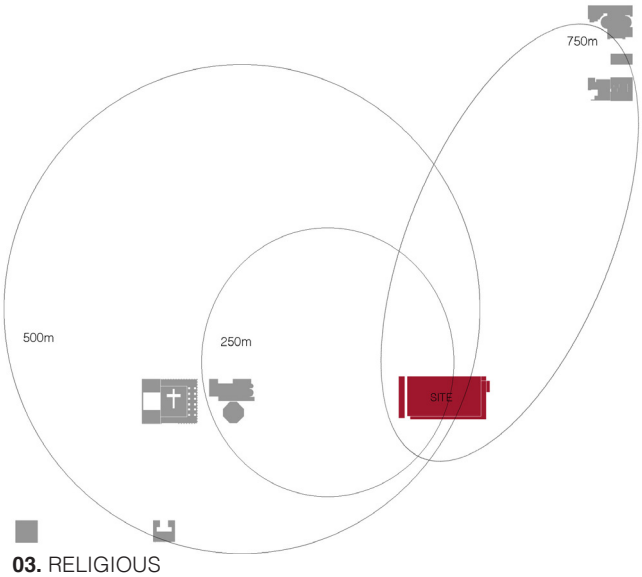
01. EDUCATION

To women in the area, skills training and education for their kids is of paramount importance to them. Towards the commercial region, there are a series of educational institutions.



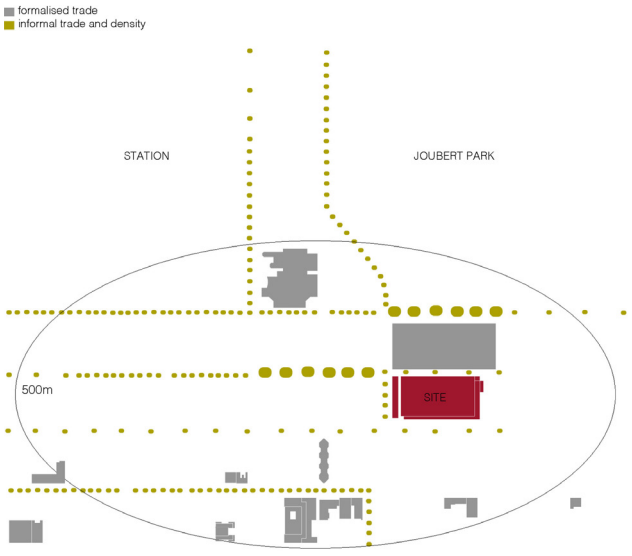
02. HEALTH

The Hillbrow Health precinct (situated within residential Hillbrow, and not represented on map), has been an initiative brought into this area of the city, to help meet the dire lack of affordable health institutions within the area (as seen in the above map)



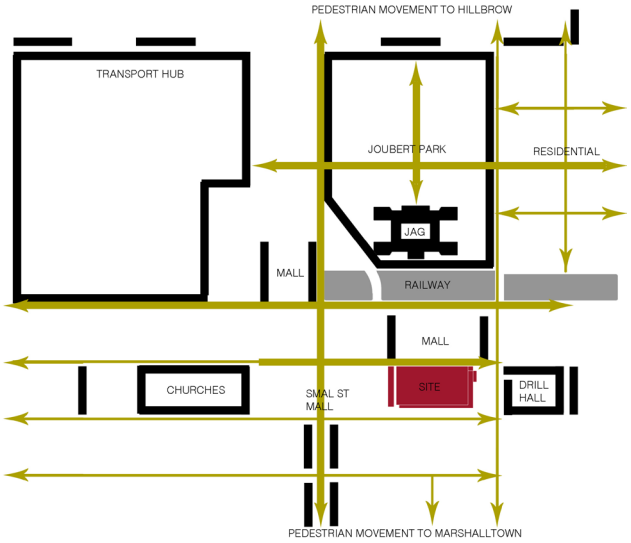
03. RELIGIOUS

Another major reason women pass through the site is to attend religious institutions, scattered throughout the area. The presence of both formal and informal churches in the region has brought a livelihood to the area on weekends.



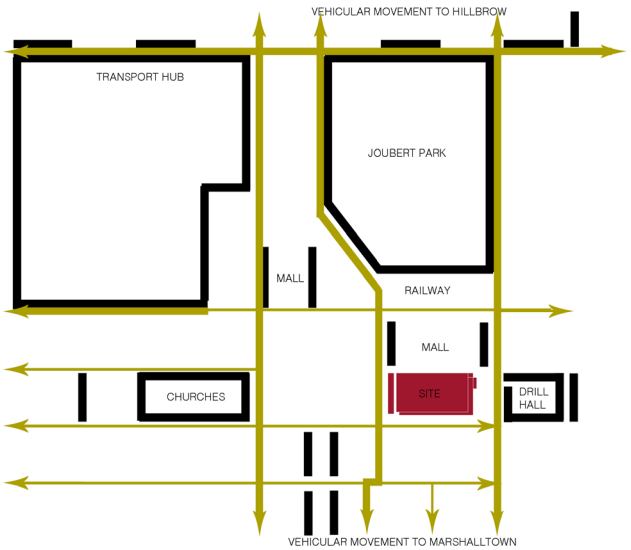
04. FORMAL AND INFORMAL TRADE

One of the largest pull-factors into this part of the city is the proximity to both formal and informal trade. Women in particular have been found both purchasing and selling goods along the strip. Informal trade along the strip is under threat however, as many of the seller's are illegal immigrants, whose goods are confiscated by the police.



05. PEDESTRIAN ROUTE AND ALL OPEN SPACE

With vehicles usurping most roads surrounding the ranks, pedestrian movement is stifled, particularly in a North-South direction. Vulnerable space is created due to the constant presence of the large and aggressive taxis. Many street level buildings around the site also have impermeable ground level space, leaving users no alternate experience, en route between destinations.



06. VEHICULAR ROUTE AND ALL CLOSED SPACE

Vehicular movement has a very strong North-South flow, with consistent vehicular movement moving over the three allocated bridges, over the railway tracks, between Residential Hillbrow and Commercial Marshalltown.

FORMAL INSTITUtions

Daily Use Of Women

To try and understand how women may be better incorporated into the existing site context, it was important to understand what has been the pull-factor to women using this transport node in the first place; Which spaces have women chosen to avoid in the vicinity, and what routes have women identified with, for what reasons?

Through a series of mapping exercises and interviews it was found that women are drawn to this part of the city mainly for 4 alternative purposes (other than their daily working commitments):

01. Education facilities (for both themselves and their children),
02. Health care facilities
03. Religious spaces (particularly over the weekends) and
04. Daily shopping

The reason most women gave for this choice was a simple one: The convenience of having all their daily needs located within a 500 m walking radius to the transport hub meant that they could streamline their varied route.

But, due to the nature of the taxi-industry in the area, most road networks are dominated by vehicles. Pedestrian movement is disrespected, and is subsequently often a very unpleasant and dangerous experience.

As a result, though women have the facilities they need to engage with in clear view, the disorganised city flow, and strong taxi and vehicular dominance, makes the pedestrian trip most difficult.


existing institutions
women groups
men groups
vehiclular movement

WOMEN & THE Site

Female Use Of The Site

To counteract the hostility of the surrounds, informal traders and clusterings of women and men, have formed along most roads in the area.

This presence of informal traders and gender groupings should not be treated lightly as they have played a significant role in creating a culture of equality within the existing city scape.

Of all the women asked, it was discovered that women felt most safe and at home on the street when engaging with groups of women. What made women feel least secure, was walking on the street being objectified by a group of men.

These gender groupings, though informal, have very strategically spread themselves, in and around the area. The adjacent mapping exercise shows the difference found between where women cluster and where men do.

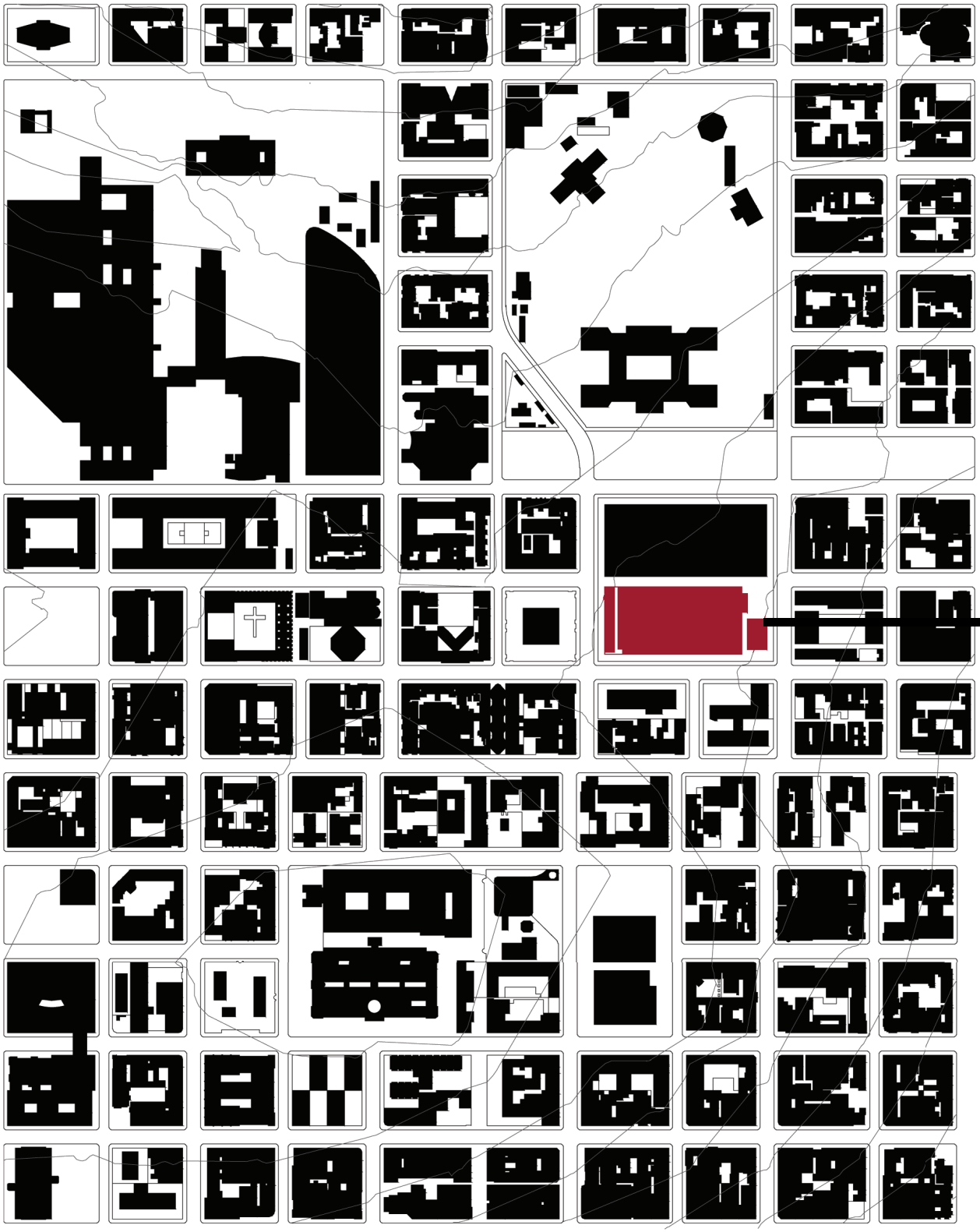
Women can be seen clustering in secluded residential areas and along retail strips, showing that female groupings occur where the surrounding buildings are at a humane scale, and a sense of community may be developed with other users.

Men on the other hand can be found gathered around transport hubs and open spaces; Spaces which have a more anonymous tone and inhumane scale.

Female pedestrian movement is constrained even further in reaching their destinations, through the visible dominance of the male clusterings along most of the major routes.

What all this highlights is that the site chosen fits the ideal parameters this thesis required : The site is used frequently by women, despite there blatantly unequal status on street level. There is an existing tension between the transport industry and women, particularly in the informal, taxi sector. And most importantly, the surrounding sites sport incredible examples of institutions which too have potential to eventually feed into the mainstreaming process of re-gendering the city..

As a result, the chose site has played an integral part in the realisation of this thesis.



SITE SELECTION *refined*

MTN Taxi Rank

Within the complexity of the Transport Node, sits the MTN Taxi Rank. The current rank serves as the replacement of the old Noord Street Taxi Rank, which was replaced by the neighbouring mall.

The MTN Taxi rank is a single story, skeletal structure which was designed and erected in approximately 2005. The structure currently has room for over 1000 taxis. The rank is split in four levels, basement 1, basement 2, ground floor and a roof top parking level.

Both underground basements were intended to house taxis in waiting, but somehow have been neglected and become unusable, dark spaces. The roof-top parking level is also minimally used; many Taxi-drivers have adopted the roof as a space to relax and mingle while washing or repairing their vehicles.

Ground level of the rank is subdivided into 10 rows (divided by an existing 7 x 8 m grid). Each of the rows indicates a different taxi route. As a taxi- rank, the site is incredibly successful and well run, in spite of the manic chaos experienced at first.

But...Due to the combination of the brutalist structure and the presence of the dominant, traditional Zulu taxi-lords (who run the roost), the entire environment is hostile and creates an air of vulnerability in the user.

With access to transport and food and city, the site has too much potential and vibrance to remain such an under utilised and dangerous space.



View of the Rank looking East, showing the strong pedestrian relationship the taxi rank has established with the adjacent mall.


Talk more
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Park Central



Aerial View of The Taxi Rank, looking North, towards Joubert Park.


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Park Central

SITE RESPONSE

Responding to the Dissected Rank

Having outlined the intricate relationship the chosen site has in relation to its surroundings, 4 main site responses have been identified in shaping the design response.

The first site response has been based on the EXISTING STRUCTURE and USER CONDITIONS of the immediate site.

Given that this thesis proposes working within existing structural and social parameters, it is important to outline these parameters, and discuss how they will be adapted and enhanced through the development of the project.

The second site response looks at the existing INSTITUTIONAL CONNECTORS which exist around the site.

Being surrounded by 2 heritage buildings (and closed institutions) on both East and West ends, the relationship with these two buildings has played an integral role in how the design development has progressed.

The third site response has been towards the existing MOVEMENT CONNECTORS.

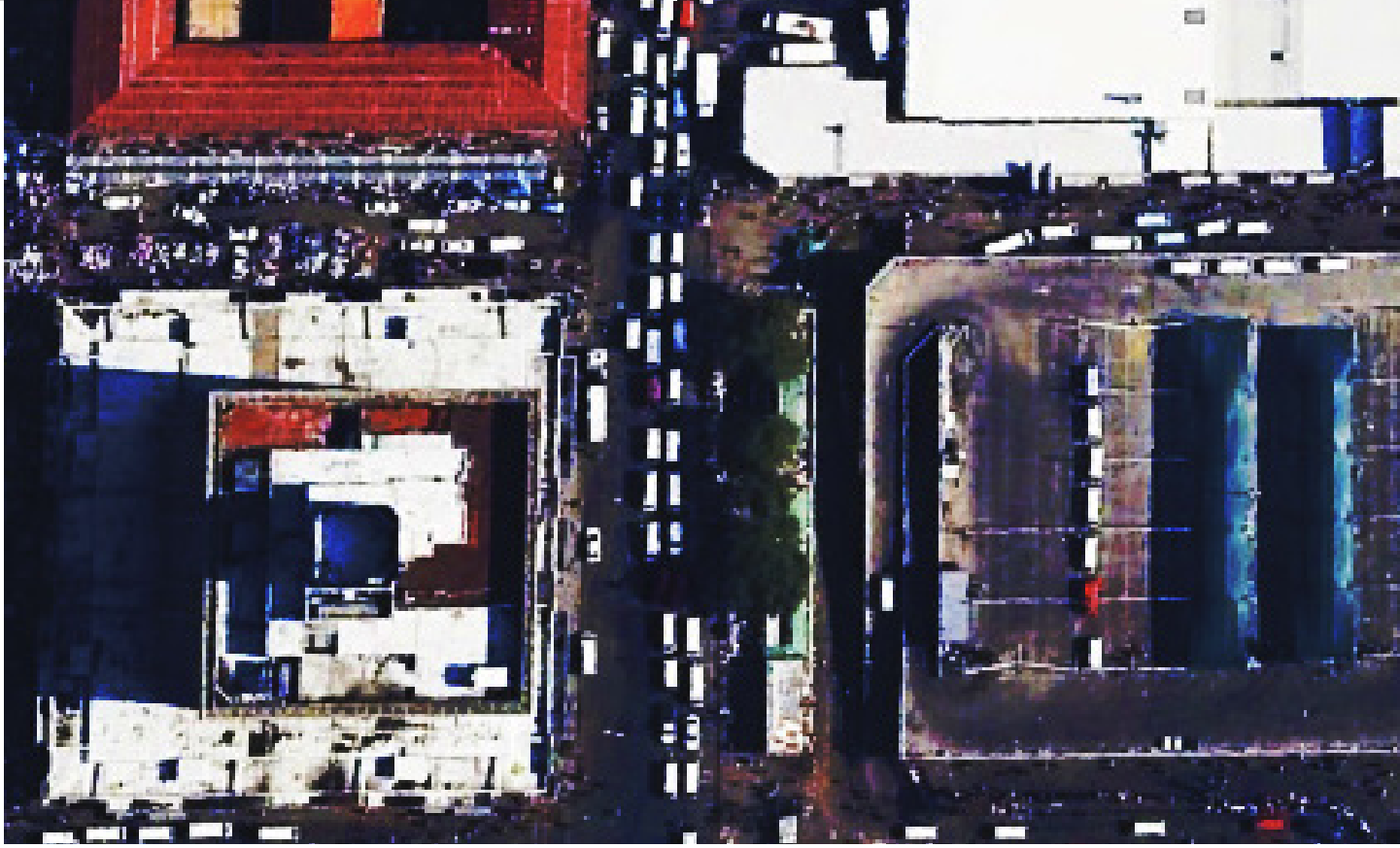
Being part of a transport interchange, the existing pedestrian and vehicular movement play a vital role in the shaping of a new space and so need be factored into a new design.

The fourth and final major site response has been the FORM CONNECTOR.

Given the surrounding built-landscape and the rich historical background of the area, this connector looks at how best a new building may respectfully integrate itself into the area, both in massing and in aesthetic.

Each of the above headings will be discussed in two parts: What the existing situation is, and then how best the existing may be adapted in order to accommodate a new deign proposal.

The purpose of the above deconstruction aims to establish site parameters within which a design development may emerge.





EXISTING STRUCture

The Rigid Rank

The existing rank (01) is made up of a 7 x 8 m column grid. Each column is 350 mm by 350 mm and spans 4 floors.

To the east, looking onto Drill Hall (06), is a Garage (02) and a Security and Taxi Administration Office (03). Both Garage and Office do not adequately cater to the volume of vehicles and users.

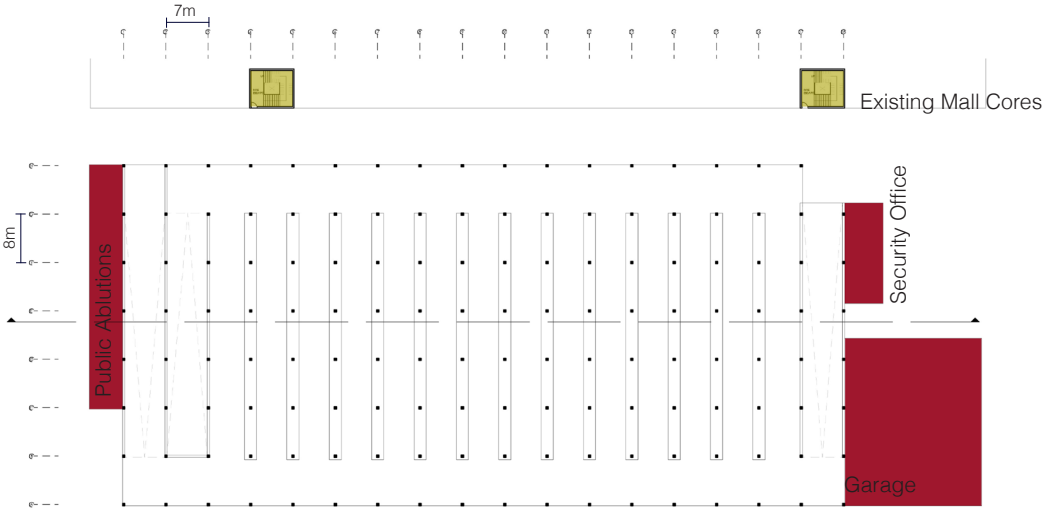
On the western end of the site, opposite Shell House (07) is a public ablution block (04). These ablutions currently under-cater to the volumes, and are poorly maintained.

The project proposes the demolition of all 3 subsidiary buildings.

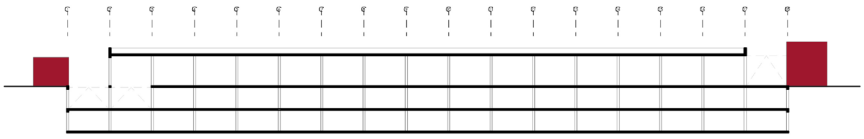
With only the structure of the remaining rank left behind, both eastern and western edges of the site allow for new development to frame the existing rank. To do this, I have proposed extending the existing column grid, to the east, in order to develop the design.

To ensure the structural integrity of the existing rank, no major structural changes or increased load has been added to the existing structure. All major vertical design developments have been established on the new extended grid, instead.

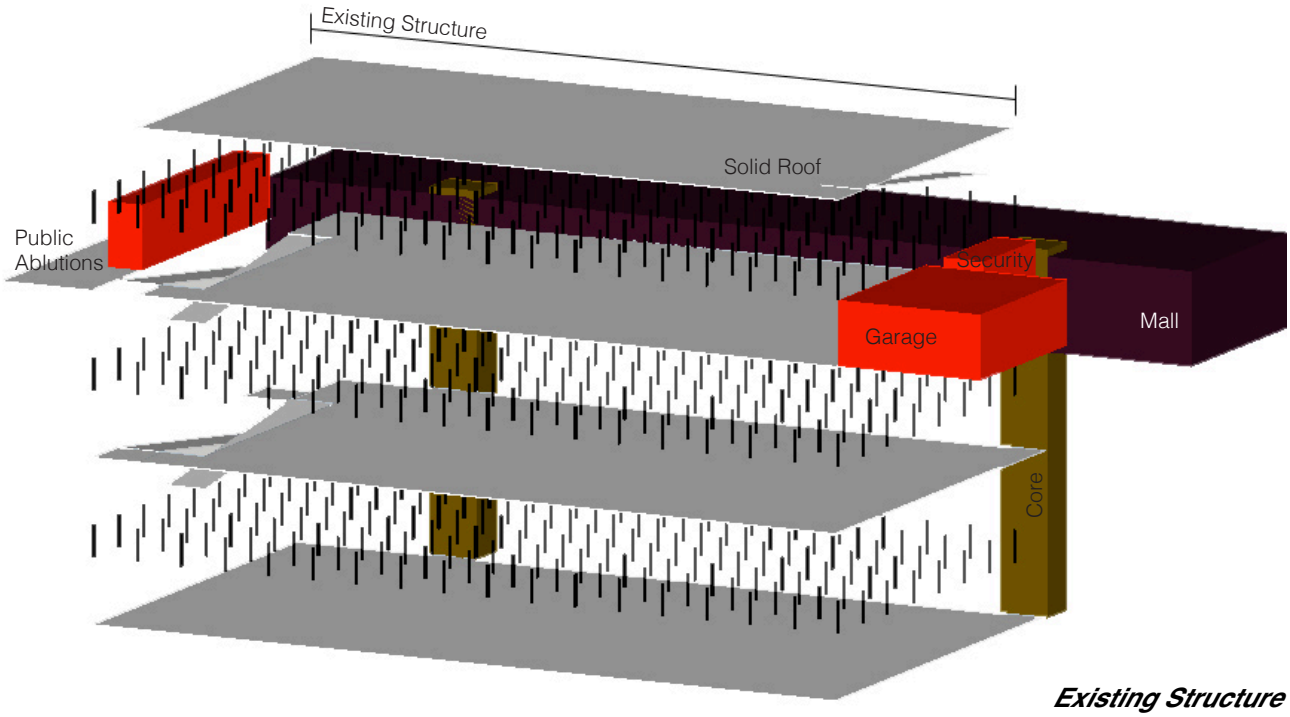
In addition, to the north of the rank is the existing mall (08). The mall has two public fire escapes which lead into the basement of the taxi rank. For the design, i have proposed the integration of the two existing fire escapes.



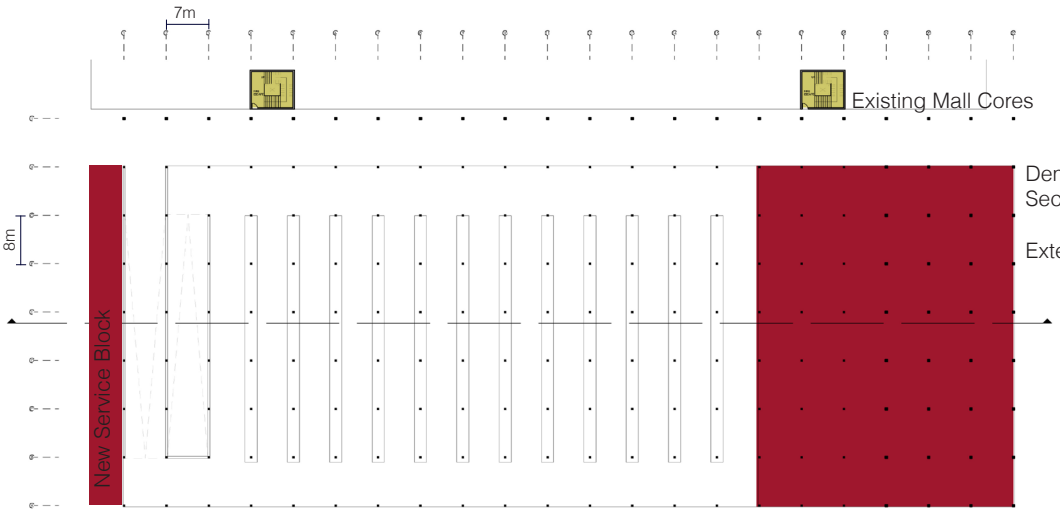
Existing Plan



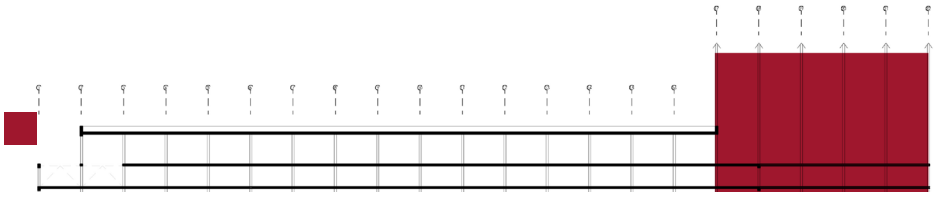
Existing Section



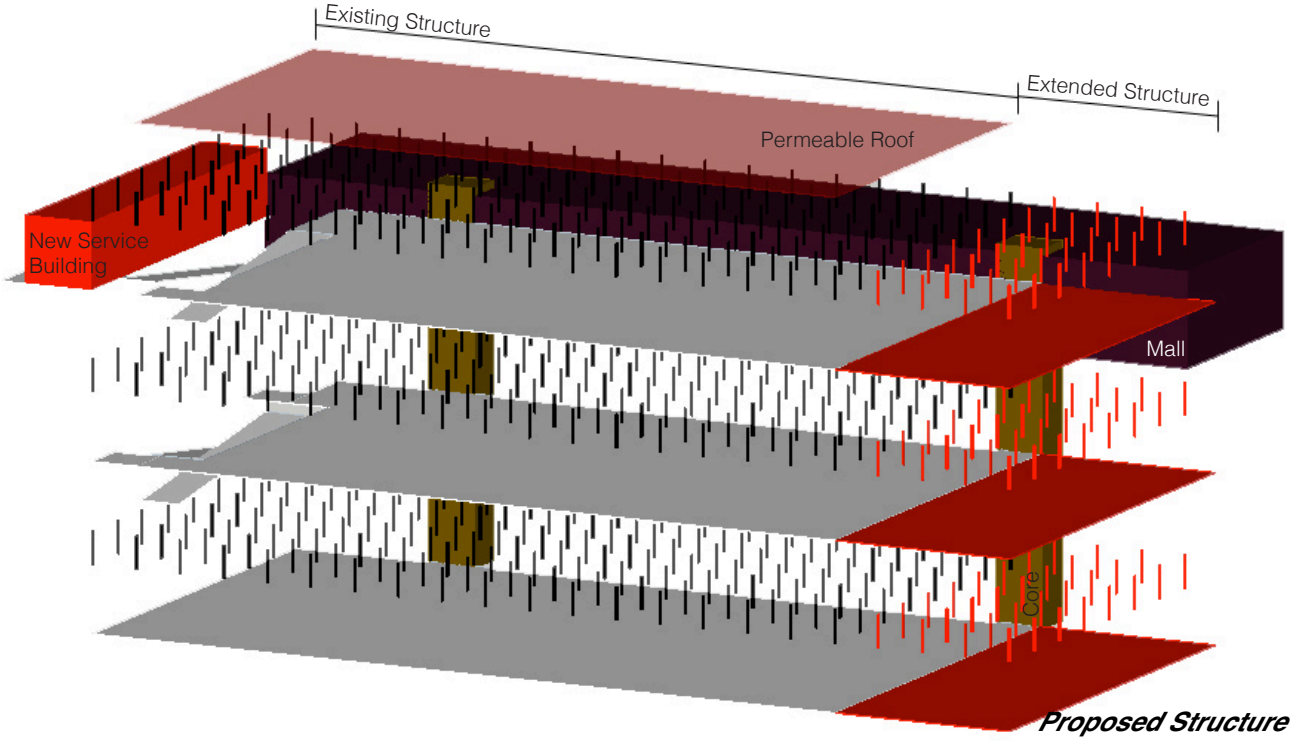
Existing Structure



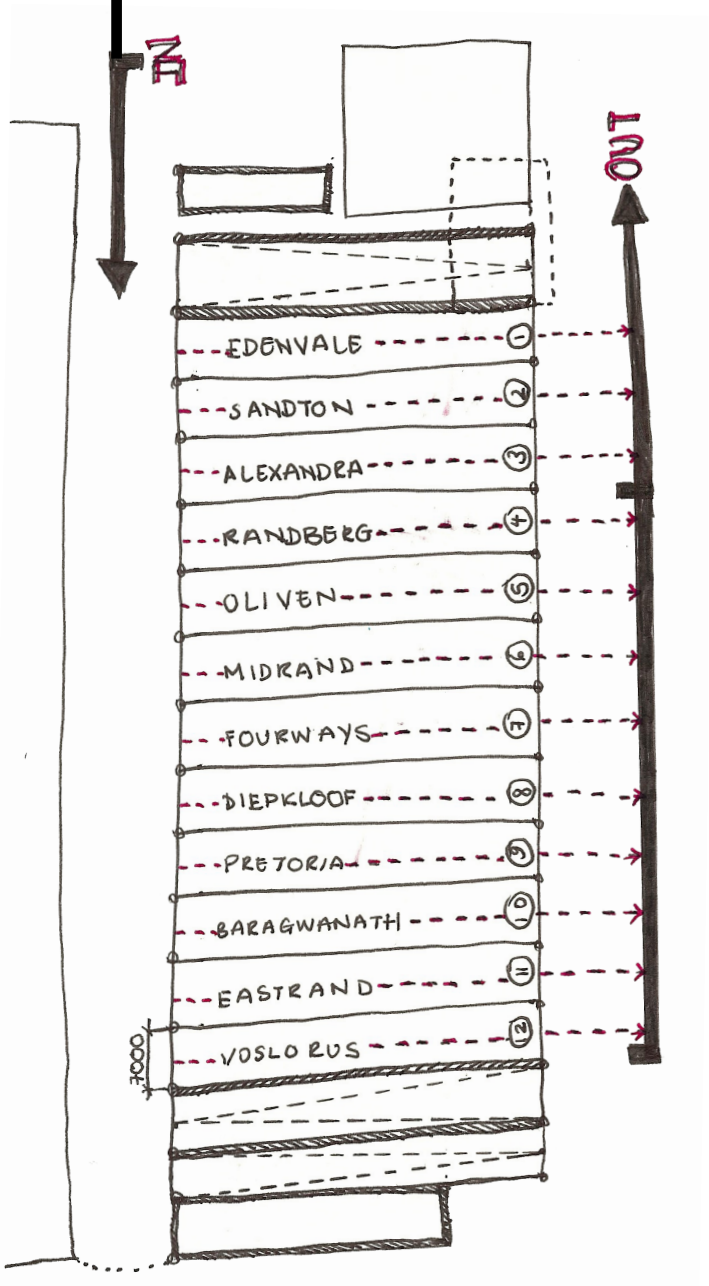
Proposed Plan



Proposed Section



Proposed Structure


IN
OUT
EDENVALE 1
SANDTON 2
ALEXANDRA 3
RANDBERG 4
OLIVEN 5
MIDRAND 6
FOURWAYS 7
DIEPKLOOF 8
PRETORIA 9
BARAGWANATH 10
EASTRAND 11
VOSLORUS 12
3000

EXISTING USER CONDITIONS

The Inner Workings Of The MTN Taxi Rank

The inside of the taxi rank is a very hostile environment. The column and slab structure has no ergonomic and sustainable insight in its design.

