

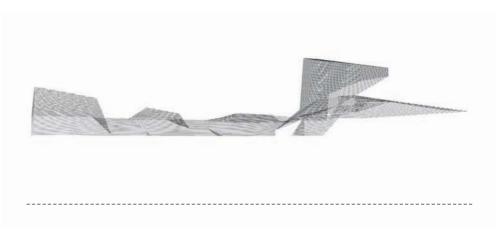
a typology of public space for everyday performances»

liminal public infrastructure

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a typology of public space for everyday performances»

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Submitted in fulfilment of part of the requirements of the degree MArch(Prof) in the Faculty of Engineering, Built Environment and Information Technology at the University of Pretoria

Pretoria, South Africa 2011



Munitoria
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South Africa
S25.74361 E28.19327

Masters Architecture

Public space / Surveillance space / Public infrastructure

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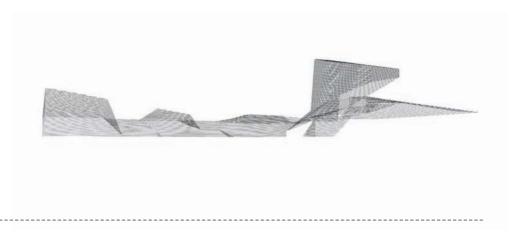
2011

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*A special thanks to everyone who made this possible...

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Abstract

Every day the city plays out its spectacle unnoticed. This quotidian context is one which is full of complexity, spontaneity and possibility. It is here that architecture can engage with both the city and its user, space and experience; challenging conventional architectural typologies. It is within public space, that architecture can both enhance and celebrate the everyday. This project investigates all of these aspects within the city of Pretoria and more specifically along Van der Walt Street, focusing on the urban cavity at Munitoria.

Surveillance is conceptually used to experience this spectacle, on multiple levels of interpretation, where the architecture is reduced to support both the concept of surveillance and its experience.



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All the world is a stage; And all the men and women merely players; They have their exits and their entrances; And one man in his time plays many parts; -Shakespeare, As you like it: 2/7 c.1650.

Introduction

The city consists of a series of parts, ranging from buildings to monuments, services and infrastructure (fig. 1.1). However, these parts are not the only components that make up the city (Krier, 1980: 40). In fact, the urban environment is far more complex, comprising of a series of scales and layers shuffling between cultural, social and economic strata (Dewar & Uytenbogaardt, 1991: 12). Public space is the city's main connective tissue, consolidating these various urban components within a single space (fig. 1.1).

As an urban component, public space is the interface by which the city is made legible to its inhabitants (Krier, 1980: 43). It is at this interface (threshold between city and public space) that architecture has the critical potential in celebrating and enhancing the urban environment. However, with more incoherent town planning, public space has lost its true value within South African cities (Jordaan, 1989: 26-29). Currently Pretoria is in limbo between an occidental post-colonial city and an African city. The emphasis of the public has shifted to the street interface (to illustrate this point a series of mapping and case studies is used to examine everyday public life). This is confirmed by the research of Koolhaas (2005, 625) on mutated African cities. The dissertation attempts to explore these new forms of mutated public space manifesting within the city, through defining a typology of liminal public space.



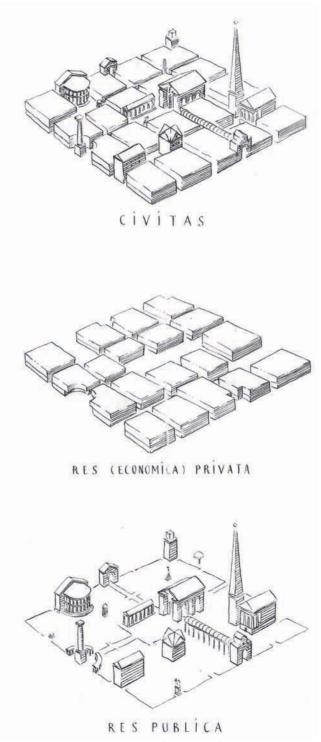


fig. 1.1 Urban Spatial hiearchy [public space]



The dissertation promotes the understanding of everyday activities as parts of the urban environment; not in opposition it.

The discourse will investigate the public realm within the urban environment, by way of an understanding of the quotidian context. Through researching how the city is used and appropriated for its everyday activities, a suitable architectural typology can be developed (liminal public infrastructure). Where the project challenges how architecture can celebrate these everyday performances within the city, as well as enhancing the user's perception and experience therein.

The project thus aims to both celebrate and enhance the quotidian context of the city, through the development of a responsive spatial typology and exploring the concept of liminal public infrastructure. The dissertation promotes the understanding of everyday activities as part of the urban environment; not in opposition to it. This encompasses the spatial identity of the city, where the design aims to uplift the urban context by providing a stage for these everyday spectacles (fig. 1.2).



fig. 1.2 Praxis of quotidian context [public space]



The dissertation is a manifestation of the research and theoretical stand point. The focus is thus placed on two inter-related topics, **public space** and **the everyday**; a quantitative mapping of the public urban realm is accomplished, while a qualitative understanding of the everyday context is documented. The project sets out to celebrate the spectacle of the everyday within the public realm (fig. 1.3). This is further studied through mixed media such as film, photography and drawing. The project proposes a programmable urban surface and a 'surveillance space' for the city. The following chapters will discuss the theoretical premise, followed by an explanation of the context as an architectural manifestation thereof.

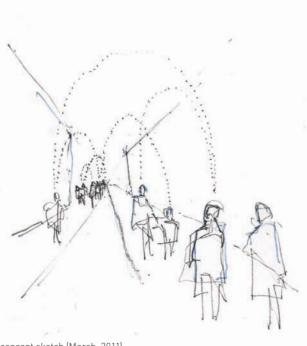


fig. 1.3 Early concept sketch (March, 2011)



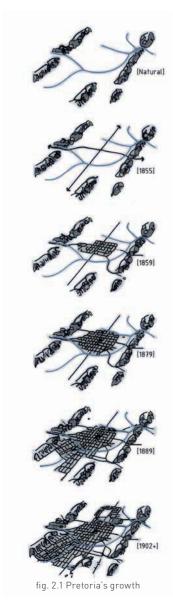
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"I could tell you how many steps make up the streets rising like stairways, and the degree of the arcades' curves, and what of zinc scales cover the roofs; but I already know this would be the same as telling you nothing. The city does not consist of this, but the relationship between the measurements of space and event of its past..."

- (Calvino, 1972: 10)

Urban space

The city of Pretoria was formalized and developed from an agrarian origin (Bell & Lane, 1905: 12). The natural boundaries surrounding the city contained its growth, which form part of the city's urban identity (Jordaan, 1989: 26). Thus this natural morphology has developed the city to what it is today (fig. 2.1). The rigid cardo-decumanus grid forms the oversized blocks which impedes pedestrian movement around the urban environment. Consequently this unique urban environment of Pretoria grew, along with its vibrant mid-block pedestrian arcades (Le Roux, 1991: 32). This distinctive layer of pedestrian connectivity responds to and defines the spatial identity of the urban environment. As Pretoria expanded, so did the need for open public space within the city. According to Maslow (1943: 373), "cities are typically seen as the engines of modern economic life. Cities are thus principally planned to optimise work and other practical, rational, preconceived objectives, and are designed accordingly, with even leisure



space serving well-defined functions. But people do not only gather together in cities to meet their basic physiological needs; they also come to cities searching for love, esteem and self-actualization, to experience the diversity of the world around them and to learn to understand it".

Koolhaas (2005: 16) proposes the concept of the 200% city, where the city is both 100% generic and 100% specific. Within the 'generic city' (fig. 2.2), exists a series of standardised components. These components provide a "visual language" which determines the form, orientation and setting of public architecture. In comparison, the generic city's

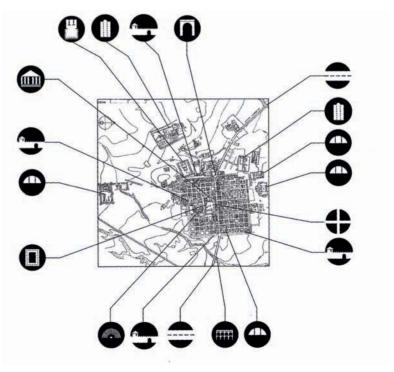


fig. 2.2 Generic City



components form the basis of Pretoria's planning, ranging from its natural fortification to its *cardo-decumanus* (fig. 2.3) (Jordaan, 1989: 26). However, Pretoria is more than a just generic city. Pretoria is also part '100% specific city', and it is that which is projected through its unique African identity. This is made visible through the variety of everyday performances which occur within the city, and more specifically in Van der Walt Street, where the urban environment becomes the stage for the quotidian context and its praxis (fig. 2.4).

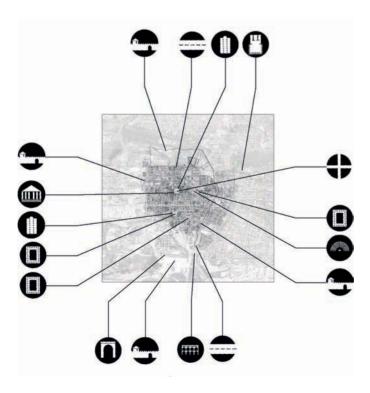


fig. 2.3 Specific City [Pretoria]



This challenges the conventional typology of public space, investigating the potential of providing a network of public space within the city, bringing together a hierarchy of both public squares and streetscapes.

The quotidian context within public space is distinctively characteristic of the '200% city' of Pretoria. Public space is described by Carr et. al (1992: 3) as a space where, inhabitants can build a community and play out everyday activities. Public space within the generic city is generally found within squares, which form the larger part of the public interface (fig. 2.5). While in comparison, Pretoria's public interface is found within the streetscape (fig. 2.5). This challenges the conventional typology of public space, investigating the potential of providing a network of public space within the city, bringing together a hierarchy of both public squares and streetscapes (fig. 2.5).



fig. 2.4 Stage for everyday performances [Pretoria]



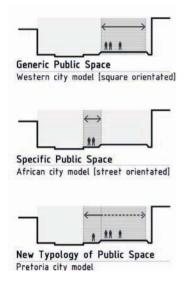


fig. 2.5 Public space realm in the generic and specific city, providing a new typology of public space

Ntuli (2002: 54) describes the struggle of African cities in reclaiming a valid African urban identity. Therein the notion of the public differs between Western and African views as suggested by Loyd (2003: 105-107). An African view of the public realm is understood as, "all space is public except when defined by ritual or private space. While in a Western view, "all space is private", except for specifically designated public areas. This concept of the public realm thus becomes critical in defining an urban threshold, by which the intervention should contain a multi-layered threshold, responding to this notion of the public realm. Currently Pretoria can be labelled an "invaded city" according to leading urbanist Jan Gehl (2003: 14). The "invaded city" has a single use, where traffic has taken precedent, drastically changing public space. This results in an impoverished form of public space, leaving behind only the most necessary of activities, where people walk between spaces "because they have to, not because they want to" (Gehl, 2003: 14).



This therefore begins to define a model of an African city, where the urban environment is practised.

Quotidian context

The conceptions of the everyday and the ordinary as developed in particular by Henri Lefebvre (1991: 167) and Michel de Certeau (1984: 22) are influential in establishing alternative urban methodologies. These concepts present many of the issues of the late capitalist city, which mostly deal with the material, the functional and the acquisitional. However, Lefebvre (1991: 117) focuses on contemporary urban environments that are concerned with the experiential and qualitative expectations of its users where, "urban citizens are not simply passive consumers, but are constantly engaged with the city, appropriating and re-appropriating the sites and systems for their own ends" (fig. 2.6) (Clear & Borden, 2009: 242). This therefore forms the basis for an African city model, where the urban environment is "practised" (Koolhaas, 2005: 694). More often than not the search for an African city is sought through patterns of planning (in 2 dimensional space). The identity of Pretoria can however be found through the understanding of its use and appropriation of urban space (in 3 dimensions). This illustrates the opportunity to investigate the daily activities of the city (fig. 2.7) (de Certeau, 1984: 124), and its appropriation of space - putting architecture at the heart of the city's identity.

Margaret Crawford (2008: 18) refers to the idea of 'everyday urbanism' which investigates small, temporary, unintentional, inexpressive but nonetheless highly frequented locations as opposed to standardized expensive, permanent and large-scale planning. Everyday urbanism illustrates the need to be specific rather than normative, reacting to existing situations and attempting to reinforce their qualities (Hayden & Temel, 2006: 56). Therefore everyday urbanism can respond to the Pretoria city model, acting as a critical form of catalytic development, which acknowledges the context, economics and social needs of the public.



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Case study 1 - Sit city»

An investigation into how people sit within the city was conducted (Alkayyali et. al, March 2011) to see how public space within the city is used (fig. 2.6). The seating classification categories were divided into 5 groups being: 'seating by appropriation of urban surface', 'seating by re-use', 'seating by design', 'seating by acquisition' and 'seating by adaptation'. From the quantitative results gathered, multiple conclusions about the city and its uses can be drawn:

Findings:	Deductions:
1) People bring or appropriate seating	Not enough designed seating
2) Formal seating used for recreation	Vending takes places along dynamic
Informal seating used by traders	routes, mapping pedestrian activity
3) Products sold vary in different	Products are an indication of
urban sectors	commercial activity
4) Pedestrian energy mostly found in	Streets can be seen as new form of
the streets	public space
5) Mostly horizontal elements and	The need for better integration with
surfaces	vertical surface
6) Old buildings are better adapted	Contemporary architecture does not
for everyday uses	respond to everyday needs of users

It is evident that Public space is the carrier for people's everyday activities. A multitude of spectacles and praxis can be found within the urban context (Van der Walt street), ranging from street vending, to informal dining rooms, to washing and even sowing (fig. 2.4 -2.14). These performances express the beauty and complexity of this quotidian context, where little attention is given to these everyday activities. Notably, these activities are found mostly within the street interface, where various urban surfaces have been adapted to suit the needs of the user. The urban environment is thus morphed according to these user's needs rather than a dictated event. Architecture is thus the "matter of interaction between fabric, spaces and people" (Cruz & Gage, 2009: 114). This can be described in two interrelated ways by which interaction might occur: 'Performance' and 'Inhabitable Interfaces'. These are discussed in the following chapters, from which design guidelines can deduced:



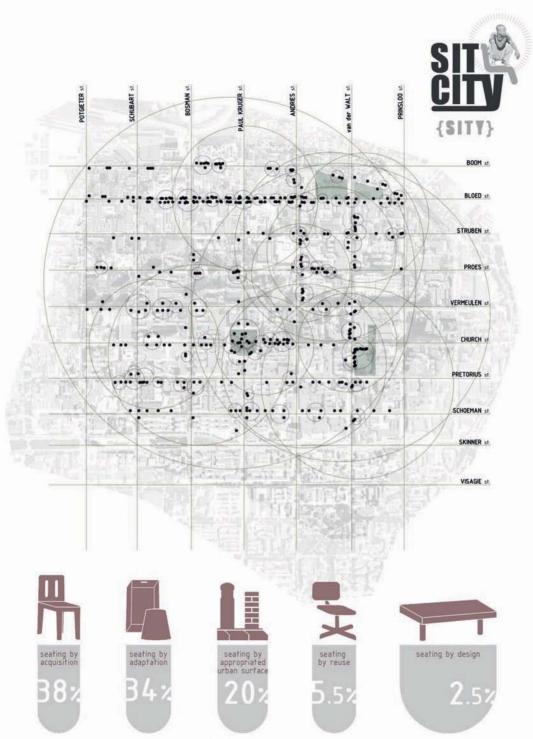
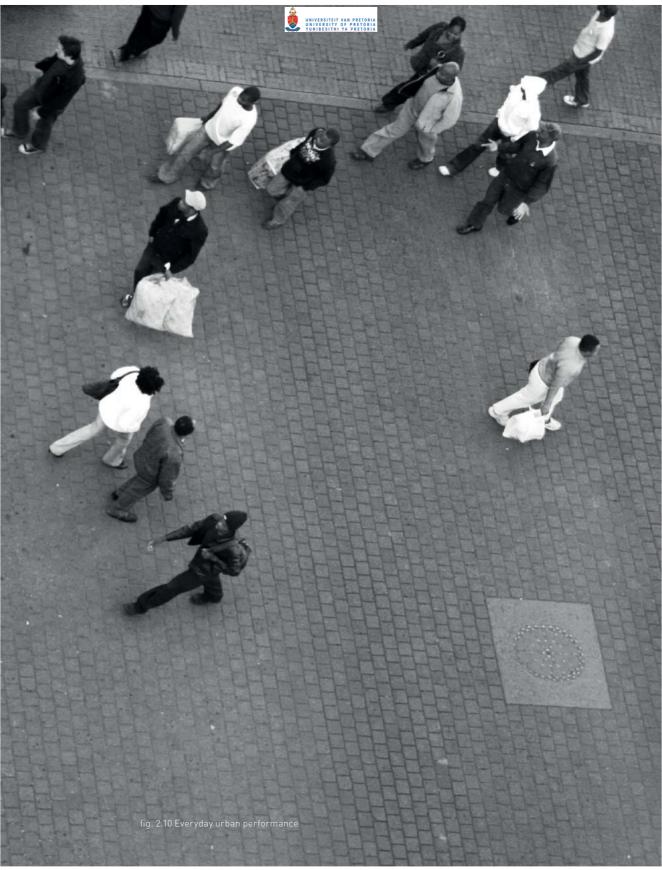


fig. 2.6 Sit City study of Pretoria context [Sity]















The built environment thus contains both settings and the props for the performance of the everyday.

Performance»

According to Borden & Clear (2009: 243) the city can be understood as something that is performed or practised. The American anthropologist, author and actor William Beeman (Beeman, 1993: 369) describes how performance is both mimetic (in that it imitates action) and affective (in that it transforms action) (Borden & Clear, 2009: 243). Through an anthropological view of performance, it becomes clear that everyday performances within the urban context contains all institutions of public behaviour, including those which control and direct ritual and social interactions (Beeman, 1993: 369; de Certeau, 1984: 104). Accordingly we can conclude that the built environment provides both settings and the props for the performance of the everyday. These everyday performances do not necessarily only imply people (performance of the users); however it also includes the flux in urban conditions (performances of the city), as well as the flux in natural conditions (performances of the seasons). This reveals a temporal element within the city, accentuating various scales of time with these performances (fig. 2.15).

Case study 2 - Can you see the dot? »

An experiment was conducted to see our level of perception within the urban environment. On the following page both a dot and an asterisk (fig. 2.26). This experiment is based on Heinz von Foerster test of the blind spot (von Foerster, 2002: 212): Cover your right eye with you right hand, while holding the page with your left hand. Slowly move the sheet backward and forward, along your line of vision, taking note when the dot disappears. This usually occurs between 18 -25cm from the eye; once the dot has disappeared continue staring at the dot, as you will see the dot remains invisible.

Heinz von Foerster explains that it is, "that our field of vision appears whole and consistent everywhere. In other words: we cannot see that we cannot see. We are blind to our blindness" (von Foerster, 2002: 21). Even though we know that the dot exists we cannot see it. The same concept can be understood as a metaphor for the everyday within the urban environment; where architecture holds the potential to celebrate these hidden









In a sense architecture becomes the device by which perspective is gained, revealing the **spectacle** of the quotidian context.

performances of the everyday. Accordingly light can be seen as an architectural tool by which we can perceive the urban environment. Le Corbusier expresses architecture as the, "masterly correct and magnificent arrangement of forms seen in light" (le Corbusier, 1931: 31). In a sense architecture becomes the device by which perspective is gained, revealing the spectacle of the quotidian context.

An everyday activity is explored by Joe Davis (2007) in his concept of "Telescopic Text", where he describes the ordinary process of making tea (fig. 2.14) (Davis, 2007). Through expanding on the seemingly simple task of making tea; the variability, slips and complexity which occur simultaneously within the activity, are exposed. As Joe's meta-description for his concept says, this is "...an exploration of scale and levels of detail. How much or how little is contained within the tiniest, most ordinary of moments" (Davis, 2007). The dominating level of detail can also be related to the interaction between people and environments, or even the simple event the everyday praxis of a pedestrian. Telescopic text thus describes the relationship and interactions between people, objects and spaces within the quotidian context.

Inhabitable Interfaces»

The concern of Modern architecture has been with the use and design of 'empty' space (Doordan, 2001: 201). As a result, walls (and by large the physical substance of architecture) have been socially, politically and functionally relegated to become mere space organizers and divider (Cruz & Gage, 2009: 114). Koolhaas (2005: 663) identifies the mutations of the use of a dividing wall within an African context stating that, "the property line, originally a conceptual and abstract legal division designed to divide, enclose and exclude, has materialized into a vertical wall, whose surface has become an attractor for use, contamination, and the establishment of new economies. The wall has come to be taken for granted as an infrastructure that supports and serves a host of economies and small-scale industries". This thus exposes the potential of programmable spaces and infrastructures, where the adaption of architecture can respond to the everyday context of the city.



I made tea.

Yawning, I filled the kettle and switched it on. I got some biscuits. I poured milk into a cup. Then I made myself a cup of tea.

Yawning, walked into the kitchen and filled the kettle with water, making sure it was cold enough (). I glanced outside for a minute at the mist. I plugged the kettle in and switched it on. I got some biscuits. I poured milk into a cup that I'd left out earlier. The kettle grumbled so I poured water onto a teabag and watched it brew. I put the teabag in the bin. I picked up my mug and left the kitchen with a cup of strong tea.

Yawning, and smearing my eyes with my fingers, I walked bleary eyed into the kitchen and filled the kettle with fresh water from the tap, checking with my hands to make sure it was cold enough (The best tea comes from the coldest water). I glanced outside for a minute at the city mist. I plugged the kettle in and switched it on. As the kettle began to hiss, I looked for biscuits, and found fusty digestives. They're always nicer when they're dry and stale. I took the milk out of the fridge and poured some into a cup that I'd left out earlier. The kettle began grumbling so I poured water onto a teabag and watched swirls rise up through the water. A few minutes passed. I removed and squeezed the teabag, then flicked it into the bin. I picked up my mug and left the kitchen with a nice, hot cup of strong tea.



The Wall has come to be taken for granted as an infrastructure that supports and serves a host of economies and small-scale industries

Cruz & Gage (2009: 114) propose the concept of 'inhabitable interfaces'- which is seen as an extended meaning of 'the wall'. This concept is further explained as, "involving both a mental and physical activity, 'inhabitable' is a condition that is ever transient, and implies the potential act of becoming inhabited. It suggests an embodied experience, which is the interplay between the body's presence, its perceptual practice, and the engagement with the environment around it" (Cruz & Gage, 2009: 114).