As a result, users are forced to stand in long cues, in a damp and poorly-lit environment.

The act of waiting plays a fundamental role in the design of a taxi rank, yet it has not been factored into this design at all. As a result, women and children are forced to wait on narrow, dirty curbs for their taxis, while taxi-drivers may spend up to four hours in their taxi's parked on the road, for lack of outside seating.

As can be seen in the adjacent diagram, the rank is dense with consistent traffic, from all around Johannesburg. The 1 meter islands between the taxis do not adequately provide waiting room for any of the users.

The rank also does not make a very significant formal gesture towards catering to pit stops. As a result, ablution facilities are scarce and poorly maintained, while only one eatery is present along the site, catering to numbers beyond its capability.

Informal trade has sprouted to help service the demand, but there is not enough trading space or storage space for this to be done successfully.



01. *EATING SPACE*

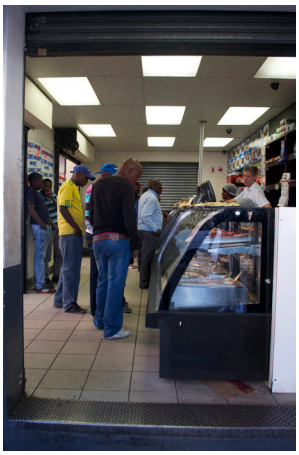
A single, 20 sq m Take-Away and Bakery is the only space to sit and formally eat, on site.

The bakery is also used as a thoroughfare between the taxi rank and neighbouring garage, on the eastern end of the site.

The consistent movement between garage and rank further congests an already crowded space, leaving even less room for people to rest.

For every one woman who uses the restaurant space, it is found that 4 men use it. On speaking to women, I was informed that women tend to steer clear of the seating area, attached to the eatery. From interviews, I was informed that "bored men would sit and slyly drink, to pass their time," in the eating area, and as a result, women often became verbally victimised by men in these situations.

In addition, women have said that they do not feel safe within the congested space and would much prefer standing and waiting in the rank, where it is more spacious and visibly transparent.

















02. *TRADING AND WAITING*

The initial design of the rank did not cater for trading requirements, which need be met by any transport interchange. The assumption was that the neighbouring mall would be able to adequately service the needs of users.

As a result, people have developed make-shift trading stalls from which to service the market within the rank. In order to do this however, the sellers have had to invade the (already thin) waiting islands between taxis, further congesting waiting space.

Lack of public ablutions and facilities have also left the space filthy, and lacking in uniformity. The lack of storage facilities have added to a buildup of waste found in and around the site as well.

Users and sellers have not taken an active interest in improving the quality of space in the site, as they do not feel it was designed for them in mind, and hence, they struggle in taking pride in a space which they do not consider their own.



03. *TAXI WAITING SPACE*

The nature of public transport- especially that as informal as the taxi industry- leaves a lot of waiting time for both taxi-driver and passenger.

With taxi drivers shifts beginnings as early as 4 am, and ending as late as 9pm, these taxi drivers have had to come up with innovative ways to rest and/or occupy themselves, between one full taxi to the next.

As mentioned previously, with no waiting space having been factored into the design, 14 hours at a taxi rank becomes very uncomfortable and hot quite quickly.

Taxi-drivers have taken to sitting in each others taxis' and socialising, or washing their taxis, in their free time. Many drivers have also taken to fixing their taxis on the roof level, but with no shading devices and a crowded surface, both washing and repairs on the site are not often successful.

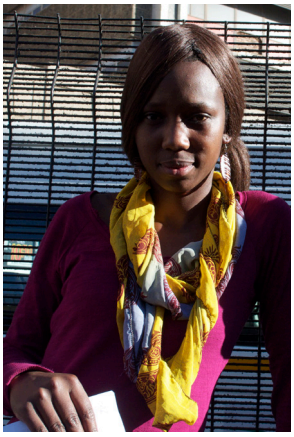












04. *VULNERABLE SPACES*

The existing rank environment is riddled with vulnerable space.

The rank itself is a vast, cold concrete structure, with very few light inlets. In addition, the rank is usually bustling with taxis, providing very little visibility to the ends.

Then there is the issue of the existing basement: The rank has a double level basement parking lot, originally envisioned to house the waiting taxis.

Due to the poor quality of the space, lighting and ventilation in the basement, it has begun to brew unsavoury activity and 'sleazy characters'. In addition, not many taxi divers are keen to park their waiting taxi underground, due to the contaminated air quality caused by burst sewerage pipes, and human excrement.

Even on the outside of the rank, visibility and access are stifled by barriers which are used to control taxi traffic. The result of these barriers are confined and uncomfortable space, which become prime spot for hijackings and kidnappings, due to the lack of peripheral visibility.

Connection To Drill Hall

Drill Hall is a heritage building situated directly east of the MTN rank. It is a low-rise building which was originally designed and developed in the early 1900's and has been the location of many great historic events including the Treason Trials.

In 1992 a fire broke out, damaging much of the original building. As a result, the building was left derelict until its renovation in 2004.

Today the building is well used; It houses a child welfare centre and aftercare facility for inner city school children, it serves as an inner city artistry hub, and the subsidiary buildings also house many smaller, women's organisations and NGO's.

Drill Hall is a successful hive of activity on most days; It is time this activity extends its reach to include and connect other similar city space.



INSTITUtions

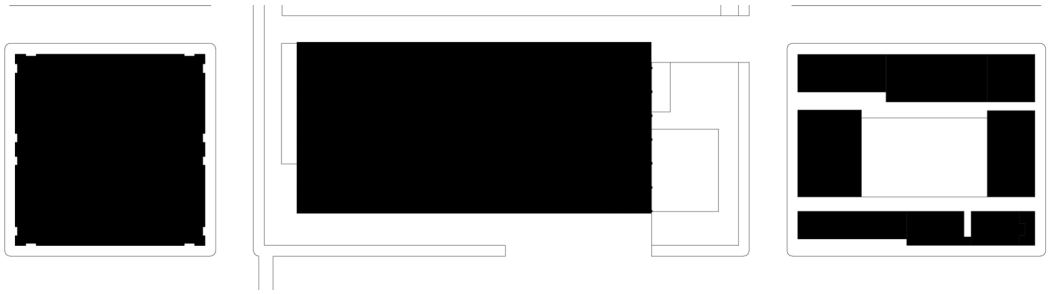


Connection To Shell House

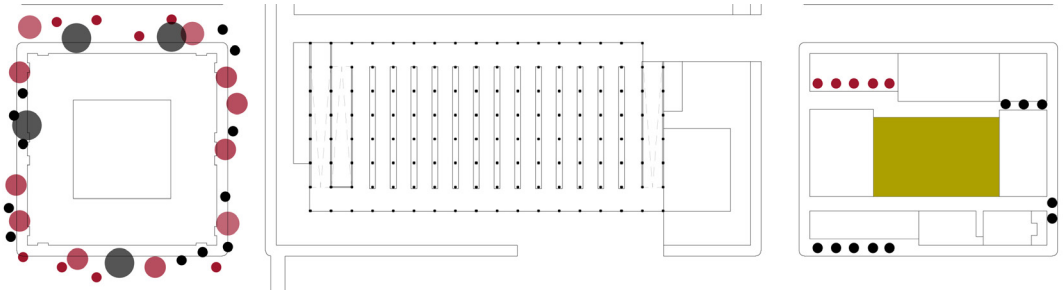
Shell house is situated directly west of the MTN rank, and is a high rise monolithic building which used to be home to the ANC during Apartheid. Since the ANC moved their headquarters to Lethuli house, however, the building has been derelict, save for the ground floor retail hub.

This thriving retail activity spills out onto all four of the Shell House street edges and feeds into a bustling pedestrian culture further west. The pedestrian movement and retail opportunity comes to a halt, however, when faced with the MTN Taxi rank and as a result pedestrian movement towards the east of Shell house is stifled.

In response to the closed nature of these institutions, part of this thesis looks at how to create alternative linking strategies between the free-standing city institution, in order to maintain a consistent pedestrian flow, using the rank as a catalyst for this change.

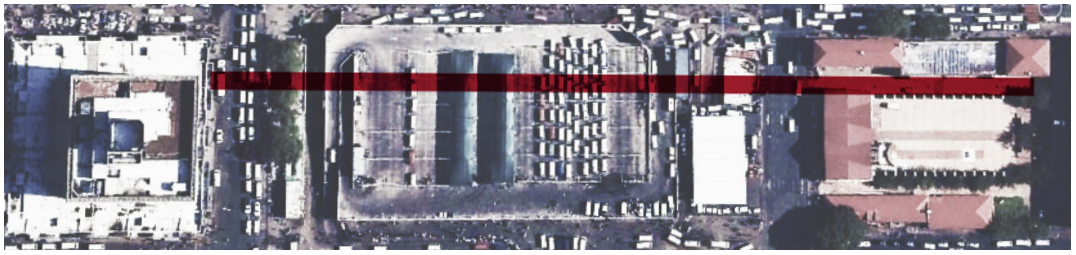


01. The 3, existing, isolated institutions.

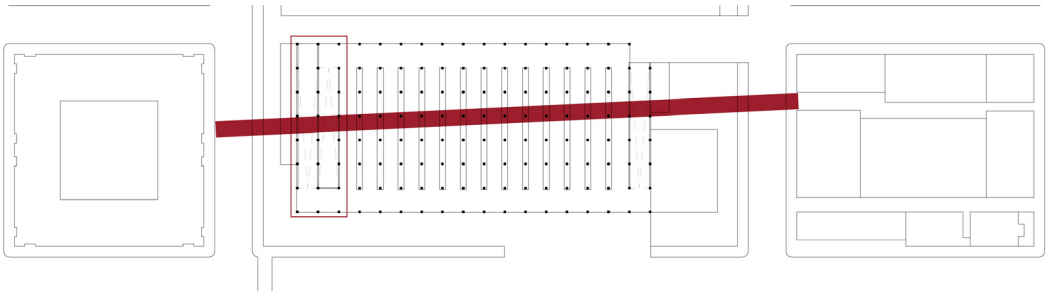


02. Existing Clusterings which occur, in and around the institutions.

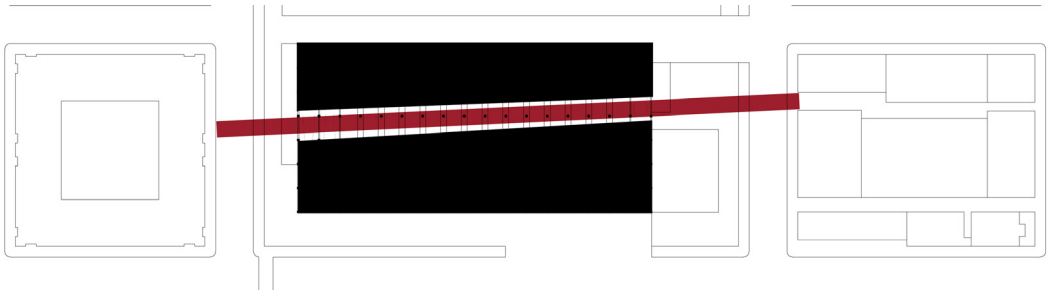
men
women
green



03. A connecting route through the rank



04. Angle the route to accommodate for difference in height of the existing vehicular ramps in the taxi rank.



05. The first stage of deconstructing the rank,

INSTITUTION CONNECTORS

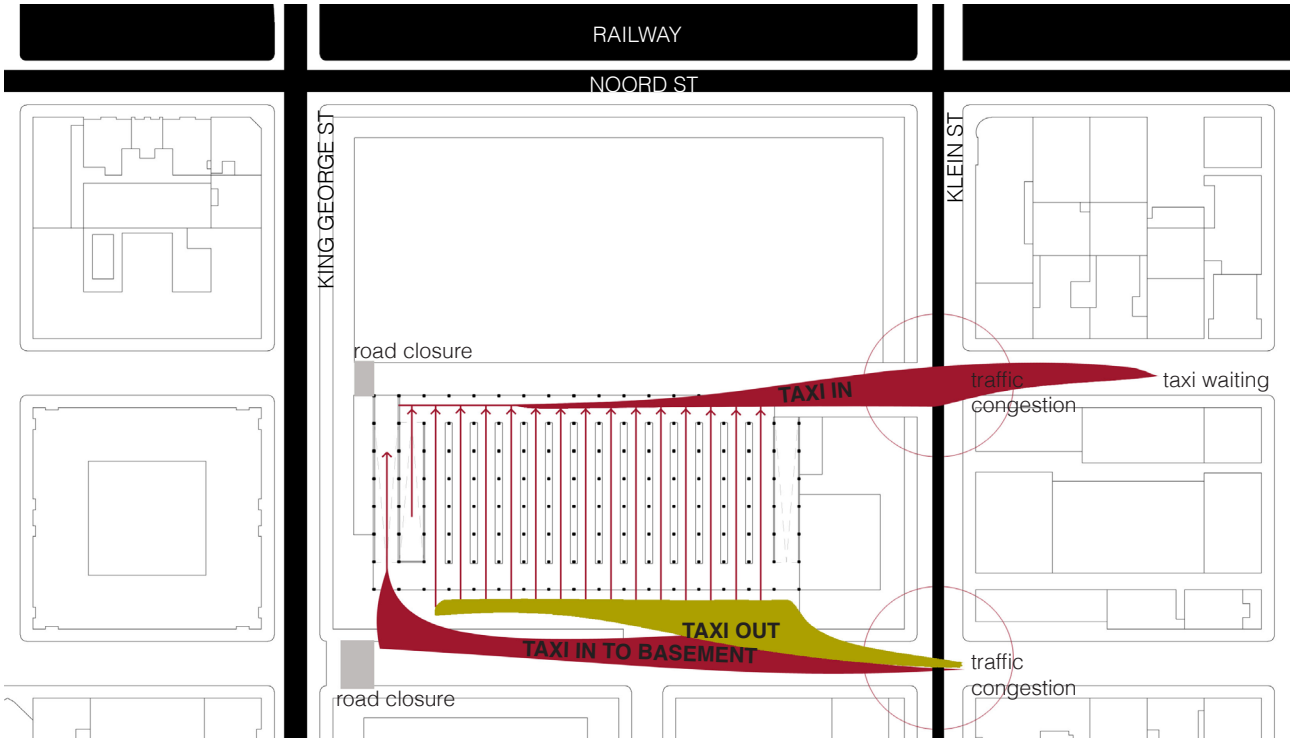
Connecting the Institutions

As can be seen in the adjacent diagrams, a process of deconstructing the existing inner-city institutions needs to begin on a small scale, addressing how one building may better relate to its neighbour.

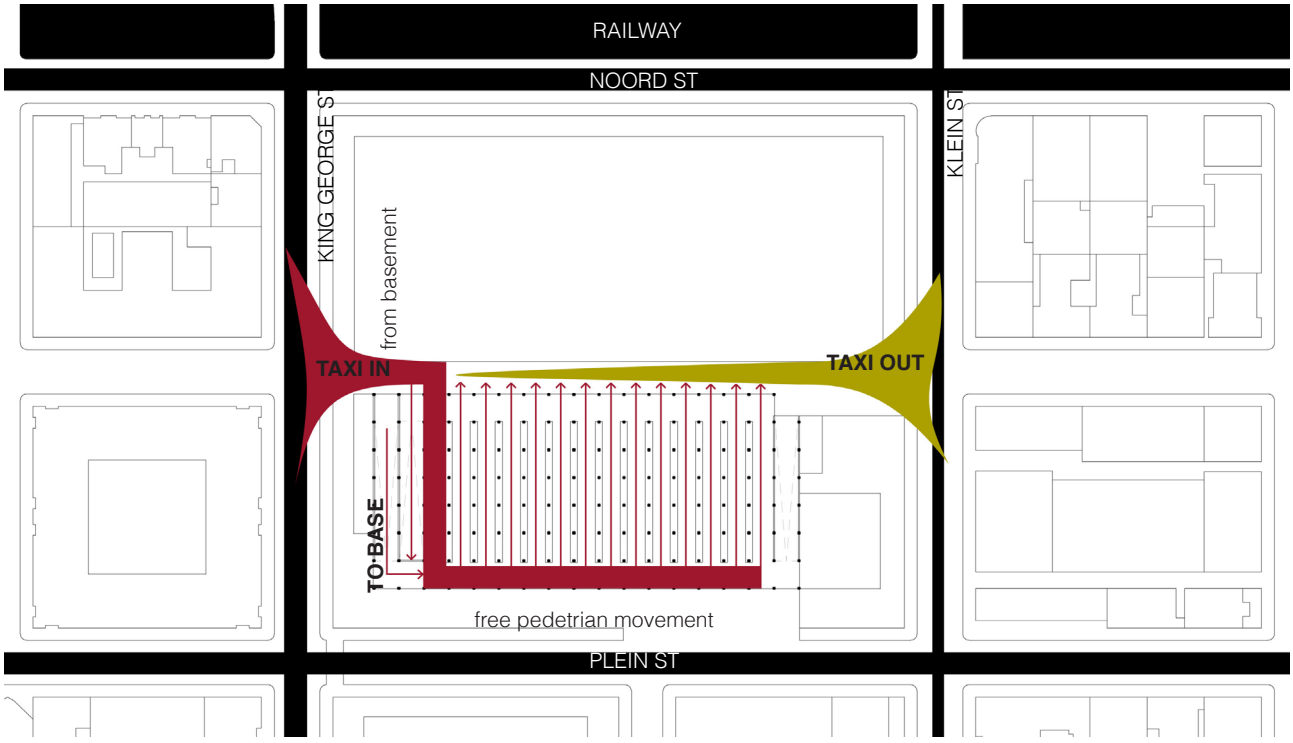
As a result, the idea of the 'alternative route', connecting spaces, amidst the city blocks, resonated with me.

It is important to note that the idea of the route does not imply a physical dissection of space, but rather an implied one.

The concept of the route, rather looks at better facilitating pedestrian movement between existing institutions and their clusters, through accommodating for the pedestrian (in scale, form and safety), along a specified path.



01. Existing Taxi Movement in and around site



02. Proposed Taxi Movement in and around site

MOVEMENT CONNECTIVITY

Taxi Movement Patterns

01. The EXISTING taxi flow is chaotic.

Taxis enter the rank at the North East corner (on Klein Street) and exit the site on the South west Corner (on to Plein Street). Instead of cueing in the allocated basement parking, taxis cue along the subsidiary roads. What this means is that there is continuous vehicle congestion along Klein Street.

In addition to this, access to the basement parking for taxis is accessed from Plein Street as well, which further congests the (previously pedestrianised) street.

02. To alleviate some of the existing congestion, the PROPOSED taxi flow aims to instead encourage the entrance to the site be just off of the main King Gorge Street and the exist out on to Klein Street.

The reason for the shift is to free up pedestrian movement along Plein Street, making the rank more accessible from the South.

In addition, the standardisation of the taxi flow, towards the North is better able to feed into the existing Noord Street Spine of Transportation which runs East to West through the City, as mentioned previously.


SHELL HOUSE
SITE
MALL
DRILL HALL



SCALE CONNECTARS

Fitting into the Surroundings

The area houses buildings of various scales and uses (due to the haphazard development which occurred as a result of the transport hub growth).

High rise buildings dominate the southern portion of the site, leading into the CBD, while the buildings (particularly around the railway track) and to the north are of a much lower, residential scale.

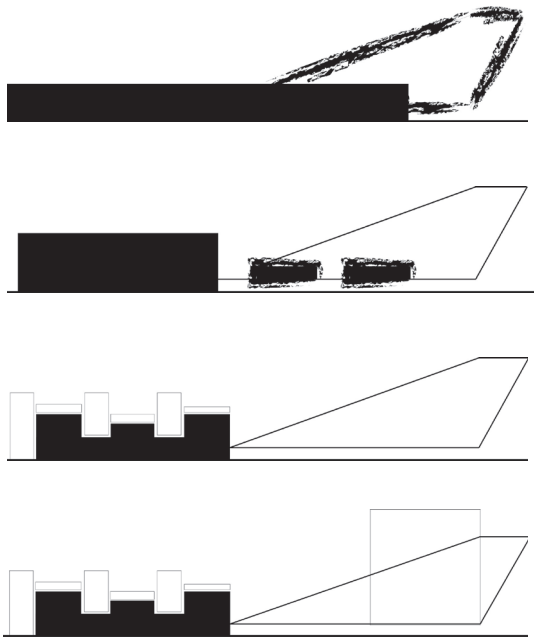
As a result, the site receives unhindered northern light and a visual connection towards JAG and Joubert Park.

Another form driver is the disparity in scale and language between the two heritage buildings on either side of the site; While Drill Hall is low rise and is a space of heritage and art, the existing Shell house is massive and brutal in scale and aesthetic.

Having The MTN rank squeezed between these two buildings, emphasises the need for the new building to bridge this disparity and equalize the existing hierarchy.







DESIGN RESPONSE one

The Appendage

Being sensitive to the jump in scale between the two immediate surrounding buildings, it was decided that the extension of the rank needs to be large and outstanding, to match the existing scale and aesthetic of the surrounding buildings.

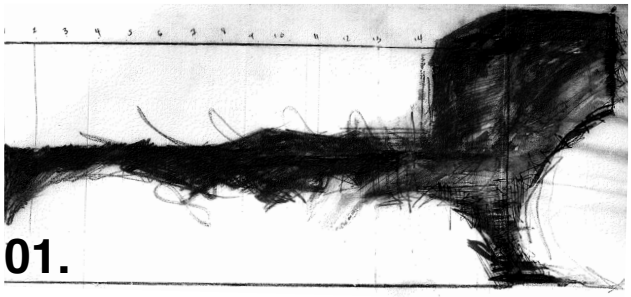
In addition, the concept of juxtaposing the rigidity of the existing rank against a softer and more organic building, became something of interest to me, in creating a duality between men and women and form.

Due to the structural constraints of the existing rank, however, it was only possible for vertical growth in the scale of the building to occur above the new, reinforced column grid , on the eastern portion of the taxi rank (refer to page...).

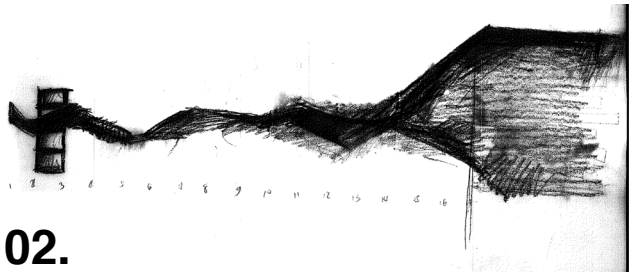
The combination of these structural constraints coupled with a language of contrast for the new building, gradually caused the form to resemble an appendage (or afterthought) to the existing rank, instead of a powerful opponent.

This approach didn't work; The existing rigid rank overpowered the addition, perpetuating the female inequality once again and the contrast highlighted the difference instead of the similarities between the sexes, emphasising a duality instead of equality.

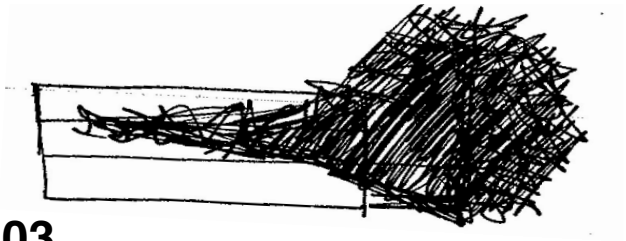
This was not what I had in mind at all and as a result, the idea of the building as an appendage was forced to further evolve.



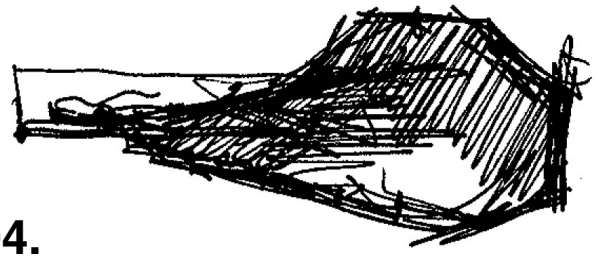
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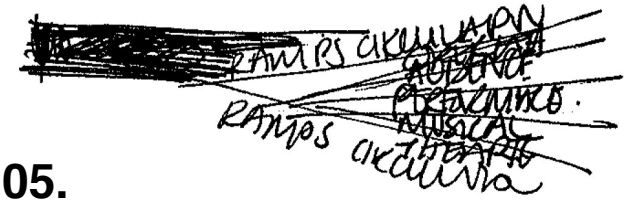
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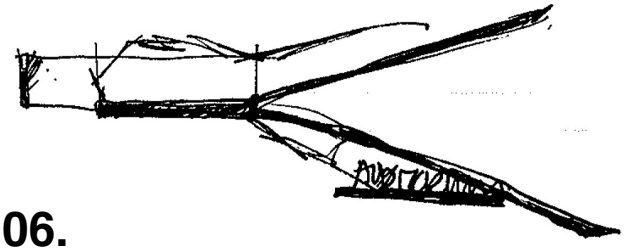
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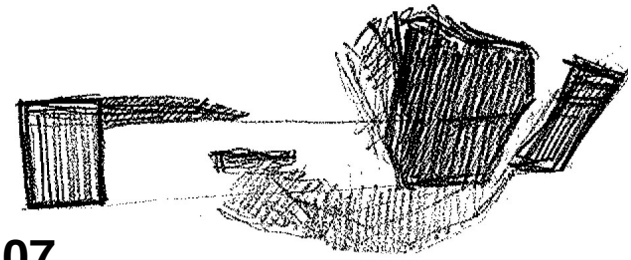
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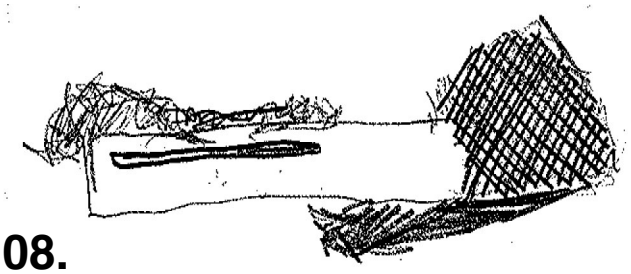
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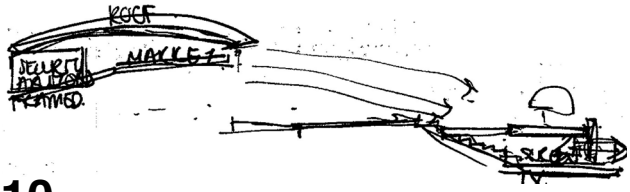
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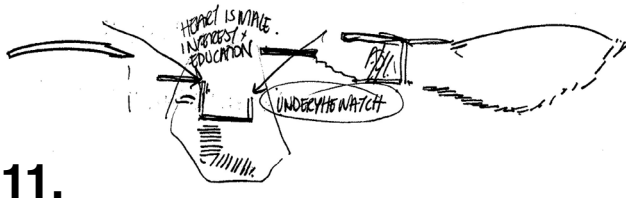
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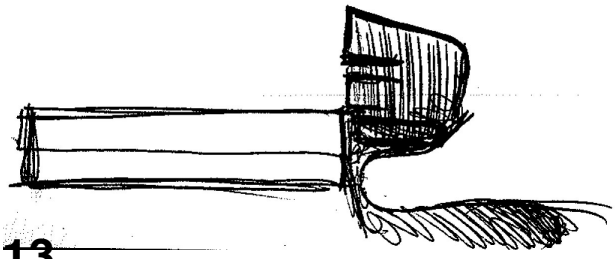
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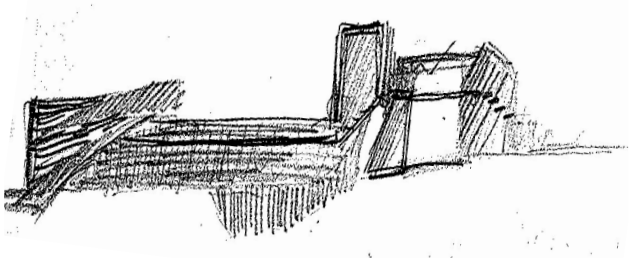
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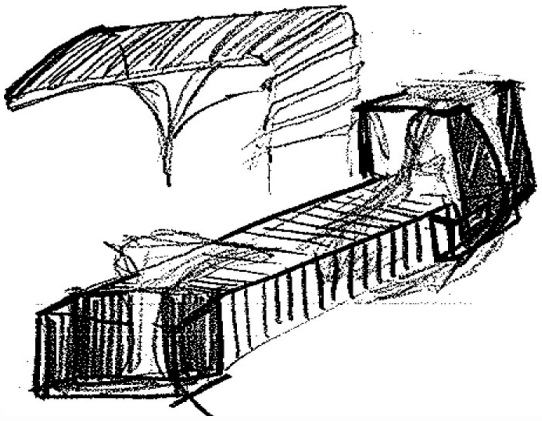
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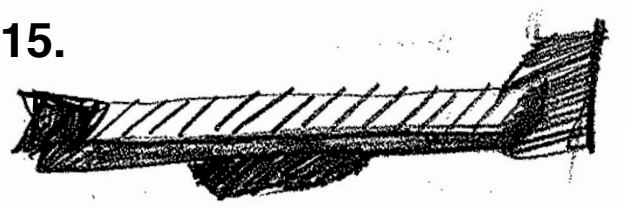
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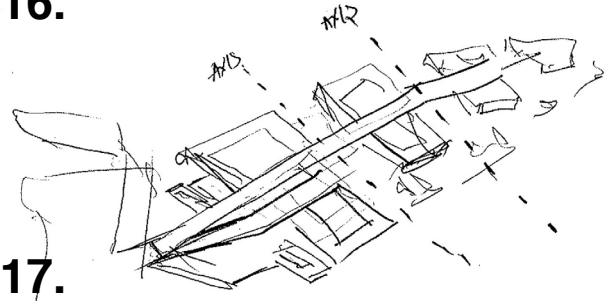
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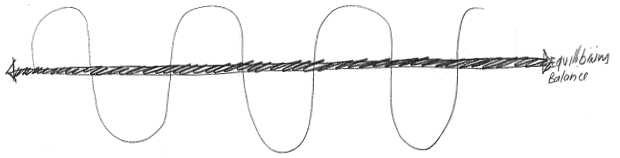
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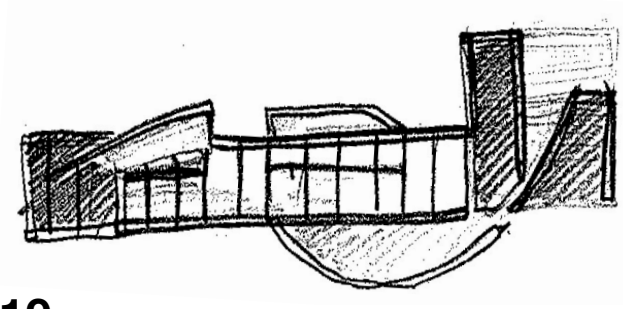
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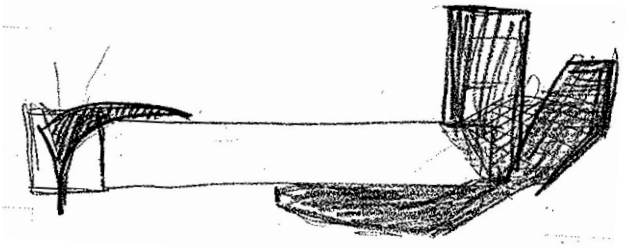
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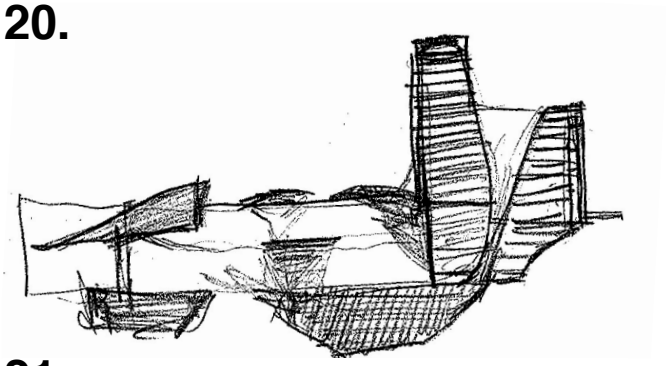
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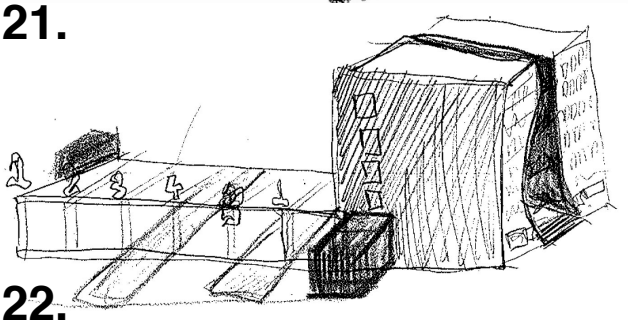
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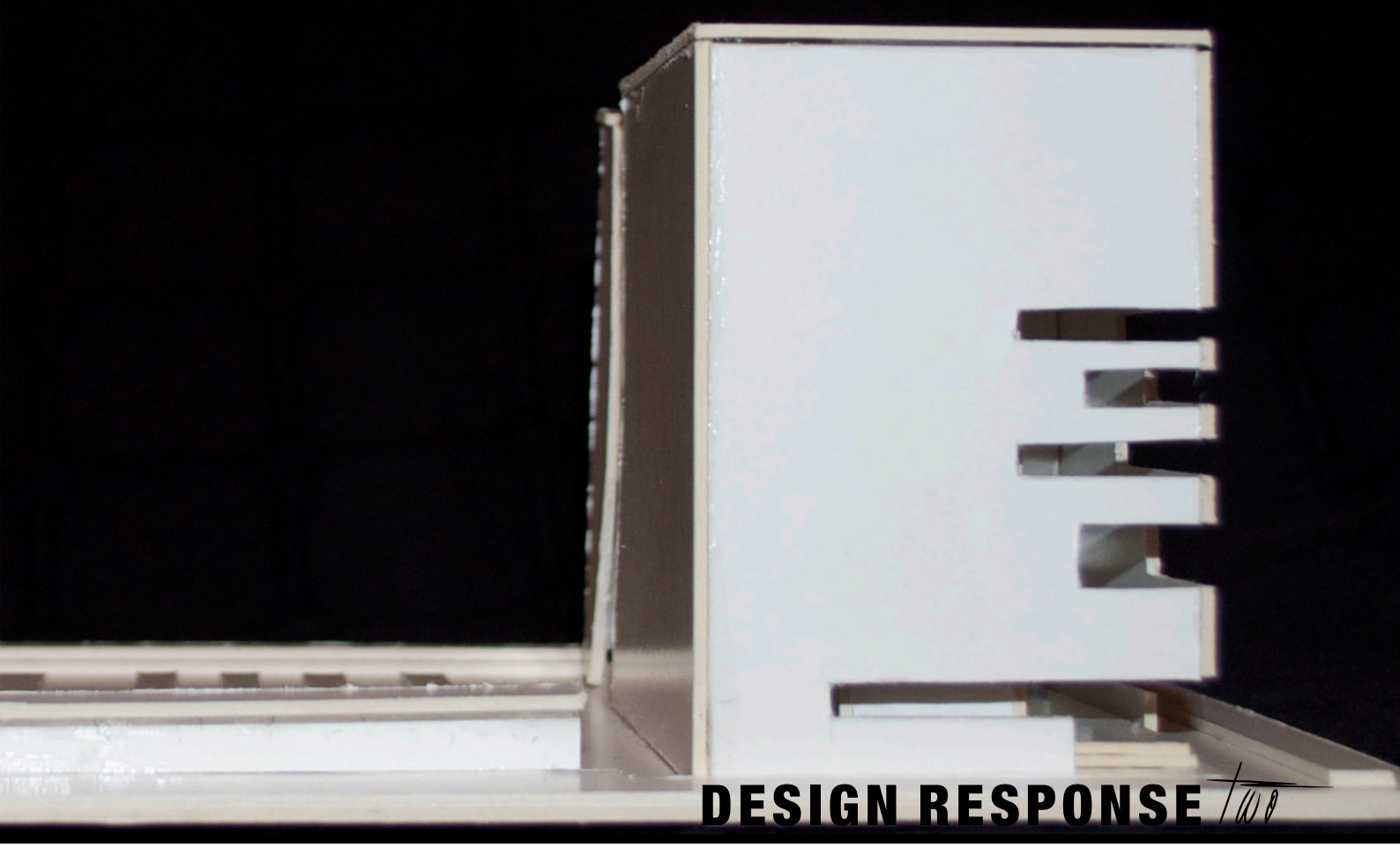
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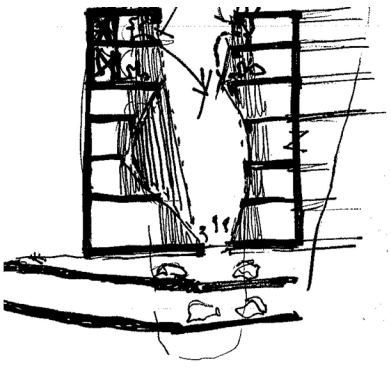


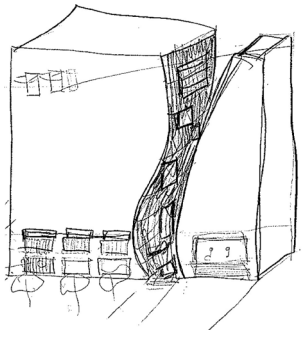
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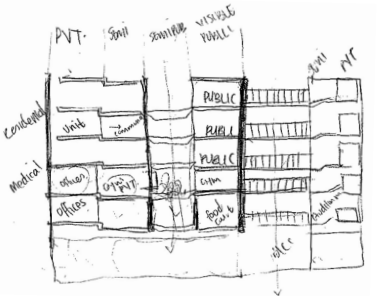


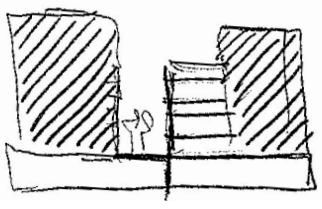
DESIGN RESPONSE *two*

The Appendage, Equalised









The idea of the building as an appendage soon evolved into an idea I call the EQUAL APPENDAGE.

The new development is still situated predominately along the eastern edge and is still an addition to the existing taxi rank structure, however to steer away from the building being an afterthought, the 'appendage' assumed a rigid, massive form instead.

This decision was made, to avoid contrasting the existing and instead achieve a sense of equality through similarity.

In addition, it was decided that the building mass of the addition needs to speak to the building mass of the existing rank, in order to achieve a visual equality.

As a result the area which the rank assumes in length and breadth (including the basement) is equal to the area the new intervention assumes in bulk and height.

The ideas I had originally on a softer contrast were not all lost; Though from an outward perspective, the rank and new building combined are able to command a certain respect, when these ideas are coupled with ideas of the dissecting route, suddenly the massive, rigid building became sliced through, providing an internal opportunity for contrast and a softer difference instead.

PROGRAMME RESPONSE

Developing a Programme of Balance

After generating the basis of a form, it became important for me to appropriately populate this form.

The first programmatic driver was to better equip the site as an existing transport hub; The existing rank does not adequately cater to the needs of the users and basic functions which should be standard within all transport hubs (such as adequate waiting space, retail opportunities, security offices and taxi administration offices) are already severely lacking at the MTN taxi rank.

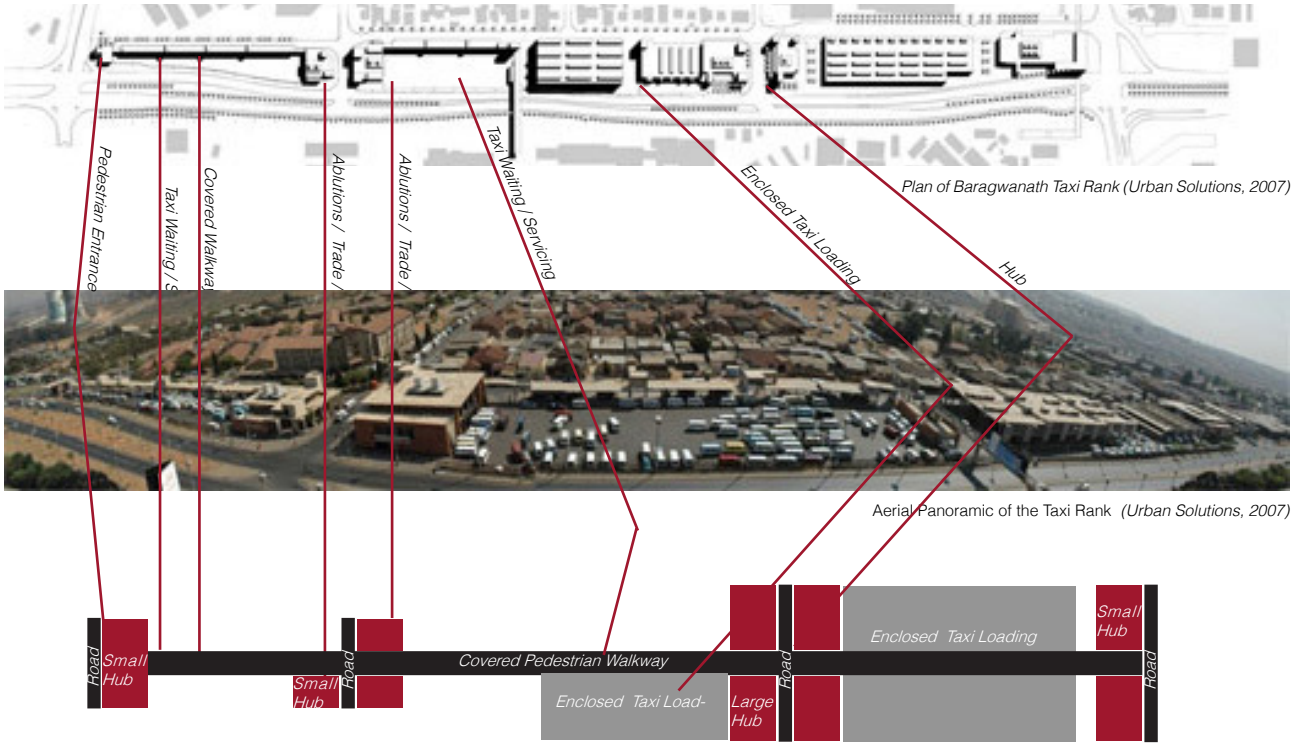
The second programmatic driver looked particularly at meeting the varied needs women have, when engaging with public transport and the city. This driver did not aim to exclude men, but rather to incorporate a programmatic response which caters to both genders's needs,as has never been done before: Equally.

To determine the programme, a study was carried out:

01. Part one of the study looked at the standard facilities housed by successful modern transport hubs within South Africa.

02. Part two of the study looked at the two main user groups this project aims to target.

As a conclusion, the above findings were layered against the existing programme offered at the rank, in order to better understand the short comings of the exiting, on a practical scale.



Large Scale Programmatic Response: The Connecting Strip

The transport interchange has become an architectural language in itself. It has evolved from being a very basic amenity to being a multi- layered, multi- million rand industry.

In order to try and understand the programmatic success of a transport interchange within a modern South Africa, it was essential for me to analyse an existing current example.

Though much larger in scale and different in context, the Baragwanath Taxi Rank, completed in 2007, has proved to be one of the most ergonomic and programmatically effective modern transport interchanges in South Africa. From the above diagram of the rank, 2 things are most apparent:

01. The programme of the interchange has been distributed along a centralised strip and

02. The programme has been broken up into 3 main components, being the vehicular space, the user hubs and the strip, connecting all the programme together.

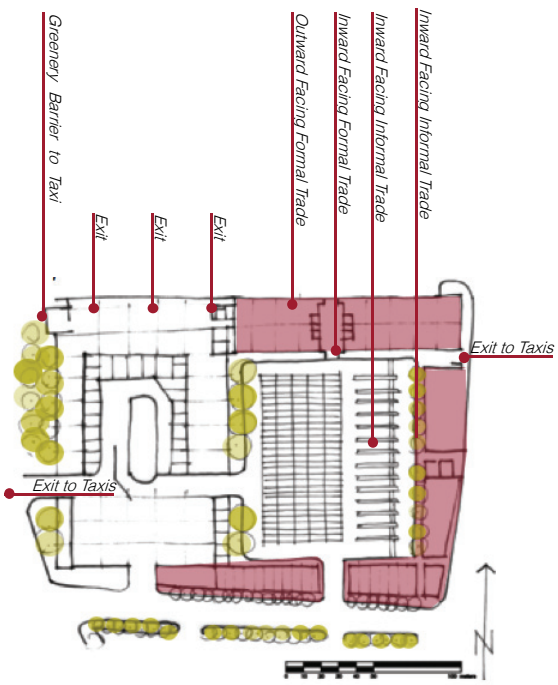
Strip Programme
As seen in plan, the entire rank is spread out along a rectilinear pedestrian path. In order to activate the entire strip, retail activity of various scales and formality has being incorporated into the design of the pedestrian strip.

Distribution of Hubs
Another interesting analysis is the incorporation of formalised hubs, along the strip. These hubs are used as a framing device, and have been distributed along the strip to celebrate street intersections along the strip. This approach is interesting, as it provides a visual beacon, which is able to orientate users along the path, while also serving as a landmark point for people to gain access to the strip, from the outside. These hubs serve as functional orientating strategies.

Ratio of Traffic to Pedestrian
The ratio of Pedestrian Facilities to Vehicle facilities (for both taxi and bus) is about 30% to 70% respectively. However, due to the consistent pedestrian strip and humane scale, coupled with formal hubs of people at appropriate intervals, the daunting imbalance of people to vehicles becomes underplayed, creating an environment FOR humans, USED BY vehicles, instead of vice versa.

Advertising
A key player in any transport is its ability to advertise. Often times, advertising has potential to override the architectural language of the interchange, if not designed adequately, such as in the case of the MTN Taxi Rank.

Due to the elongated nature of Baragwanath Taxi Rank, the ability to strategically place signage along the main pedestrian strip, became very useful. As a result, the main street facing space was allowed to remain bare of advertising, successfully.



Dissection of a Large Hub along Baragwanath Taxi Rank Strip, *(Urban Solutions, 2007)*



Photo of inside of Large Hub

TRANS-HUB PRECEdent

Baragwanath Taxi Rank

Small Scale Programmatic Response: The Hub Deconstructed

'Hubs of People' are distributed along the pedestrian strip. Dissecting the idea of the formalised Hub, a bit further, there are two types:

The Small Hub
The small scale hubs, which consist of informal retail stalls, ablutions, security presence and access to other transport transits (via bridges over the road etc). These hubs are situated along the outer most end of the strip and provide a break along the strip, offering basic amenities and resting space.

The Large Hub
The large scale hubs, are situated towards the middle of the strip. These hubs cater to large numbers of people, simultaneously. On ground level, the hub is made up of a combination of formal and informal retail opportunities, Ground level allows for resting space, ablutions and greenery.

It is also in the main hub where administrative activity takes place: Stall hire, Security Offices and Taxi-Lord headquarters are all found above ground level within these hubs, giving the structure height, formality and a layering of privacy.

In addition, this privacy also allows for formalised services like banking and access to telecommunications and internet cafes to occur at these large hubs.

As seen in the diagram above, the formal architectural language of the hub exterior aims to insulate informal trading activity on the inside of the hub, providing a layer of distinction between the hostile vehicular environment outside and the human environment inside. Further layering is achieved between street and trading hub through the abundance of Greenery and Waiting Space on the Exterior of the hub.

These Hubs cater to 3 different types and scales of retail activity and trade.

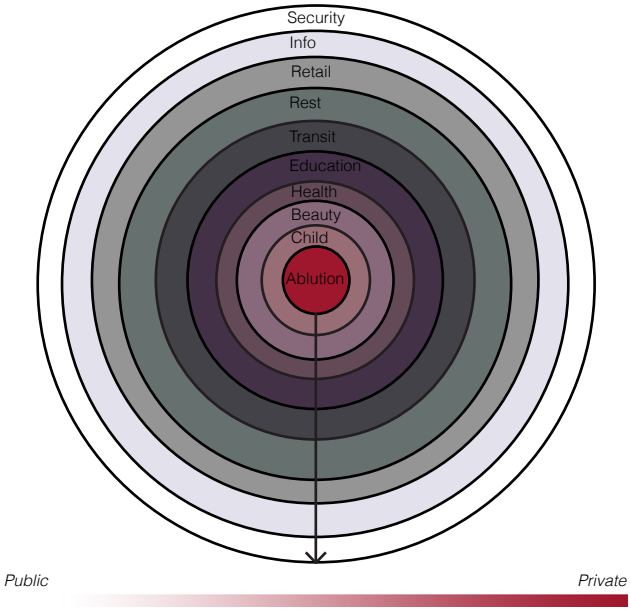
01. The outward facing trade, found on the street facade of the hub caters to formalised trade. These stalls have rigid security measures and are stepped off the street level, to provide a differentiation between vehicular and human movement.

02. The inward facing trade is formalised retail space found on the inside of the hub. Most of these stalls are smaller than the exterior ones and are used as restaurants and eating hubs, providing clients with a degree of privacy while they dine.

03. The last and final type of trade catered for, within the hub, is the informal trade. Standardised tables and storage space is rented out to traders on a monthly basis. These concrete tables may be seen throughout the entire rank, however, they are concentrated within the hubs (refer to diagram above). These 3 layers of trading have proven to be very successful, programmatically.



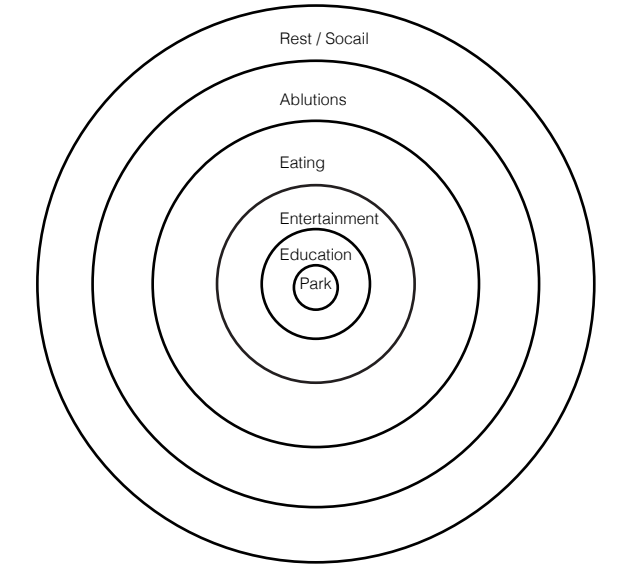
Female Entrepreneur; Umama, selling sweets and tupperware on the street corner



Highlighted Needs of the Female User;
Seen in order of most public to most private



Male Taxi Driver; Charles, waiting for his taxi to load



Highlighted Needs of the Male User;
It can be noted that privacy is not an issue to the male user

The other major component which has driven the programmatic development has been the user; In particular, I have focused on 2 specific user groups:

The first group identified has been the female user group.

The second, less obvious user group identified has been the taxi lords and taxi drivers.

The reason for the later choice is two-fold: As already mentioned-the taxi industry, which serves most of the countries impoverished nation, is completely dominated by this select group of men.

As a result, whether or not we care to admit it, without the incorporation of the most permanent male figures, into the design, a quest towards long term equality will probably be a superfluous endeavour. On a more practical note, the incorporation of members of the opposite sex in the study is also to ensure that the building does not take preference to women, but instead continues to focus on fair and equal integration for all.

Women
From dissecting the varied routes taken by women (through the 4 institutions highlighted in the essay), it became clear that programmatically, women have two integral complaints:

01. The first complaint is that basic facilities such as health care, banking and education facilities are not centralised enough and as a result, women tend to spend more money and time on public transport to achieve their varied daily goals.

Programmatically, this means that the building's programme would need to try accommodating as many of these mixed use functions as possible, in order to streamline the varied female route.

02. The second complaint was on safety and security. As can be seen in the diagram above, the distinction between public and private space is important to women, as it provides women with a feeling of security and formality through the programme.

Women also admitted that levels of security vary between function; This variation is depicted in the diagram above.

Men
The needs of the male user and driver of the existing rank were found to be far less complicated.

Where women worried about levels of privacy and efficiency in time, the main concern for the male users and drivers was physical comfort.

As seen in the diagram above, of paramount importance to men would be the incorporation of better resting and socialising space.

01. WHAT ARE STANDARD FACILITIES FOR TRANSPORT HUB ?



From analysing the Baragwanath Taxi Rank facilities, alongside some international examples of transports hubs, what emerged was a set of key facilities which run through them all, and aided in their safety and success. First and foremost, spaces of information and orientation were found to be of great importance. To the same degree, security presence and a streamline progression from one transport mode to the next, were also found integral.

Secondly, the obvious food outlets, public ablutions and resting space were all found indispensable as well. More recently, these basic amenities have extended to include banking facilities and telecommunication access as well.

Advertising Space still holds a certain degree of importance within transport hubs as well.

02. TO WHAT EXTENT DOES THE EXISTING MTN RANK MEET THESE ABOVE STANDARDS ?



I then went on a process of trying to measure the existing facilities at the MTN taxi rank, against the list of average standards which I had come up with. The outcome was shocking...

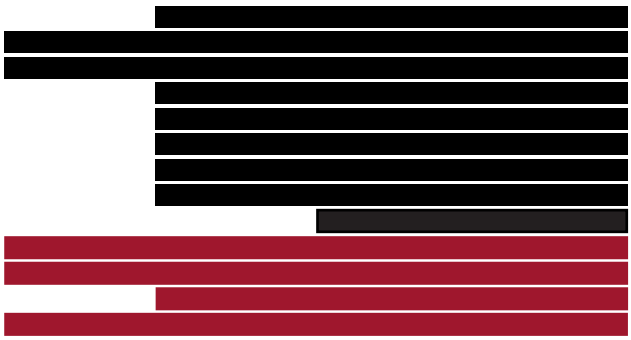
The existing MTN Taxi Rank fell well below the bar on almost every single one, placing greatest emphasis on advertising space and security presence, without trying to first accommodate the user successfully.

Spaces of information and orientation are currently almost nonexistent, making it very difficult for new users to engage with the site.

Very little retail space is catered for, and there is even less access to public ablutions, rest space and technology of any sort.

The design of the current rank thus proves to be unsustainable in a modern society.

02. TO WHAT EXTENT DOES THE EXISTING MTN RANK MEET THESE ABOVE STANDARDS ?



The final step in establishing a program lead me to layer the found female needs against the standard list.

This was done to discover what facilities had been excluded in the design of successful transport hubs, according to women.

The results were unanimous- the four main facilities women found lacking in existing transport hubs were education, health, overnight and public gathering facilities; The reason for these choices all aimed towards streamlining their daily route.

Interestingly, the incorporation of these facilities also speaks to a public/private distinction of space, which proved to be of utmost importance to women.

PROGRAMME ANALYSIS

In conclusion, what was established from the study was 2 fundamental factors:

01. The existing rank is severely under programmed and ill-equipped to manage the existing users' needs.

02. The female users' main interest lies in the streamlining of her erratic route.

The analysis also made me aware that the female user is often a very ambitious mother of two, or a struggling foreign prostitute, who wants to better her situation. As a result the request for education and skills based facilities for women en route, has been an overwhelming outcome of this study.

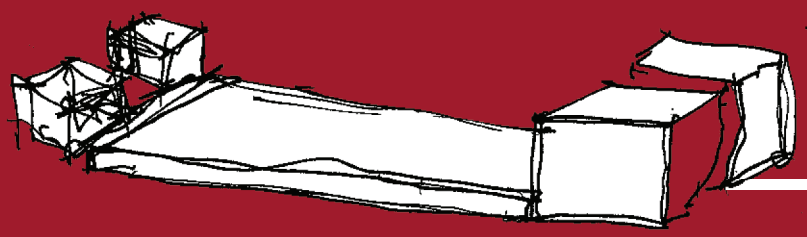
The study has also emphasised to me that most male users of the site are absolutely harmless. Most men just want to get through their days as comfortably as possible... and if they are afforded the opportunity to learn new skill or attend a public lecture, or soccer match, they would not pass up the opportunity.

As a result, the emphasis on education to instil greater change has been re-ignited; with both men and women willing to engage in conversation, the issue of gender inequality may finally perish in the taxi industry... all that is require is the appropriate venue.

NO	NAME	UNITS	AREA (sq m)
A.	**Basement (B1 and B2)**	**10**	**9380**
01.	**Parking**		
	Taxi Parking	80 bays	1000
	Taxi Park and Load/Wait	2	1700
	Resident Parking	180 bays	2250
02.	**Taxi Repair Workshop**		
	Mechanics Workshop	1	1750
	Mechanics Lecture Rooms	2	100
03.	**Storage**		
	Bicycle Storage	1	200
	Bike Repair	1	60
	Trader Storage	1	600
04.	**Ablutions**		
	Male Ablutions	1	60
	Female Ablutions	1	60
B.	**Ground Floor (Taxi Rank)**	**41**	**727**
01.	**Rentable Retail Space**		
	Small Rentable Stalls	5	15
	Medium Rentable Stalls	11	10
	Large Rentable Shops	5	20
	Formalised Restaurant	3	50
02.	**Ablutions**		
	Public Male Ablutions	1	15
	Public Female Ablutions	1	15
03.	**Offices**		
	Admin Office (Taxi & Other)	11	8
	Security Office Admin	1	90
	Security Hut	1	8
	Security Ablutions	1	6
	Bicycle hire Office	1	70
C.	**Taxi Rank Circulation**	**4**	**200**
01.	**Circulation**		
	Existing Fire Escapes	2	50
	New Circulation	2	50
D.	**Ground Floor (Building)**	**12**	**611**
01.	**Library**		
	Digital Lab	1	60
	Reading Nook	3	15
	Librarian Office	1	20
	Library	1	180
02.	**Public Information Centre**		
	Auditorium	1	160
	Auditorium Storage	1	20
	Discussion Room	1	30
	Public Information Desk	1	36
03.	**Ablutions**		
	Male Ablutions	1	30
	Female Ablutions	1	30

E.	**1st Floor – Skills and Education**	**27**	**768**
01.	**Skills Centre**		
	Auditorium	1	100
	Communal Class Room	3	30
	Skill Rooms (Cook,Sew,PC)	3	50
	Admin Office	2	30
	Office Kitchenette	1	8
	Storage	2	6
	Open Plan Gallery	1	60
	Female Ablutions	1	30
	Male Ablutions	1	30
	Atrium	1	80
02.	**Creshe**		
	Play Room	2	35
	Locker Room	1	10
	Toy Storage	1	6
	Gathering Pit	1	20
	Reception	1	6
	Welfare Office	1	6
	Storage	1	6
	Female Ablution	1	9
	Male Ablution	1	9
	Kitchenette	1	6
F.	**2nd Floor - Wellness**	**25**	**814**
01.	**Gym**		
	Aerobic Studio	1	70
	Zen Studio	2	50
	Spinning Studio	1	50
	Open Plan Gym	1	200
	Open Plan Wellness & Admin	1	100
	Female Change Rooms	1	100
	Café	1	60
	Reception	1	30
02.	**Clinic**		
	Reception/ Nurse Station	1	20
	Pharmacy	1	8
	Staff Room	1	20
	Consult Rooms	6	12
	Disabled Bathroom	1	8
	Storage	1	6
	Waste Storage	1	6
	Male Ablution	1	9
	Female Ablution	1	9
	Kitchenette	1	6

G.	3rd – 7th Floor – Residential	28	860
01.	**Living**		
	Female Hostel	3	60
	Double Room (Female)	3	20
	Single Room	5	10
	Double Room (Mixed)	7	20
02.	**Communal**		
	Communal Kitchen	1	35
	Pantry	1	6
	Storage	1	6
	Lounge	2	50
	Kitchenette	1	6
	Female Ablutions	1	100
	Female Visitor Ablution	1	9
	Male Visitor Ablution	1	9
	Atrium	1	160
H.	**Building Circulation**	**4**	**104**
01.	**Circulation**		
	Core	1	50
	Service Lift	1	18
	Fire Escape	2	18
	PRELIMINARY TOTALS	**151**	**13464**



DESIGN DEVELOPment

Theoretical Principles become Design Strategies

Having successfully generated a form and programme, which were primarily dictated to by the site and user, the remainder of the design looked at the appropriate detailing of the design in order to adequately meet the inner-city requirements of the female.