Case study 3 - Musical stairs»

An investigation into how the introduction of a new experience into the urban environment can attempt to activate the quotidian context. Swedish design firm DDB° (2009) designed an installation on a busy Swedish staircase in the subway (fig. 2.15). Their aim was to see how they can activate the staircase rather than the use of the escalator (DDB° Stockholm, 2009). The installation provided musical notes that played when people walked up the stairway. This introduction of musical sound within the context catalysed the use of the stairway, exposing the experience of the change in levels. Thus highlighting the experience, making it something tangible; where the mundane function of the staircase is inhabited, adapted and experienced (fig. 2.15).

From this experiment we can note how the stairway has become both inhabited and activated through the installation. It is understandable that the novelty of such an installation will become old in time; however the underlying concept is still valid. Through looking at a mundane architectural element such as a stairway from another perspective, we can transform it to become something more. Thus by questioning the function of the simple wall as proposed by Koolhaas, Cruz and Gage we can transform the everyday context to something responsive, interactive and inhabitable - highlighted by the experience and performance of the urban environment.



G ODENPLAN

fig. 2.15 Musical stairs in Stockholm, 2009.



The city exists in mutated forms of the generic city, where urban fortifications have been adapted to block fortifications, the public forum internalized, and trade replaces social necessities

Typology of public space

"Public space is the city's medium for communication with itself, with the new and unknown, with the history and with the contradictions and conflicts that arise from all those. Public space is urban planning's moderator in a city of free players" (Christ, 2000: 17). In an increasingly diverse community, the role of public space within the city becomes critical. Currently Pretoria exists in isolated instances encapsulated by impenetrable boundaries. The city exists in mutated forms of the generic city (Koolhaas, 2005: 16), where urban fortifications have been adapted to block fortifications, the public forum internalized, and trade replaces social necessities (Bremner, 2010: 252). Thus there is a need for public spaces to revitalize the urban environment, attempting to achieve a "reconquered city" as expressed by Gehl (2003: 18). Krier (1980: 47) identifies the need for a hierarchy of public space, where in Pretoria, the scale ranges from commemorative historical squares, to open green space and pedestrian arcades (fig. 2.16). This hierarchy of public space is found along Van der Walt street, however a network of public space is needed to link these spaces in a positive manner (fig. 3.10).

The need for a new public typology is thus evident, bringing both the street and square interface in a hierarchy of space, responding to the fragmented relationships of the city. Aymonino & Mosco (2006: 21-23) identify four points that defines positive public space:

- 1) A strong relationship with its surrounding context
- 2) Multiple potential and variety of use
- 3) Evoking a positive sense of participation
- 4) A space that is open to all.



















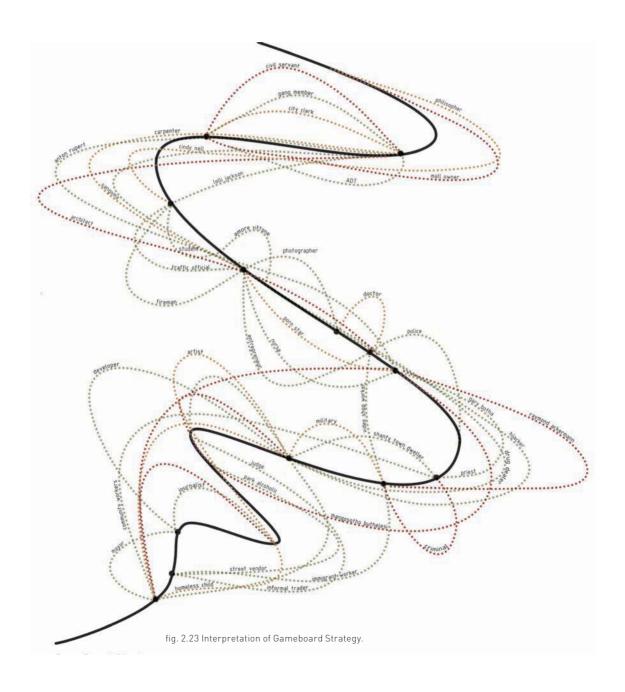
The crossing of these paths leads to a plethora of inevitable interaction possibilities within urban space. Architecture has the responsibility to create the platforms upon which these interactions occur.

The everyday activities within public space are investigated by Graafland (2008: 23 -29). The "gameboard strategy" explores the temporal qualities of the urban environment (fig. 2.23). Within this dimension exists patterns of use, different patterns for different urban users. While care is taken by the urban dwellers for these paths not to cross, a type of 'cat and mouse game of avoidance' is formulated (Graafland, 2008: 24). However, these paths do cross resulting in either harmonious or harmful space. This metaphysical 'gameboard' forms the structure of the city which forms the "backbone" of the hypothesis (public space) (fig. 2.23).

Time is a function of the layering of different rates of change, the "backbone" introduced in this hypothesis illustrates not a linear quantitative representation of time, but rather a qualitative multi-layered perception of time. Spontaneous daily activity leads to possibilities for interaction similar to the rolling of a dice in a board game (Alkayyali, Gouws & Grobbelaar, 2011). These interactions occur when the different paths cross upon the "backbone". The crossing of these paths leads to a plethora of inevitable interaction possibilities within urban space (fig. 2.23). Architecture has the responsibility to create the platforms upon which these interactions occur (Alkayyali, Gouws & Grobbelaar, 2011).

Similarly, Franck and Stevens (2006: 42) identify the need for the "looseness of space". Loose space is defined as, "space that has been appropriated by citizens to pursue activities not set by a predetermined program". Within this concept the quotidian context is identified as a critical setting which encapsulates loose space, as it does not enforce strict control, making it a successful form of public space (Franck & Stevens, 2006: 42). This looseness of space does not coincide with the 1960's concept of universal space, where theoretically within a space, anything can happen- but more often than not, nothing happened (Allen, 2008: 107). The looseness of space thus strengthens the concept of a programmable urban surface, which responds to the everyday identity of space, allowing for adaptation, development and growth.







Liminal Public Space»

Through celebrating the everyday performances and with the understanding of the 'gameboard strategy' it is possible to gain a perspective on the spatial narratives which exist within the city. The poetics of the everyday exposes the identity of the urban space, through both the context and its activities. The notion of the everyday acknowledges certain silent or invisible dimensions of urban performances: where common practices have become routines (Franck & Stevens, 2006: 42). From the research it is evident that the praxis of the everyday manifests within the inbetween spaces of the city. It is these multi-directional spaces that provide the "looseness of space" for everyday life (fig. 2.24).

Therefore there is a need to define an architecture that responds to this concept of liminal public space. The understanding of liminality has multiple contexts, ranging from the social and cultural to the spatial. The root word "limen is derived from the Latin word for 'threshold', meaning 'being on' a threshold" (Alexander, 1977: 31). In all contexts, liminal refers to an intermediate state or condition; an in-between condition where the spectacle of the everyday can be perceived.

The success of public space is dependent on the programming of its edge or threshold. The relationship between the spaces and practices of liminality is illustrated in the approaches of Italian architectural group Stalker. Stalker are interested in disused and physically marginal, urban spaces where people appropriate and occupy space beyond architectural practice norms (Stalkerlab, 2010). Within these spaces, Stalker believes that architecture can manifest as events and acts of occupation rather than building form alone (Stalkerlab, 2010). Stalker's approach to architecture thus illustrates the importance of liminality within the public realm. Here architecture has the opportunity to provide an inhabitable surface as expressed by Cruz and Gage (2009: 114) that supports the quotidian context. A space that allows for all the variations of de Graafland's gameboard (2008: 24). Here architecture is almost reduced to its minimum so that the maximum gain can be achieved by the urban context. The architecture in a sense becomes a form of an inhabited infrastructure, both celebrating and supporting the everyday praxis - including all 3 performances: personal, urban and natural.



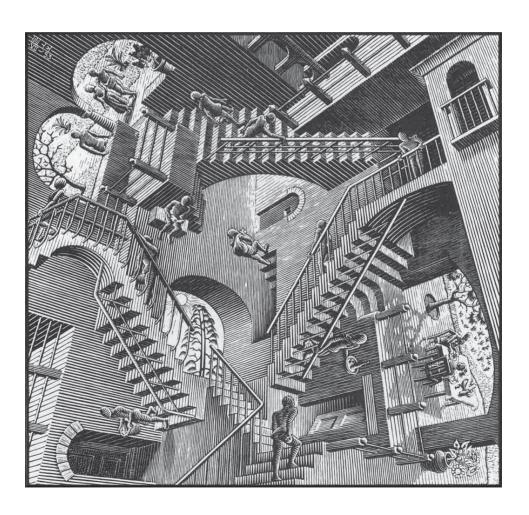


fig. 2.24 Relativity (Escher, 1953).



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Case study 4 - Spectacle of the everyday: Spanish Stairs»

The Spanish Stairs in Rome is a good example of a positive liminal public space (fig. 2.25). Although the two contexts are different, the Spanish Stairs project provides a good precedent for an in-between space, where a multiplicity of narratives can occur. Jan Ghel (2011: 9) describes the Spanish Stairs in Rome as "a climb that is beautifully combined with interesting experiences." The progression of the steps provides an experience of movement for the user. De Certau (1984: 104) investigates the spectacle of the everyday within these liminal spaces. He proposes that through the observation of the quotidian, we can gain a greater understanding and perception of our urban environment.

This illustrates how architecture can respond to the quotidian context, where architecture almost recedes and provides the opportunity for activity rather than attempting to force it. Although simple in design, the steps provide an ideal backdrop, setting a stage for the praxis of the everyday, both celebrating and enhancing this spectacle.









fig. 2.25 Spanish Stairs, Rome.

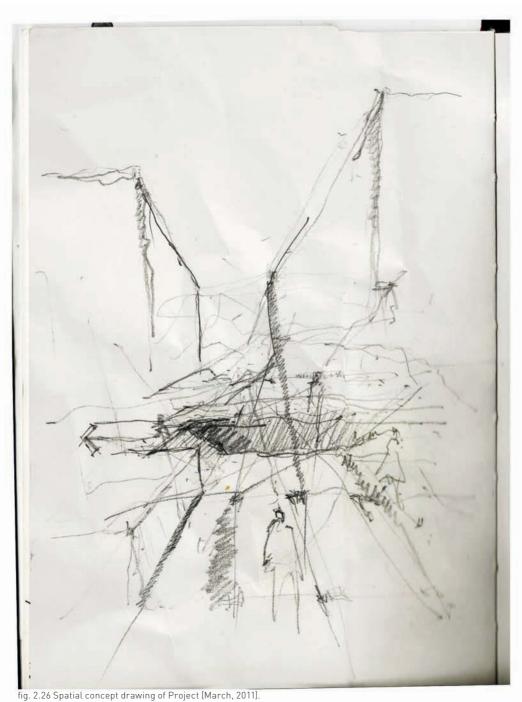


Conclusion

In conclusion, through identifying the value of the urban performances which have become overlooked within the city, architecture can respond to and celebrate these activities. By investigating an urban scale, through the definition of a contextual public space typology, the concept of an inhabitable urban surface is developed. From the research and theoretical argument, an architectural intervention should respond to Crawford's everyday urbanism (2008: 18), providing a small scale catalytic intervention for urban renewal of liminal spaces.

Through exposing these everyday workings of the city, the project provides the potential for a fragmented intervention along Van der Walt Street, linking and exposing the incoherent urban environment. The spectacle of the everyday is exposed through the inhabitation of the public realm. The focus of the architecture is then placed on the liminal spaces and the spectacle of the quotidian. This theoretical investigation is therefore used as the basis and generator for the project, where the site, design and resolution are seen in a similar theoretical premise (fig. 2.26).







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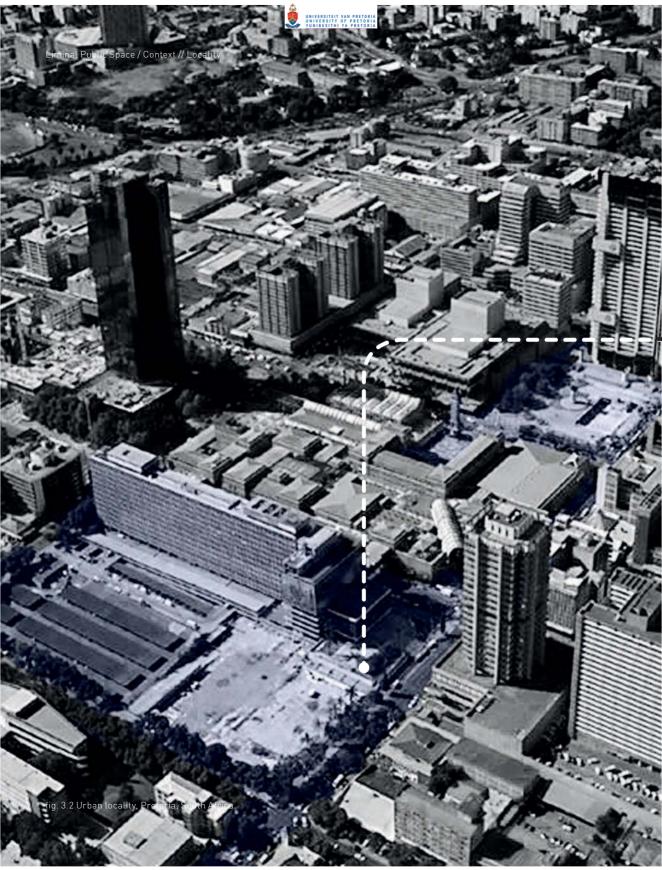
Union Buildings

to Pretoria East

"Among the many networks of flows that go into the making of the city; the network of encounters, of meetings, is a network that is underestimated and underrated." – [Holden, 2008: 289]

Site

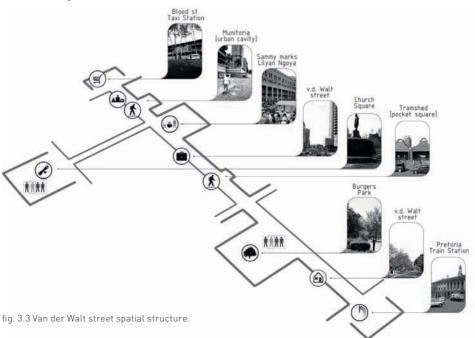
The site area under investigation sits along Van der Walt Street, Pretoria (fig. 3.1). Van der Walt Street, which runs north-south within the city, is one of the most active pedestrian corridors due to the two modal interchanges found at either ends (fig. 3.3). Along this corridor lies a series of important public urban components (fig. 3.1 -3.9). Le Roux (1991: 40) identifies Van der Walt Street as a critical pedestrian axis within the city, highlighting the active street's interface which is provided by buildings that open up onto the street.



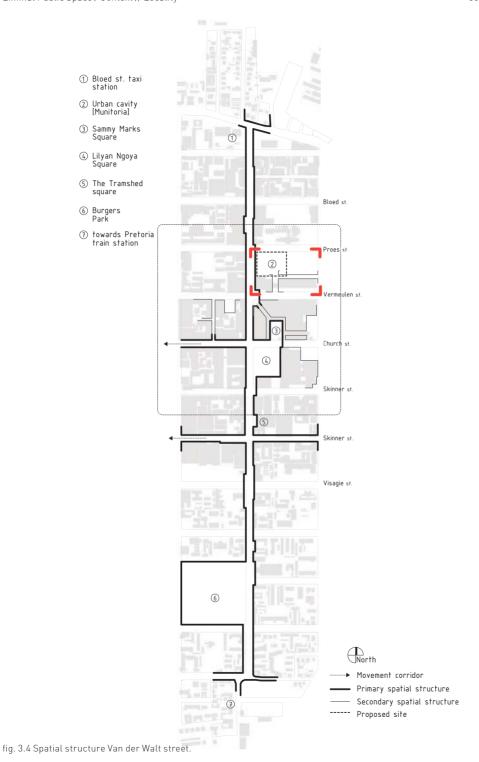


.___ Locality

The site is located in the civic and economic heart of the city. Pretoria labels itself as the governmental capital, housing the majority of government departments. Within the 'city's centre' there is a balance between government, economic and private ownership. The site under investigation is erf 3200 on which the Munitoria building sits. In front of the augmented building exists an urban cavity. This urban cavity is what remains of the Western wing of Munitoria, which burnt down in 1997.









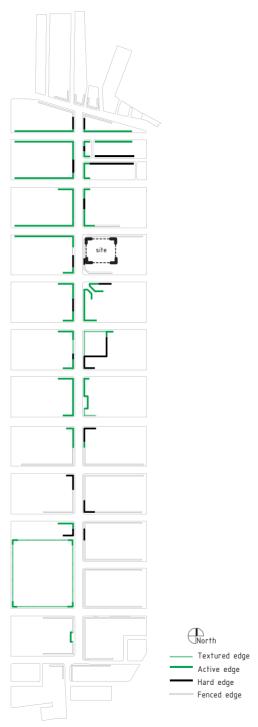


fig. 3.5 Edge condition Van der Walt street.

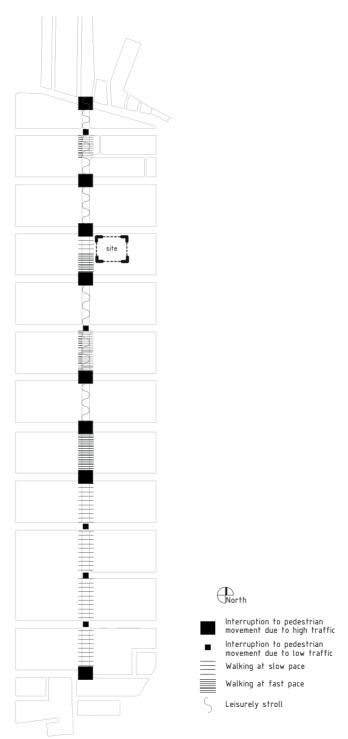


fig. 3.6 Pace of Pedestrian Van der Walt street.



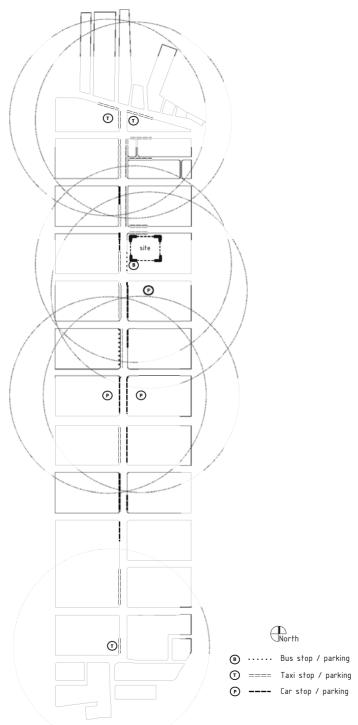


fig. 3.7 Public Transport along Van der Walt street.



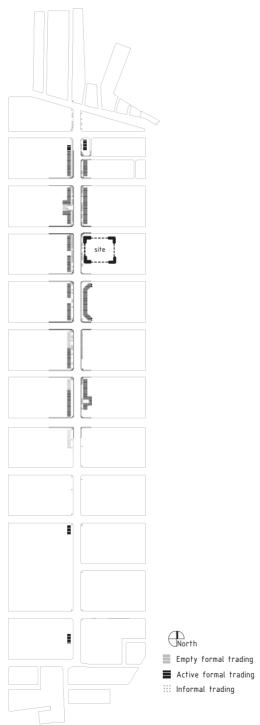


fig. 3.8 Trading opportunities Van der Walt street.



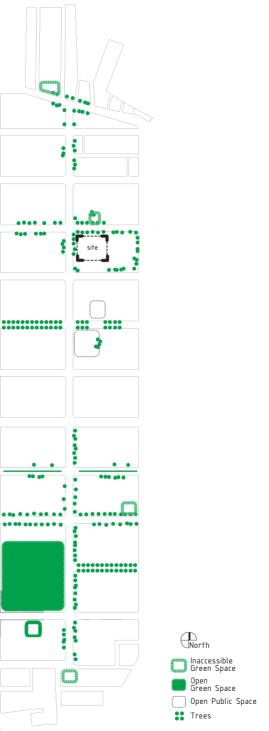


fig. 3.9 Open green spaces Van der Walt street.



.....

Urban group framework»

The proposed urban framework is a contextual framework aiming to strengthen the existing urban fabric by reacting to and consolidating existing infrastructure- rather than imposing on the existing urban context (fig. 3.10). A particular emphasis is placed on the connectivity of the study area and the linking of the different proposed interventions. Four different scales are addressed: urban (macro planning strategies), block (micro planning strategies), architectural (edge conditions) and detail level (design guidelines) (fig. 3.11).

T T

Urban Comfort

Protection against:

- 01 | Unpleasant Sensory Experience wind & rain pollution & dust noise & glare
- 02 | Crime & Violence lively public realm eyes on the street (passive surveilance) overlapping functions day & night good lighting
- 03 | Traffic & Accidents protection for pedestrians eliminating fear of traffic







- 01 | Human Scale buildings and spaces designed to human scale
- 02 | Enjoy Climate sun / shade heat / coolness breeze
- 03 | Positive Sensory Experience good design & detailing good materials fine views













Urban Opportunities

Opportunities to:

- 01 | Sit zones for sitting utilising advantages: view, sun, people good places to sit benches for resting
- 02 | Stand & Stay (Wait) edge effect / attractive zones for standing supports for standing
- 03 | Walk room forwalking no obstacles good surfacing accessibility for everyone interesting facades
- 04 | See reasonable viewing distances unhindered sightlines interesting views lighting (when dark)
- 05 | Talk & Listen (social interaction) low noise levels street furniture that provides 'talkscapes'
- 06 | Ptay & Exercise invitations for creativity, physical activity, exercise & play by day & night in summer & winter



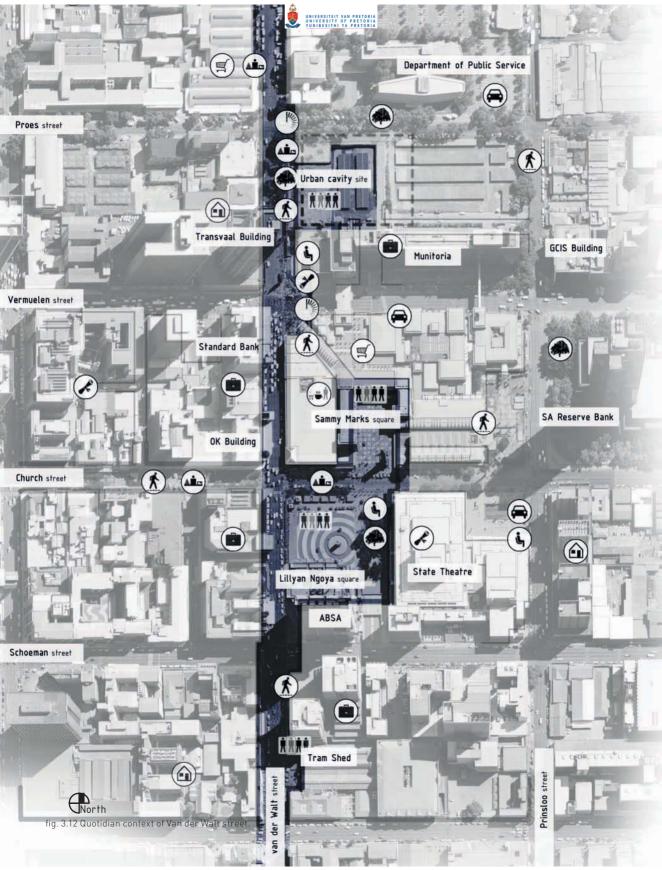
 $fig.\ 3.10\ Design\ Guidelines.$







fig. 3.11 Group urban framework







housing and residential units



commercial and institutional units



retail and shopping opportunities



cultural and religious spaces



entertainment spaces



informal trading



private vehicle parking



pedestrian activity



seating spaces



shaded green spaces



waiting spaces



public space and squares

Local context»

The site houses both Munitoria and its aftermath; lightweight parking structures, and a permanent parking structure. The site lies on an important threshold within the city. Van der Walt Street supports various open public spaces (fig. 3.12), with a strong pedestrian link towards the historical centre (Church Square).