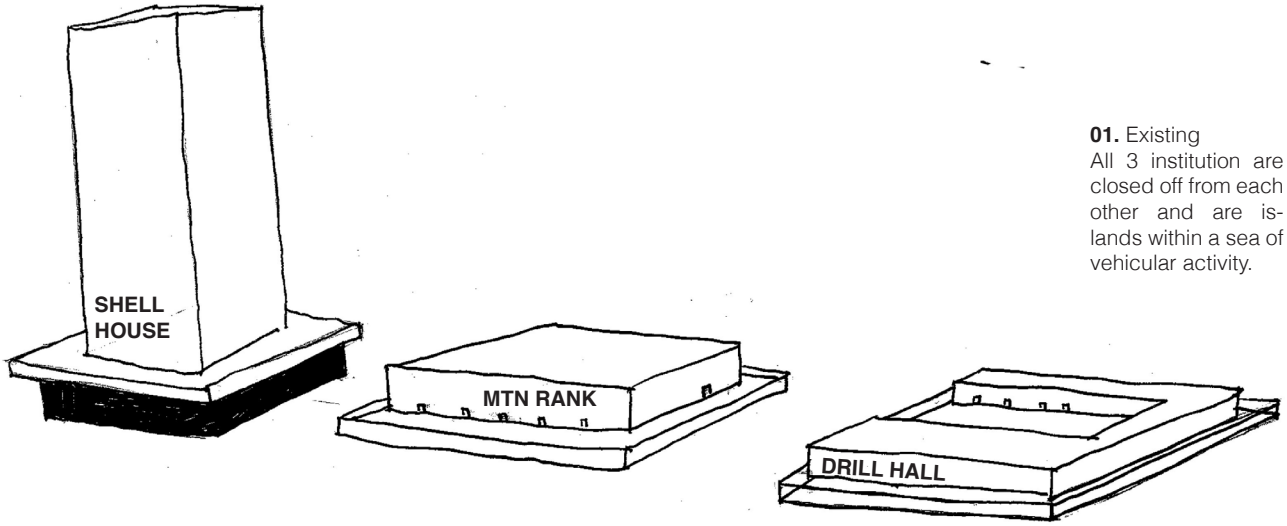
To achieve this, i did two important things:

01. I did a quick graphic outlining all the design informants affecting the design thus far

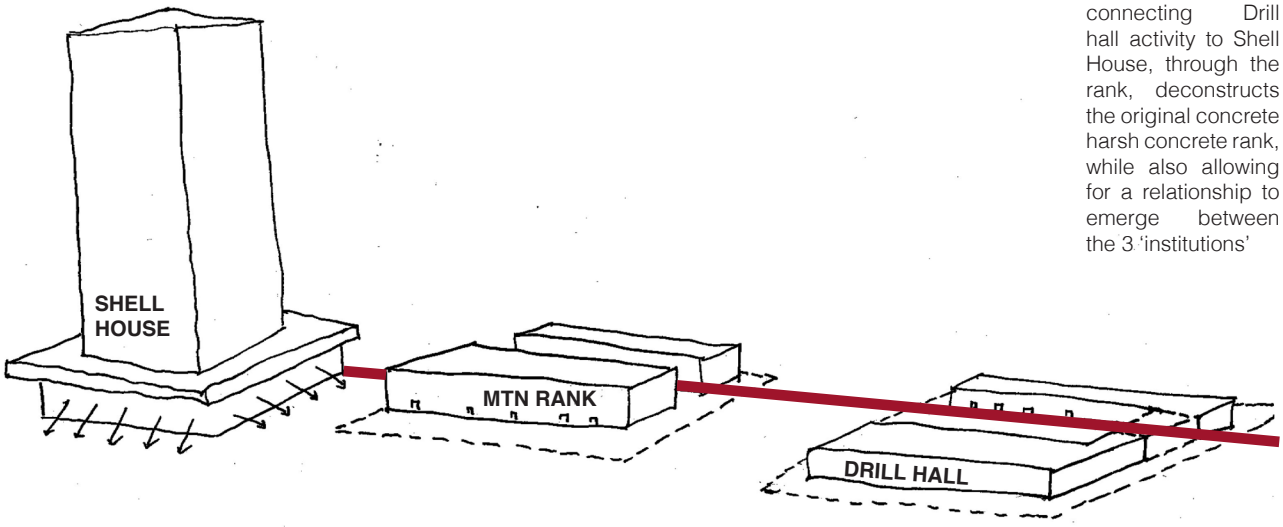
02. I reverted back to the essay and the 6 hard principles which had been established, in order to try and catapult the design forward, in the right direction.

Through the following dissection of the design, I wish to explain how I have reinterpreted these 6 hard principles and converted them into softer ones in order to apply them to the building more holistically.

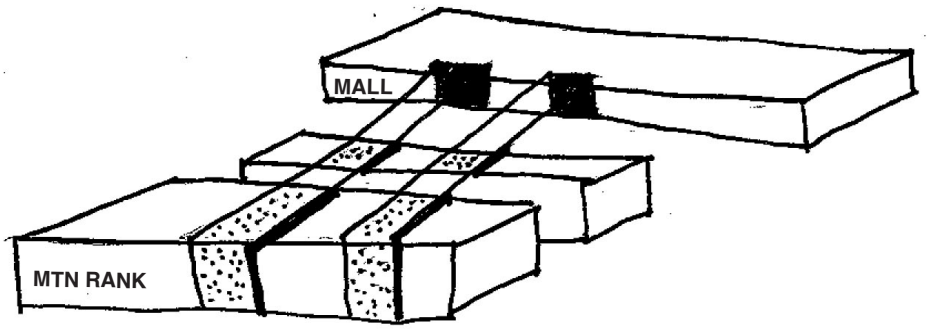
The outcome of this design development is the reinterpreted MTN Taxi Rank.



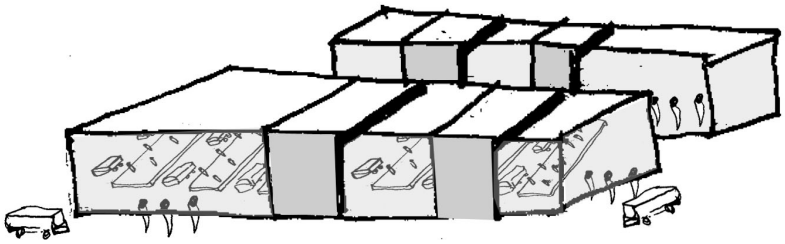
01. Existing
All 3 institution are closed off from each other and are islands within a sea of vehicular activity.



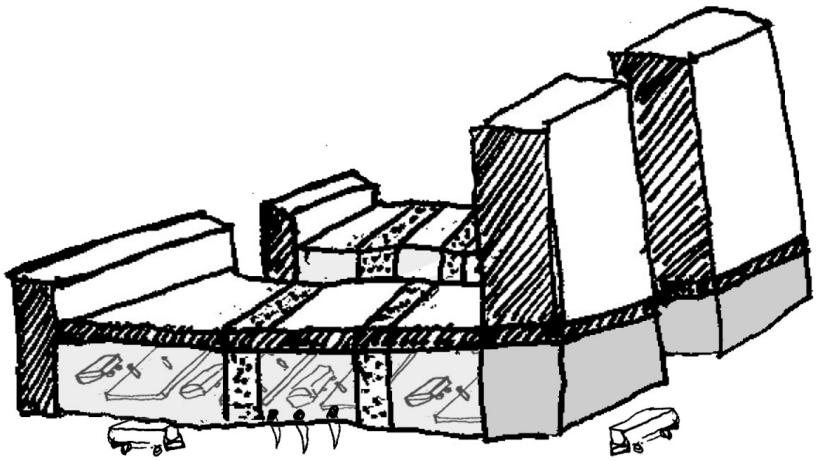
02. E-W Dissection (Route)
Having the route connecting Drill hall activity to Shell House, through the rank, deconstructs the original concrete harsh concrete rank, while also allowing for a relationship to emerge between the 3 'institutions'



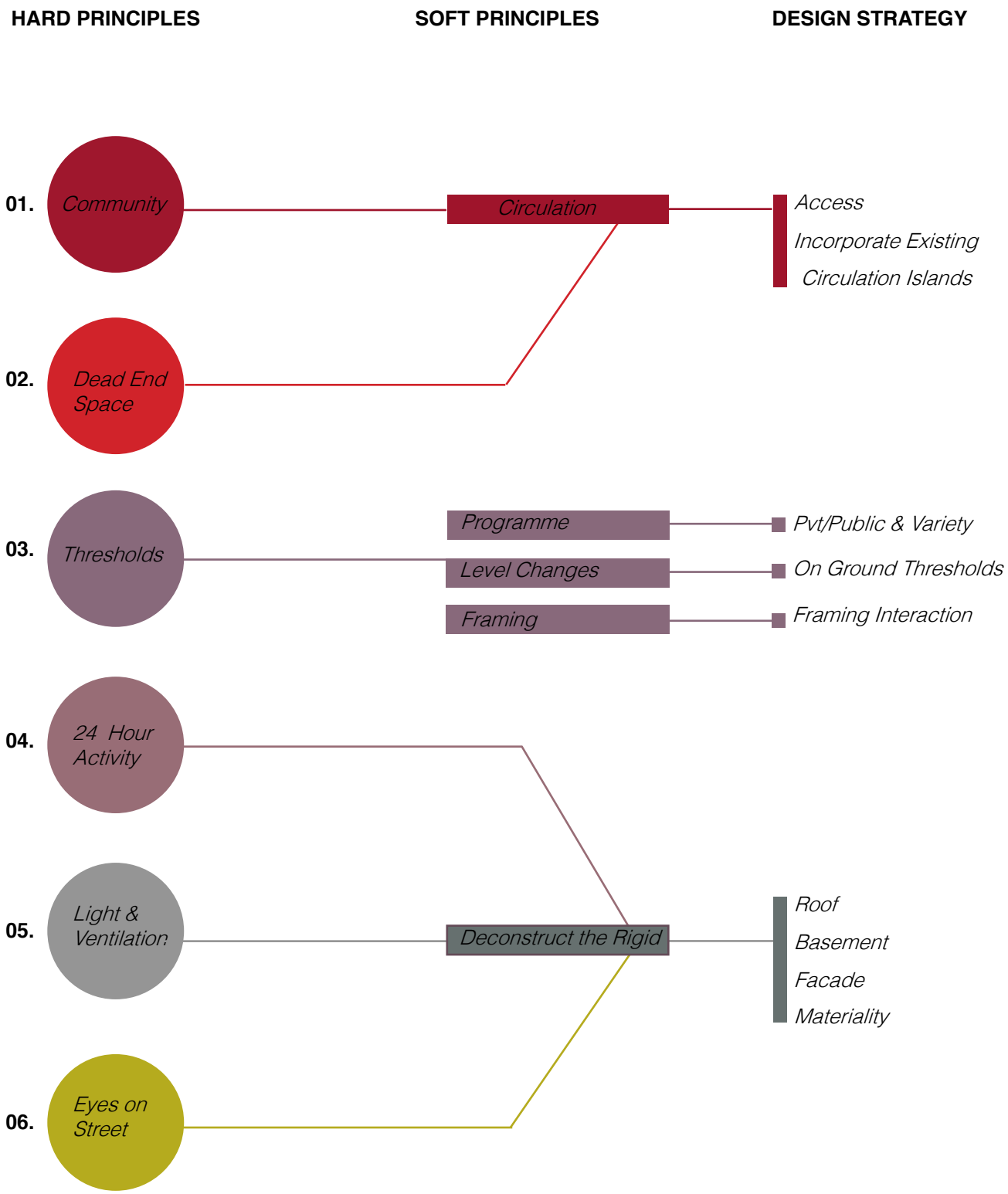
03. N-S Dissection (Circulation)
To further dissect the axis along which existing fire escapes ran, was extended into the rank. These axis translated into circulation space and islands, within the monolithic rank, dissecting the structure in a north-south direction as well.



04. Transparency
To further lighten the rank, the original structure is adjusted to allow more light and ventilation in. This is done through heightening the existing roof and making the original rank structure as light and transparent as possible.



05. Framing
In order to frame the now visible, vulnerable rank space, the building begins to form along the periphery of the site, celebrating the east-west movement.


HARD PRINCIPLES
SOFT PRINCIPLES
DESIGN STRATEGY
01.
Community
02.
Dead End Space
03.
Thresholds
04.
24 Hour Activity
05.
Light & Ventilation
06.
Eyes on Street
Circulation
Programme
Level Changes
Framing
Deconstruct the Rigid
Access
Incorporate Existing Circulation Islands
Pvt/Public & Variety
On Ground Thresholds
Framing Interaction
Roof
Basement
Facade
Materiality

SOFT PRINCiples

Theoretical Principles Become Design Strategies

In the beginning of this thesis I was able to identify 6 core principles which served as a base from which the design strategy was to grow.

The 6 core principles, expanded, gave me the opportunity to explore Soft Principles, of intuition and feeling, as can be seen in the adjacent diagram.

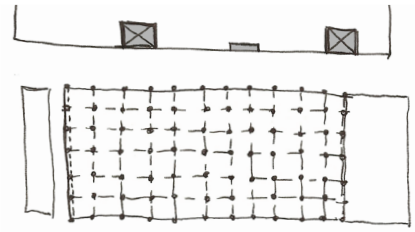
As a result, physical design strategies have been the outcome of the original list and speak about how (in particular) the following core elements of the design have been addressed accordingly.

01. Circulation
02. Programme
03. Level Changes
04. Framing Strategy
05. Deconstructing the Rigid

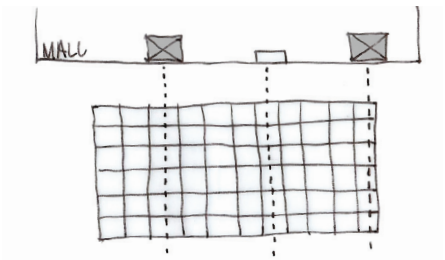
The result of the following study gives an insight as to why complex design decisions were made, and what elements of the 6 principles were extracted and reinterpreted, in order to inform these decisions.

INCORPORATING EXISTING CIRCULATION

01. Currently there are 2 existing fire escapes attached to the mall (north of the rank), which share basement space with the rank. They are constructed on the same 7m x 8m column grid.

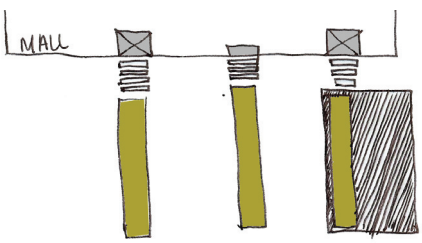


02. To maintain reminiscences of the existing, I have proposed incorporating the two fire escapes into the design, through extending the fire escape axes.

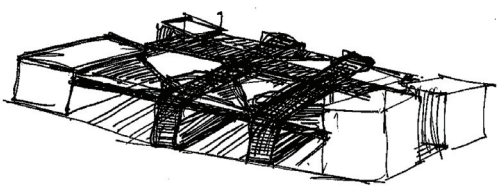




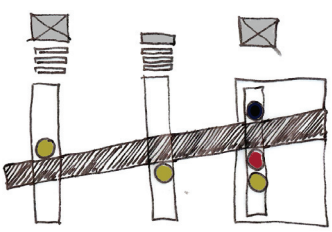
03. The result of the extension provides 3 axes along which circulation will run; 2 which run through the rank, and one which informs the placement of circulation within the proposed building on the eastern end. These extensions serve as an 'island' for human interaction, trade and circulation within the rank.



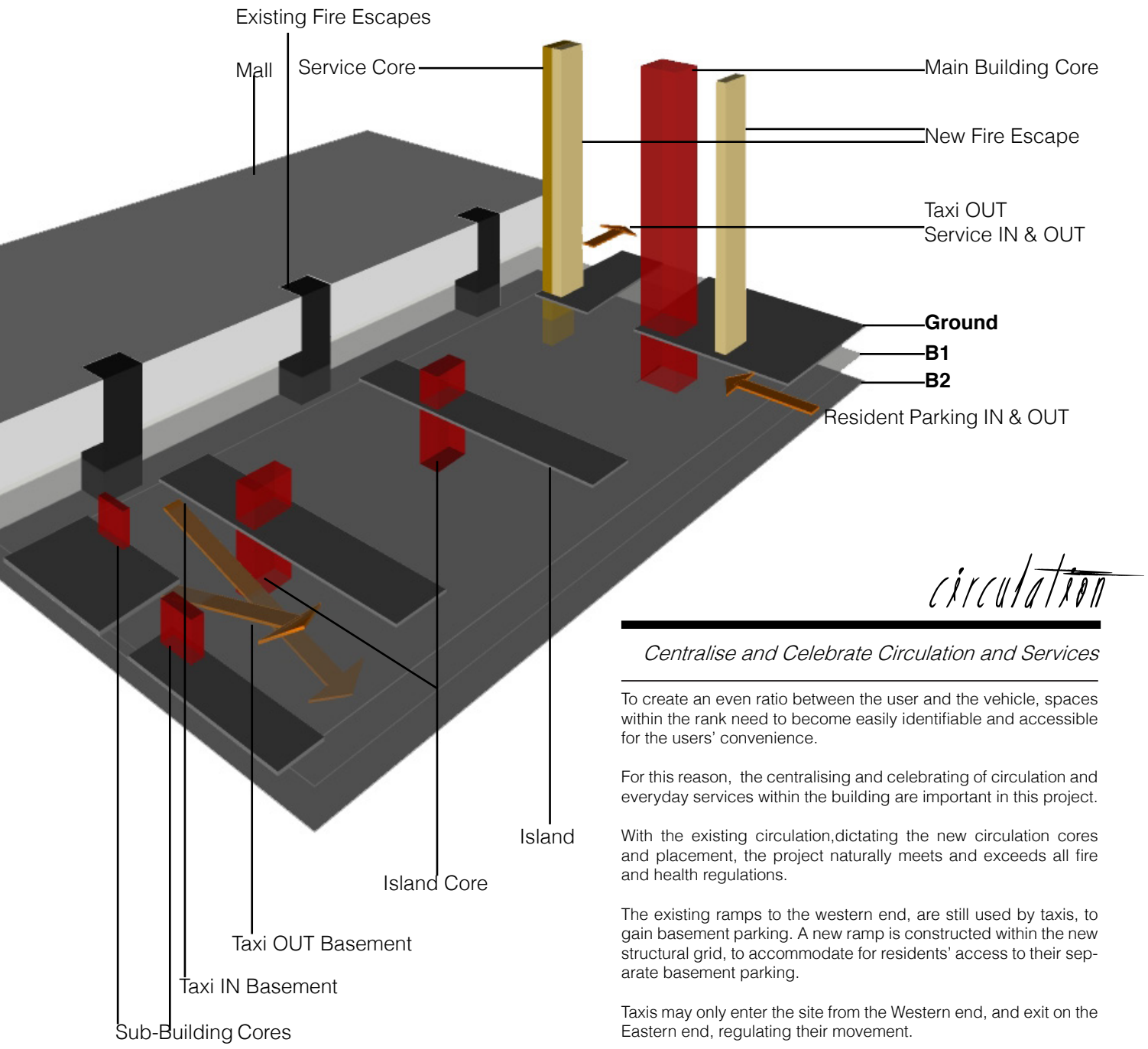
04. The axes within the rank may be easily identifiable through a distinction in material and height. The extended islands provide a space of rest and vertical movement for all users.



05. Further dissection of the rank, with the East-West Route, informs the placement of the remaining circulation along the grid



- Existing Fire Escapes
- New Fire Escapes
- Building Core
- Service Lift



circulation

Centralise and Celebrate Circulation and Services

To create an even ratio between the user and the vehicle, spaces within the rank need to become easily identifiable and accessible for the users' convenience.

For this reason, the centralising and celebrating of circulation and everyday services within the building are important in this project.

With the existing circulation,dictating the new circulation cores and placement, the project naturally meets and exceeds all fire and health regulations.

The existing ramps to the western end, are still used by taxis, to gain basement parking. A new ramp is constructed within the new structural grid, to accommodate for residents' access to their separate basement parking.

Taxis may only enter the site from the Western end, and exit on the Eastern end, regulating their movement.

The Service Core has access to all floors of the building, and the Service truck entry gains direct access to this core on ground level.

VERTICAL PROGRAMME



PVT

RESIDENTS

RESIDENTS

RESIDENTS

RESIDENTS

WELLNESS CENTRE

SKILLS CENTRE

PUBLIC INFORMATION, RETAIL, WAITING

PUBLIC/ COMMUNAL/INFO

HORIZONTAL PROGRAMME

PVT PUBLIC/ COMMUNAL/INFO PVT



PVT ROOM - DORM ROOMS

PVT ROOM - DORM ROOMS

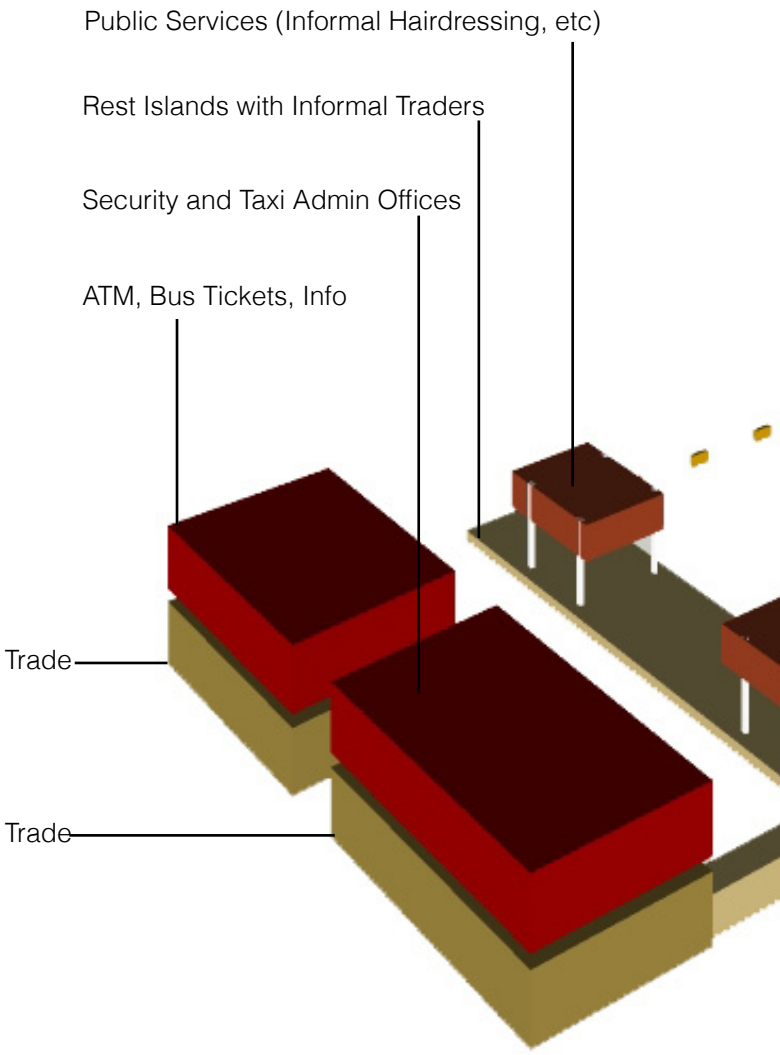
PVT ROOM - DORM ROOMS

PVT ROOM - DORM ROOMS

MEDICAL/SANCTUARY - GYM

OFFICE/ADMIN - PUBLIC SKILL

LIBRARY - PUBLIC INFO

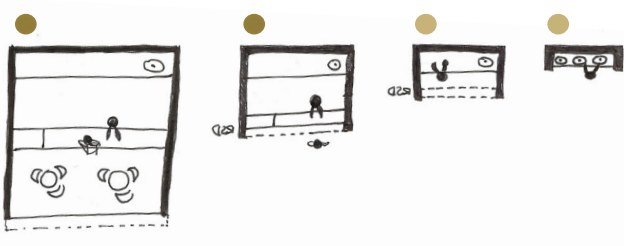


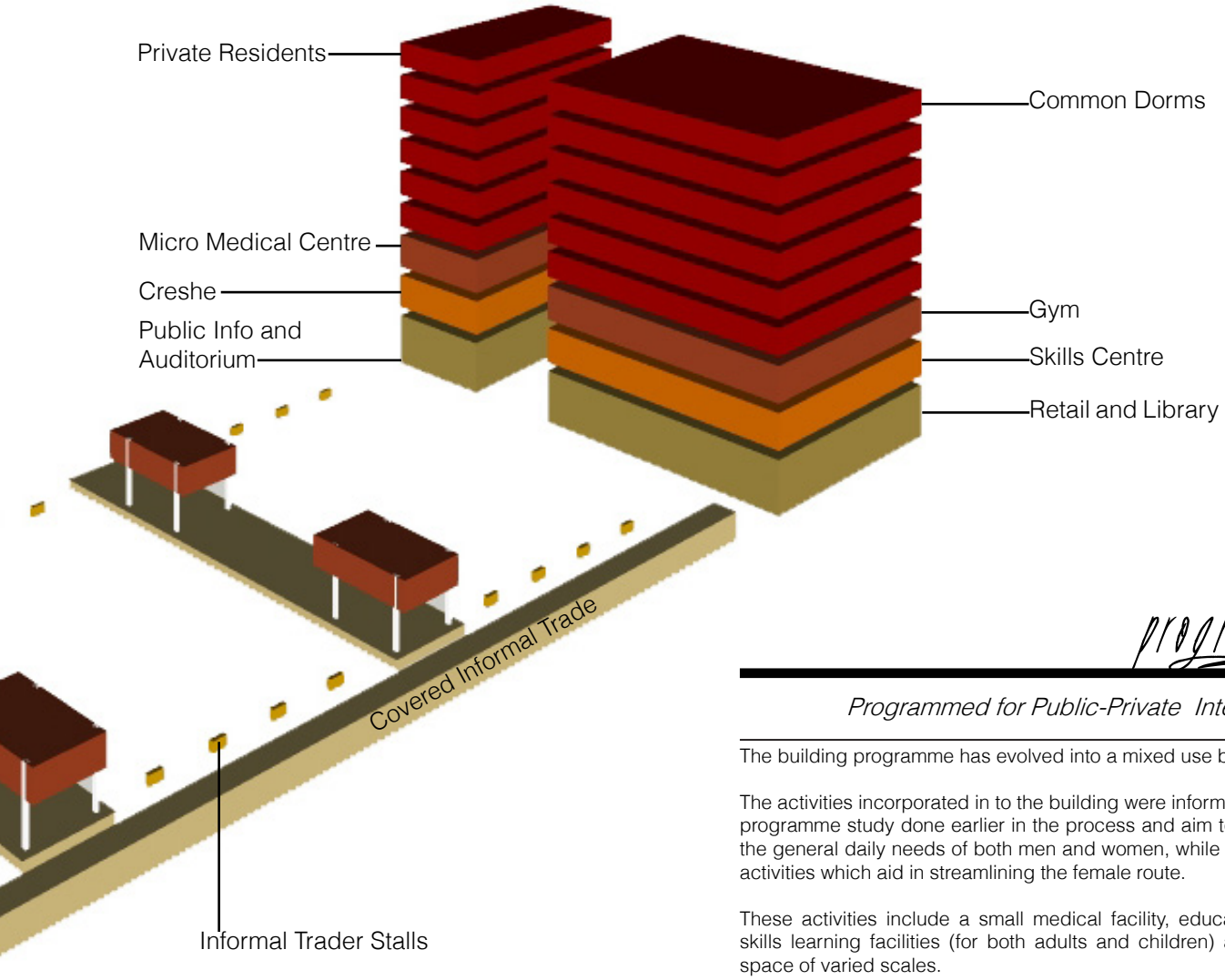
VARYING SCALES OF PROGRAMME

In order to accommodate the diversity of transport hub users, it was important to accommodate the varying needs of users, according to their time constraints and income brackets.

A successful way to incorporate as many users as possible was through varying the scale of the food stalls and retail hubs.

As a result, the programme caters to all income groups. Low income, informal traders may gain access to public taps, while full restaurants cater to the more elaborate traveller, with an extra hour to kill.





programme

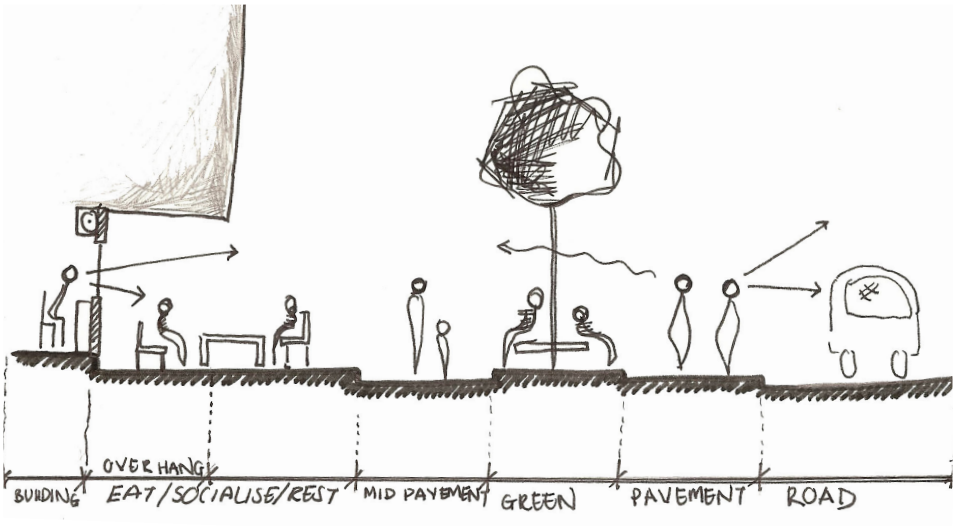
Programmed for Public-Private Interaction

The building programme has evolved into a mixed use building.

The activities incorporated in to the building were informed by the programme study done earlier in the process and aim to cater to the general daily needs of both men and women, while providing activities which aid in streamlining the female route.

These activities include a small medical facility, education and skills learning facilities (for both adults and children) and retail space of varied scales.

The programme dictates a strong relationship between the public and the private realm, allowing the public realm to feed off the surveillance provided by the private realms, on several levels.

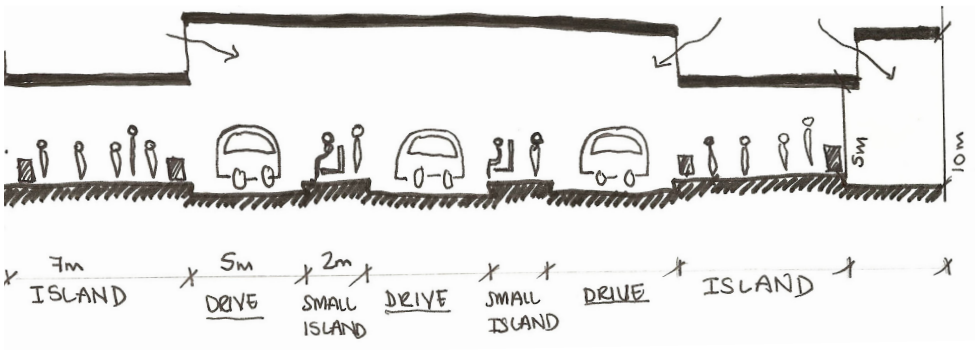


01. ROAD - BUILDING RELATIONSHIP

What was found was that many city streets do not adequately cater to the woman pushing her pram along a side-walk. In addition, there were found to be very few resting spaces along pedestrian routes in the city.

As a response, the layered pavement looks at creating a gradual buffer between the bustling noisy road which is most public, through to meeting the actual building which becomes a quieter, more interactive space.

In addition, a planted raised surface, between road and building, allows for a mother to pull off under some shade and feed her baby; This planted surface also creates a visual buffer between the building and the road.



02. BUILDING - RANK RELATIONSHIP

The distinction between the vehicle and the human is severely underplayed in the existing rank, due to the dominance the taxis have in the space. As a result, a person within the rank is never fully at ease, due to the erratic taxi behaviour.

In order to relieve some of the users' tension, spaces need to be carved out, for the users, in order to honour them within the rank.

To achieve this, head heights of pedestrian spaces should be lowered to a more human scale.

In addition, users should be elevated off the ground level, to avoid feeling intimated by vehicles, putting them at eye-level with taxis.

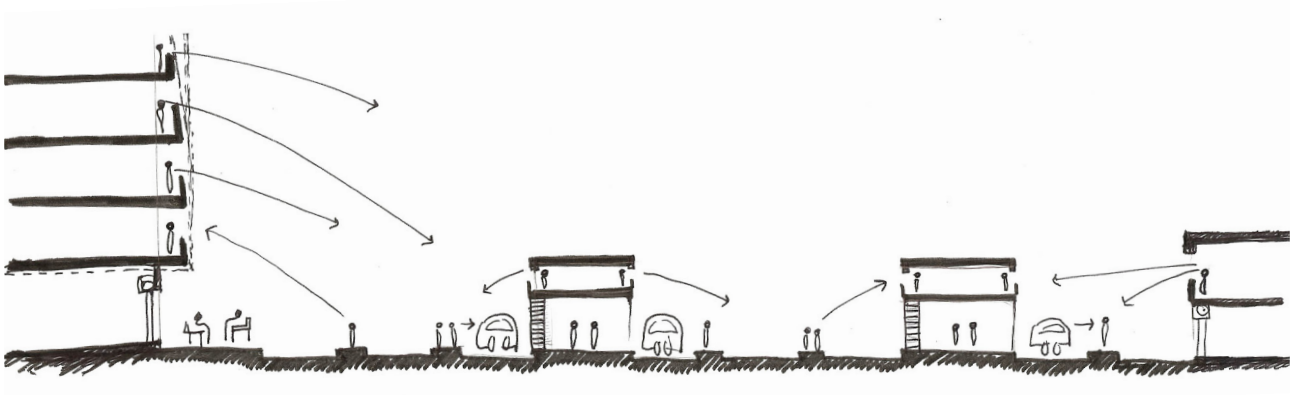
levels

On Ground Thresholds

The ground level relationship is an imperative one, considering that this project aims to achieve a neutral ground plain, for all its users.

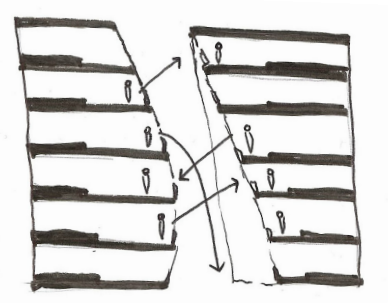
As a result, series of layering and level changes have proven to soften harsh, existing relationships in subtle yet effective ways, easily configuring multiple layers of privacy, within the public realm.

This strategy has also proven effective in particularly drawing female users into the space, instilling in them a feeling of empathy and safety.



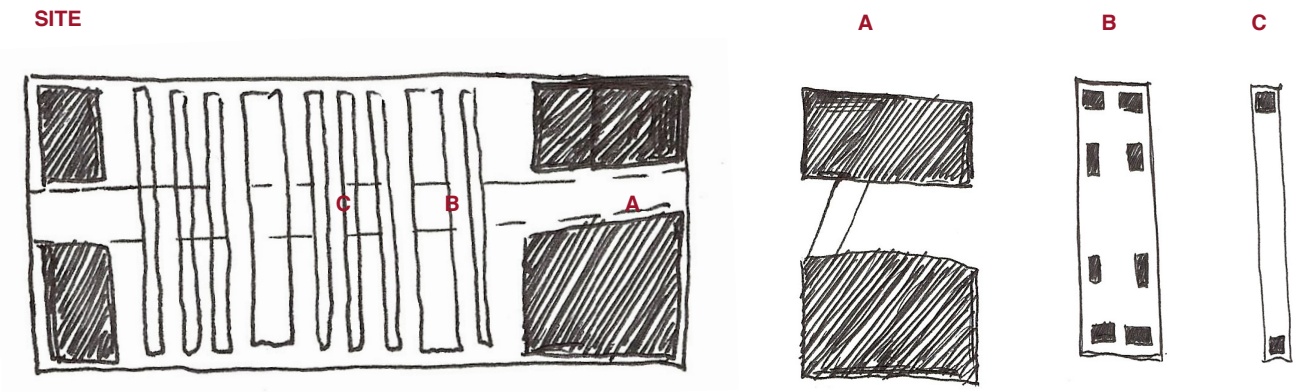
01. FRAMING INTERACTIONS IN THE RANK

The above section looks at how spurts of built form, in and around the taxi rank, aim to increase levels of visibility and interaction within the rank.



02. FRAMING INTERACTIONS IN THE BUILDING

The adjacent cross section indicates how this concept of framing interaction may be found within the building, between floors, as well.



03. FRAMING CONCEPT CARRIED THROUGH

The concept of framing interactive space was then extended through to the rest of the rank, informing the design of the islands within the rank as well.

In all sceneries, the main interactive space is framed by a more solid, higher element on either side, allowing for natural surveillance and a loose definition of space.

framing

Framed Interaction

According to Oscar Newman in his study of 'defensible space', an integral aspect in community safety is the ability to naturally surveil (Newman, 1973).

Through framing the most public aspects of the building, the most vulnerable space is subsequently always under surveillance, providing a passive safety mechanism to both user and observer.

Framing may be seen on a variety of levels within the building.


Park Central
01.


Park Central Taxi Term
02.


Park Central
03.


Park Central
04.


Park Central
05.


ark Central
11.


Park Central
12.


Park Central Taxi Terr
13.


ntral
Park C
14.


Park Central
15.


Park Central Taxi Terr
21.


Park Central Taxi Ter
22.


Park Central
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Park Central
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ntral
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34.


Park Central Taxi Terr
35.

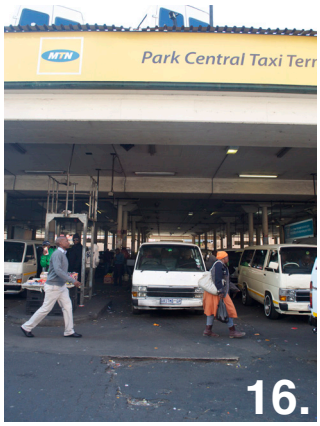




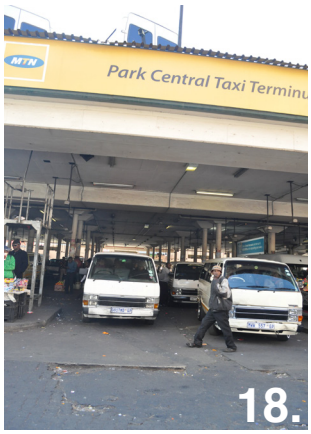
















deconstructing the rank

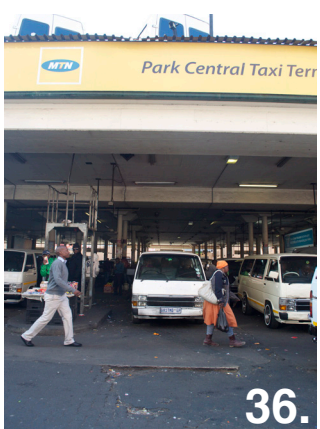




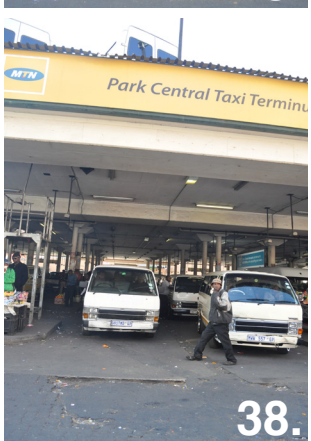








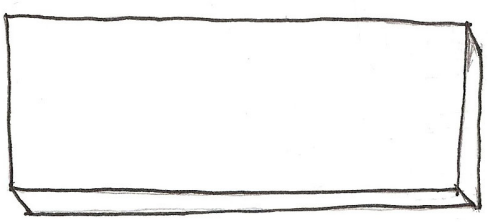




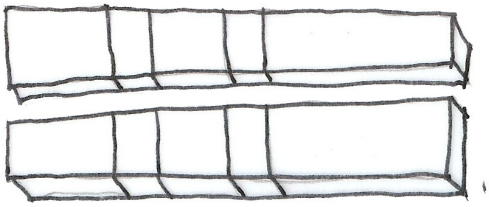




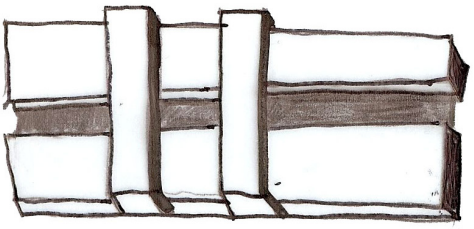
01. ROOF DECONSTRUCTION



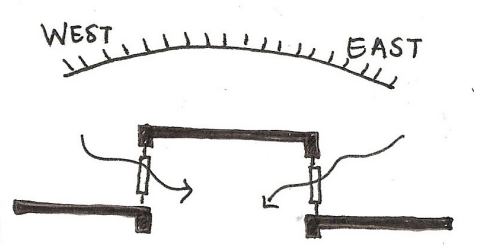
Original Rank Roof: Solid Concrete



Defining 2 Axis (Route And Circulation)

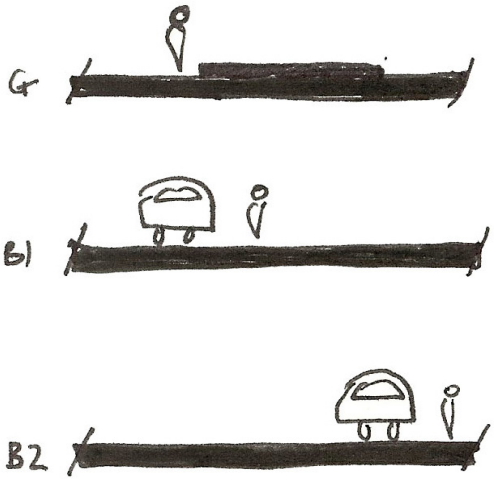


Axis Celebrated With Level Change



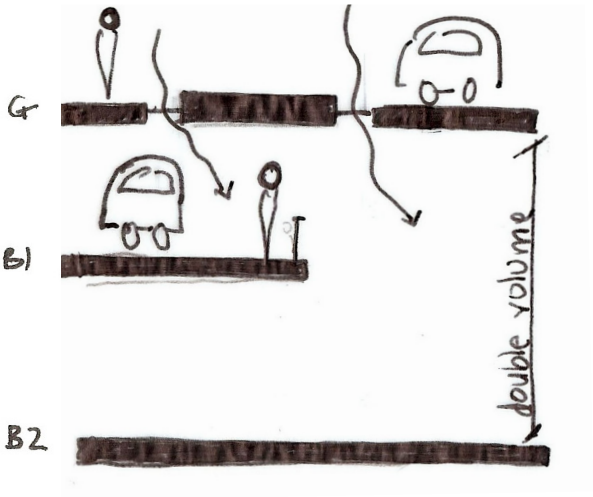
Section Showing Effect of Level Change in Roof

02. BASEMENT DECONSTRUCTION



Original Basement:

The original basement is dark and unsafe. The structure is a solid concrete slab and column system.

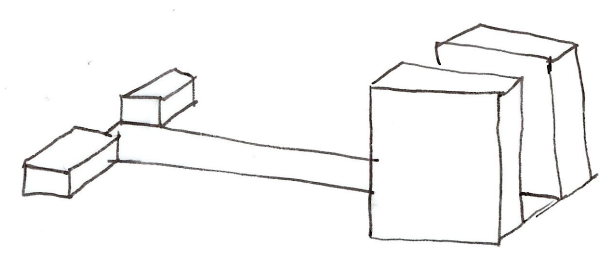


Deconstructed Basement:

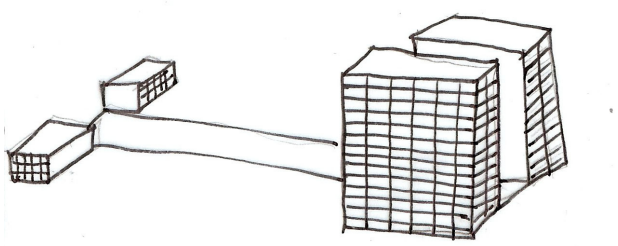
The ground floor is penetrated along route, in intervals, allowing for an infiltration of light and fresh air into the basement.

An increase in volume, in parts of the basement, allows for better light and air infiltration, to the lower basement floor, as well.

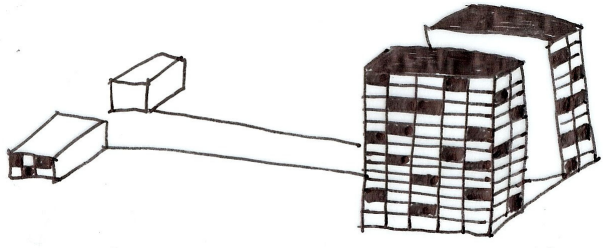
03. FACADE DECONSTRUCTION



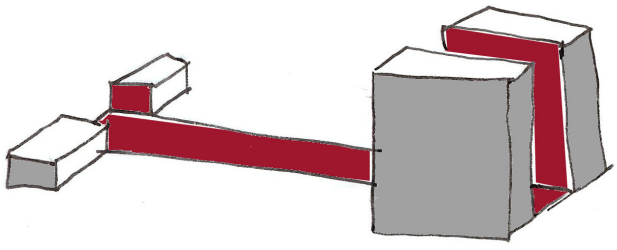
The Concept for a Solid Facade, to frame the rank.



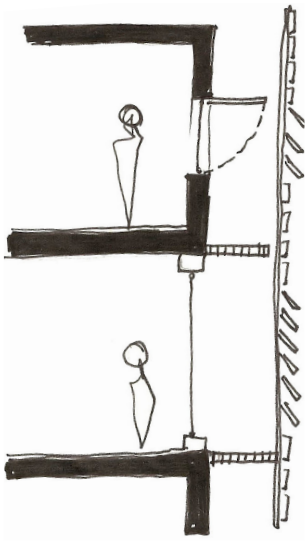
Keeping the facade solid , while adding in slits for light and ventilation along a regulated grid.



Varying the inlets, creating both exterior and interior interest, while maintaining a solid exterior feel.



Enhancing idea of the 'Solid Exterior - Soft Interior' through choice of Material. Warm Materials are used on the inner and more solid materials are used along the exterior



Sketch detail of how the facade would infiltrate light

deconstruction

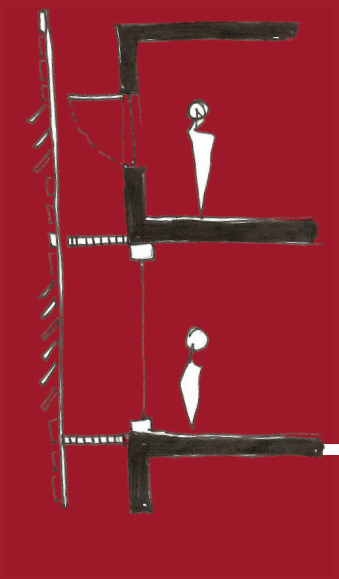
A Break Down

The process of deconstruction has played an integral role in the project from theory to end as the entire argument has been centred around adjusting existing city space and mind to become more inclusive.

The argument stated that in order to achieve this, the existing power play in both space and mind need be deconstructed; As a result, through choosing the existing MTN Taxi rank as a base point for the design, it was only natural that the existing structure (which epitomises the harsh 'masculine' institution) need be deconstructed and better adapted as well.

The result of the process has been a better infiltration of light and air, as well as greater levels of surveillance at a more human scale.

This was achieved mainly through the deconstruction of the roof, the basement and the facade.



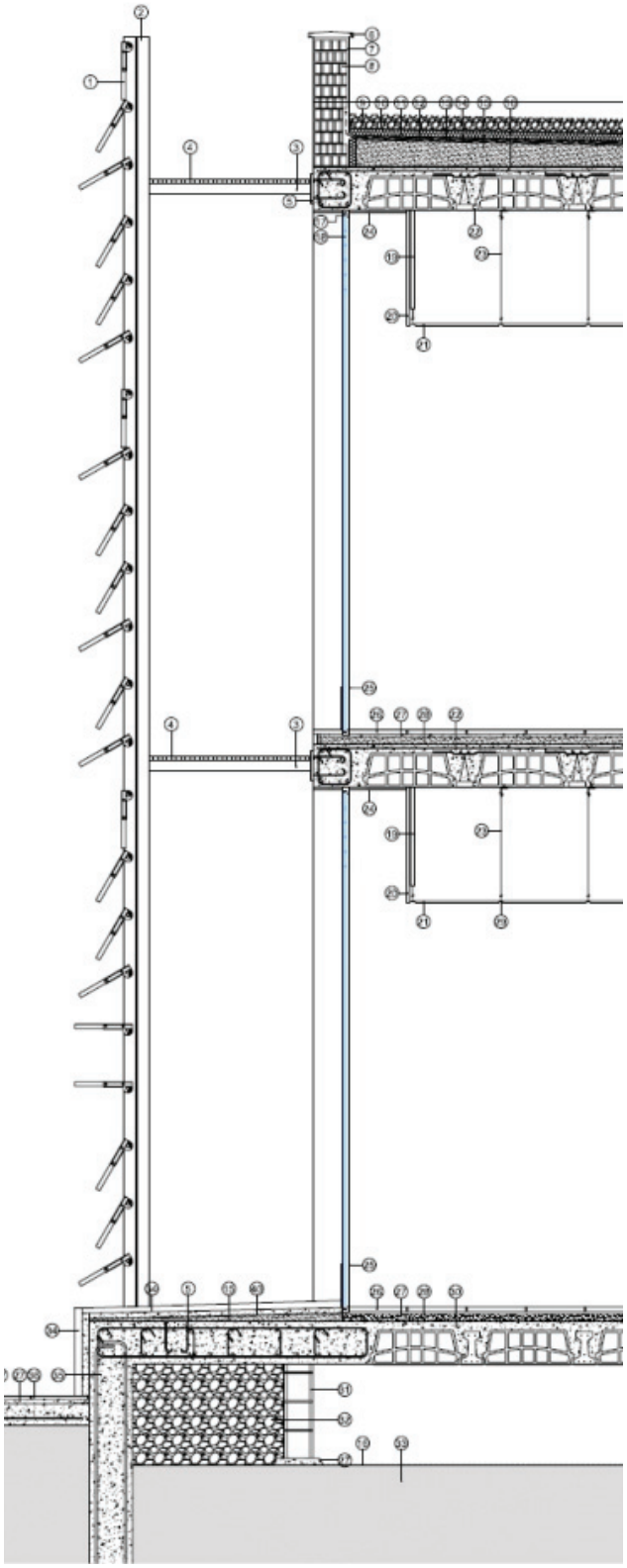
TECHnical

A Detailed Facade

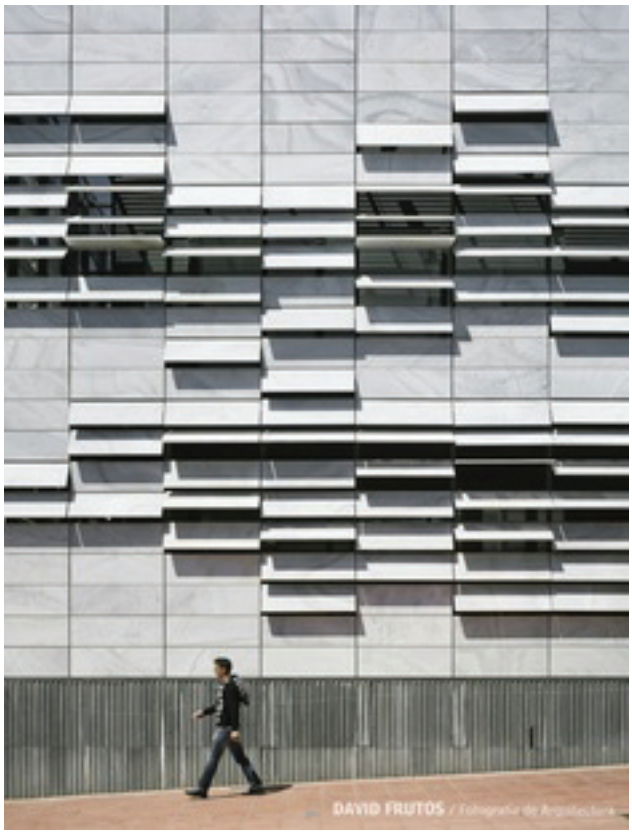
Taking the issue of deconstruction to a technical level, I have chosen to highlight how the building facade works in adequately deconstructing a potentially rigid facade.

The aim of this analysis is to show how the deconstructed facade better caters to ventilation and light quality within the building (and enhances the users participation in the building), while simultaneously serving as a means of passive surveillance to the exterior.

I have analysed the building through looking at precedent of a similar facade system, used in the The North Mediterranean Health Centre.

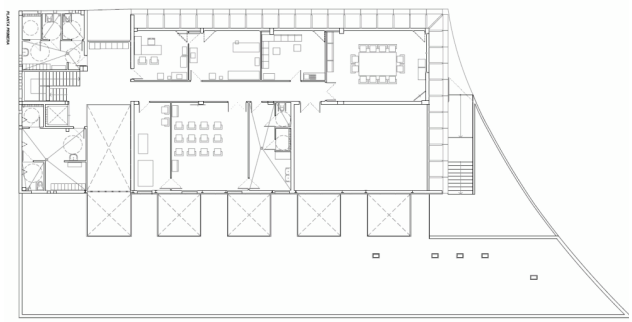


Detail of NMHC, (*Ferror Architects, 2010)*





Photos NMHC, *(David Frutos Photography, 2010)*



Plan of NMHC, *(Ferror Architects, 2010)*

Analysing the Existing
The North Mediterranean Health Centre is situated in Almeria, Spain and was designed in 2010 by Ferrer Arquitecturos. The building's core function is a Medical Centre.

Due to the warm climatic nature of Almeria, and the private nature of the building function, climatic sustainability, as well as adequate privacy thresholds were of great importance to the architectural team, throughout the design ('North Mediterranean Health Centre', Arch Daily).

As a result, though dense and solid in appearance, from the exterior, the entire building is structured around multiple internal courtyards. The series of these courtyards are able to provide ventilation and light to all rooms within the building, without the inclusion of many visible and conventional openings, on the exterior.

The building's aesthetic is contemporary and robust; The facade is based on a 'perforated ceramic prism', which is supported by a heavy base block, clad in prefabricated concrete slats. ('North Mediterranean Health Centre', Arch Daily).

01. Facade
The facade is a double skin solution, constructed of varied marble slats. This allows for the natural infiltration of light and air into the building, in a diffused and indirect way.

From the exterior, the facade is dappled with variation amidst the rigidity, while on the inside, the facade is able to create a light and breezy atmosphere, which ultimately reduces the building's energy consumption and meets the necessary sustainability criteria ('North Mediterranean Health Centre', Arch Daily).

02. Structure
Structurally the facade consists of a series of regular, adjustable concrete panels which are supported by a steel framework. The framework consisting of 150 mm x 100 mm hollow steel tubes.

Most of the panels on the building are fixed to the framework; The only adjustable panels are situated in front of the openings on the inner skin. Louvres are electronically adjustable from the interior of the building, and are manoeuvred according to needs of users.

These panels are bolted to the exterior of the steel tubes to ensure a flush facade finish; Each marble slat is 1000 mm in width by 300 mm in height and as a result, the steel framework sits on the same 1000 mm grid. The steel frames are then cross braced and bolted vertically into the column grid, using steel i-beams.

03. Environment and Maintenance.
Having a double skin (with double glazing and double skinned brickwork used on the interior), the building is well insulated. In addition, the exterior skin of the building is offset approximately 900 mm from the interior structure, so despite the horizontal louvres on all facades (for uniformity), direct light from the East and West is shaded because of this indent.

The gap between skins also holds a metal grating walkway on each floor. The walkway was designed for maintenance, making the window cleaning and louvre-upkeep easy and efficient.

Reinterpreting the Precedent
The most significant difference between the precedent the taxi rank's facade detail has been the choice of material and base structure used.

01. Facade
For the MTN taxi rank, I propose the use of concrete slats instead of marble. Not only is marble more expensive than concrete in South Africa, but the material would not be appropriate within the existing CBD setting; Transport interchanges require the use of very durable materials, and concrete is one of the most durable.

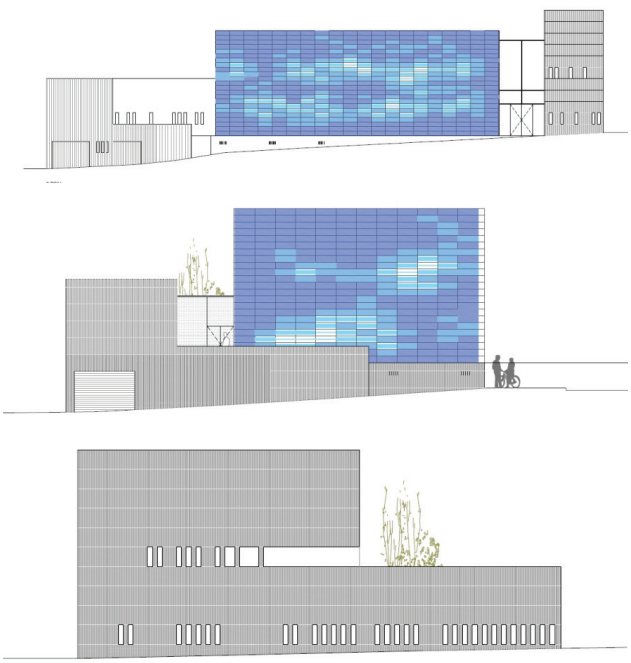
02. Structure
The base of the Ferror design is a semi-solid concrete structure, which aids in the support of the facade.

Due to the interactive ground level, of the taxi rank design, however, a solid ground floor will not be appropriate; And thus instead of a solid facade on ground level, I propose a very permeable / transparent one.

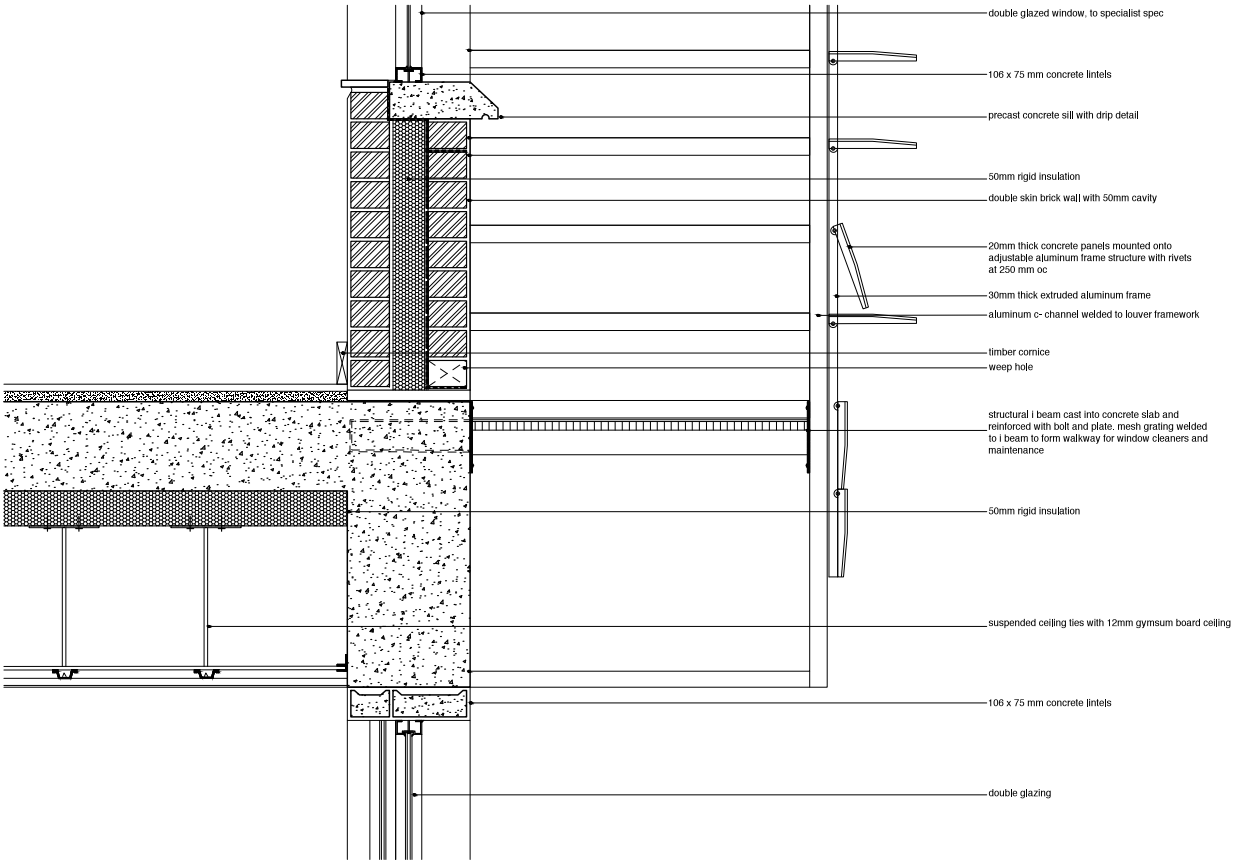
The structural implications of this decision places heavy emphasis on the lateral support structure connecting the skin to the column grid. As a result, the existing grid need be reinforced, to bear the additional load. The following design detail explains how this was done.