While it is important to map out the existing buildings surrounding the site, due to the formal and social qualities they provide (fig. 3.12); it is as important to note non-architectural qualities that occur in-between the buildings (fig. 3.12). Trees that provide shade and shelter from the sun, vendors tapping into pedestrian activities, interim spaces where people can cross the road or even ledges that form seating in the urban environment. These factors inform the quotidian context of the city, these 'urban accidents' which inform the architectural identity of the urban environment (fig. 3.12). All of these conditions direct the performances within the city, which as stated earlier, are in constant flux.



Munitoria

Munitoria [from] Muni-cipality and Pre-toria, was named as part of a public competition in February 1969 to find a suitable name for the council building (Tindall, 2002: 2).

On Tuesday 4th March 1997 the blazing fire that destroyed the west wing of the Munitoria complex finally came to rest after about 12 hours of fire fighting. Records, documents and office equipment of various departments were turned to ash (Leitch, 1997: 22). The remaining structure was imploded in 1998 (fig. 3.14). The only remains, to this day is the concrete basin (fig. 3.16). The building was designed by Burg Lodge Doherty and completed in 1969, show a strong resemblance to Van der Rohe's Alexander Platz project (fig. 3.13) (Fisher, le Roux & Mare', 1998: 52).

The building houses the Tshwane Municipality. In attempts to raise the building from its ashes, Project Phoenix was launched. A competition established to rebuild the destroyed section of the building, but with intent to "reflect a distinctly African character, with an emphasis on the precolonial history of the City" as stated by Subesh Pillay- Member of the Mayoral Committee responsible for Public Works and Infrastructure (Hlahal, 2007). However, the project was terminated due to financial and feasibility issues.

The building is sometimes viewed as a symbol of Afrikaans nationalism, a regime linked to struggle and heartache (fig. 3.15). Recently a plan to implode the building, along with its connotations, and to replace it with the building of Pillay's "African character" (Hlahla, 2007). However one needs to question the value of the structure. Amongst its heritage, embodied energy and its environmental value, the building forms a distinct character and edge within the city (see appendix A).



Currently the building sits trapped in time, as a result of government inactivity, forming the backdrop for the everyday performances. Where on the outside people carry on with their everyday lives, while hidden on the inside, the inner workings of the municipality play out its script. Visible, however, is the result of these activities, the textures, colours and surfaces (fig. 3.17 -3.21). The urban cavity forms a negative space and requires redevelopment. The intervention should therefore provide a civic forum for the city, where changes in levels and texture thus becomes another layer by which the everyday is exposed.



fig. 3.13 Munitoria under construction.



fig. 3.14 Munitoria implosion.



fig. 3.15 Munitoria West-Wing.



fig. 3.16 Munitoria Urban Cavity.















4

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Park(ing) Day

by REBAR» adaptability of public space

The projects aim was to provide temporary public open space in a privatized part of the city. "One of the more critical issues facing outdoor urban human habitat is the paucity of space for humans to rest, relax, or just do nothing. For example, more than 70% of San Francisco's downtown outdoor space is dedicated to the private vehicle, while only a fraction of that space is allocated to the public realm" (REBAR, 2005). Parking spaces in the city occupy precious real estate, whereby they are 'rented' out on an hourly basis by feeding the parking meter with coins. The parking spaces are then transformed into a positive form of public space (fig. 4.1). Park(ing) Day is an initiative that occupies metered parking within the city, turning them into a 'public park' for one day. It happens annually on the 16 September worldwide where in 2010 more than 800 PARKS where placed in 183 different Cities covering 30 Countries and 6 Continents. The project engages with the adaptability of space. The designed transformation of a 2,5x5,5m parking space is given back to the public realm, providing positive soft spaces within the city - demonstrating the potential of small scale 'everyday urbanisms' responding to the context of the city. The project also shows the adaptability and appropriation of the public realm in both function and space.





fig. 4.1 Park(ing) Day, REBAR adaptability of public space.



Casco-Land

by Sharp City» appropriation of public space

Cascoland is a project that takes artists, architects and designers, and concentrates their collective energy and creativity on public spaces (Cascoland, 2007). The aim of the project is to activate and animate public spaces within the city. In 2007 the project looked at the site of the Drill Hall in Johannesburg, where "... a structure that is not programmed in itself; but has the capacity to catalyze other programs, functions and other interventions, thus animating public space" was proposed for this site (Hofmeyr & kiratzidis, 2007: 32). The intervention design by A. Hofmeyr and D. Kiratzidis with SharpCity looked at the everyday activities of the site, while it proposed various possibilities of new activities that can be introduced (fig. 4.2).

The architecture responds to Crawford's concept of everyday urbanism (2008: 18), while considering the idea of Cruz and Gage's inhabitable interface (2009: 114). This intervention shows the manner in which local public space can be transformed through an unprogrammed architecture. Exposing how public space is appropriated to suit the needs of its users, function, events and activities accordingly.



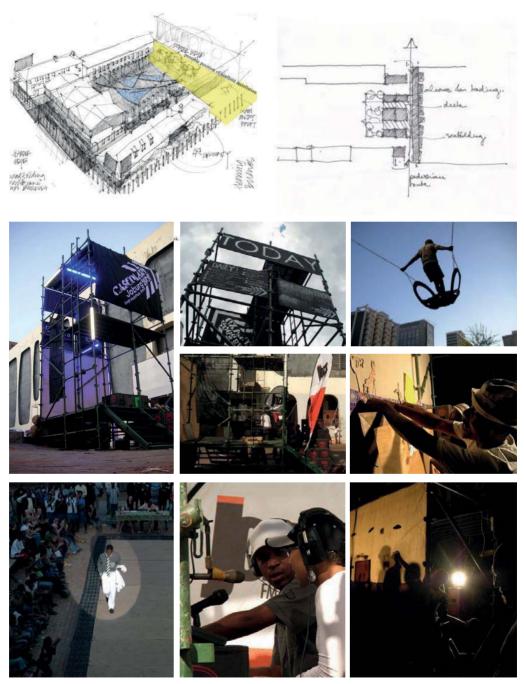


fig. 4.2 Casco-land, Sharp City appropriation of public space.



TKTS building

by P. Eastman» contextual public architecture

Situated in one of the busiest public spaces in the world, Times Square, the TKTS building serves the mundane function of selling discounted Broadway tickets. However the architecture forms more than just a ticket booth. Viemeister (2008) says that, "It goes beyond meeting the criteria [of the competition] and is even poetic, which is really hard considering the Times Square environment. It will become a landmark." The design philosophy behind the architecture stemmed from the fact that the original booth was one of New York's great gathering points, and a focal point for urban theatre, yet there was nowhere for people to sit and soak in the ambience.

Thus the architecture responds to the context by providing a space to sit and observe the everyday activities within Times Square, where the roof of the booth is terraced to create seating. Also the building frames the statue of Father Duffy, and provides and urban edge to the space. In a sense the buildings form a type of public infrastructure supporting the public space of Times Square (fig. 4.3).

















fig. 4.3 TKTS building, P. Eastman contextual public architecture



Parc de la Villette / Magnets

by B. Tschumi / C. Price» public infrastructure and planning

Parc de la Villette» B. Tschumi

Designed on the principle of point, line and surface Parc de la Villette challenges the idea of urban planning and architecture. These points are deconstructed follies, which are planned along a grid that is superimposed on the site and the urban context. The design of the follies allows for multiple programming of the site, almost becoming infrastructural. Here Tschumi introduces the ideas of "cross-programming, trans-programming and disprogramming, which challenge conventional building typologies.

Tschumi's design for Parc de la Villette allows various elements outside the realm of architecture to influence the design. The "park" also follows a deconstructive approach, were the boundaries between architecture, philosophy and literature are blurred. This allowed an approach which is heavily entrenched in meaning. Events were designed instead of defining a form or structure, in that sense Tschumi challenges the idea of a park, and develops the concept of an 'urban park'. Instead of creating a formal language for the 'function' of a park, events and experience of space were the design for the park, which questions the idea of a park typology (fig. 4.4). This approach opens the design to criticism of its validity, because the theory followed may not be accepted by all. However the theory also gives the design meaning and justification, it also makes the space more than just architecture.



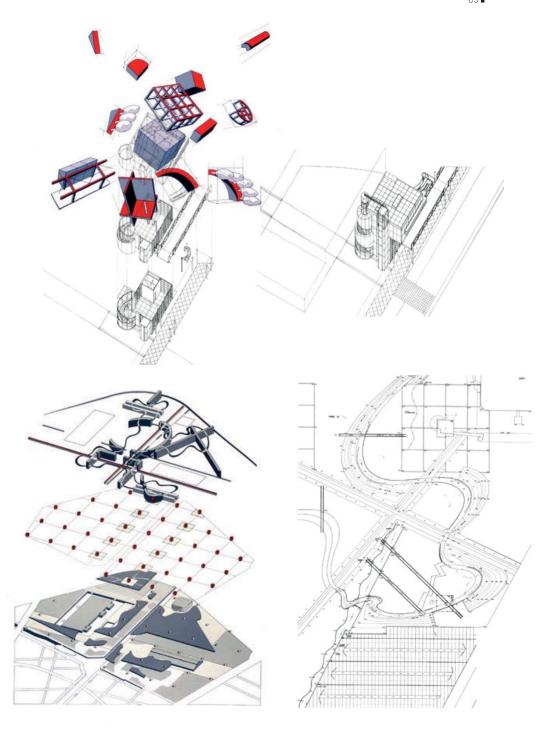


fig. 4.4 Parc de la Vilette, B. Tschumi public infrastructure and planning

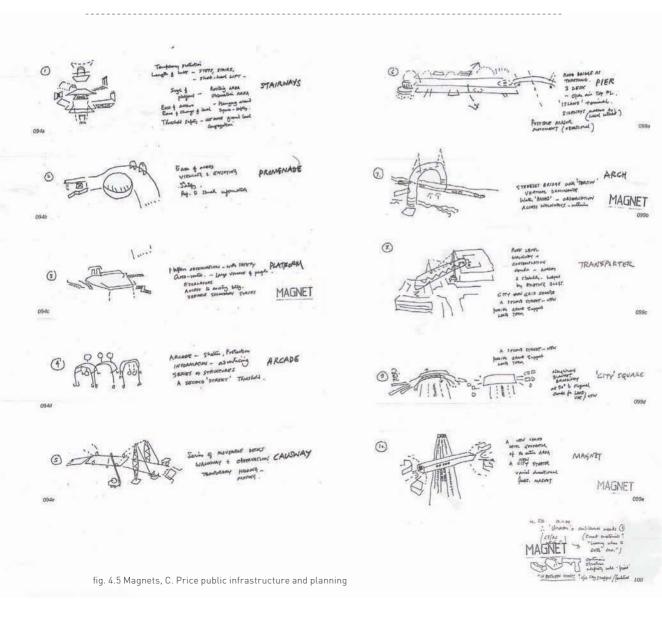


Magnets» C. Price

'Magnets' by Cedric Price gives insight into an alternative approach. Magnets proposes a series of short life structures, to be funded by local authorities, which would be used to set up new kinds of public amenity and public movement. According to Price (Hardingham, 2003:89) these structures would occupy space not usually seen as sites available to the public such as air space above roads, streets, parks, lakes and railways. They are designed to generate new kinds of access, views, sanctuary, safety and delight. They are designed to "overload" underused or misused sites, to make them more delightful and playful (Hardingham, 2003: 89) (fig.4.5).

This concept opens up the possibilities of architecture, where the building allows itself to do more, better rooted to its context and simultaneously light-hearted. These two projects show a varying approach, one which is deeply rooted to its site, and another to its theoretical argument. Both these projects can provide lessons in a planning approach for the project, where the site chosen contains the need to be flexible as well as contextual







Yokohama International Port Terminal

by FOA» public architecture and policy

"Our proposal for the project starts by declaring the site as an open public space and proposes to have the roof of the building as an open plaza, continuous with the surface of Yamashita Park as well as Akaranega Park. The project is then generated from a circulation diagram that aspires to eliminate the linear structure characteristic of piers, and the directionality of the circulation" (FOA, 2005). The project investigates an uninterrupted and multi-directional architecture, rather than a gateway to flows of fixed orientation. Rather than developing the building as an object on the pier, the project is produced as an extension of the urban surface, constructed as a systematic transformation of the lines of the circulation diagram into a folded and bifurcated surface. These folds produce covered surfaces where the different parts of the program can be hosted (fig. 4.6).

The policy of planning and architecture thus become critical in the Yokohama International Port Terminal. The architecture is viewed as something fluid and responsive to the context rather than opposing it. The articulation of surface through its folded organization produces two distinct spatial qualities; the continuity of the exterior and the interior spaces and the continuity between the different levels of the building. In a similar manner this continuity of urban surface is critical at the site on the 'urban cavity' at Munitoria









fig. 4.6 Yokohama International Port Terminal, FOA public architecture and policy





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"...our society is not one of spectacle, but one of surveillance; we are neither in the amphi-theatre, nor on the stage, but in the panoptic machine." -[Focault,1977: 217]

Concept development

The design concept is an amalgamation of the theoretical investigation. The design is an extensive process manifesting from the theoretical premise, discussed in the previous chapters. The project investigates the quotidian [or everyday] context of the city, where the urban environment is seen to contain both the 'settings' and the 'props' for these everyday activities. The mapping of the public realm reveals the quotidian context of the city, by using Bernard Tschumi's three squares principles (Tschumi, 2000: 14) (a system developed to read the narrative of film and architecture; fig. 5.2) as a design generator for the intervention. As a response to the extensive mapping of the context (Van der Walt Street), a series of public infrastructures are conceptually proposed to respond to each public condition (fig. 5.1); thereby both celebrating and enhancing the everyday context of the city. Such a response attains Crawford's (2008: 18) 'everyday urbanism' whereby a series of small scale public interventions are proposed along Van der Walt Street (fig. 5.1).

'Powers of Ten' is a 1968 American documentary short film written and directed by architects Ray Eames and her husband, Charles Eames, rereleased in 1977. The film depicts the relative scale of the Universe in factors of ten (Powers of ten, 2010).

The critique on Tschumi's la Villette and Price's Magnet projects' sets the planning approach for the interventions. The project is therefore an investigation of architecture on multiple scales. Inspired by Eames's 'powers of ten' (see note left) the intervention is an adventure in exploring Pretoria; and Van der Walt Street from these varying levels of scale, where the architecture provides a platform for viewing and engaging with the city. The proposed interventions planned along vd. Walt street are seen in the mapping (fig. 5.2) and placed on the model (fig. 5.1), setting both physical and theoretical macro context for the project.



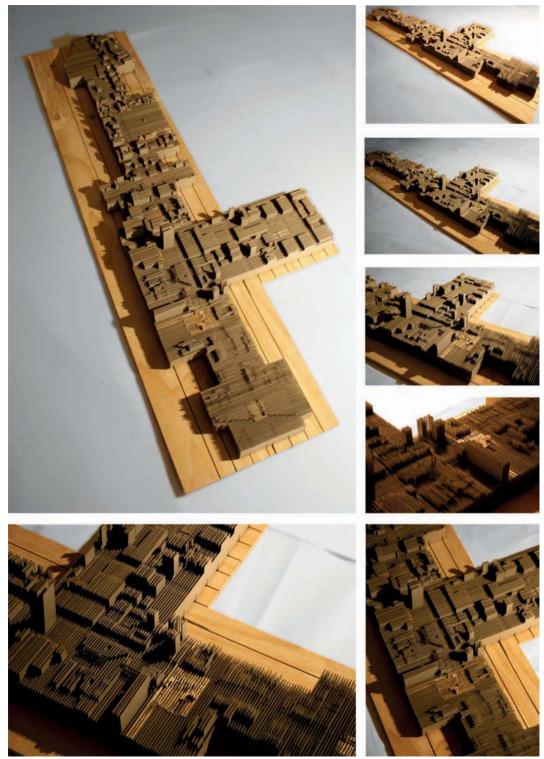
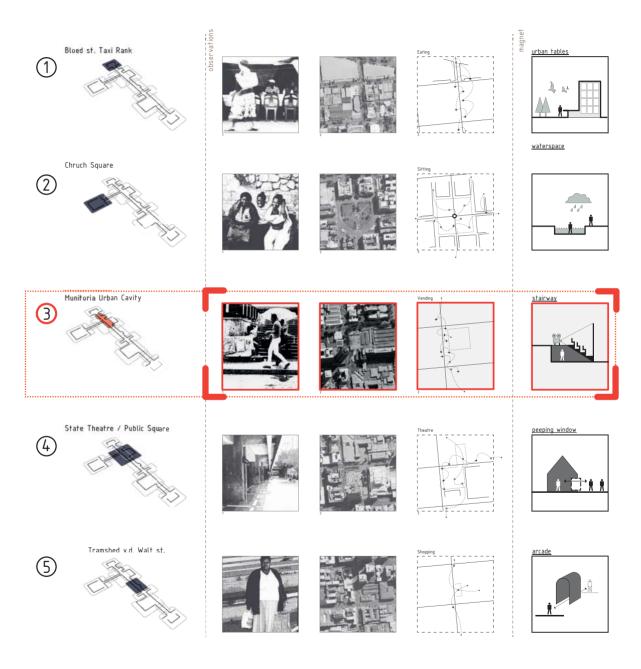
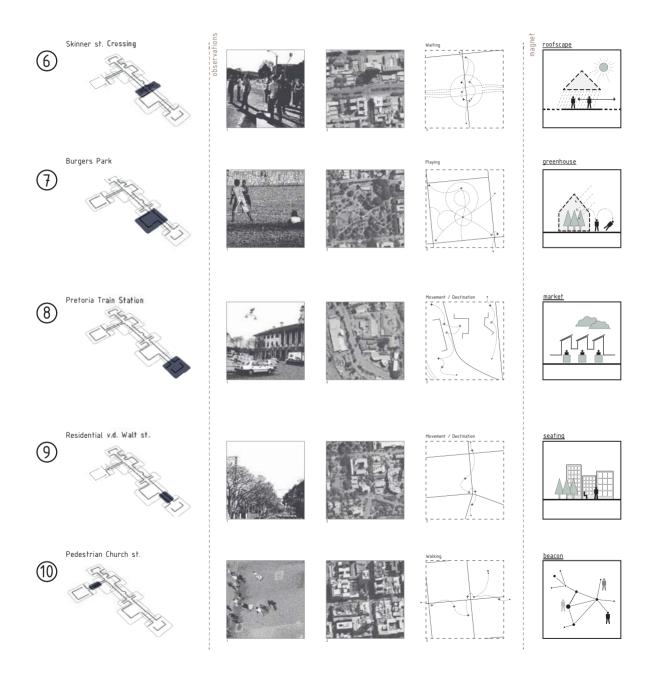


fig. 5.1 Concept Model of Van der Walt street and interventions [June 2011]







 $fig.\ 5.2\ Mapping\ and\ analysis\ of\ Van\ der\ Walt\ street\ with\ proposed\ interventions\ [June\ 2011]$

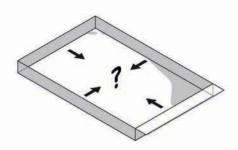


#3 Stairway

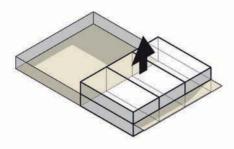
#3 the "Stairway" at the site of the urban cavity (at the burnt down West-wing) at Munitoria is developed further in detail. At this key site along Van der Walt street, a conceptual inhabited "stairway" is provided to bridge the level change (threshold) of the urban cavity and the street. As seen from the mapping, the burnt down basement creates a negative inaccessible void within the urban fabric, in turn creating inhumane edges (fig. 5.3). Through the manipulation of the urban surface the stairway brings together a multiplicity of programmes celebrating and enhancing the everyday context through its inhabitation. The stairway thus forms a new public building typology (defining liminal public architecture for an *active* public space, rather than the *static* form of public space which we find within the city).

Rather than designing for a fixed program, the architecture responds directly to the context (as observed in the "sit city" case study: fig. 2.6). Whereby the overlapping of activities of the quotidian define the urban surface allowing for its appropriation and inhabitation. Thus the stairway responds to Cruz and Gage's (2009: 114) notion of an "inhabitable interface", whereby the surface is programmable for the spontaneity of the everyday. This potential and complexity is understood through Davis' "telescopic text" (2007) which illustrate the multiple scenarios and possibilities within the everyday. The Stairway's multi-directional surface forms an extension of the street interface, linking both levels of public activity; offering potential to provide multiple configurations of the Stairway. This allows for various programming of the public space and its liminal infrastructure that responds to these varying narratives and events of this spectacle - as explained by de Graafland's "gameboard strategy" (2008: 24).

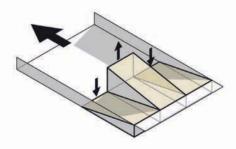




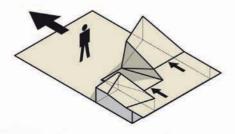
urban cavity as unkwnown space within the city, the need to link with surrounding context of the city.



activating the street edge by placing an architecture to activate both the street and the urban cavity.