FACADE Study

North Mediterranean Health Centre (NMHC))

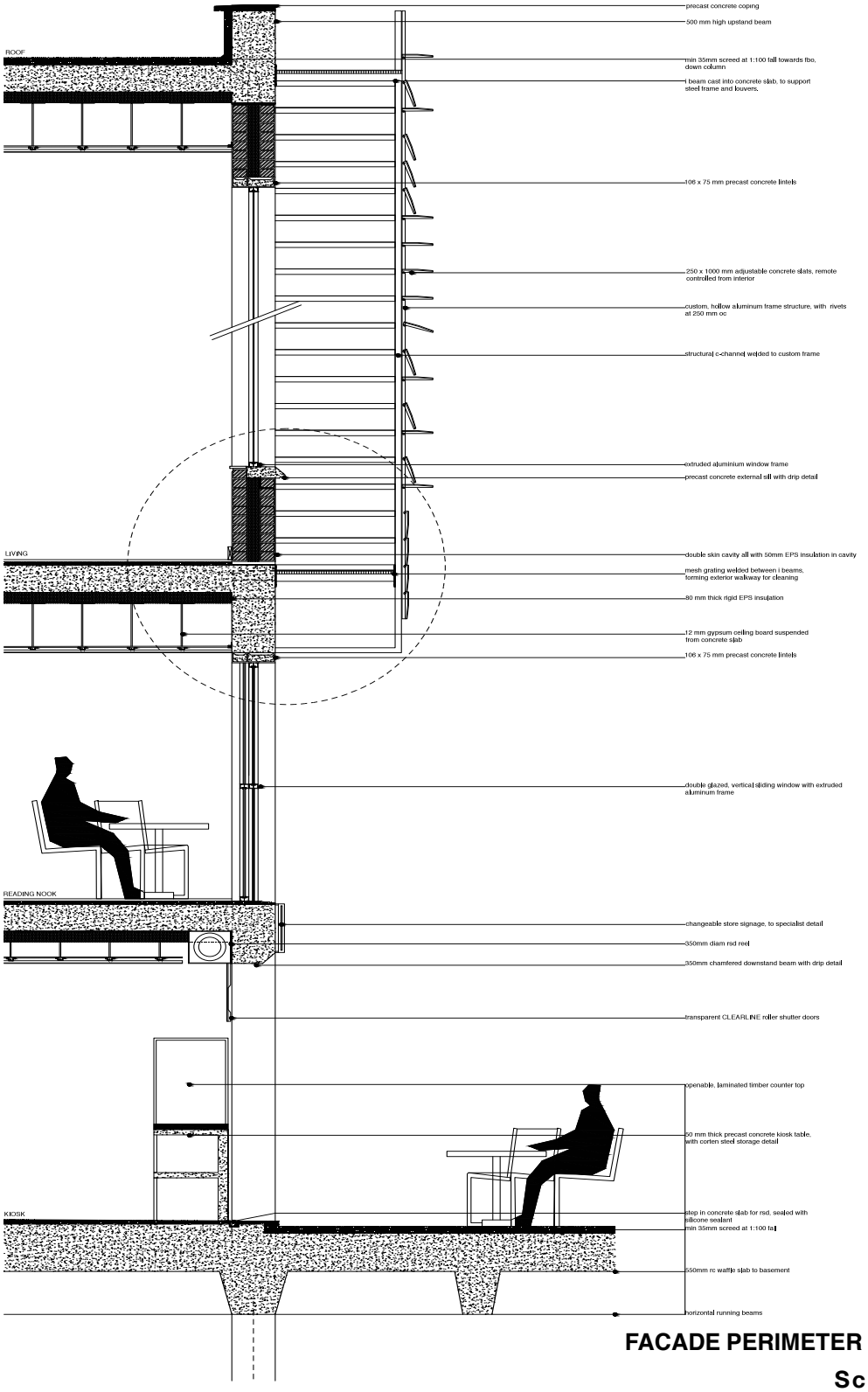


Elevations of NMHC, *(Ferror Architects, 2010)*



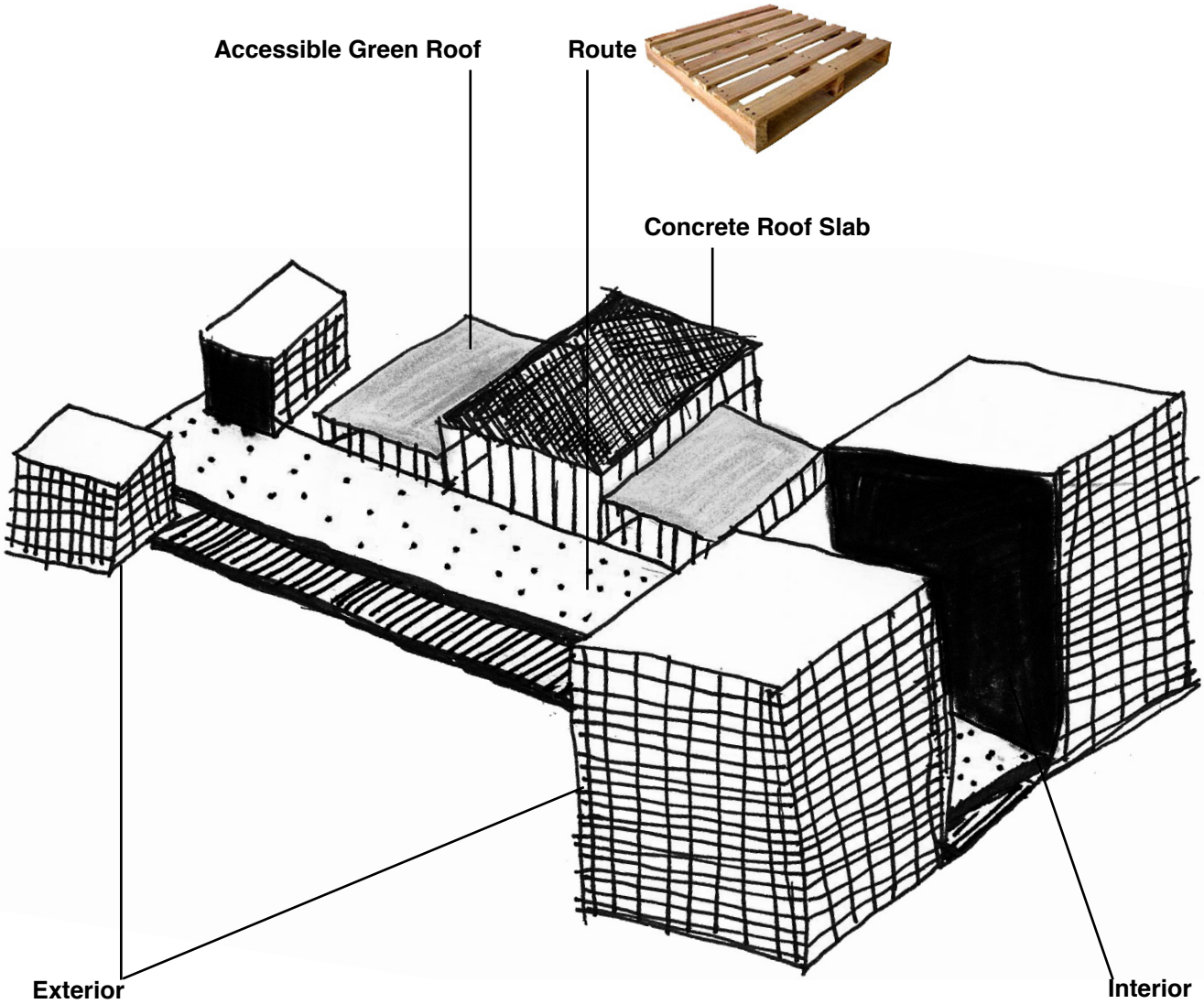
FACADE DETAIL

Scale 1:10



FACADE PERIMETER SECTION

Scale 1:20

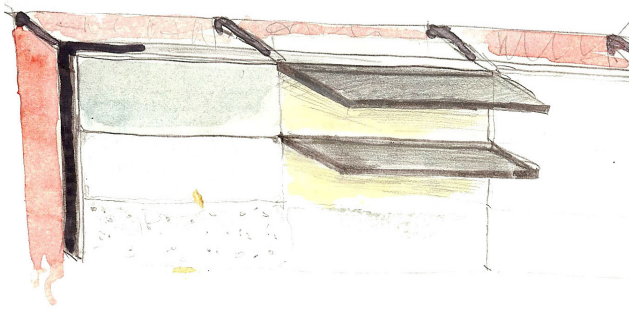


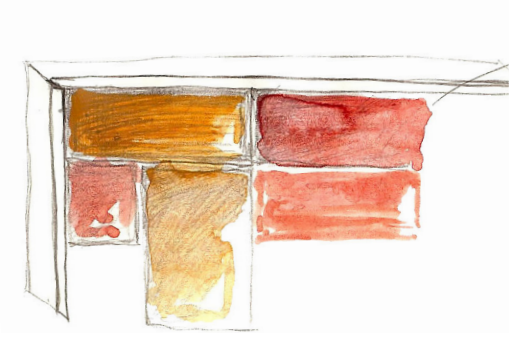
Brickwork

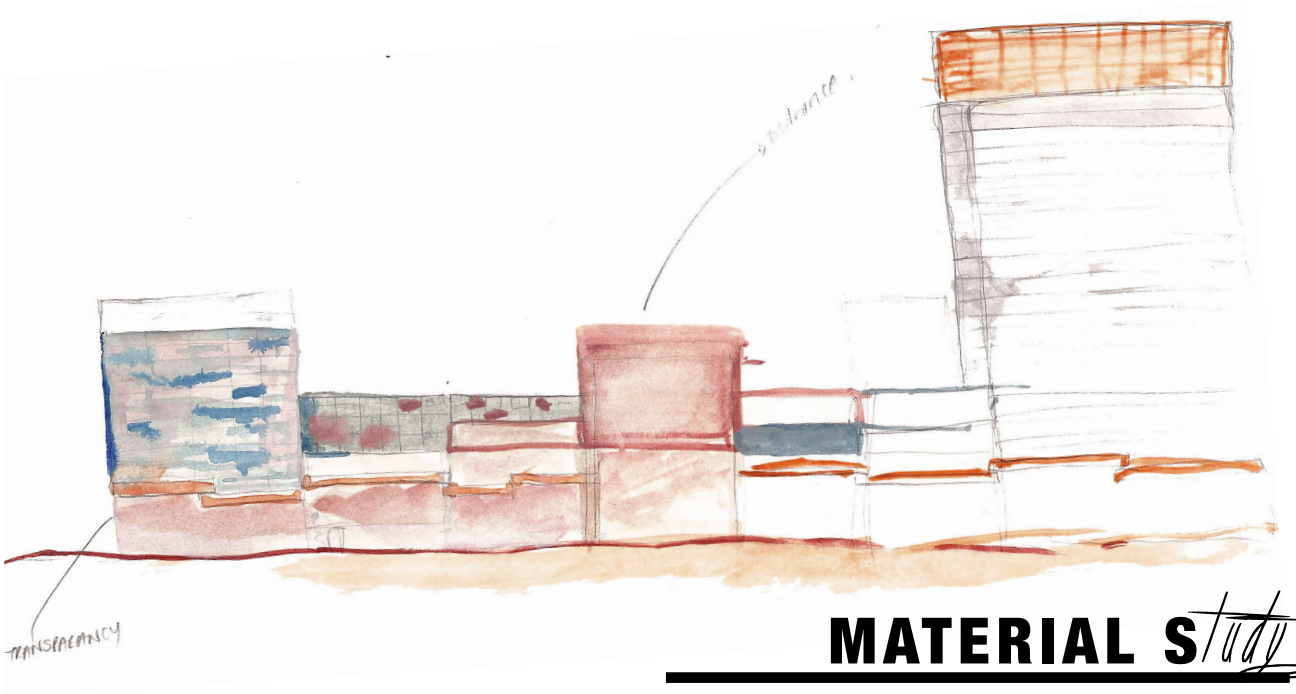
Concrete Cladding

Corten Steel

Brickwork







MATERIAL Study

A Study in the Choice of Materials

The choice of materials have been integral in the design process, to show the gradual progression from exterior space to interior space.

As a result, the most external buildings are clad in concrete cladding, as detailed in the facade study.

As the users further engage with the building and rank they begin to see the warmer materials along the route and within the interiors of the buildings.

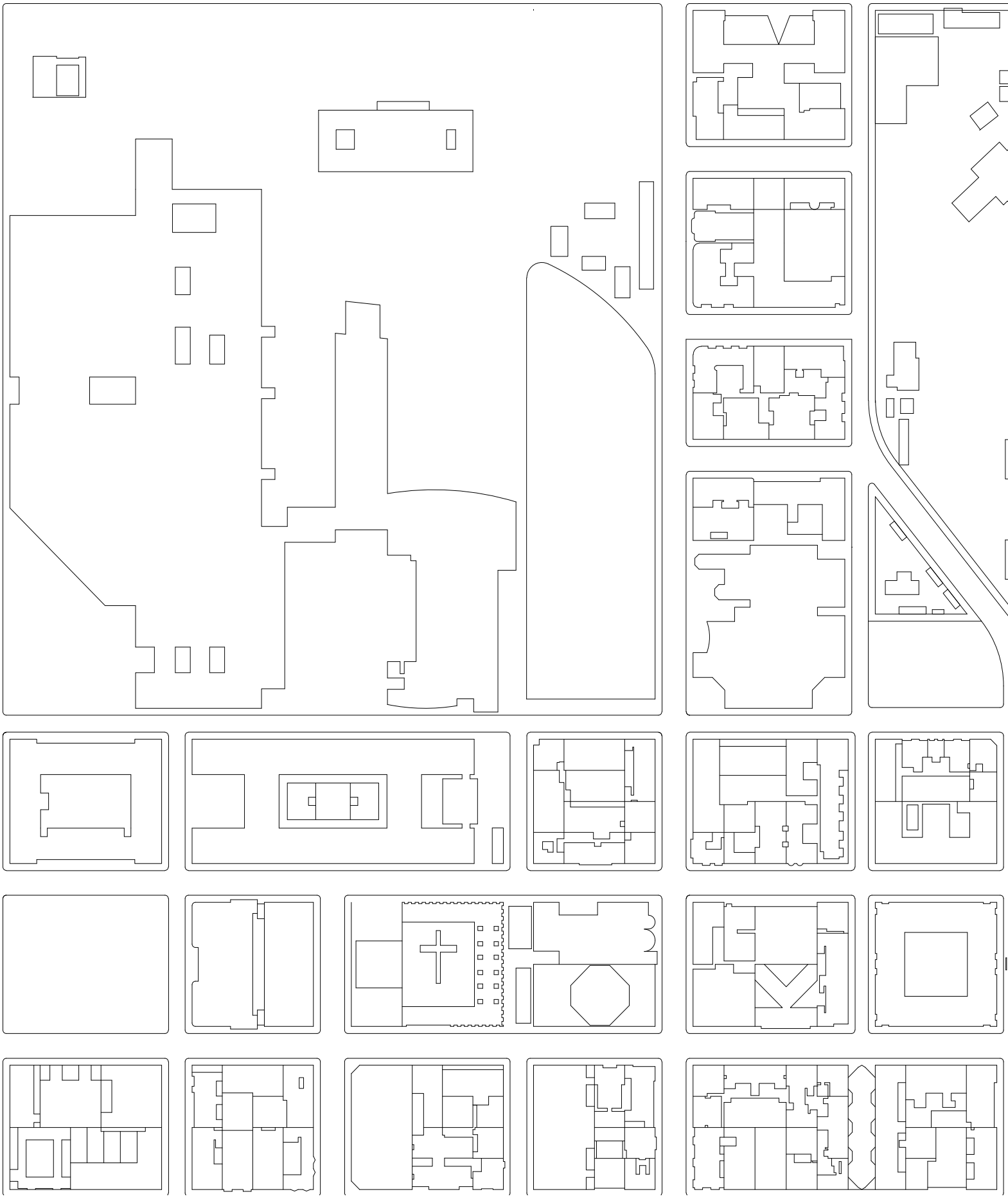
The natural differentiations in colour, of these materials, have also played an integral role in how they have been applied to the building; Cool concrete grey is kept to the exterior, while warm brick work and corton steel are used in the interior spaces. The interior of this building will also contain elements of timber cladding as well.

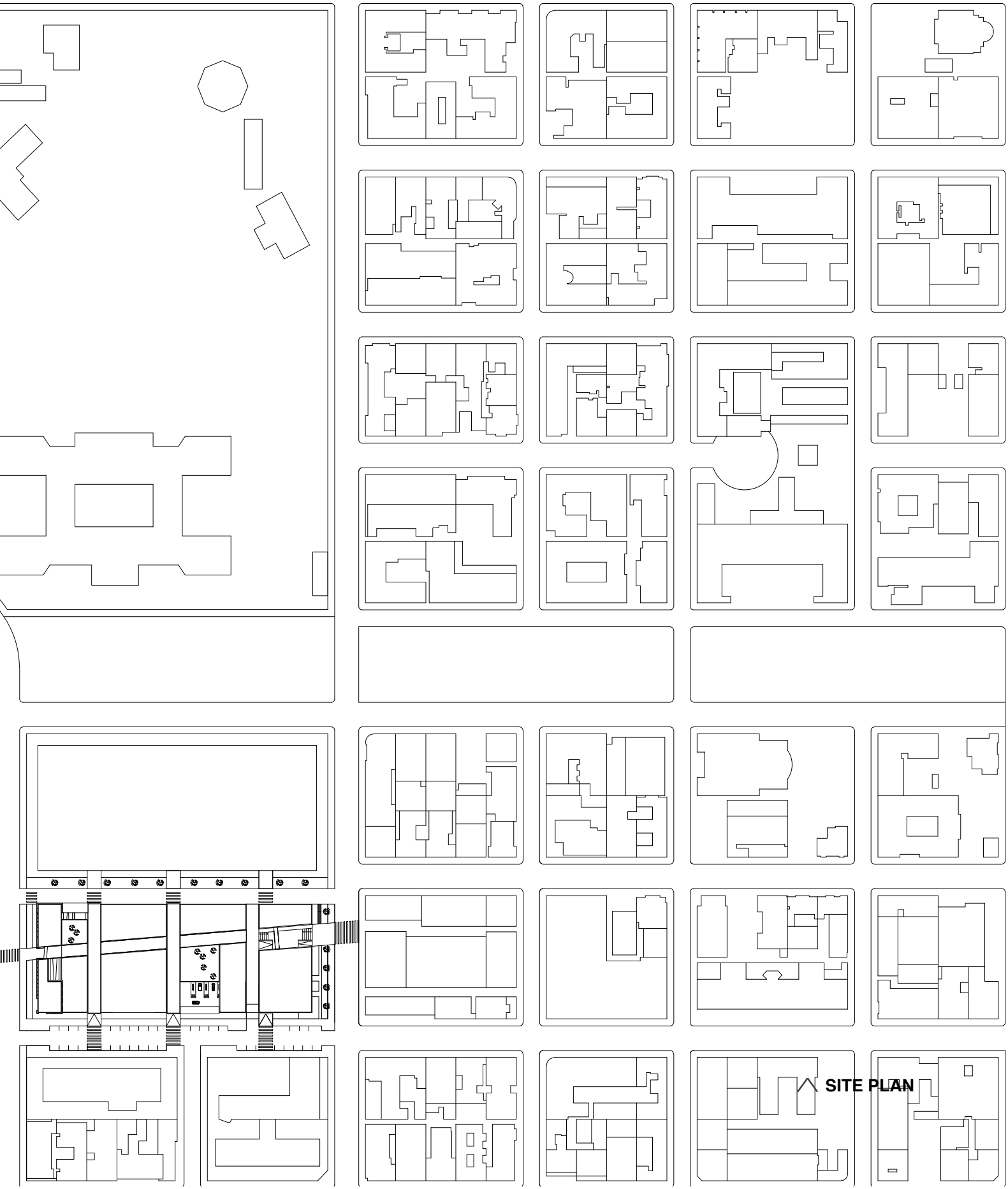
In keeping with warmer materials along the interior, I have proposed the acoustic panels along the route to be constructed out of stained, wooden shipping palettes. These are easy to construct, recyclable and cheap to maintain.

In conclusion the overall building aesthetic allows for the user to look past the solid facade and be invited into the space through the glimpses of warmer materials and humane scale.

GENDER, RANKED: *a reinterpreted into taxi rank*

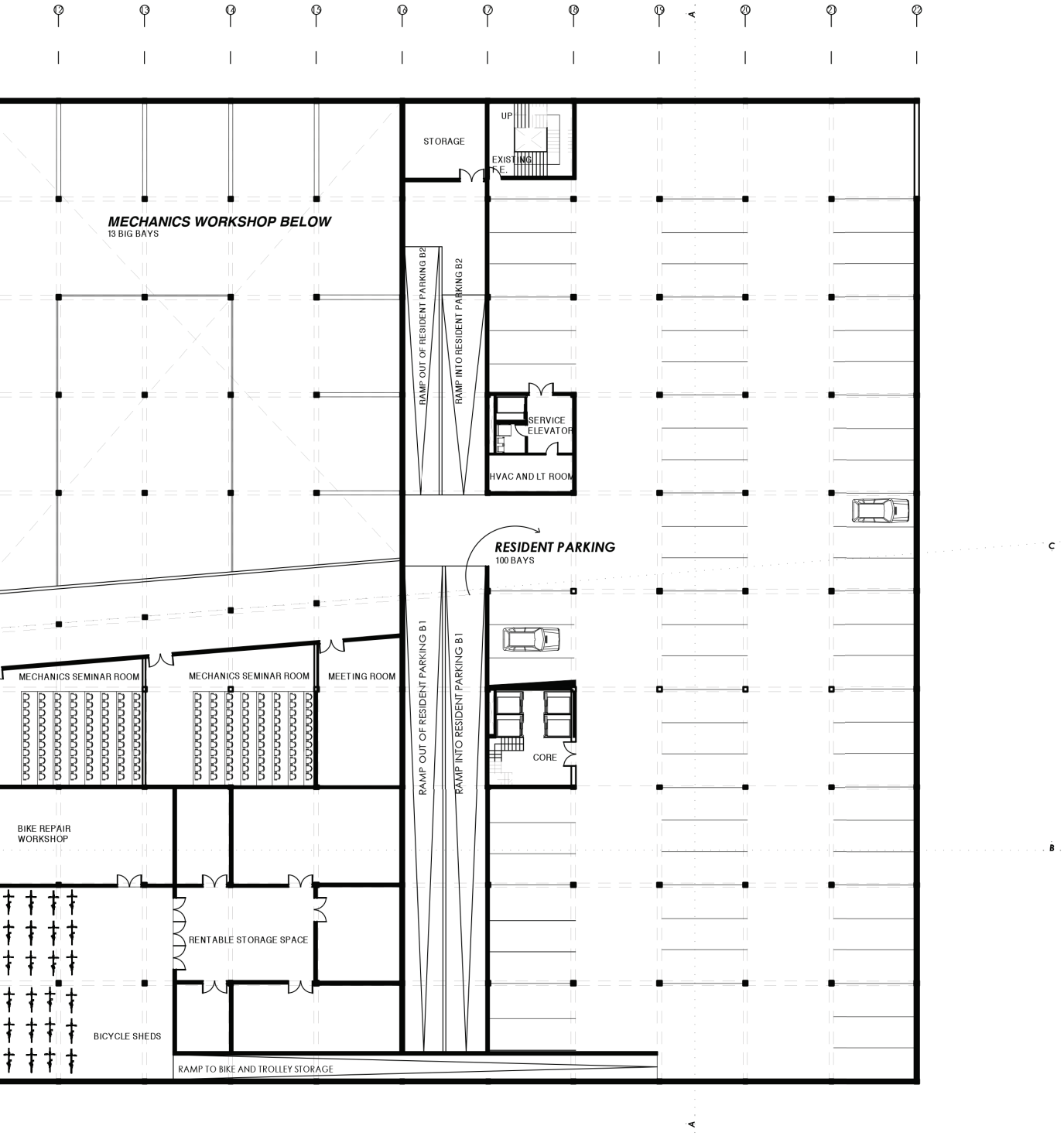
Final Drawings



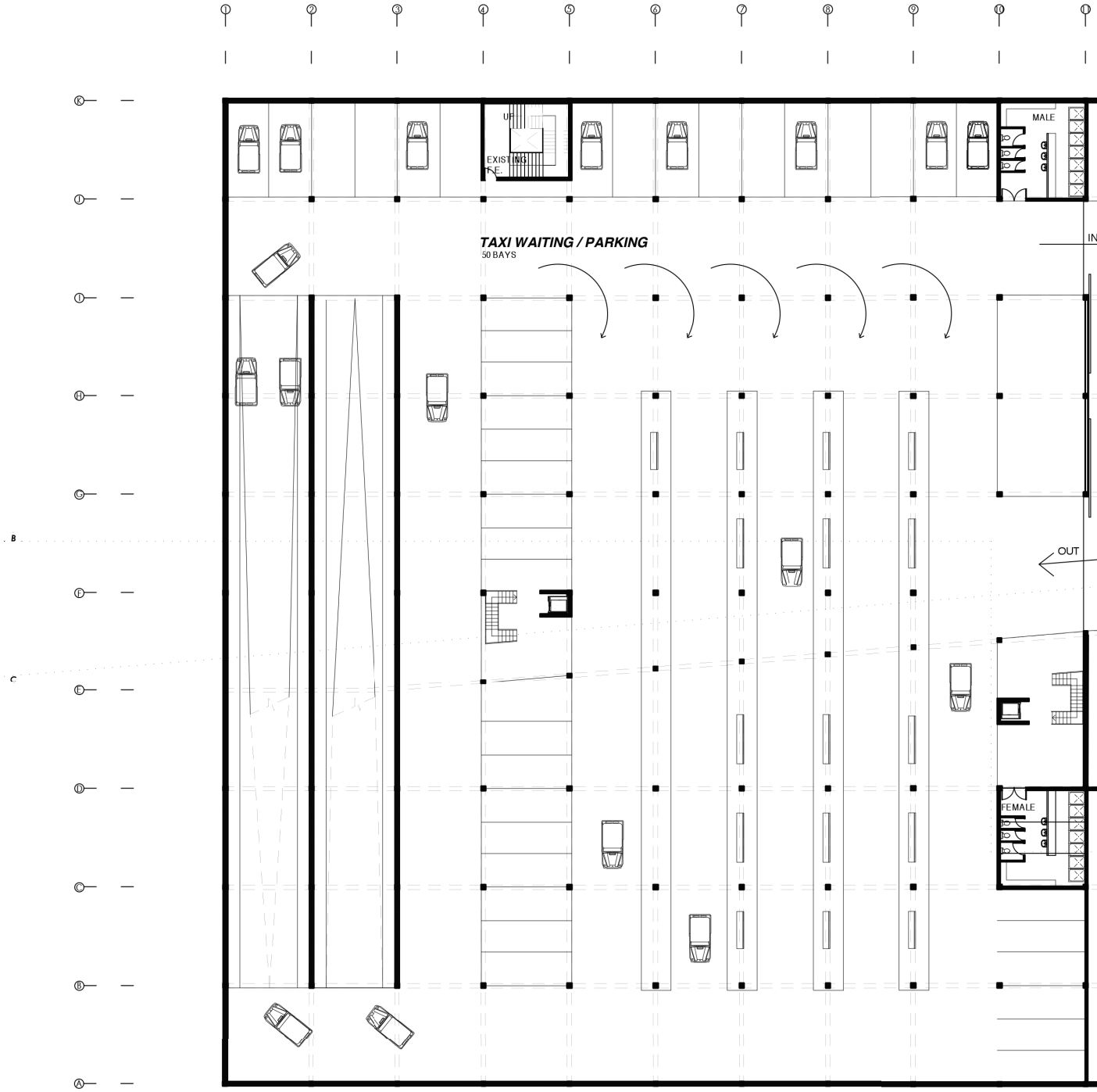


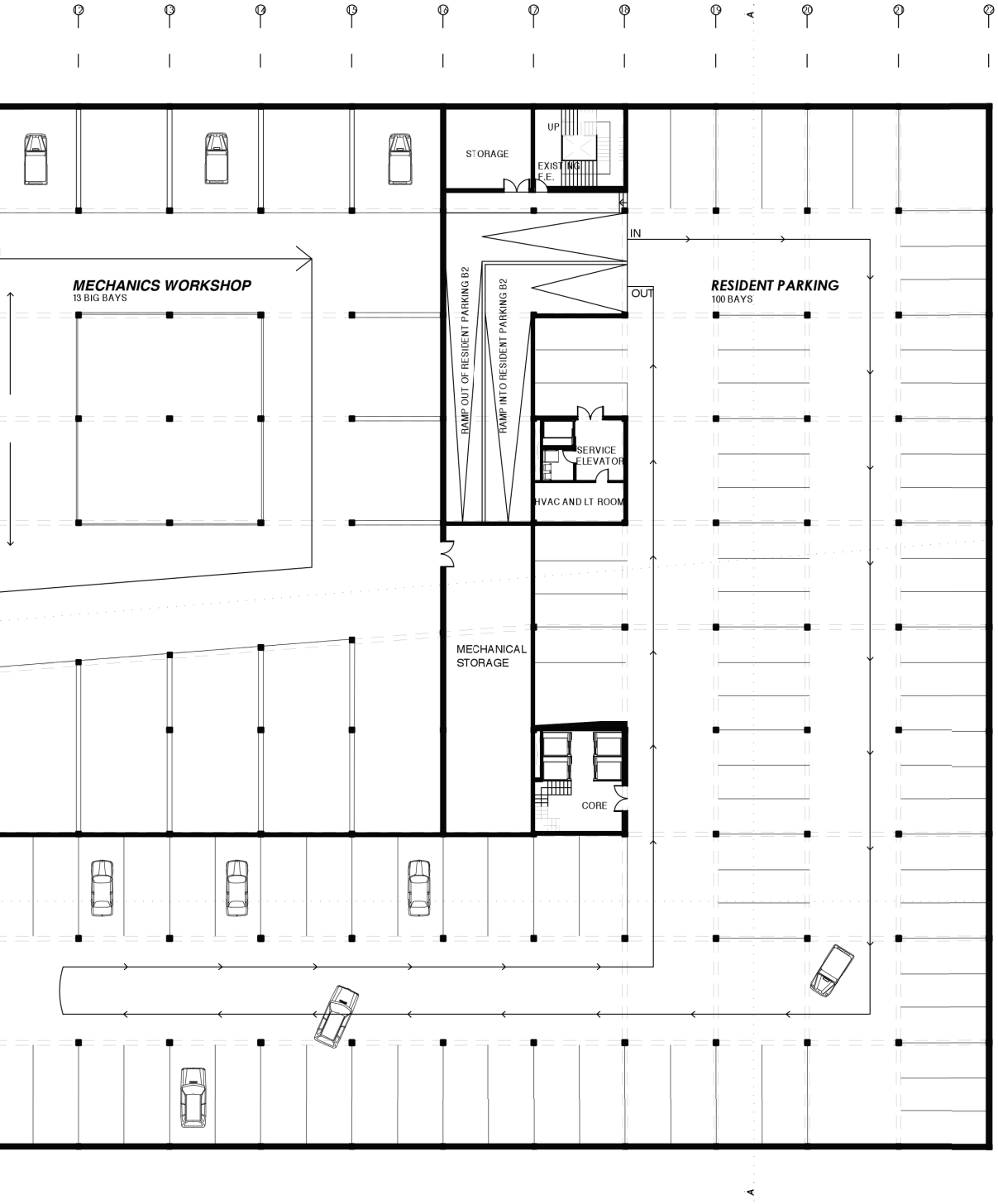
SITE PLAN

1
2
3
4
5
6
7
8
9
10
11
K
J
I
H
G
F
E
D
C
B
A
UP
EXISTING T.E.
MALE
TAXI WAITING / PARKING
50 BAYS
GOING DOWN TO B2
COMING UP FROM B2
FEMALE

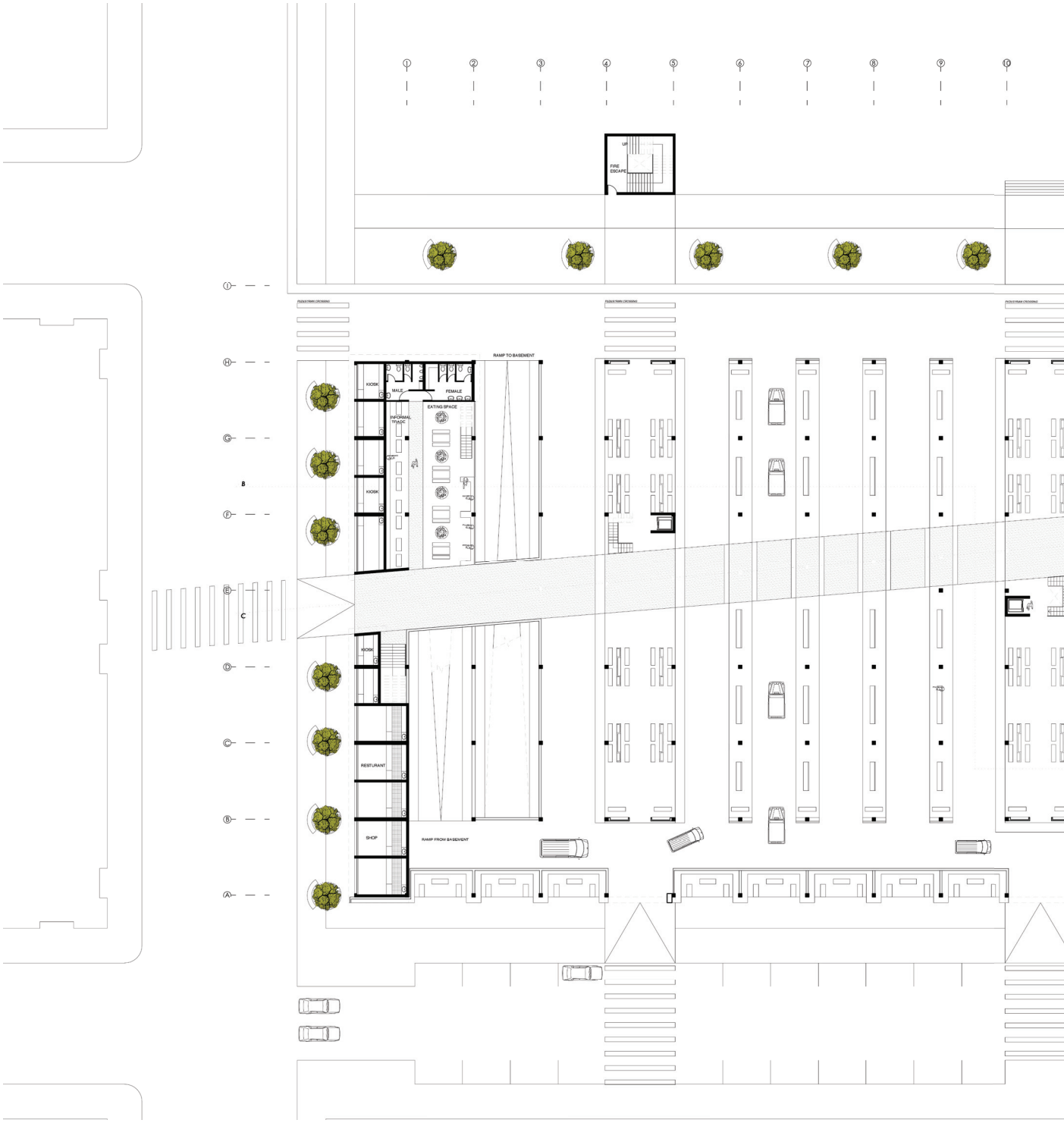

MECHANICS WORKSHOP BELOW
13 BIG BAYS
STORAGE
UP
EXISTING
RAMP OUT OF RESIDENT PARKING B2
RAMP INTO RESIDENT PARKING B2
SERVICE ELEVATOR
HVAC AND LT ROOM
RESIDENT PARKING
100 BAYS
MECHANICS SEMINAR ROOM
MECHANICS SEMINAR ROOM
MEETING ROOM
RAMP OUT OF RESIDENT PARKING B1
RAMP INTO RESIDENT PARKING B1
CORE
BIKE REPAIR WORKSHOP
RENTABLE STORAGE SPACE
BICYCLE SHEDS
RAMP TO BIKE AND TROLLEY STORAGE