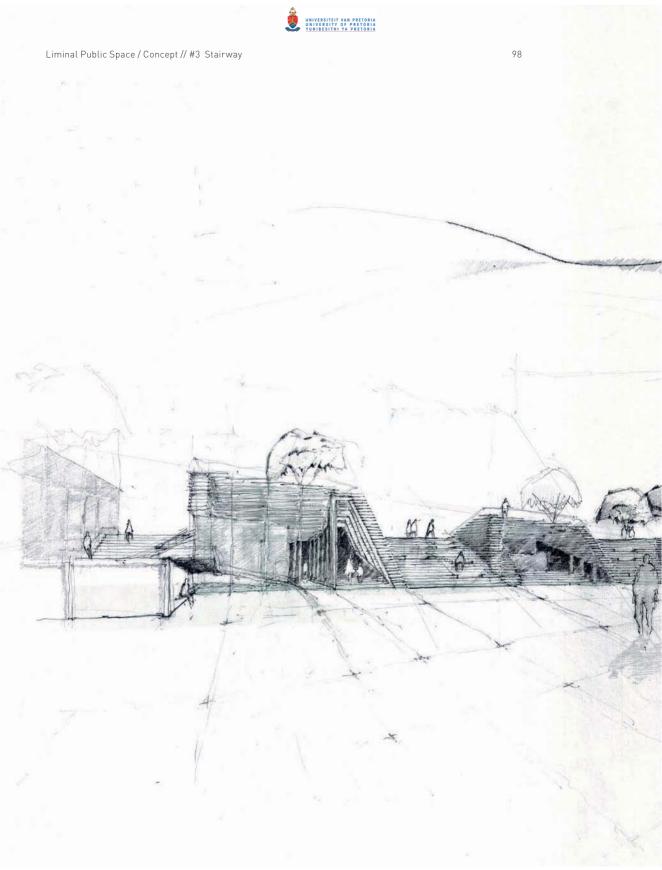


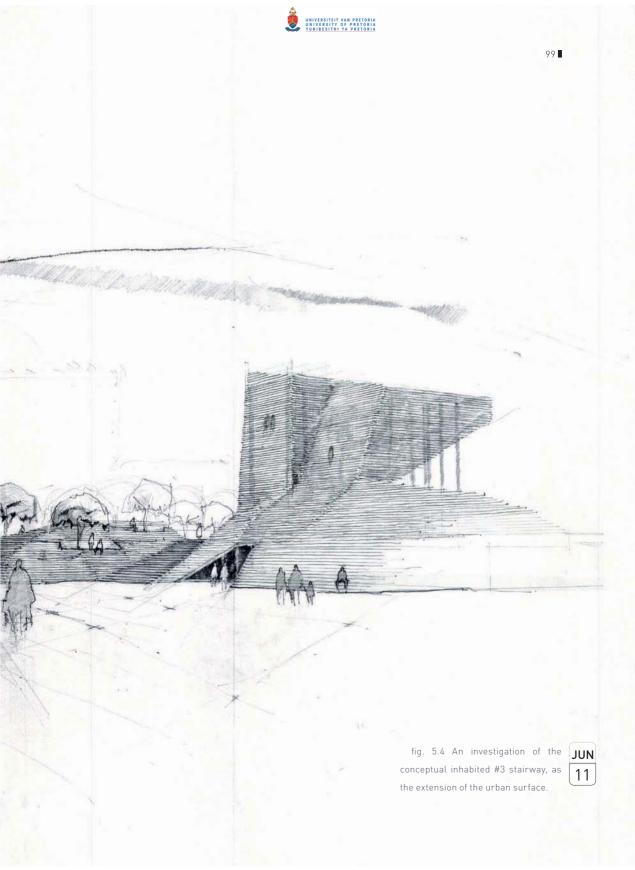
stairway links both levels of the public realm, allowing for the continuation of public space.

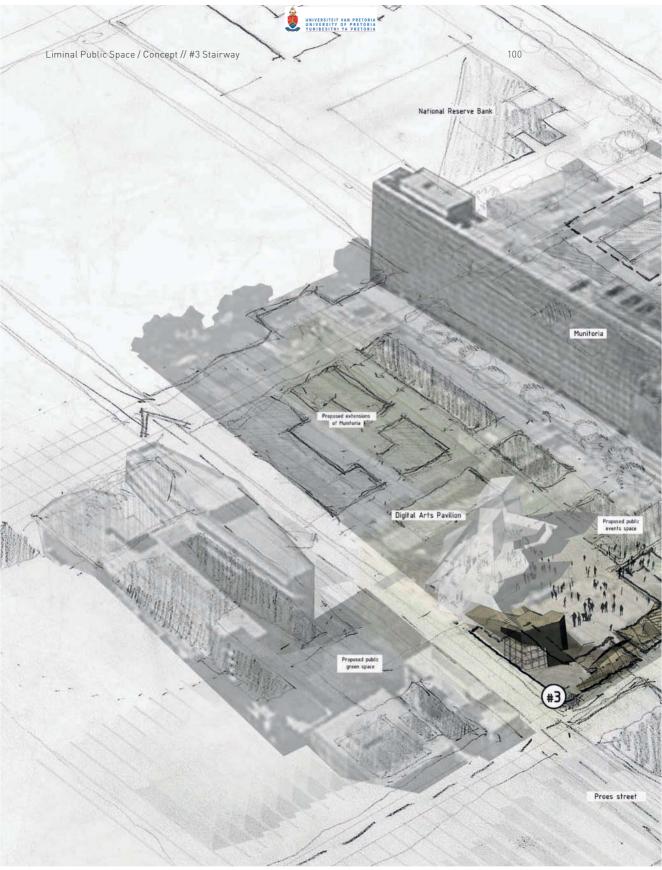


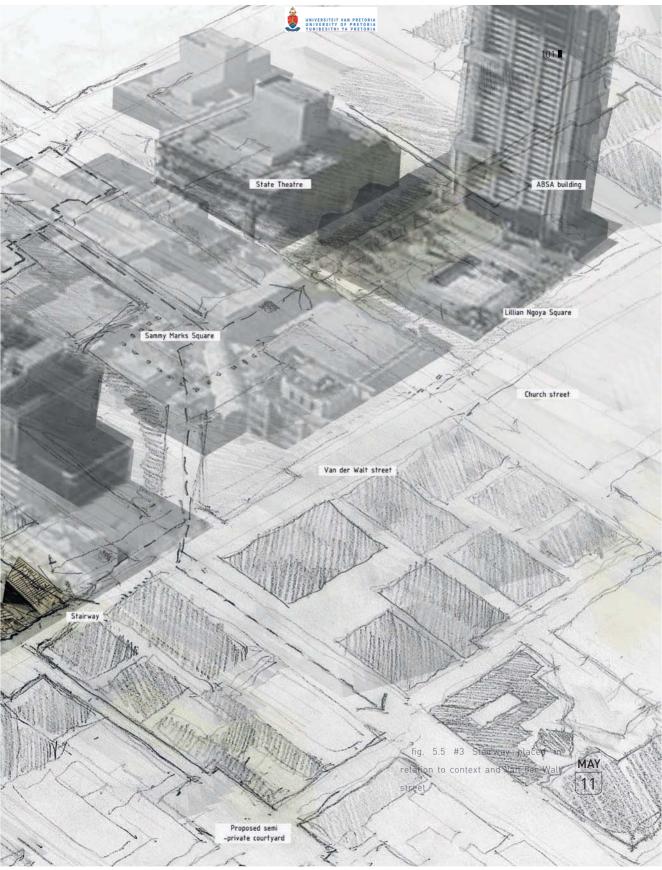
manipulation of urban surface to celebrate the everyday performances of the city, allowing for the inhabitation of the edge.

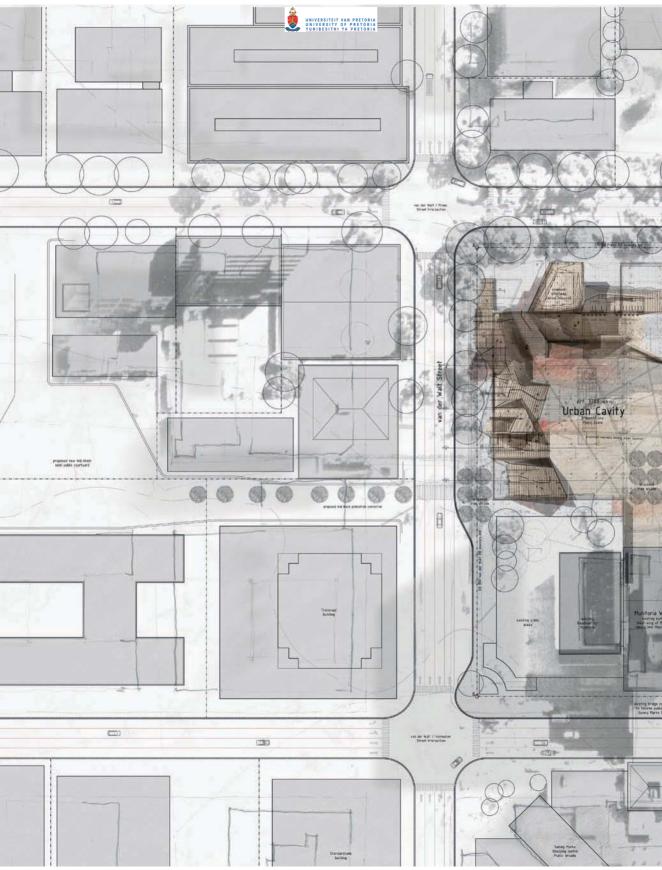
fig. 5.3 Concept of #3 Stairway [July 2011]

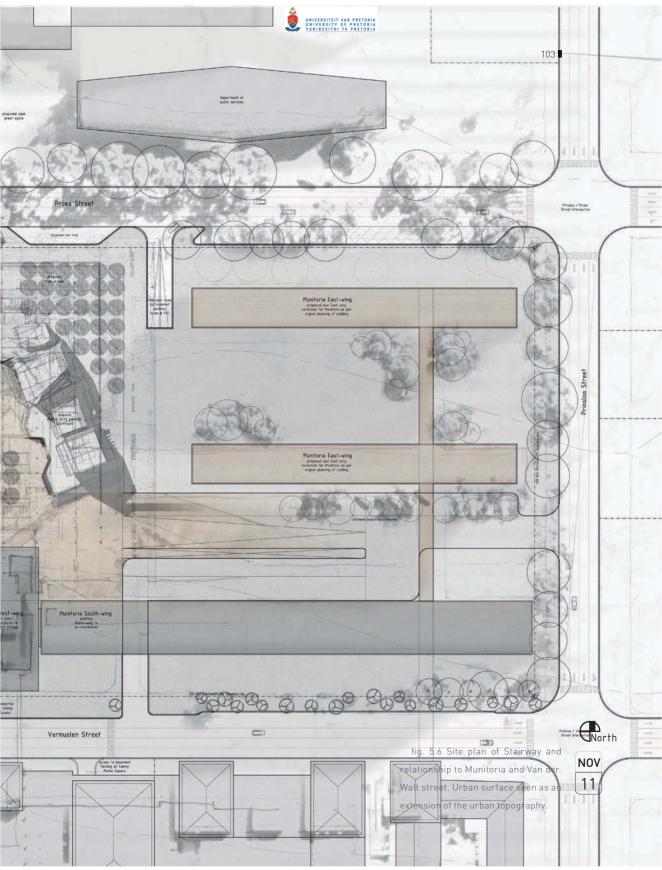




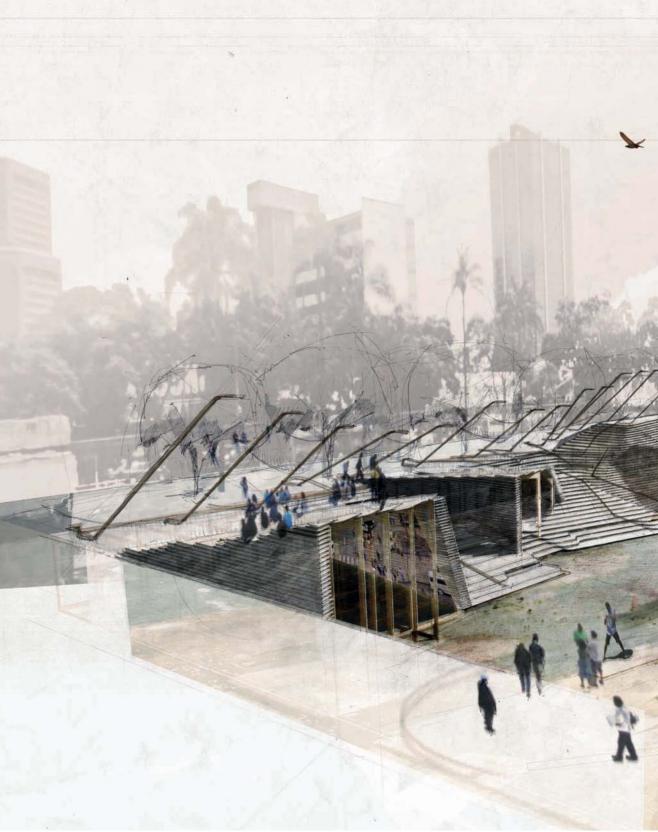




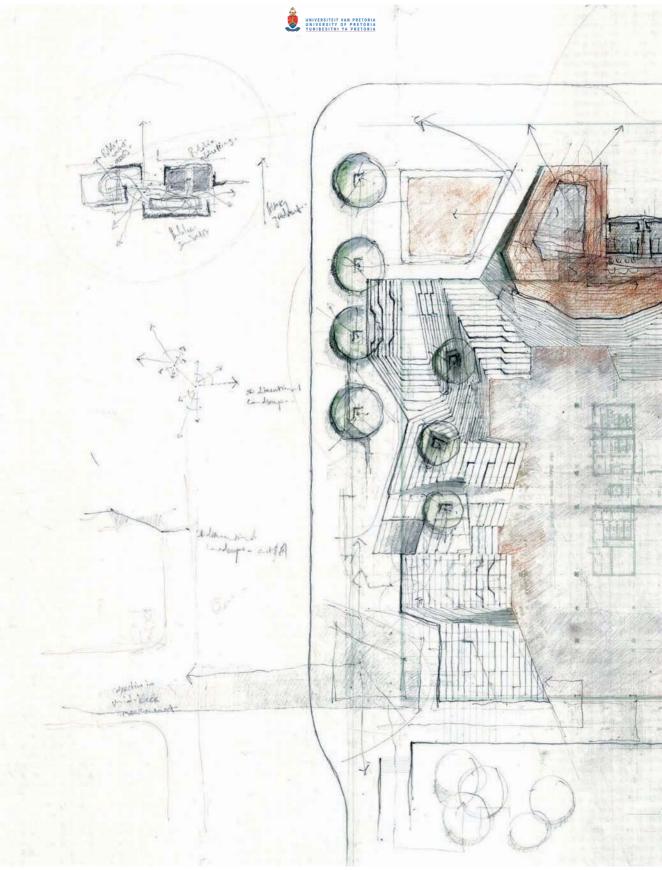




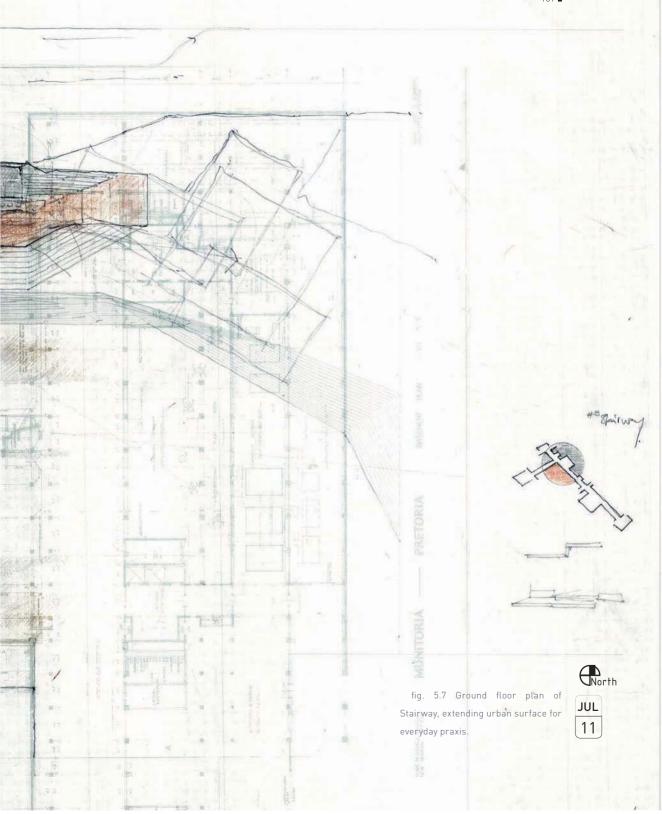


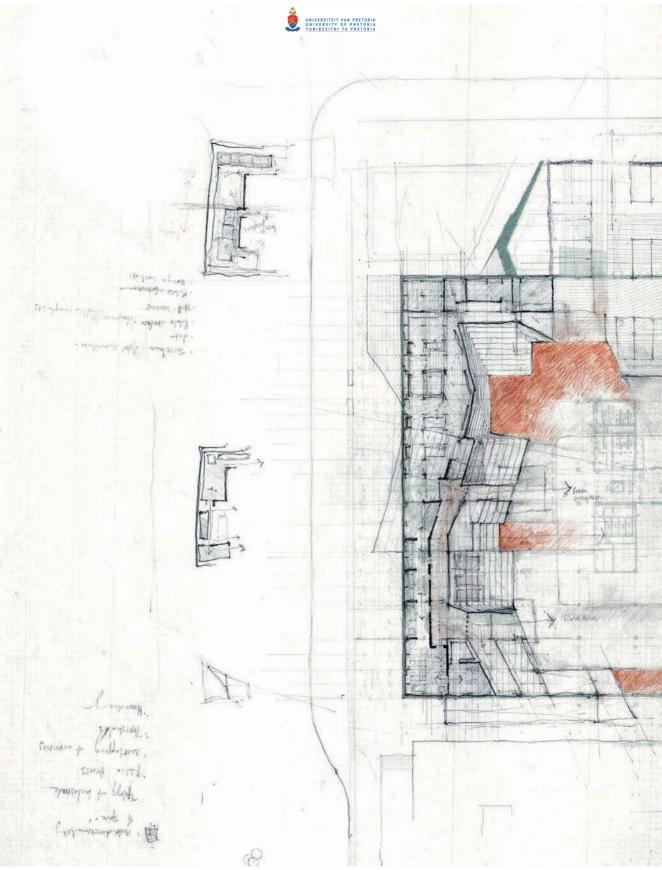




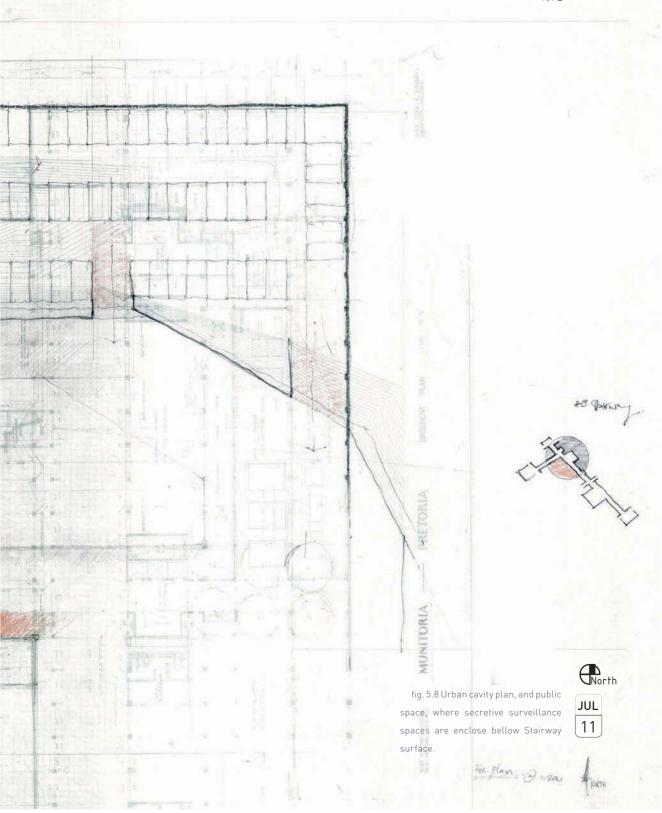




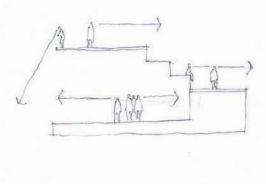


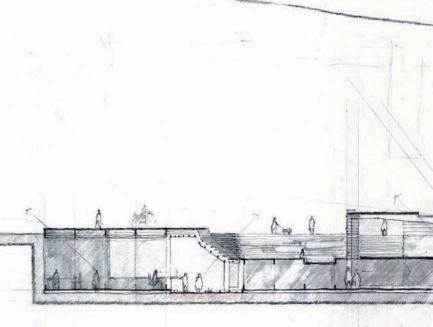










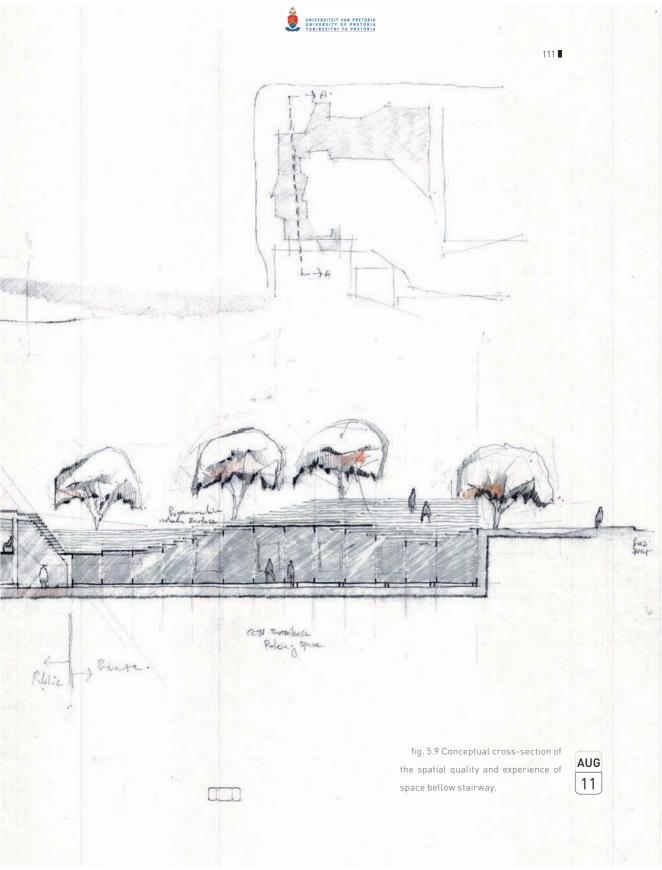


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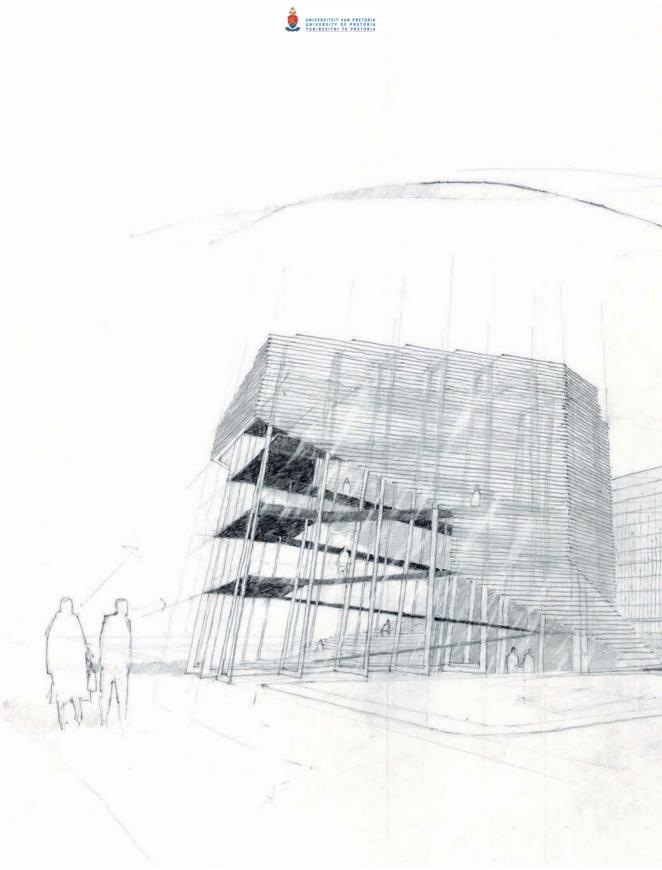
Program

The concept of surveillance becomes the medium by which the spectacle of the everyday is viewed and celebrated. Accordingly, the stairway encloses a series of private and public spaces (fig. 5.10). The program of surveillance can be understood on two levels, public and private. On a public level, the stairway responds directly to the context by providing a multi-directional inhabitable urban surface, with public infrastructures that enhance and celebrate the quotidian. Through a public interface of surveillance, an alternate platform for experiencing the city is provided; a form of 'augmented urbanism' (Bartle, 2007: 157). At the same time the surveyed spaces are made 'public' through the 'eyes on the street'.

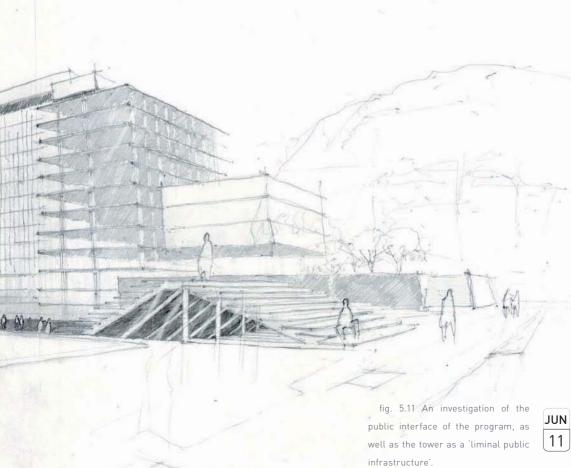
The Panopticon is a type of building designed by English philosopher and social theorist Jeremy Bentham in the late eighteenth century. The concept of the design is to allow an observer to observe (-opticon) all (pan-) inmates of an institution without them being able to tell whether or not they are being watched.

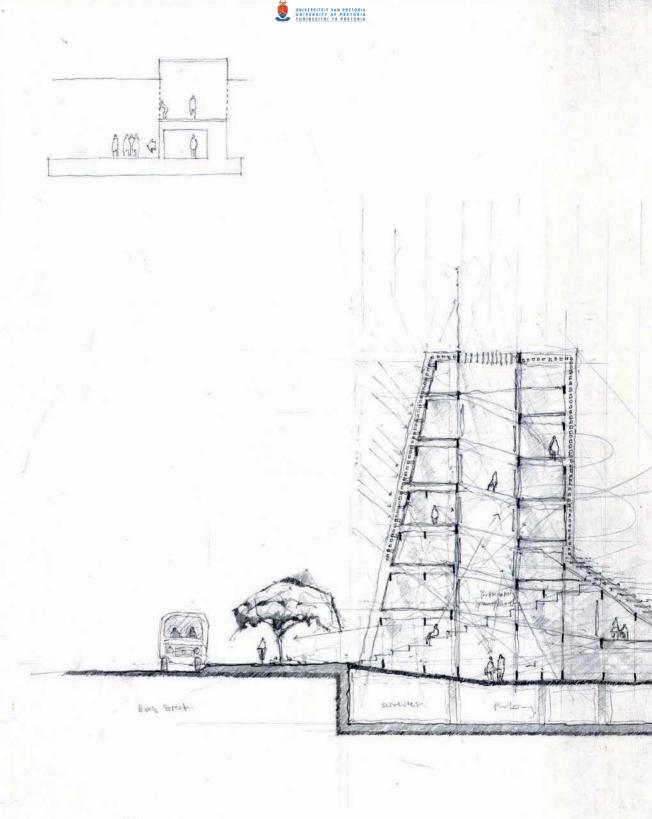
While on a private level the spaces below the stairway, which are perceived as 'secretive' spaces, are occupied by the city's closed-circuit television cameras surveillance control centre, where the city is surveyed on a detailed level. The concept of Jeremy Bentham's (1995: 30) "Panopticon" is challenged (see left note), as the architecture exposes threads of the 'private' narrative to the public. In turn the public interface of the surveillance forms a typology of a 'participatory panopticon' as it has been experimented with in London (BLDGBLOG, 2006).











Section 8-8 @from

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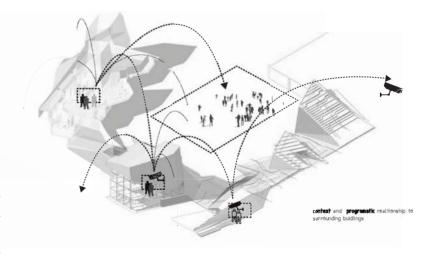


Meanwhile this intensive video surveillance is then filtered and carried over to the neighbouring digital arts pavilion, where artists can re-interpret the data and use it to generate various art forms. The stairway and its adjacent infrastructures thus become an interplay between public and private, viewer and performer.... which challenges the 'panopticon' model, allowing for the exposure of the quotidian. At the same time the relationship between the stairway and the neighbouring digital arts pavilion (design by L. Kruger, 2011; fig. 5.13) animates the urban cavity, allowing for a multiplicity of activities and events (Fig. 5.14).

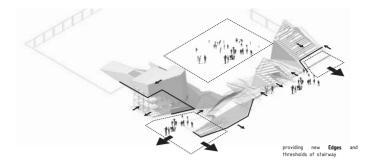
L. Kruger Project summary:

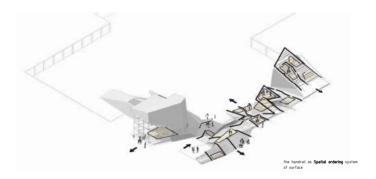
The project focuses on architecture in the information age. Information technology is evolving at an alarming rate, which opens up a vast landscape of possibilities within the architectural realm. These possibilities are discussed and implemented into an architectural intervention, with a specific focus on the relationship between the real and the virtual.

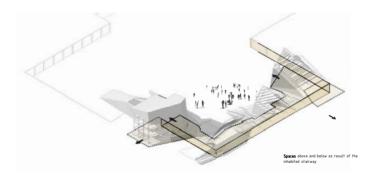
A digital art pavilion is proposed on the corner of Proes and Van der Walt Street in Pretoria CBD, where the Munitoria Complex is currently situated.

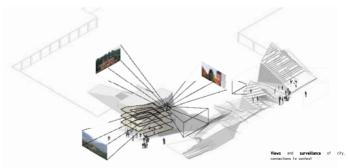






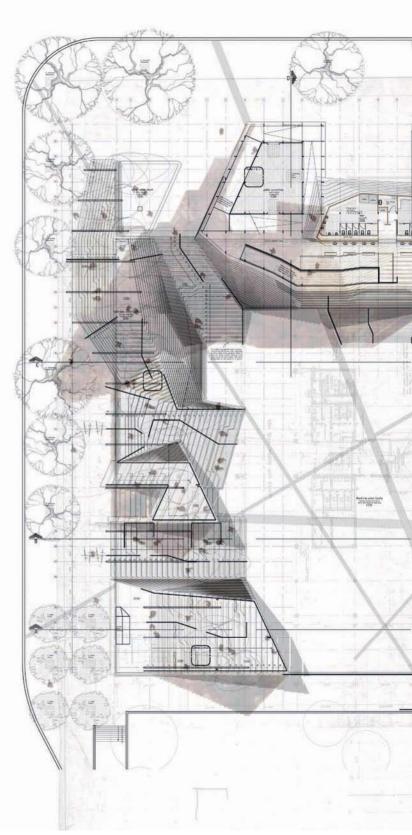




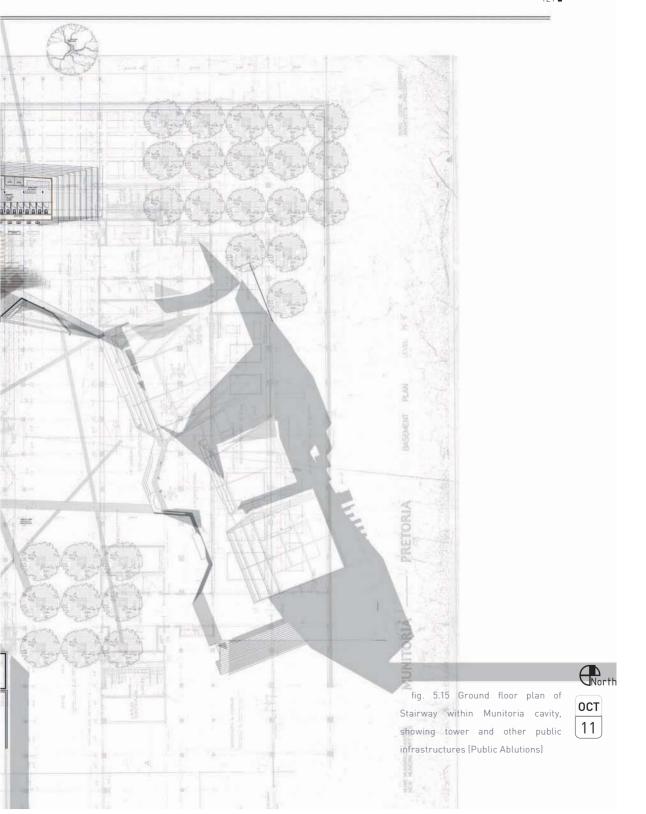


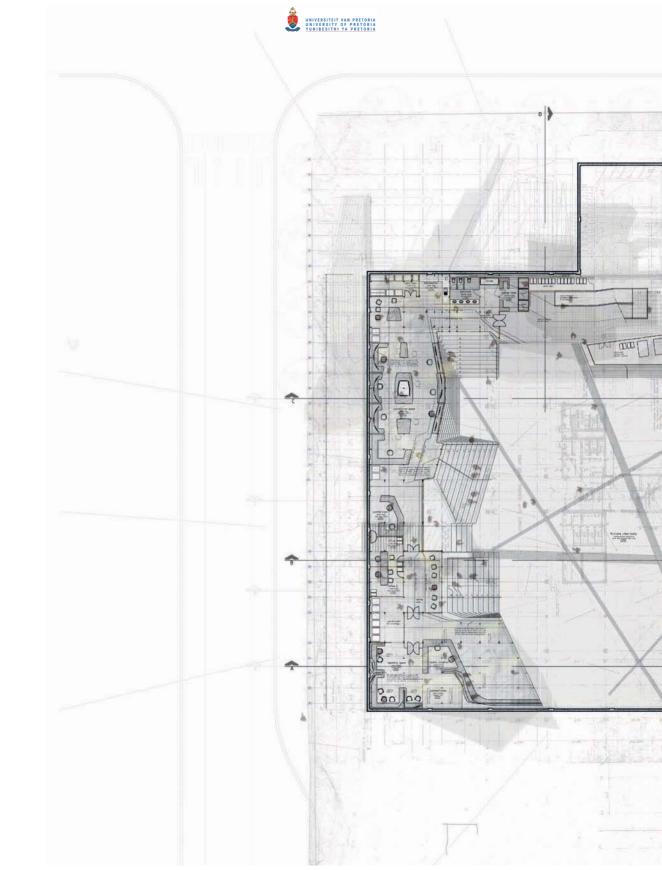
 $fig.\ 5.14\ Architectural\ response\ of\ Stairway\ to\ quotidian\ context.$







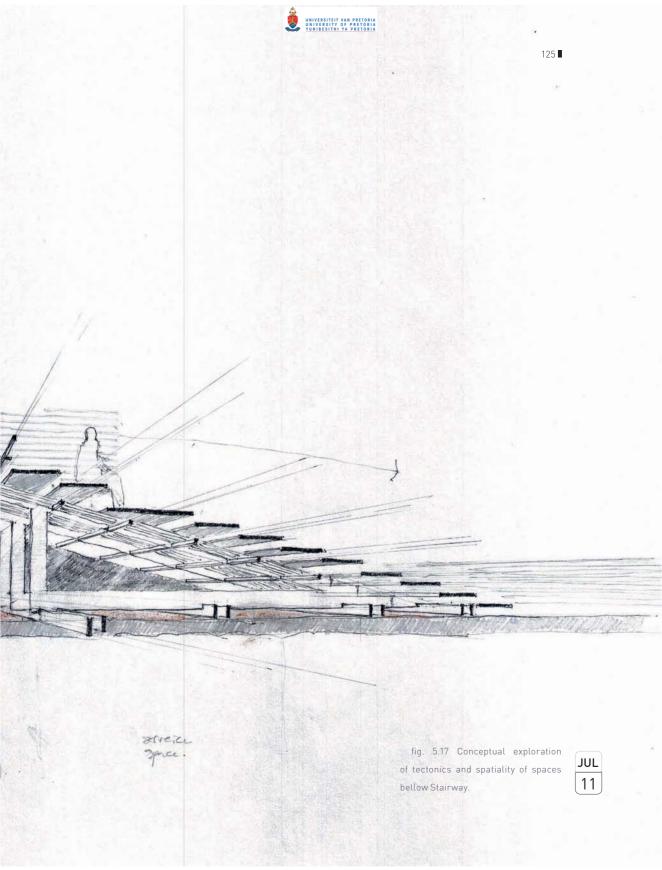














Techné

Conceptually the building is comprises of 4 main components (fig. 5.18):

- 1) The existing **urban cavity**, where the architecture is to respect and celebrate the present everyday; as well as the burnt down of the Munitoria West Wing and its memory.
- 2) The **spaces** created both above and below the stairway, coupled with the surveillance programs that are accommodated therein.
- 3) A primary timber (Pine ThermoWood) support **structure** responding to both the urban cavity and the street; providing the inhabitable stairway.
- 4) The **surface** or stairs, which is an extension of the urban surface, stitching the urban cavity back to the city.

The stairway's tectonics' are designed at a humane scale, allowing for a haptic and positive experiential interaction with the architecture. The choice of materials thus responds to the existing urban cavity and the experiential qualities of the urban context. The following section will expand on the spatiality and tectonics of the architecture, in relation to the **space**, **structure** and **surface** (the urban cavity has been previously discussed on page 68):



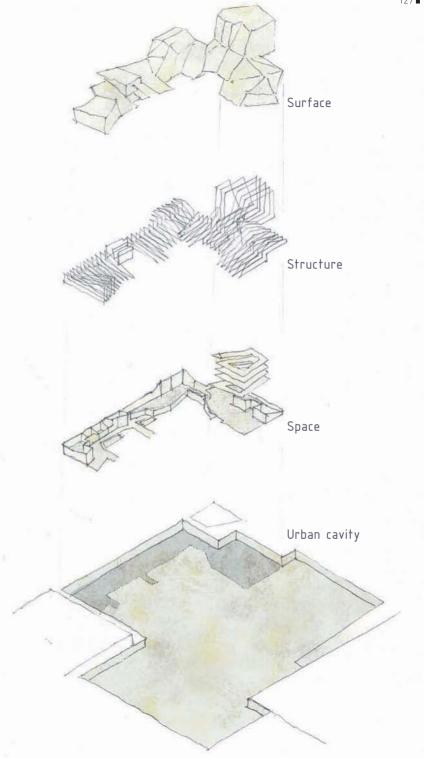


fig. 5.18 Concept of #3 Stairway [July 2011]



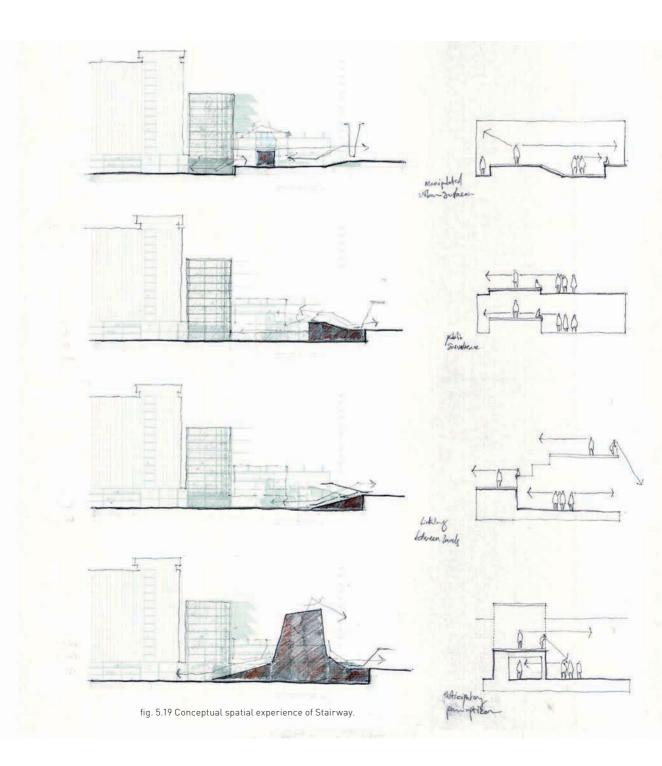
Space

The stairway encloses various forms of spaces, both private and public; above and below ground spaces. These spaces respond to the previously described urban cavity at the site of the burnt down West wing of Munitoria. The Stairway reciprocates the existing urban context, allowing for the public inhabitation of the stair surface, which is folded to provide edges and surfaces allowing the structure's inhabitation of everyday performances (fig. 5.19).

The concept of surveillance is used to experience the spectacle of the everyday performances of the urban environment. The building will accommodate a control centre for the existing and network of closed-circuit television cameras throughout the CBD. This venture is said to reduce crime by 80% through 'aggressive surveillance' (Sensormatic, 2010). The interventions is to be financed by the City Council of Tshwane, working with private bodies such as Sensormatic SA (Pty) Ltd. for the installation and maintenance of such equipment. This control centre requires a certain level of privacy and security in aspects of access and function, where the perceived spaces below the stairway can accommodate these aspects of the 'secretive' program. The paradoxical cross-programming such a private program within a public space sector of the city can thus lend itself to an interesting architectural typology, as stressed by Tschumi (1994: 173).

In turn the public is made aware of itself, through an augmented relationship with the city. The stairway thus becomes the platform to experience of this spectacle, allowing for the inhabitation of the everyday within a liminal public architecture.









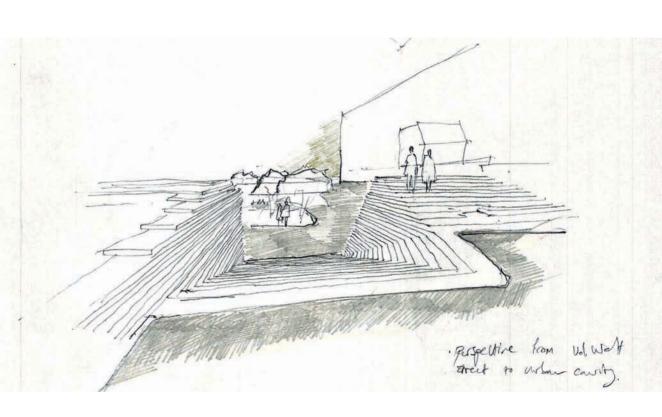
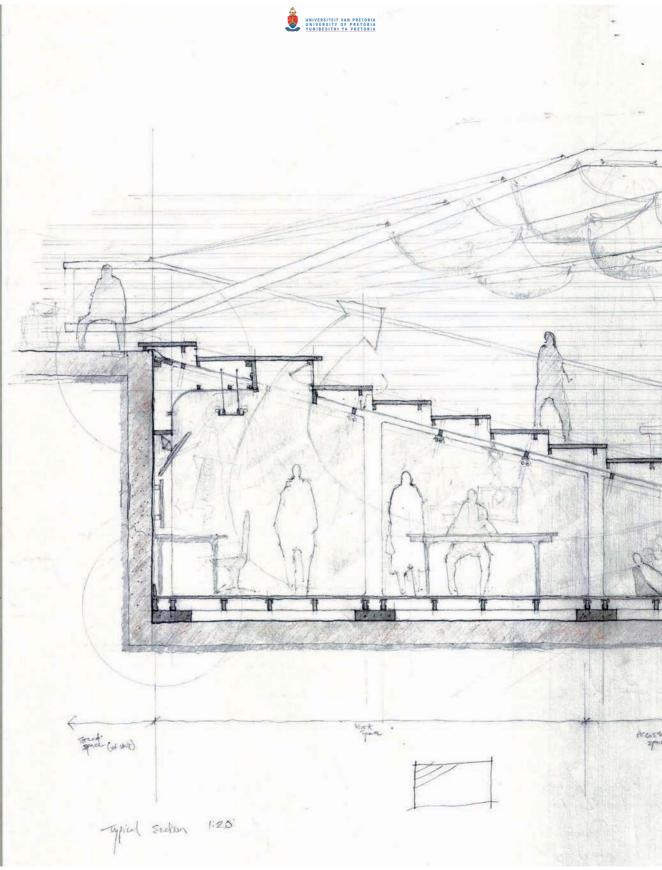
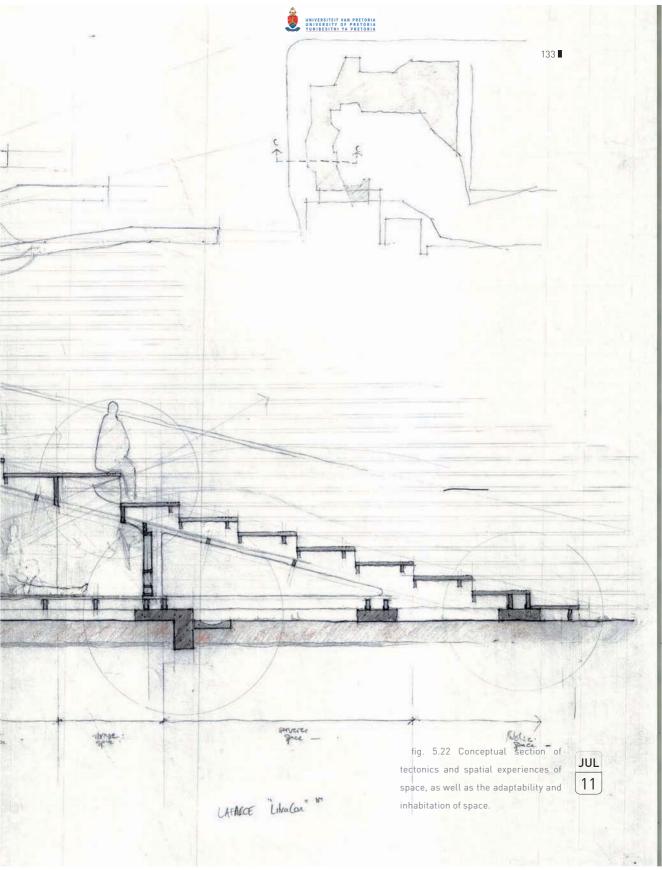


fig. 5.20-21 An investigation of the spatial qualities of the urban surface.