BASEMENT 1


TAXI WAITING / PARKING
50 BAYS
EXISTING
T.E.
MALE
FEMALE
OUT

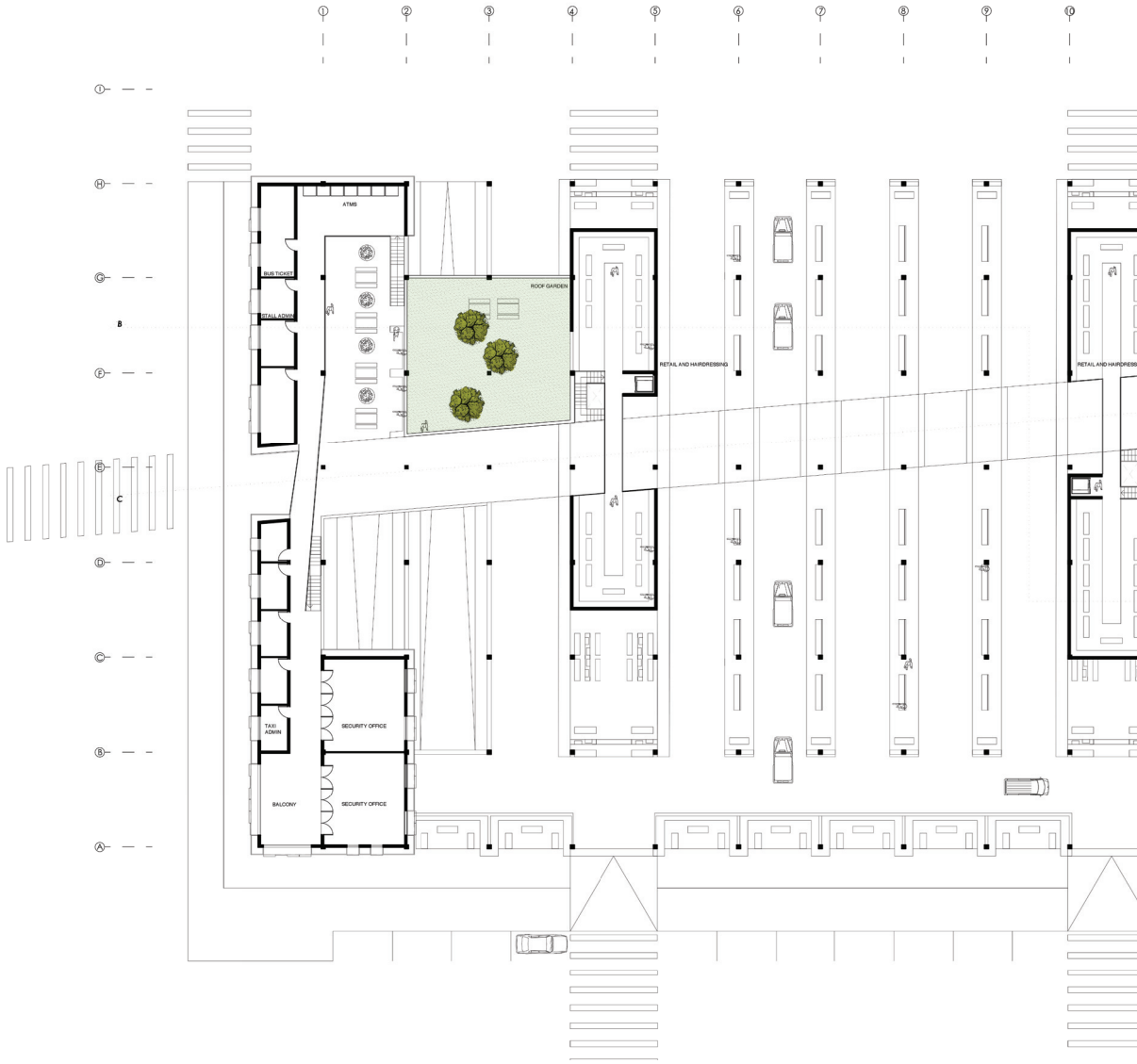

12
13
14
15
16
17
18
19
20
21
22
A
STORAGE
UP
EXISTING
F.E.
IN
OUT
MECHANICS WORKSHOP
13 BIG BAYS
RAMP OUT OF RESIDENT PARKING B2
RAMP INTO RESIDENT PARKING B2
RESIDENT PARKING
100 BAYS
SERVICE
ELEVATOR
HVAC AND LT ROOM
C
MECHANICAL
STORAGE
CORE
B
A

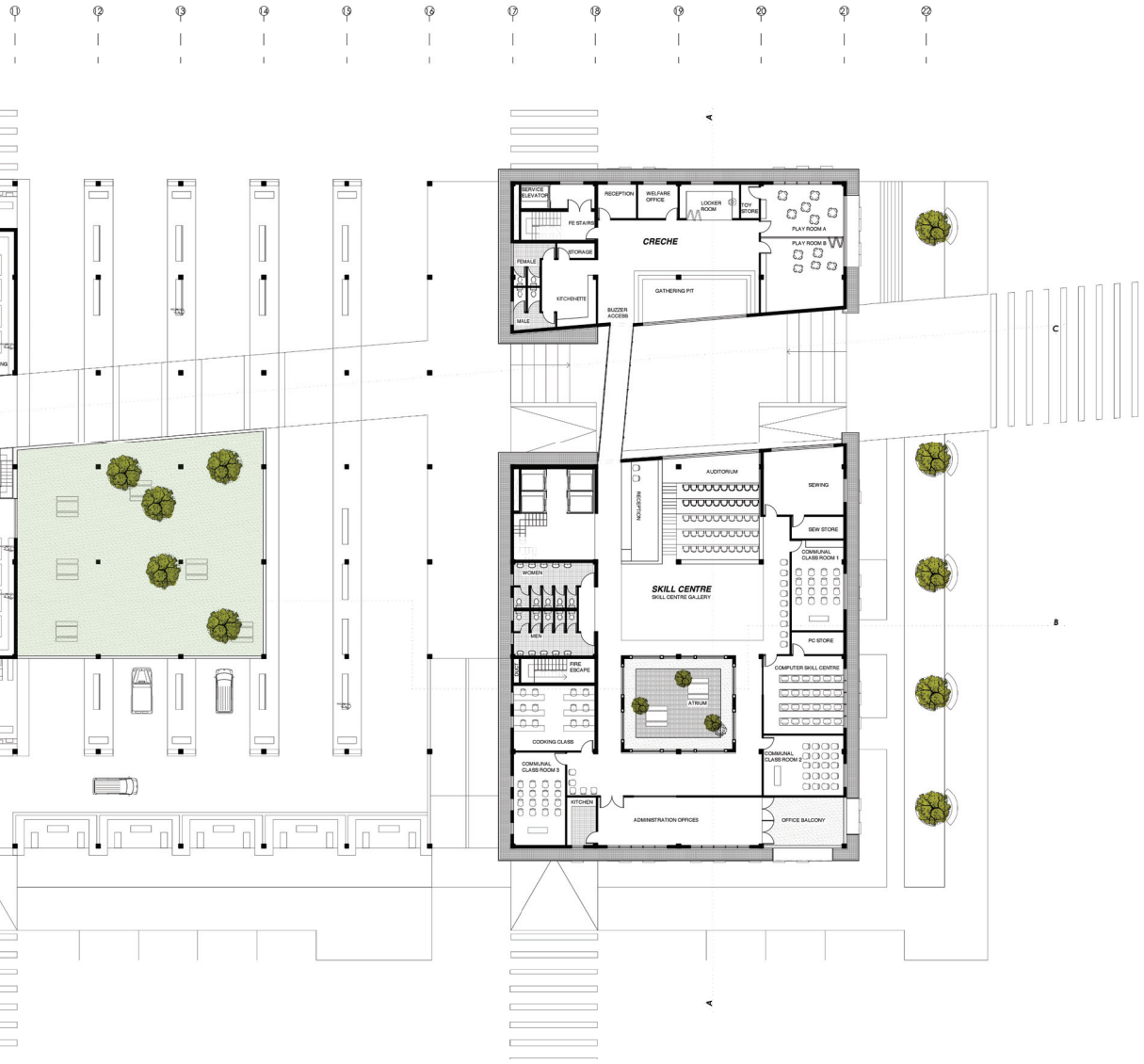
BASEMENT 2


1
2
3
4
5
6
7
8
9
10
I
H
G
F
E
D
C
B
A
UP
FIRE ESCAPE
PEDESTRIAN CROSSING
PEDESTRIAN CROSSING
PEDESTRIAN CROSSING
RAMP TO BASEMENT
KIOSK
MALE
FEMALE
EATING SPACE
INFORMAL TRADE
KIOSK
KIOSK
RESTURANT
SHOP
RAMP FROM BASEMENT
B
C



GROUND FLOOR PLAN - RANK, INFORMATION CENTRE & RETAIL


ATMS
BUS TICKET
RETAIL ADMIN
ROOF GARDEN
RETAIL AND HAIRDRESSING
RETAIL AND HAIRDRESS
TAXI ADMIN
SECURITY OFFICE
BALCONY
SECURITY OFFICE
B
C



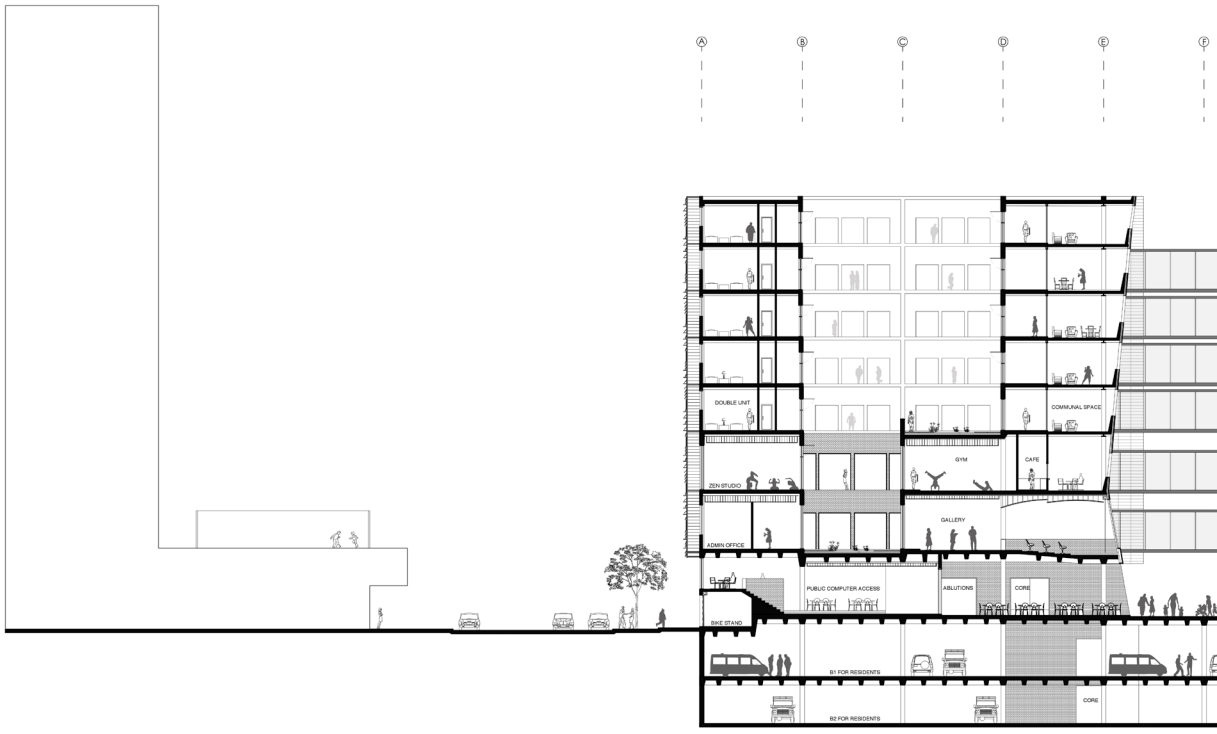
FIRST FLOOR PLAN - SKILL CENTRE & CRESHE

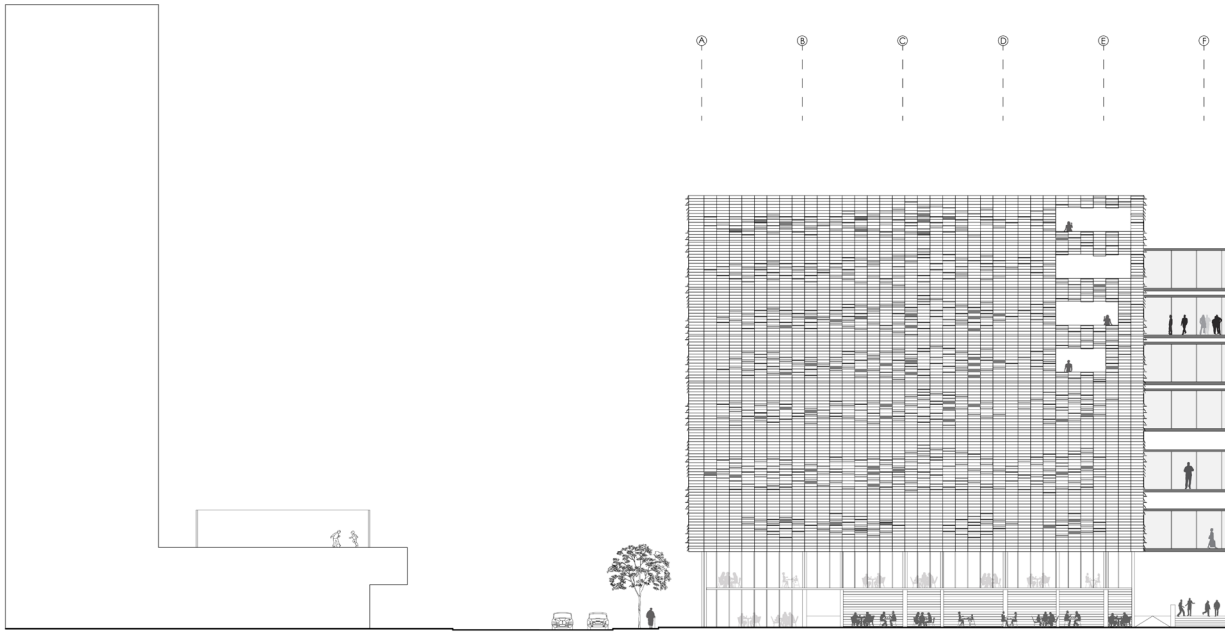


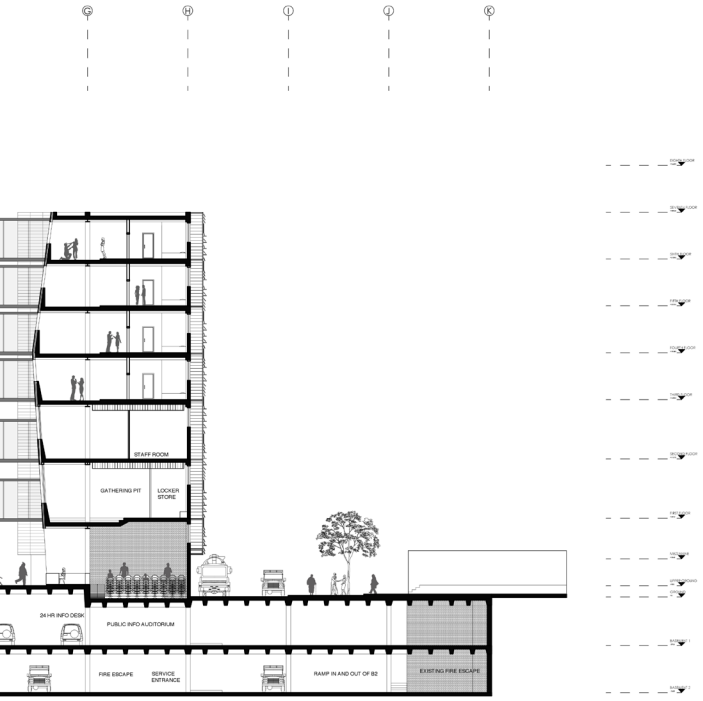
SECOND FLOOR PLAN - MEDICAL & WELLNESS



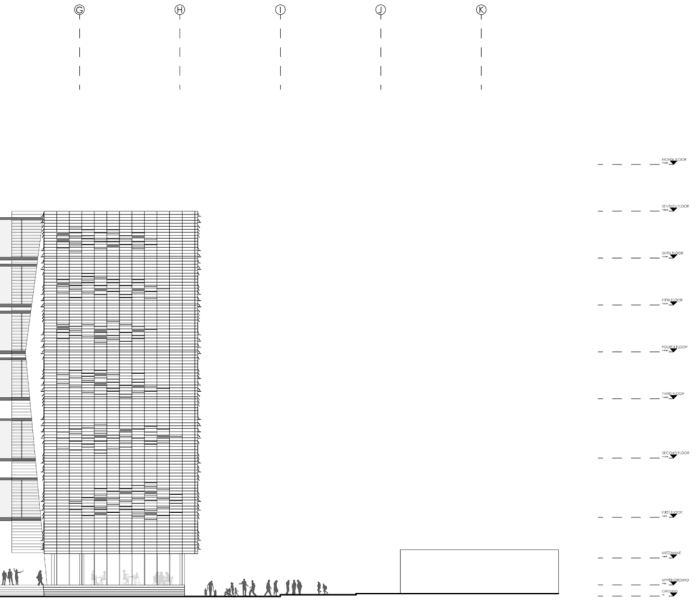
THIRD - SEVENTH FLOOR PLAN - RESIDENCY


A
B
C
D
E
F
DOUBLE UNIT
COMMUNAL SPACE
GYM
CAFE
ZEN STUDIO
GALLERY
ADMIN OFFICE
PUBLIC COMPUTER ACCESS
ABLUTIONS
CORE
BIKE STAND
B1 FOR RESIDENTS
CORE
B2 FOR RESIDENTS