Structure

The structure of the Stairway is to be constructed of local Pine which has been thermally-treated. Timber is selected as a structural material as it responds to both the design and spatiality of the architecture, for the following reasons (ThermoWood, 2003: 18-42):

- 1) Wood presents a 'soft' tactile quality, responding to the everyday on a humane detail level.
- 2) Modulation and prefabrication of members, allowing for ease of construction and experimentation of form.
- 3) Considered as "new light" material, as it is a sustainably conscious renewable material.
- 4) Timber construction is a lightweight building typology, suitable for the infill of the existing Munitoria basement.
- 5) Wood is used to highlight and express elements of the design.

The primary support structure consists of prefabricated CNC timber members (fig. 5.24). The thermally treated soft-wood (local Pine) gains the characteristics of a hardwood, giving it greater resistance to weather fluctuations (ThermoWood, 2003: 20). The primary structure is segmented into smaller members to be assembled on site, and reduce wastage during fabrication.



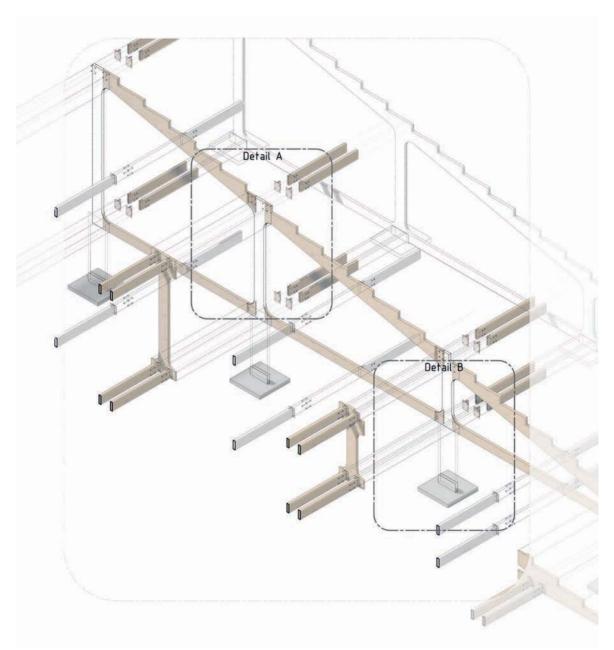


fig. 5.24 Structural exploration of Stairway

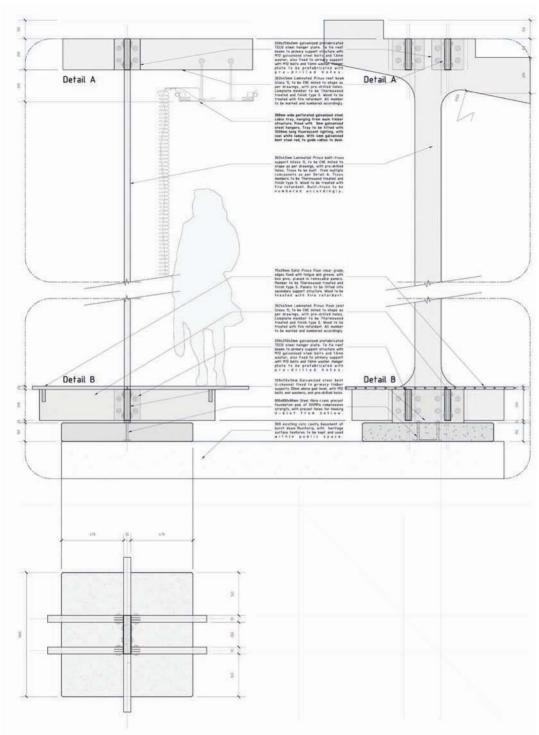


fig. 5.25 Detail exploration of structure tectonics



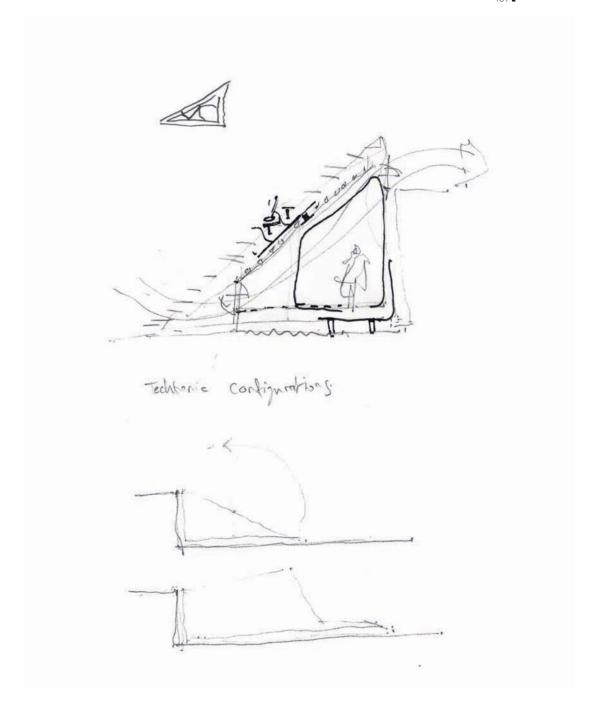
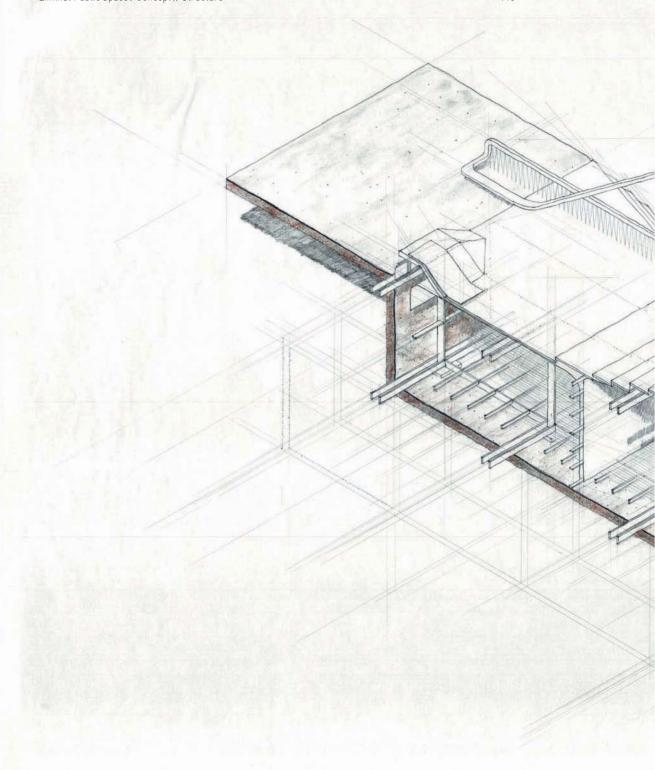


fig. 5.26 Concept exploration of structure tectonics





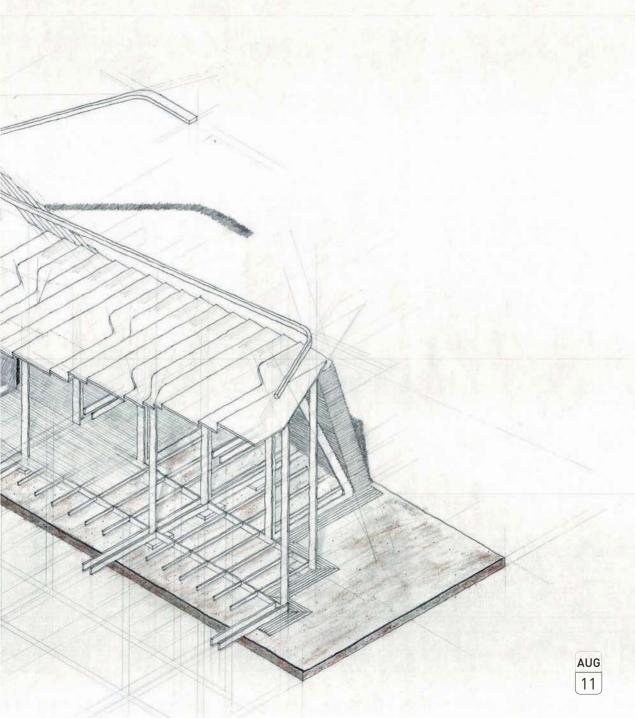
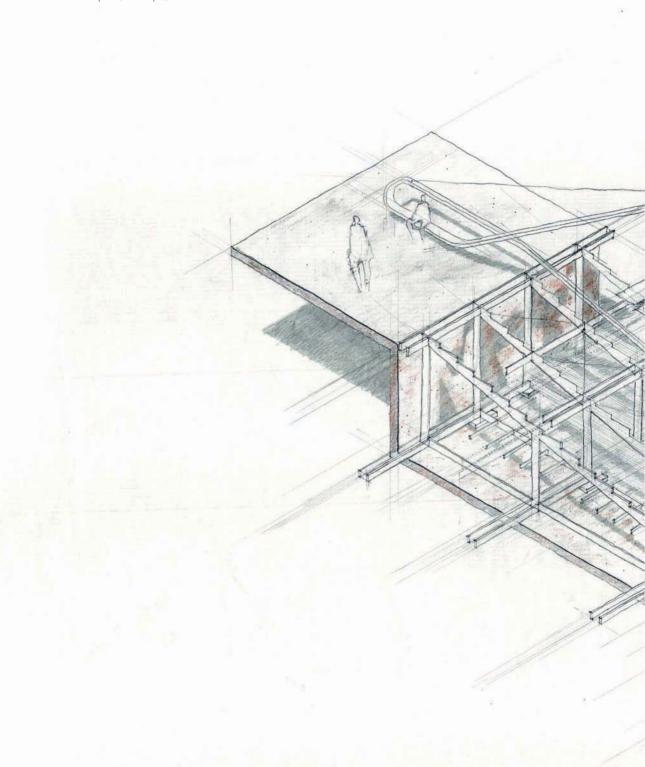
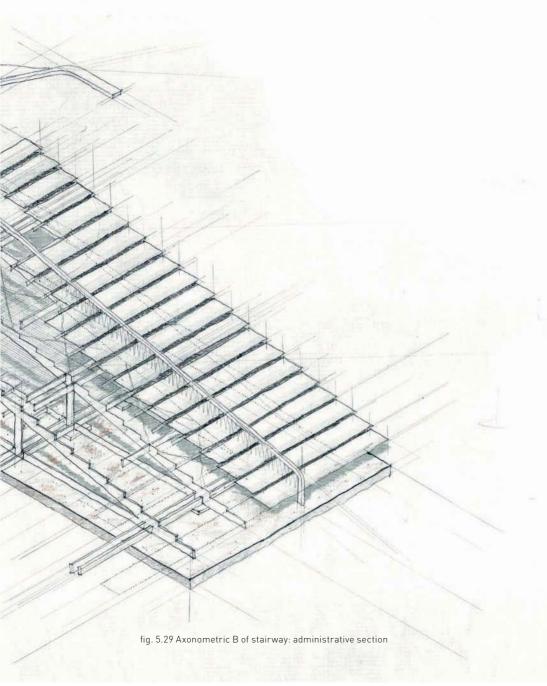


fig. 5.27 Axonometric A of stairway: public interface

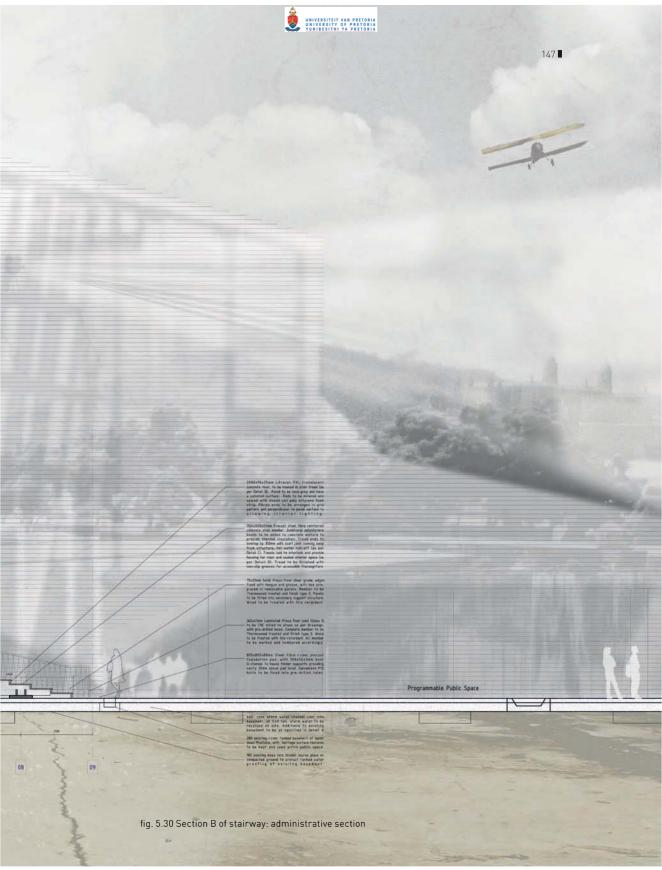




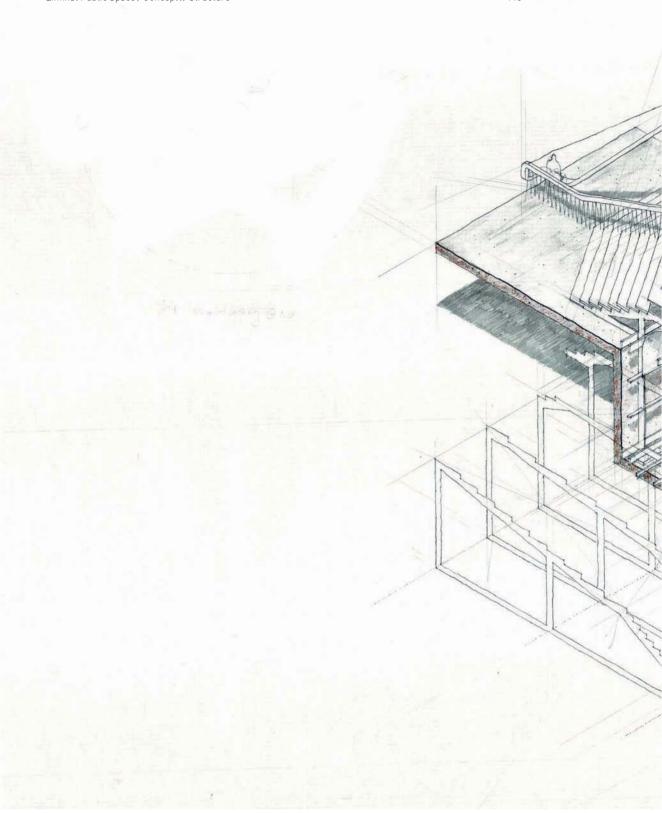




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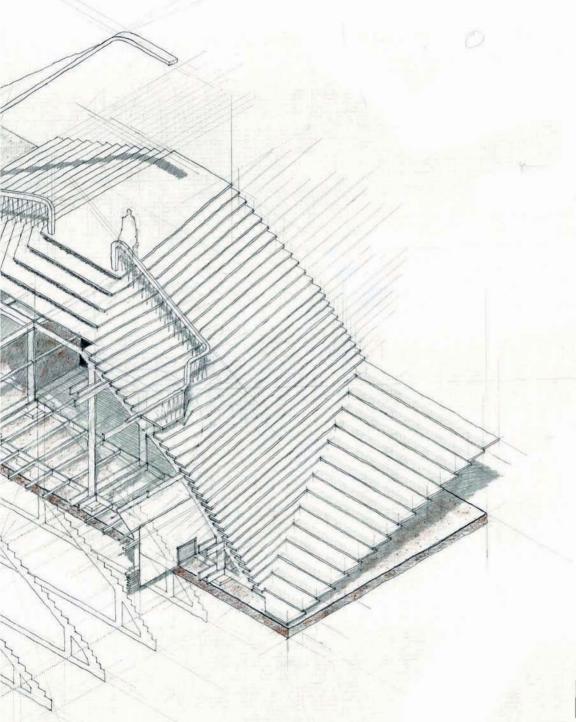
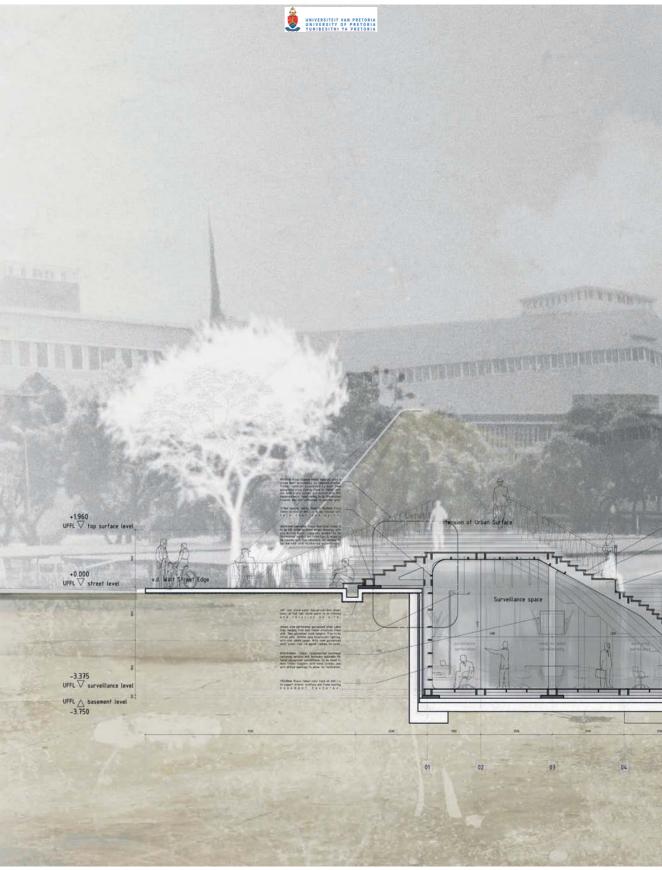
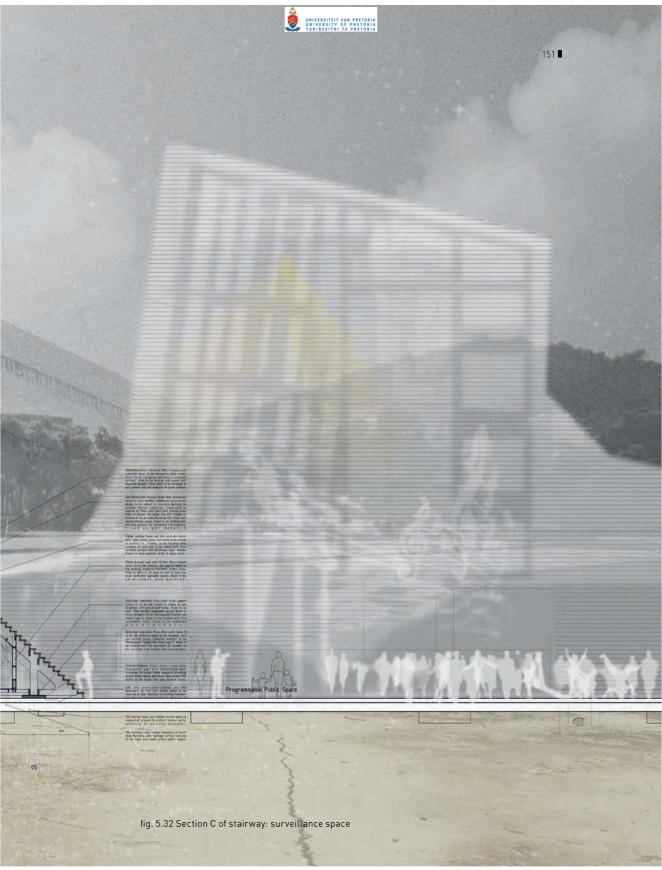


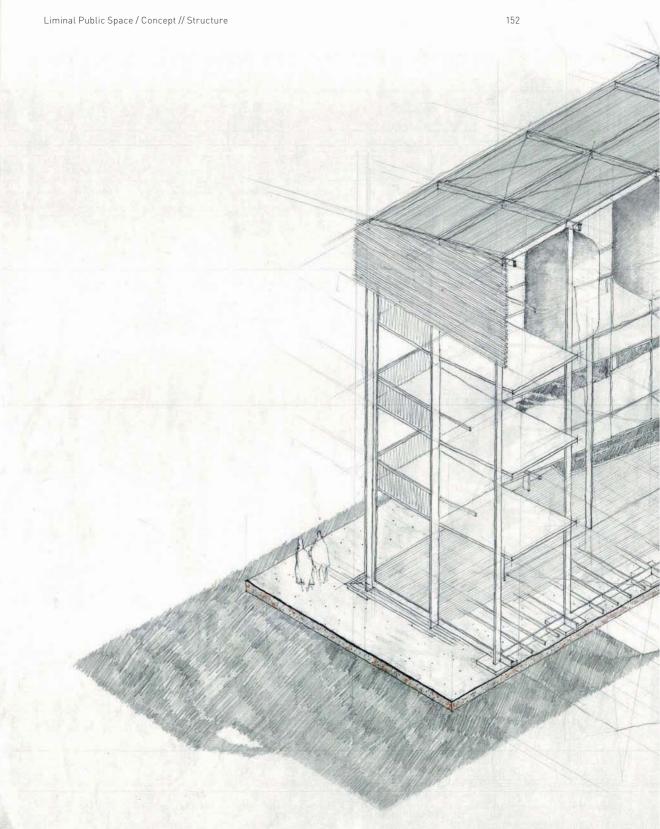
fig. 5.31 Axonometric C of stairway: surveillance space

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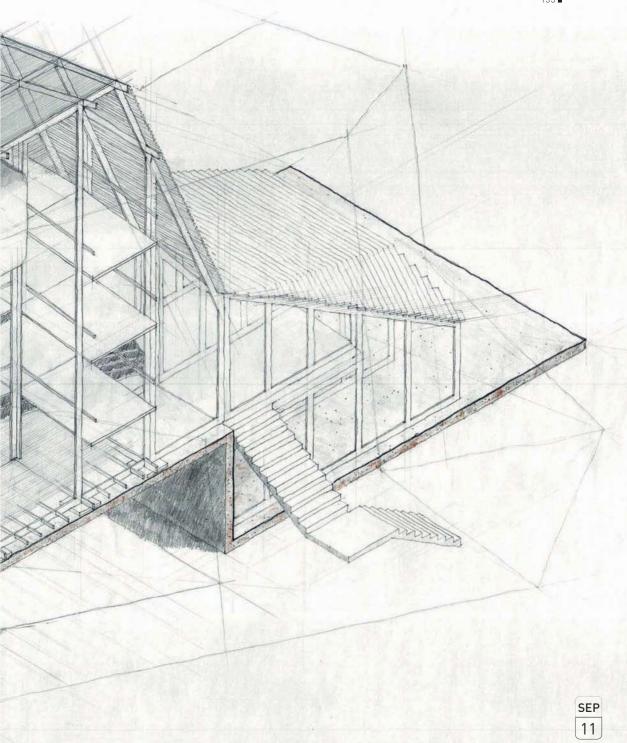
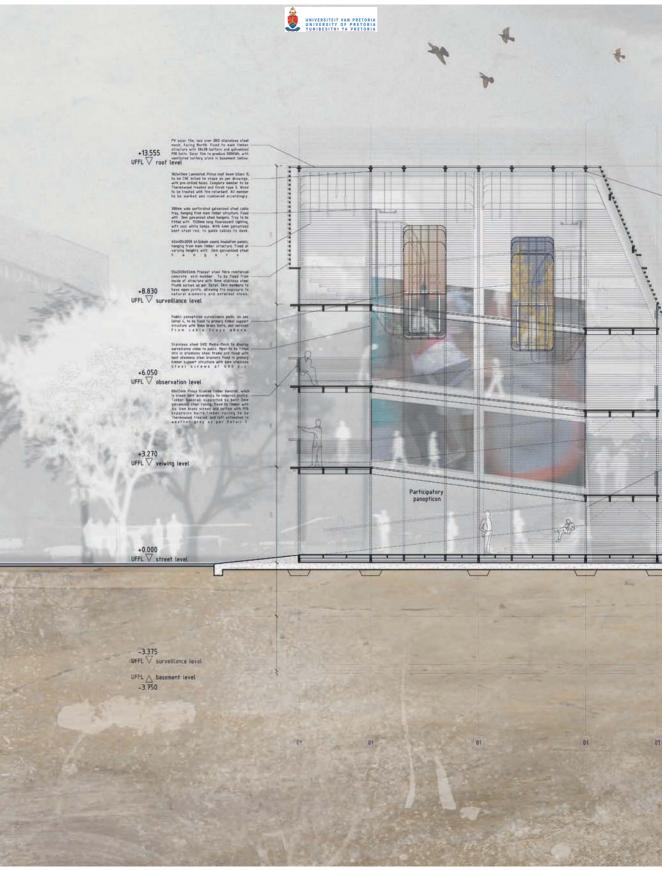


fig. 5.33 Axonometric D of stairway: public surveillance tower







Surface

The Stairway surface is an extension of the urban surface, where it provides a continuation of the habitable urban plane, seamlessly linking both the urban cavity and the street. This is housed on the Stairway's surface, while enclosing surveillance spaces below. The surface is the physical manifestation of Cruz and Gage's (2009: 114) 'inhabitable interface'. As the concept lies in extending the urban surface, a material associated with the quotidian context is used, concrete (steel fibre reinforced concrete) (fig. 5.35). It is this surface that creates the stage for the spectacle of the everyday to be realized (fig. 5.36).



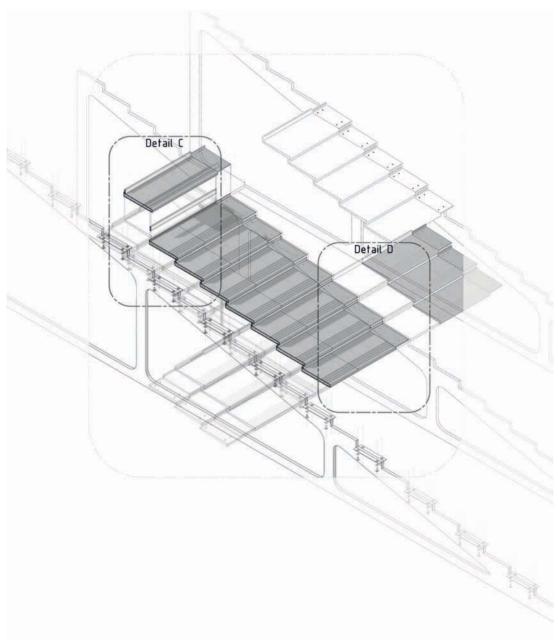


fig. 5.35 Surface exploration of Stairway

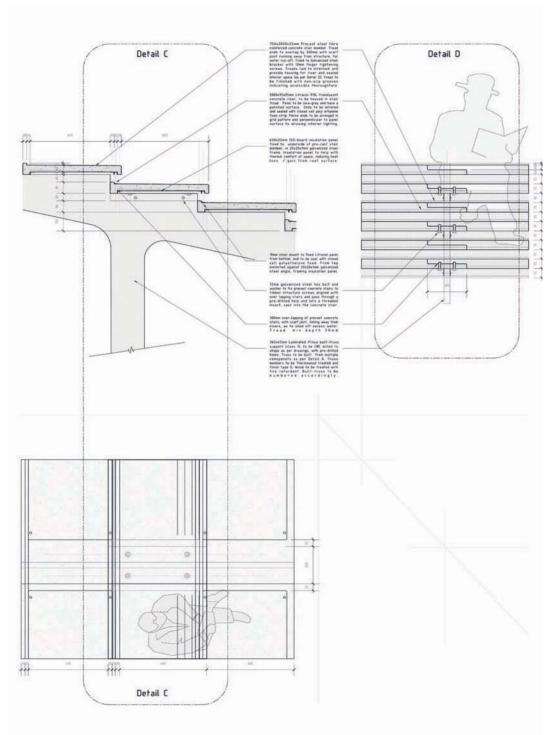
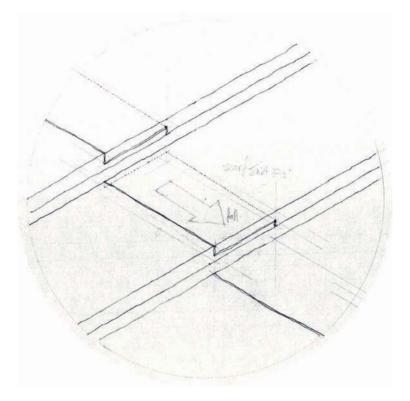


fig. 5.36 Detail exploration of surface tectonics





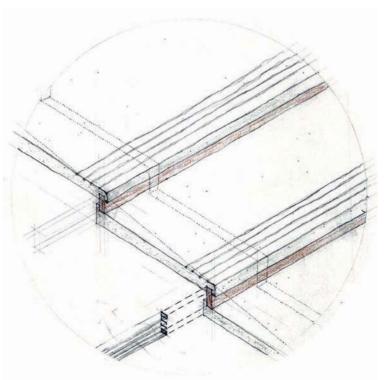


fig. 5.37 Concept exploration of surface tectonics



Skin»

The skin of the structure can be compared to that of a conventional building. Usually a building's skin is comprised of an exterior finish, a supporting structure, insulating material and internal finish (fig. 5.38) (Brand, 1994: 23). Within the stairway surface the skin follows the same principle; however it is compacted into the stair member. Through innovative use of concrete and recent research, it is then possible to combine these elements to provide the same concept as a conventional skin, but in a compacted member, where the skin is the structure, finish and insulation at the same time.

By using new technologies of steel fibre reinforced concrete, according to Lafarge (2011) a strength of 125MPa can be achieved with members as slender as 30mm. Also much research has gone into finding new aggregates for concrete. Thus within this innovative member, we can achieve the same characteristics as that of a conventional skin, however within a single building component. The stair treads also become critical in creating the spatial qualities of the architecture. The tread allows for the opportunity for lighting and ventilation of the space, where the tread is either a Litracon translucent panel or a louvred member to allow cross ventilation.



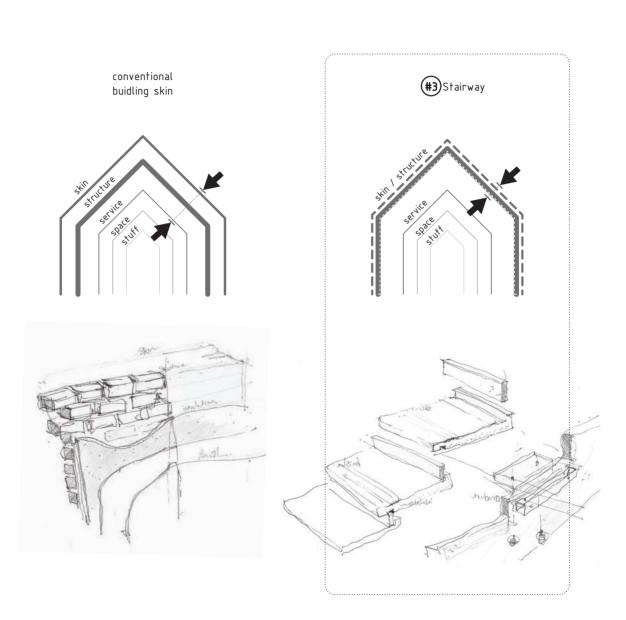


fig. 5.38 Analogy of skin typologies



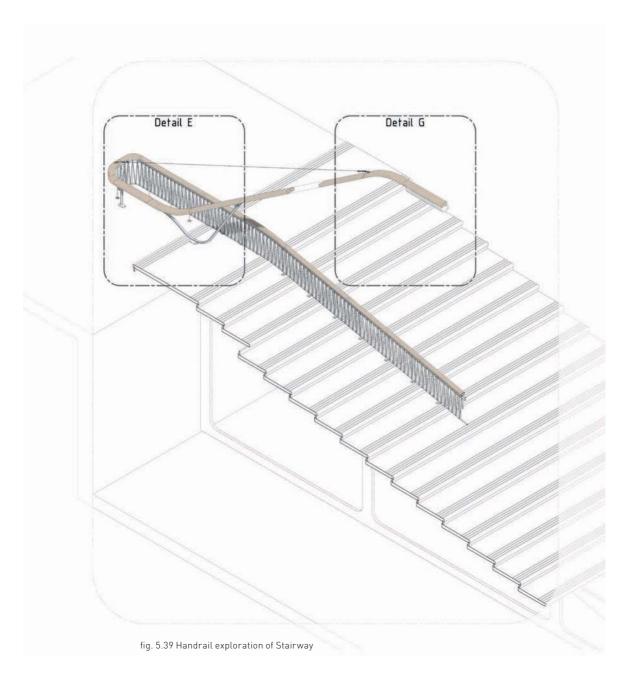
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Handrail»

In the same manner that the stairway can achieve more, so is the conceptual thinking behind the handrail design. The handrail is used to as a design tool to provide order within the stairway. It is used to soften space, acting as an infrastructural element. The handrail is to be constructed of a steam bent, laminated wood member, which folds to become a handrail, seating or light fixture (fig. 5.39).

Wood is chosen as it offers a tactile quality to the surfaces that a person interacts with and touches. The limitations of steam bending of wood are overcome through a segmented design of the handrail (fig. 5.40). The construction of the handrail is reminiscent to that of pipe work. As the wood can only be bent in a single direction, the wood member is adapted to suit the required form.







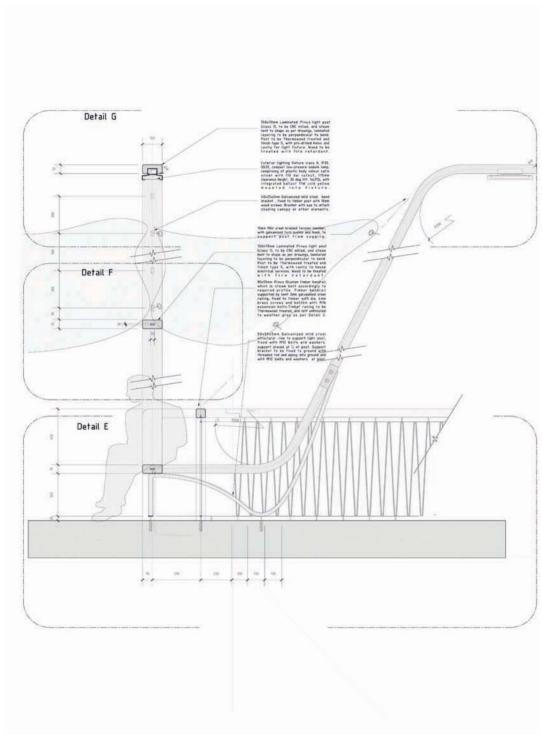


fig. 5.40 Detail exploration of handrail tectonics



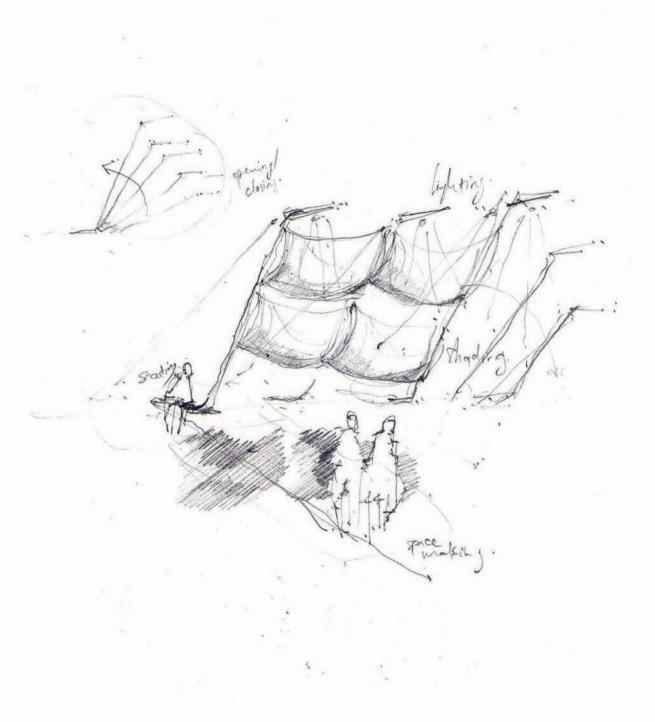


fig. 5.41 Concept exploration of handrail tectonics



Public Infrastructures

Surface»

Koolhaas (2002: 305) defines the concept of 'flex-space' as an "undifferentiated, all-accommodating, flexible surface... becoming whatever it needs to at any given moment." While Bremner (2010: 280) indentifies the need for the surface to become infrastructural, containing the possibility for multiple programmes. Here the stairway (at Munitoria) provides an extension of the urban surface, seen as a 'flex-space' while housing a multiplicity of programmes and events (fig. 5.42).

The stairway responds to the everyday activities of the city, but can be adapted to the needs of the users accommodating various spatial configurations (fig. 5.43).



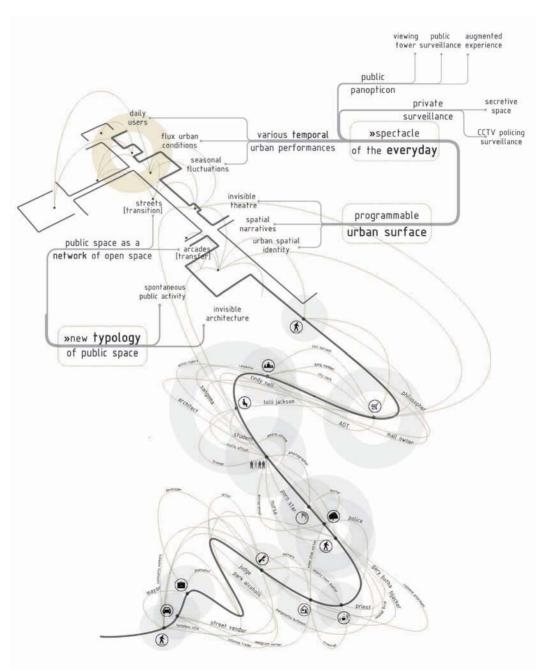
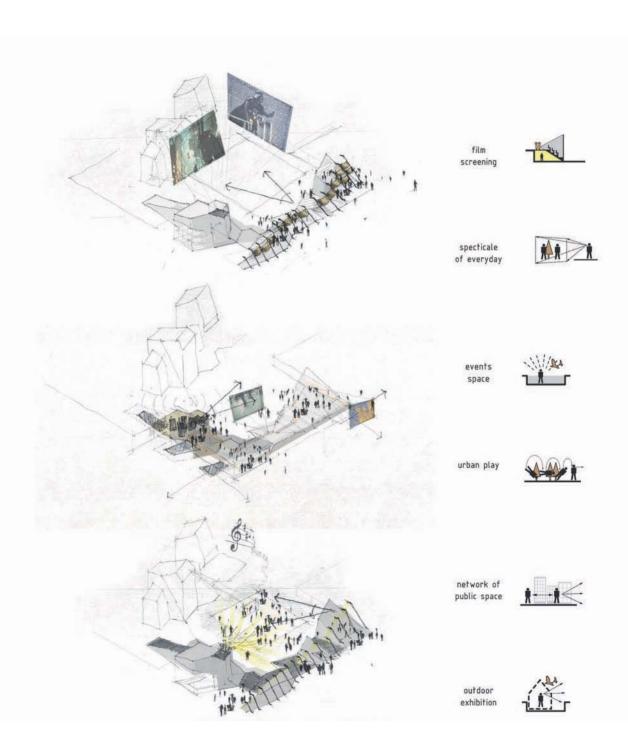


fig. 5.42 Programming public space and Stairway.







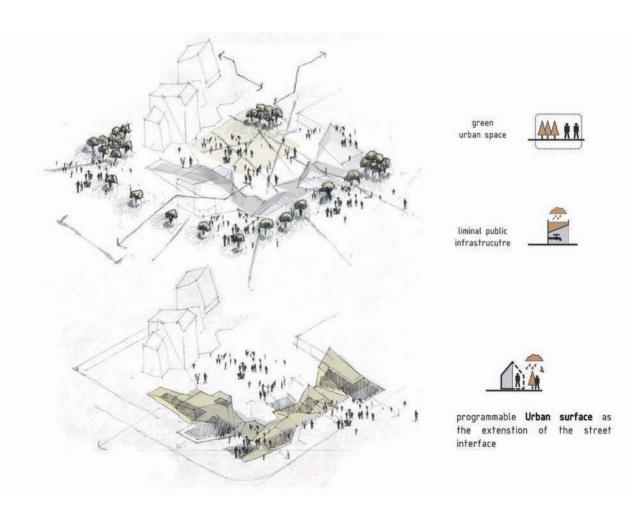


fig. 5.43 Multiplicity of programming of public space and Stairway.



Spatial response»

The spatial quality of the surveillance space is dependent on the thermal comfort of the space. A series of strategies is implemented to enhance the experience of the space, to allow for a comfortable space.

A ground to air heat exchange (GAHE) is used to regulate the interior temperature of the space. At a depth of 2 to 3m the soil strata have almost no diurnal temperature fluctuations, with an average temp of 19°C (Kyasol, 2011). Thus as a result the space's temperature is regulated to achieve a thermal comfort within the space in both summer and winter (fig. 5.44). A vertical earth tube of about 25-30m is required to complete the heat exchange, where a 70% reduction in energy consumption is expected as compared to conventional HVAC (Sharan & Jadhav, 2003; 14).

The effect of lighting is also taken into regard, with the activities that occur within the space in mind. The space is to essentially be occupied as a surveillance control space, where the viewing of monitors is prevalent. Here a soft diffused level of lighting is required as to reduce glare given off the screens (fig. 5.44). The spaces are equipped with task lighting where required to aid in the lighting of the space where necessary. The translucent risers allow for the penetration on natural lighting within the interior spaces and create a visual continuity with the external spaces.

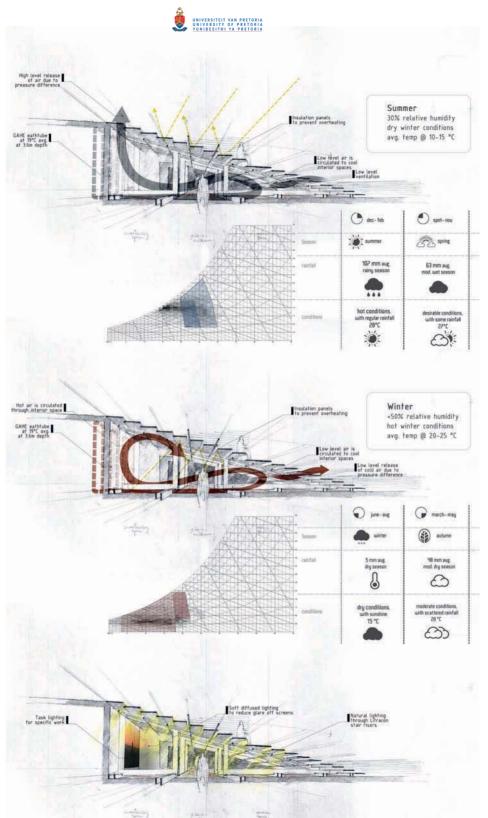


fig. 5.44 Spatial quality of stairway, thermal comfort.



Materials»

The choice of materials responds to the quotidian context of the site. The site of the Urban Cavity contains a palimpsest of textures and meaning (fig. 5.45), where the design includes these materials to the design of the stairway, either highlighting them or blending in with the context (fig. 5.45). The primary materials used in the construction of the stairway are discussed below:

material

ThermoWood lightweight primary timber structure



description

- 1. Timber is lightweight construction, allowing for the simple addition of a new structure within the existing basement (Urban cavity) of Munitoria.
- 2 ThermoWood heat-treated wood gives the timber the characteristics of a hardwood and makes its durable, weather resistance and finishes the wood.
- 3. Pine is a locally harvested timber, and is a renewable resource ['new light' material].

application

- Used for the primary support structure of the Stairway, and other structural supports.
- Interior floor spaces to be finished with suspended timber flooring.
- Framing structure of existing basement wall textures
- Used to highlight spaces within the Stairway.