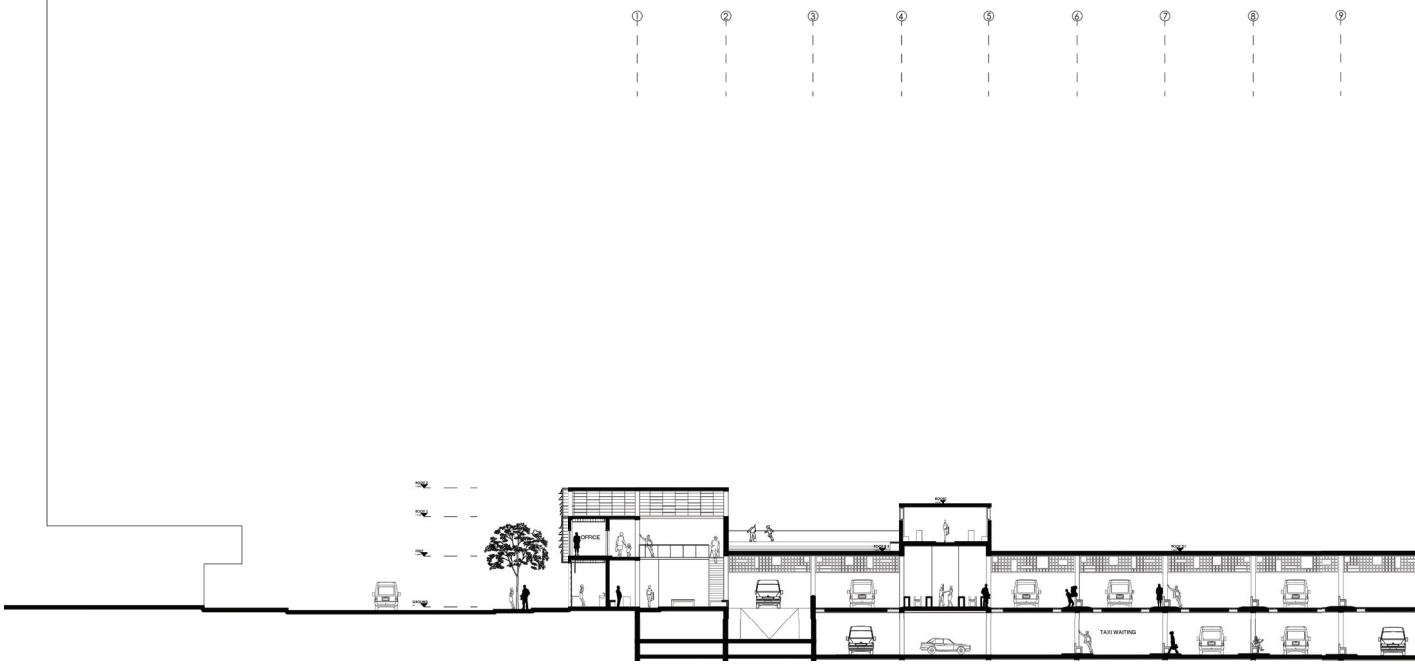

A
B
C
D
E
F

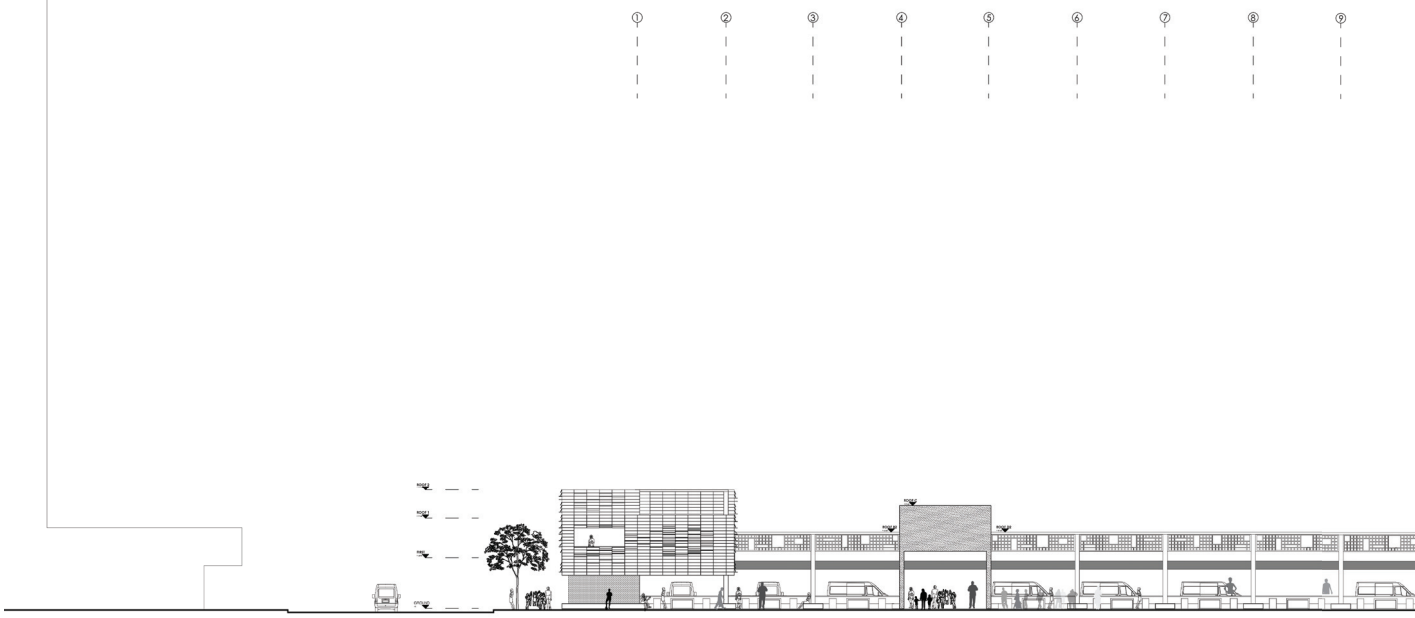


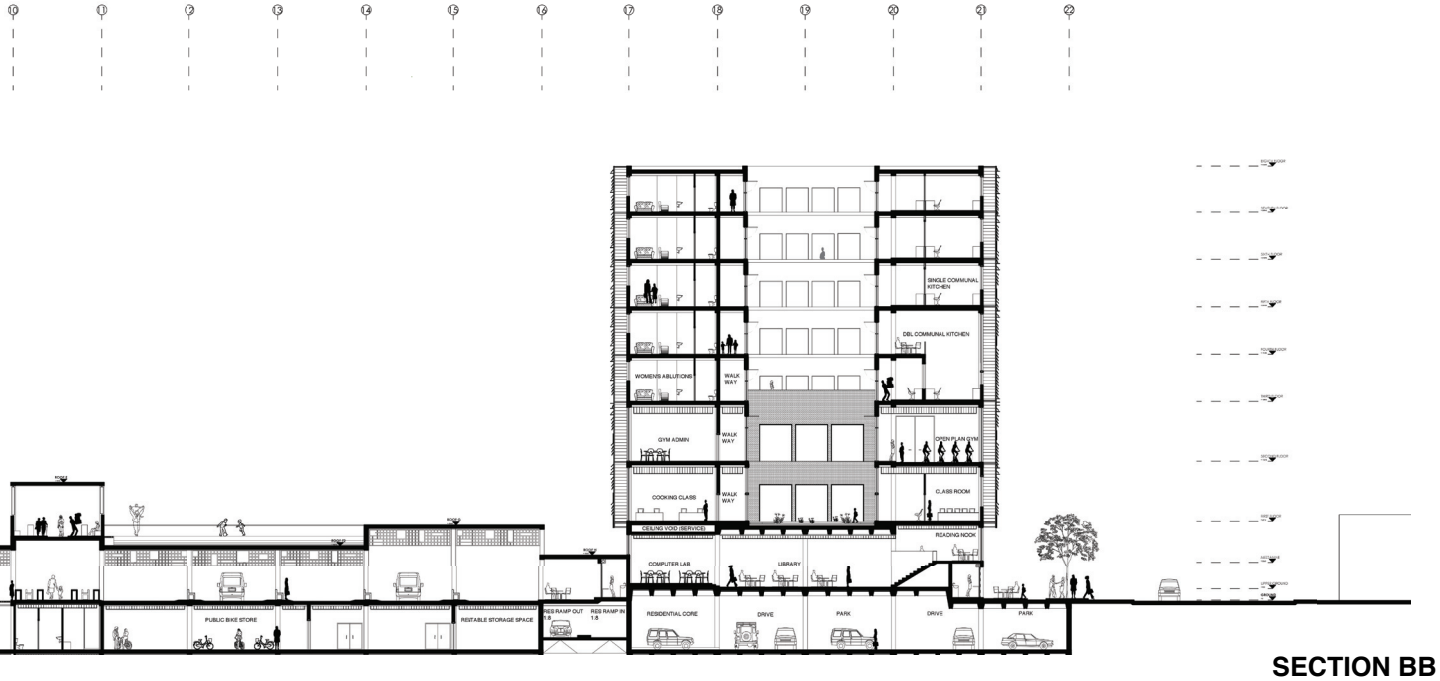
SECTION AA



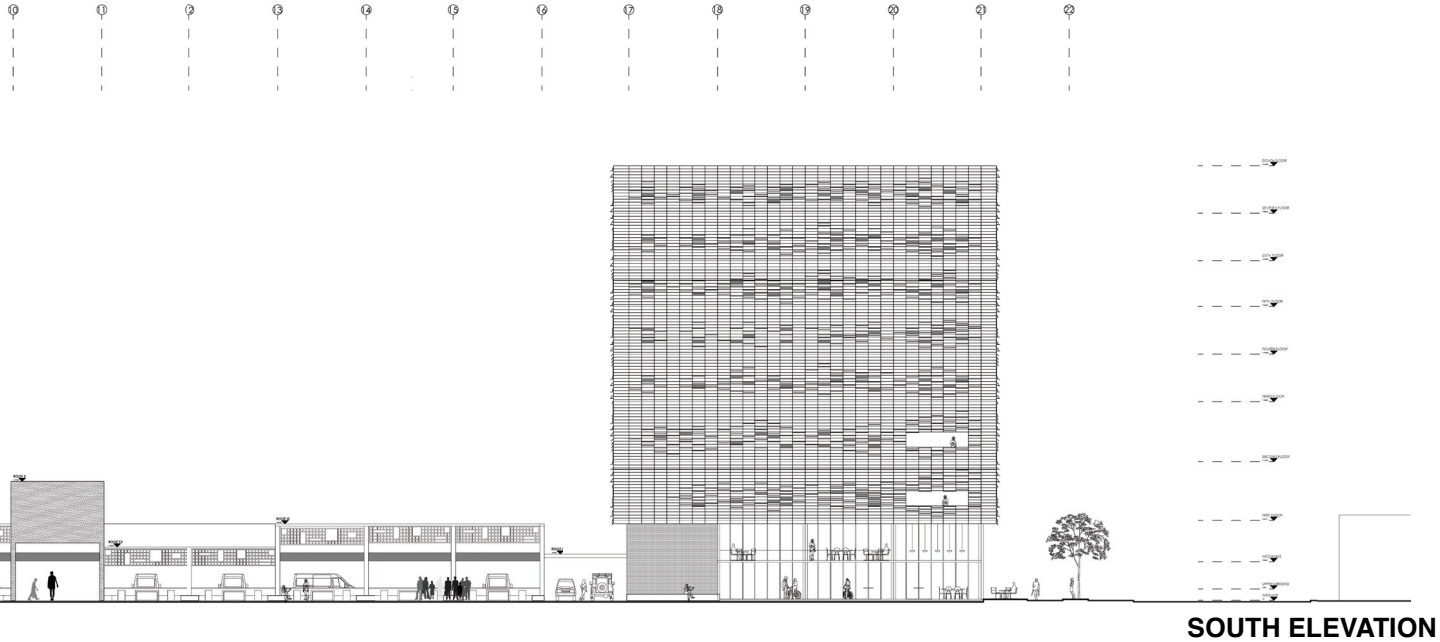
EAST ELEVATION


OFFICE
TAXI WAITING

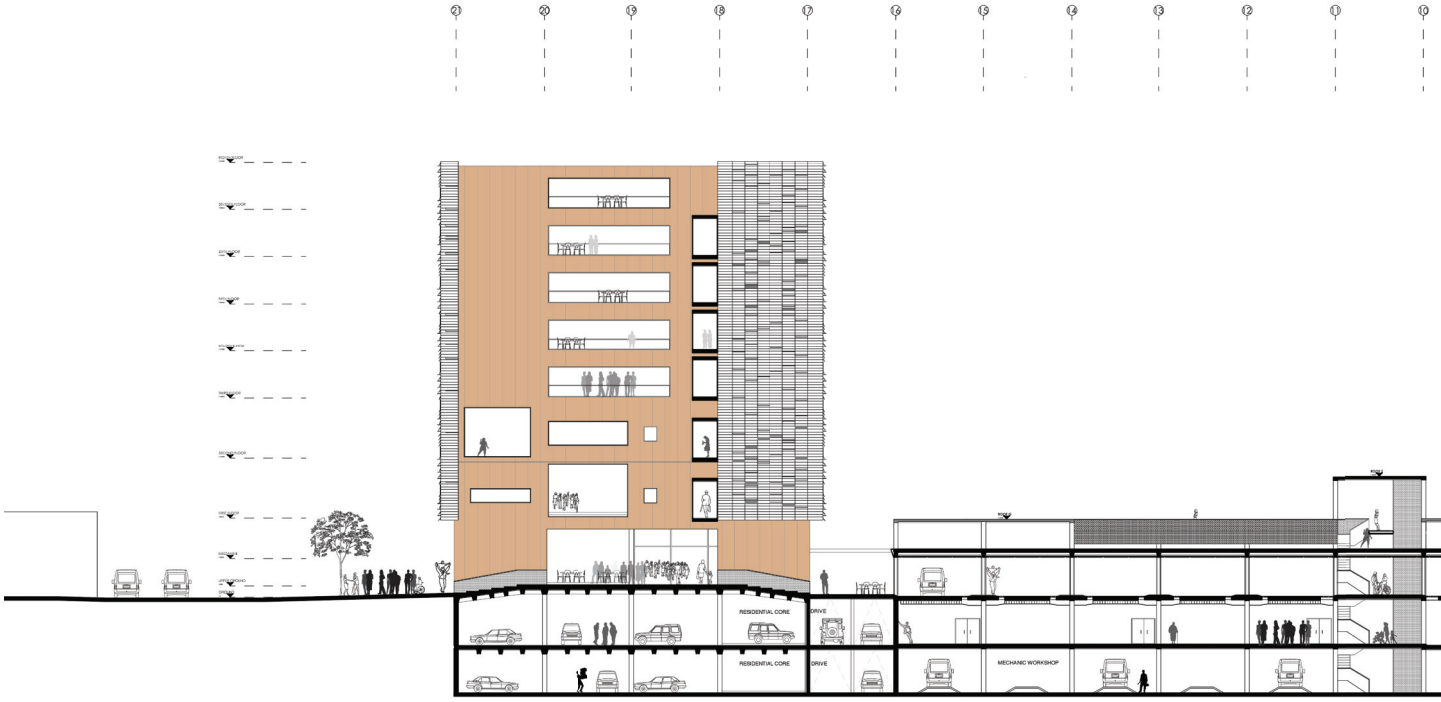


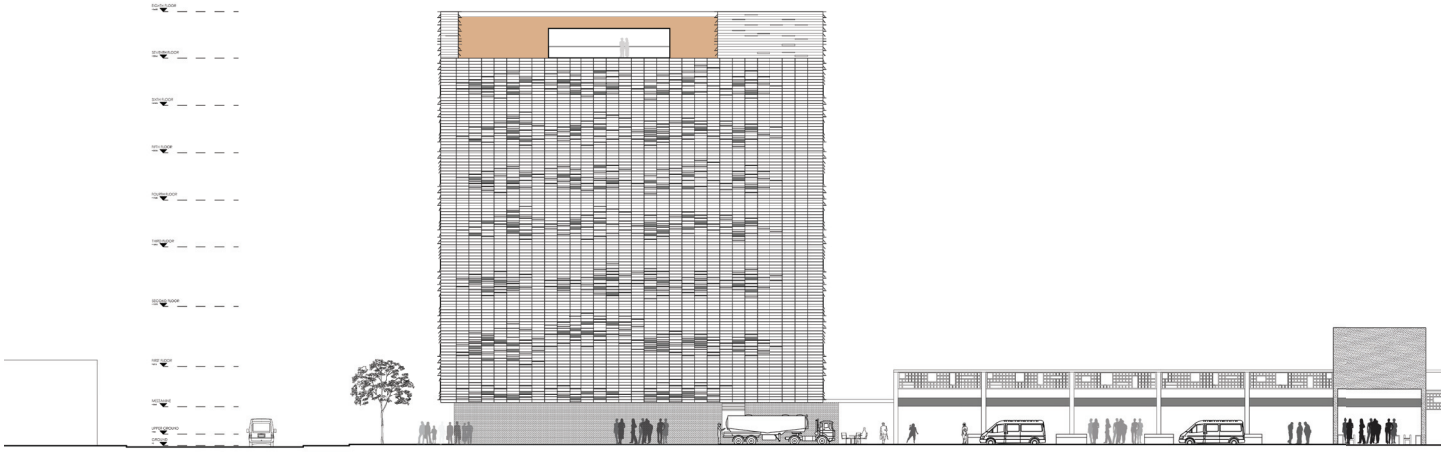


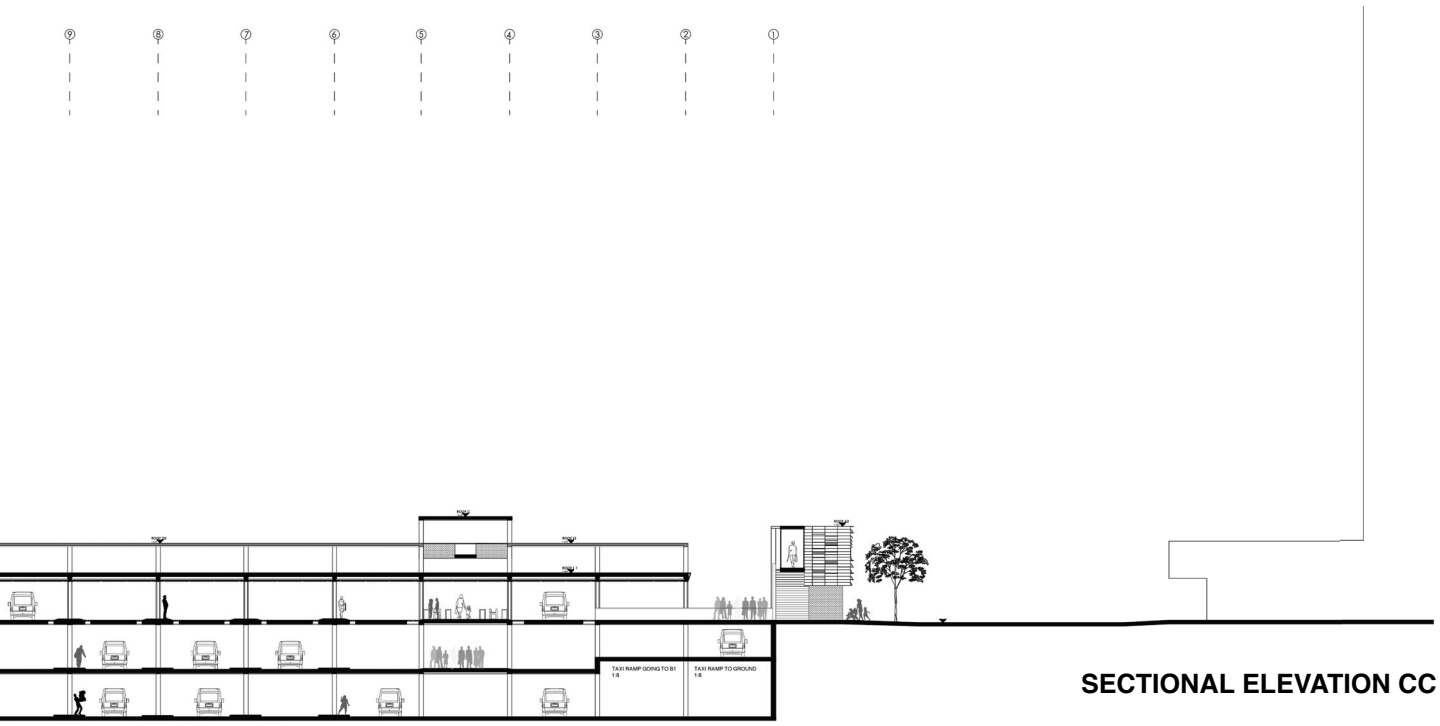
SECTION BB



SOUTH ELEVATION


RESIDENTIAL CORE
DRIVE
RESIDENTIAL CORE
DRIVE
MECHANIC WORKSHOP

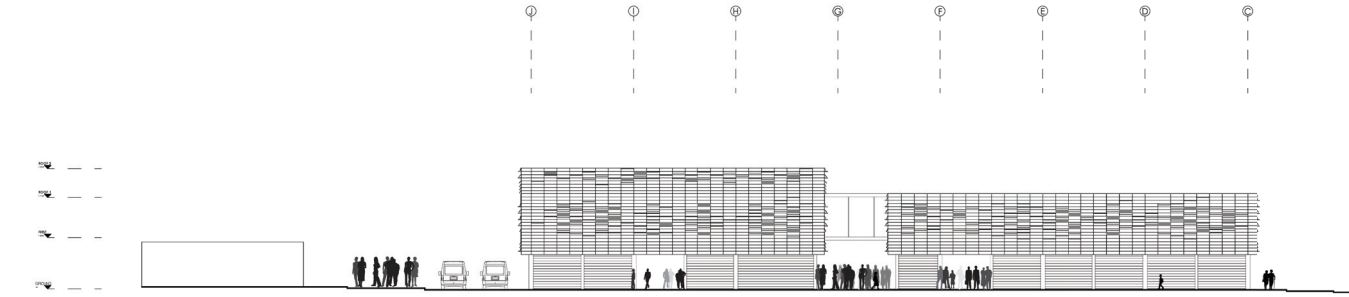


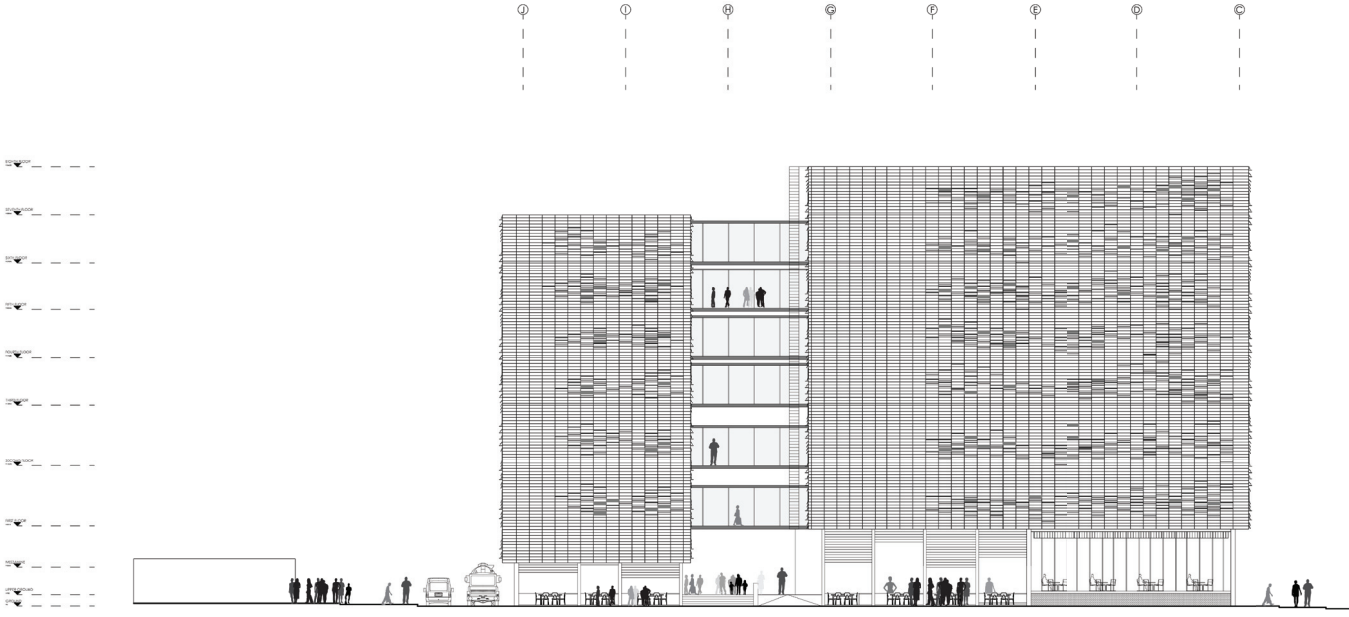


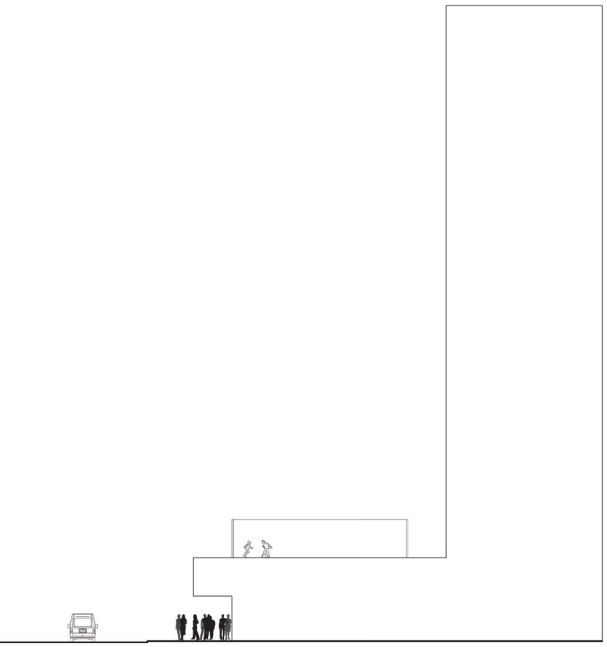
SECTIONAL ELEVATION CC



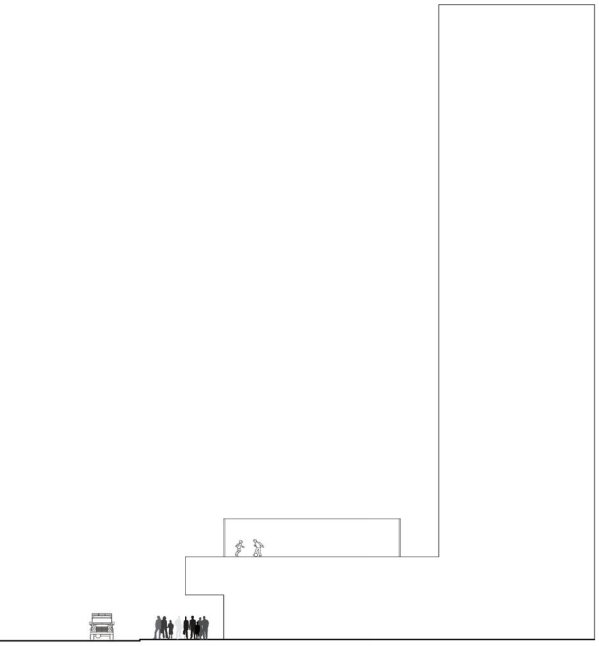
NORTH ELEVATION


J
I
H
G
F
E
D
C

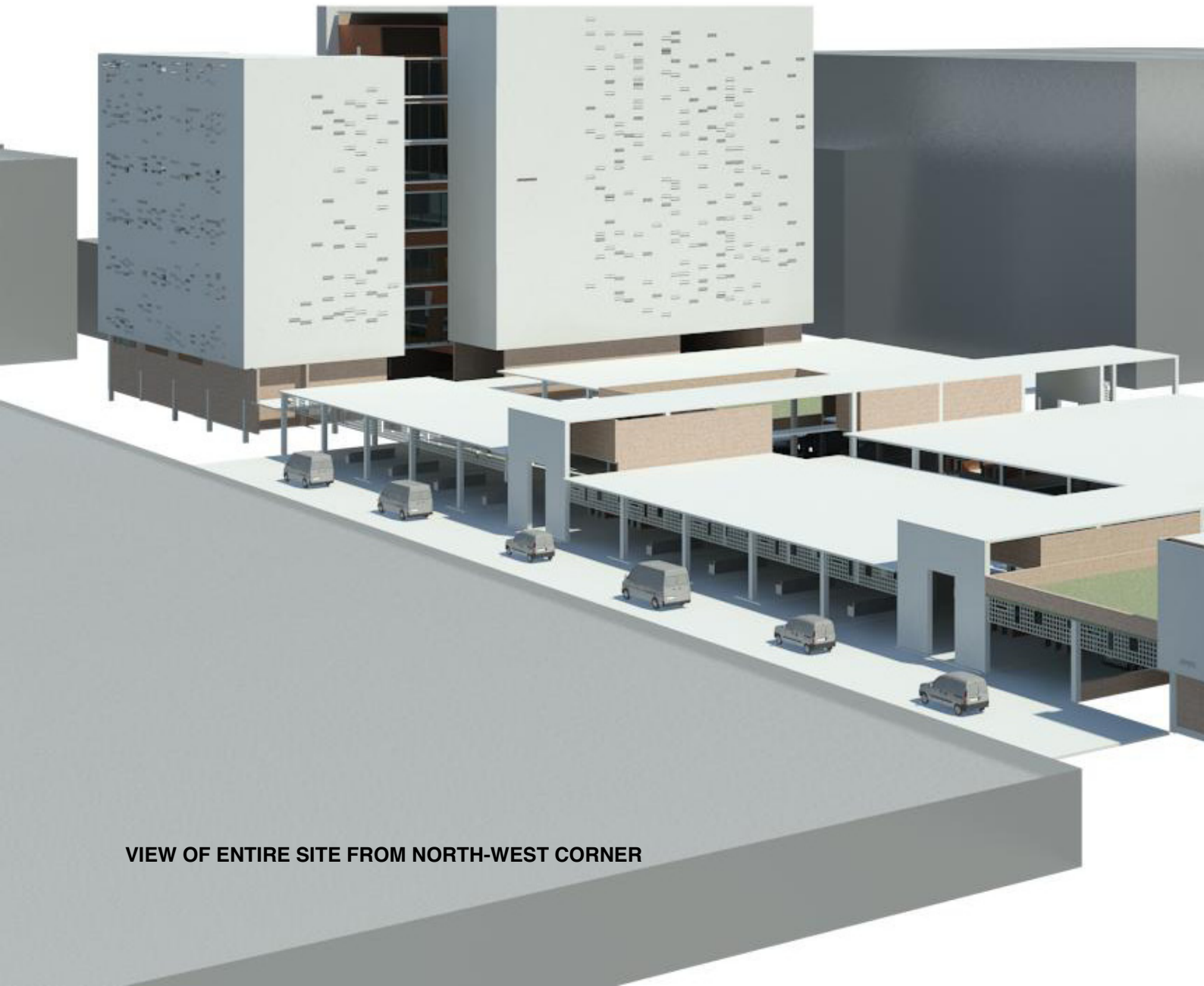

J
I
H
G
F
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D
C



WEST ELEVATION 1



WEST ELEVATION 2



VIEW OF ENTIRE SITE FROM NORTH-WEST CORNER



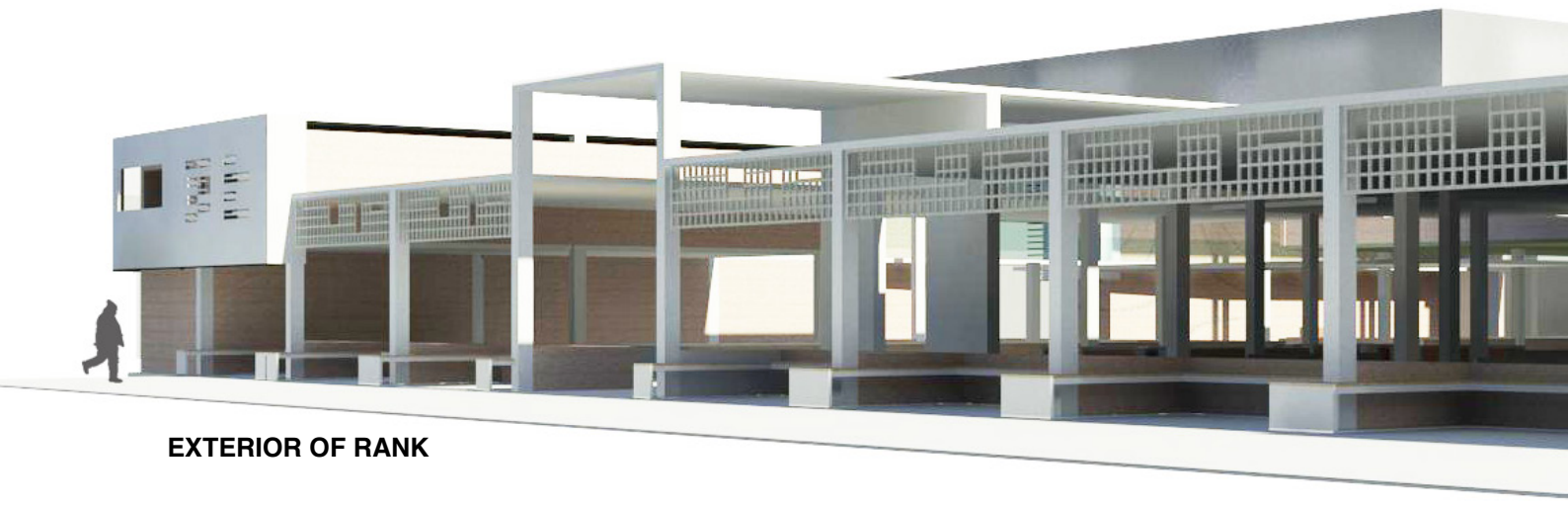

ROUTE



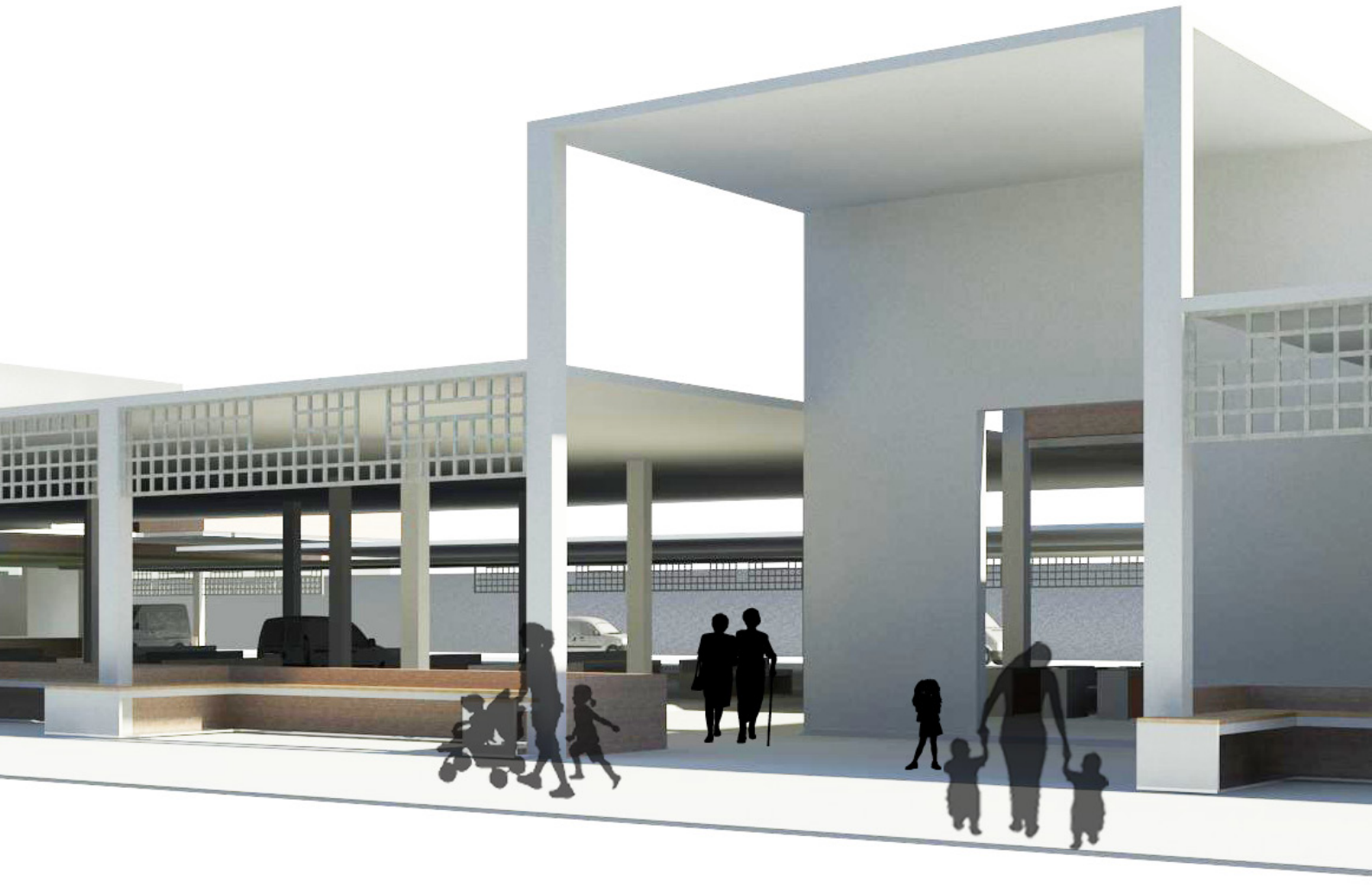


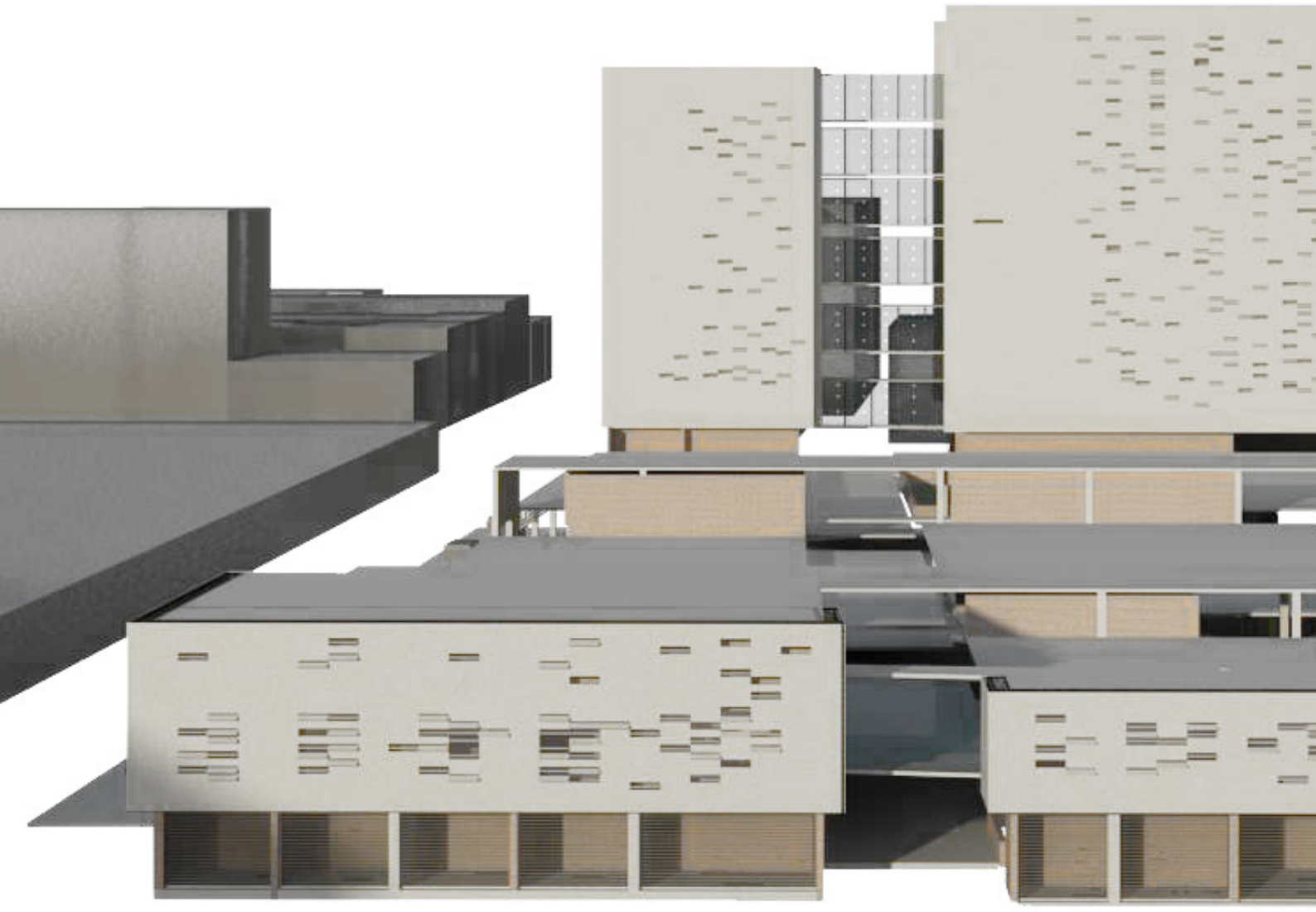
INTERIOR OF RANK

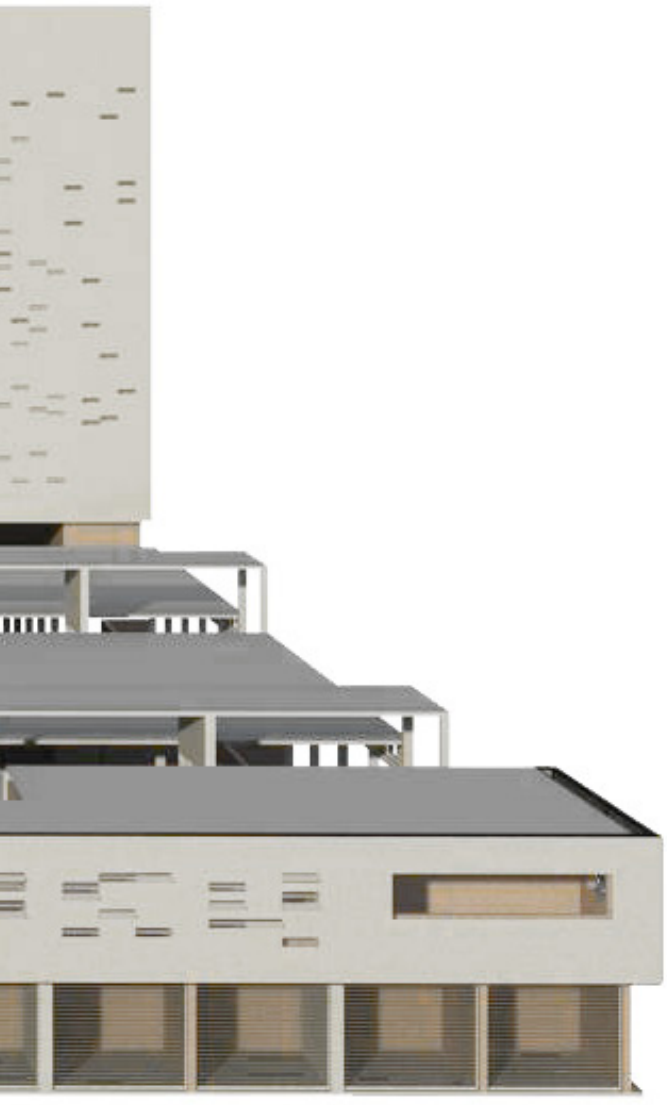




EXTERIOR OF RANK







VIEW FROM THE WEST





NIGHT VIEW FROM THE EAST

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IMAGES

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