Steel fibre reinforced concrete extension of urban surface



- 1. Steel fibre reinforced concrete is significantly stronger than conventional reinforced concrete. and has better impact resistance.
- 2. The steel firer reinforcing allows for a slender member, that is strong, durable and water-tight.
- 3. The precast members provide and accurate
- surface finish and allows for standardization.
- Robust surface finish of Stairway's skin, where concrete is an extension of the everyday urban surface.
- A weather tight finish to the Stairway, protecting the interior spaces from the elements
- Used as a lightweight footing for the timber structure, distributing load to the existing basement.
- Translucent finish to stair treads, to allow visual connection between inside and outside
- Allow soft lighting of the interior space of the surveillance control space.
- A weather tight finish to the Stairway, protecting the interior spaces from the elements.

Litracon translucent concrete light transmitting surface



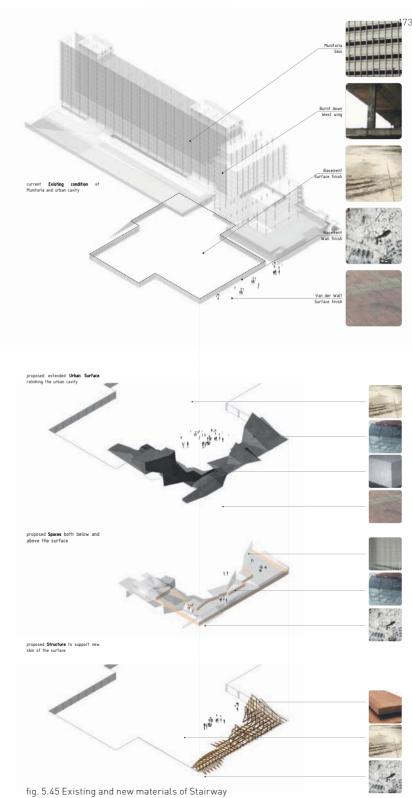
- 1 Litraron is used to animate the interior spaces, below the stairway; providing a soft lighting of the interior spaces.
- 2. The translucent concrete is allows for a connection between the spaces below and above the urban surface, giving a hint on the activities on the other side of the surface.
- 3. Provides a water-tight finish to the Stairway's surface.

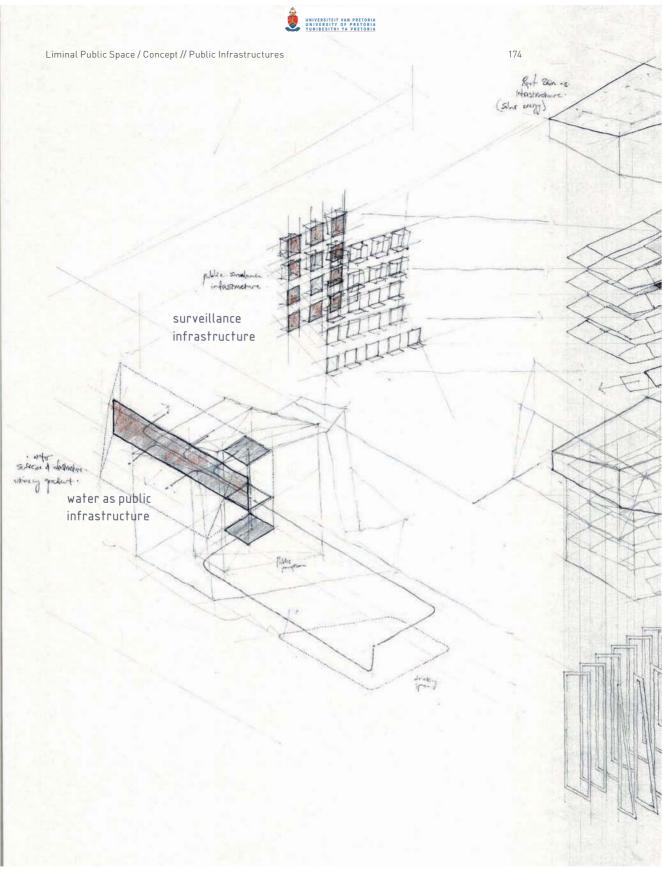
GKD MediaMesh translucent digital display screen

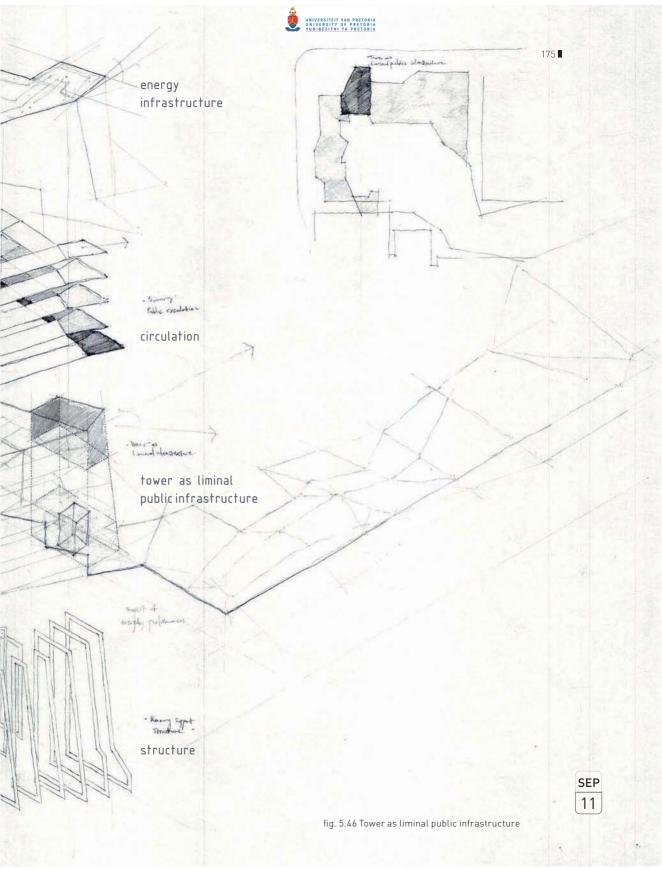


- 1. The MediaMesh is a durable woven stainless steel / LED screen, used for external displays.
- 2. Similar to the concept of the translucent concrete, the MediaMesh is used as a transfurent screen to show the relationship between various spaces and the city.
- 3. The LED display is a low energy screen, reducing energy consumption of the space.
- Mesh screen used as robust public displays of surveillance footage from CCTV cameras.
- Translucent screen display, creating a continuity of space, as well as providing an augment experience of the urban environment.











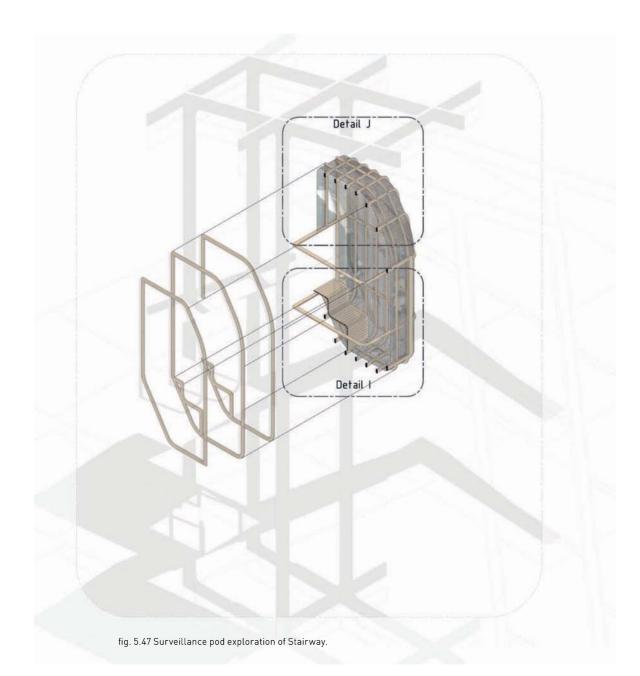
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Surveillance»

The concept of everyday spectacle is an extension of the interpretation of surveillance. Surveillance is presented to the stairway on both a public and private level. The secretive spaces below the stairway, houses the control surveillance space for the city (fig. 5.46). While the spaces above allow for the viewing of the spectacle of the everyday, an augmented experience of the city (fig. 5.46).

Public surveillance is provided through a form of 'participatory panopticon' (BLDGBLOG, 2006). The concept of a public surveillance pod is developed, where both the possibility of public surveillance and an augmented form of experiencing the city is provided (fig. 5.47). In a sense, the pod creates a surreal digital experience of the city, extending the interpretation of spectacle, surveillance and experience (fig. 5.48).







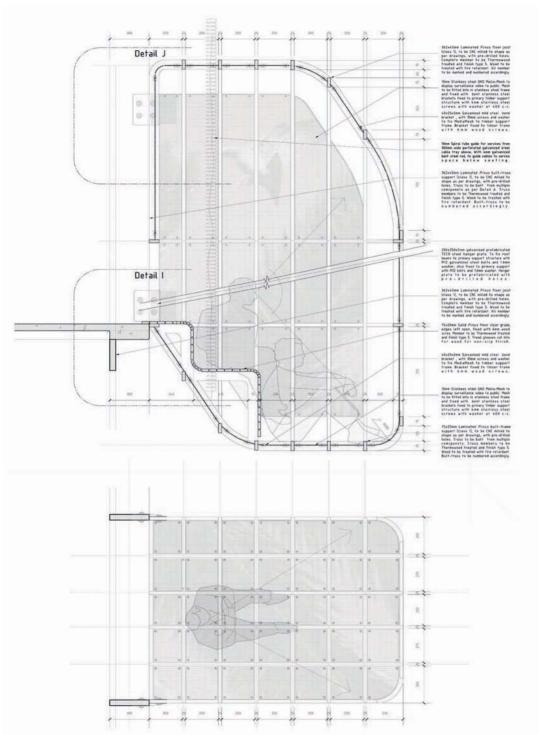


fig. 5.48 Detail exploration of surveillance pod tectonics



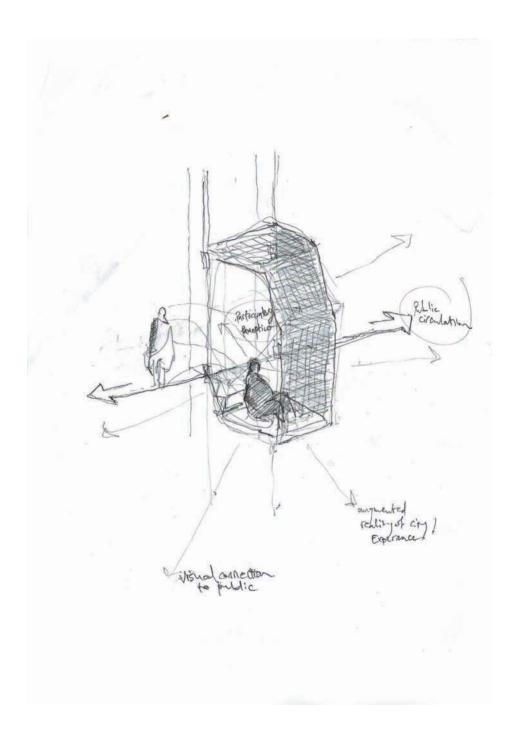


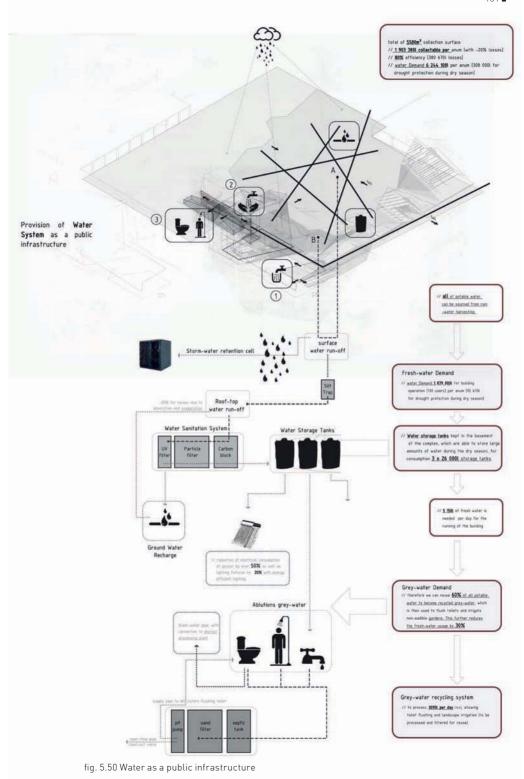
fig. 5.49 Concept exploration of surveillance pod tectonics



Water»

Water is presented to the site on an everyday level of activity. Water as an infrastructure has been defragmented so as to respond on multiple levels to the user. At the one end of the spectrum water as an infrastructure is represented in the form of public ablutions; where the intimacy gradient has been extruded to respond to multiple levels of the quotidian context, stringing a narrative between the toilets, washing basins and the 'urban basin'. Rainwater is also harvested from the site and recycled to close the loop of this process, where the structure houses all the necessary services within the stairway (fig. 5.50).







Design Synthesis

The architectural investigation lends itself to an iterative design process. The aim of the dissertation was to investigate to spectacle of the everyday within public space (fig. 5.51). Here the concept of the spectacle morphed into the idea of surveillance. The site selected revealed the potential of liminal space within the urban context. The design of the stairway manifested from the theoretical investigation, and allowed for a unique exploration of architecture dealing with the quotidian, experience and spectacle. Furthermore the building's design blurred the boundaries between conceptual development, design and technical investigation; where the identity of the design is encapsulated in an individual process.

The Stairway's design explores the multiple opportunities of architecture and design, providing a window of possibility into architecture's response to the urban context and its potential.



fig. 5.51 Spatial concept drawing of Project [March, 2011].





Presentation 186 Model @ 1:200 190 Technical model @ 1:25 194











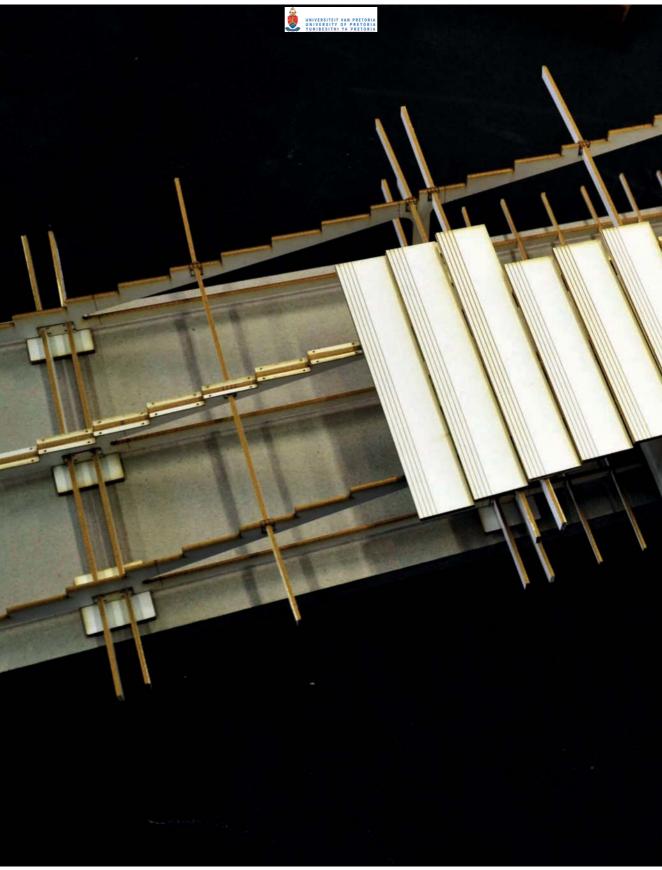


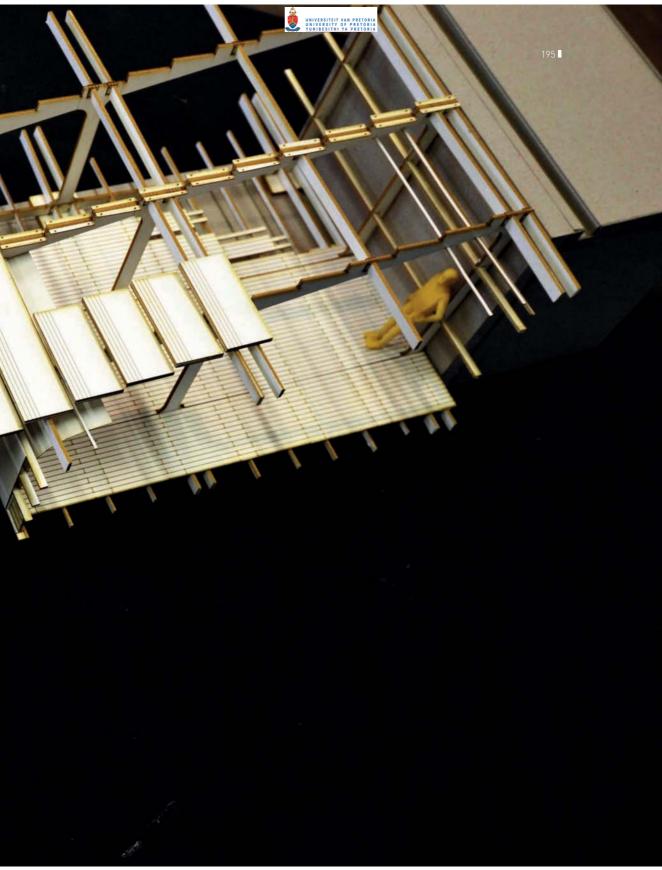


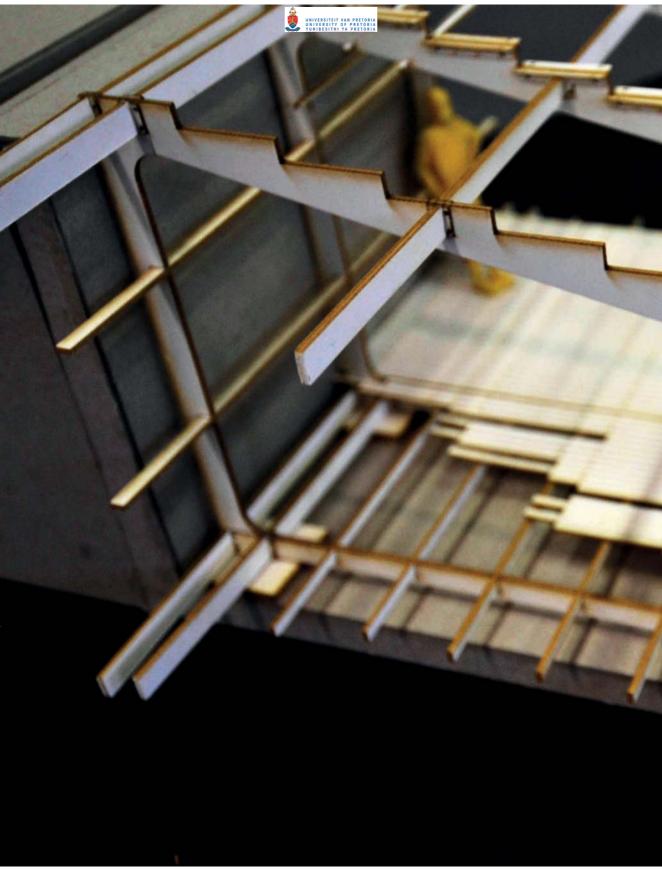


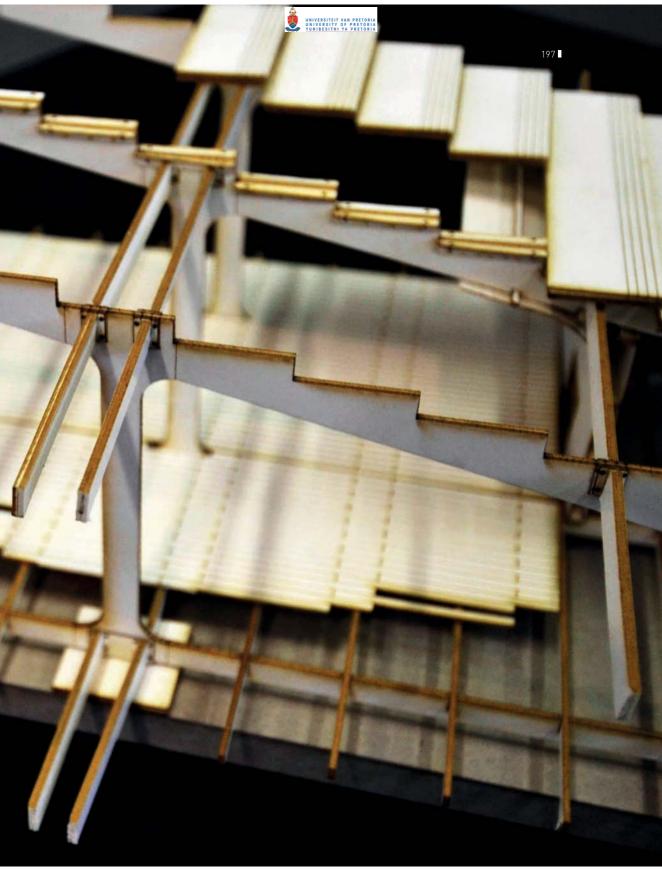












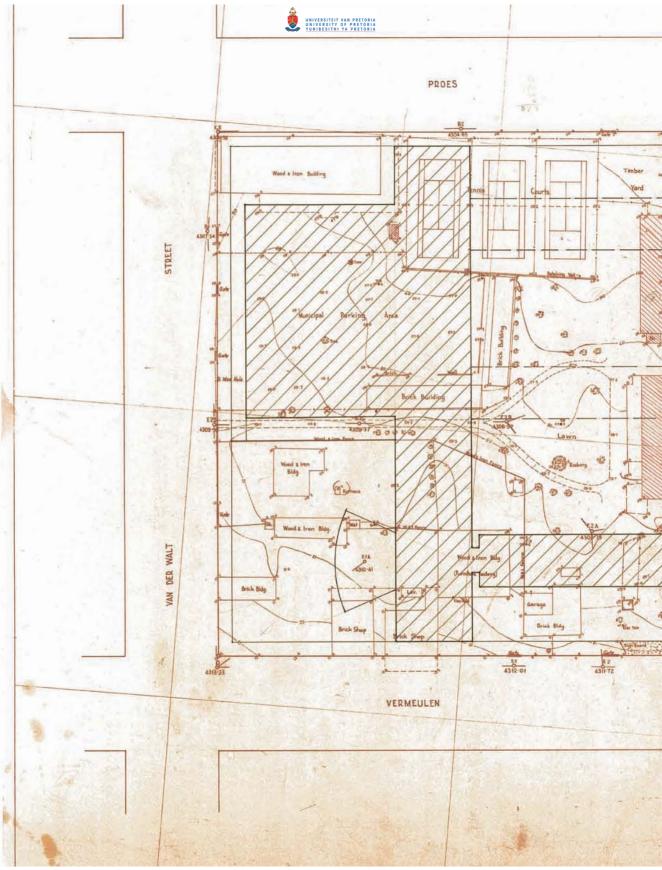


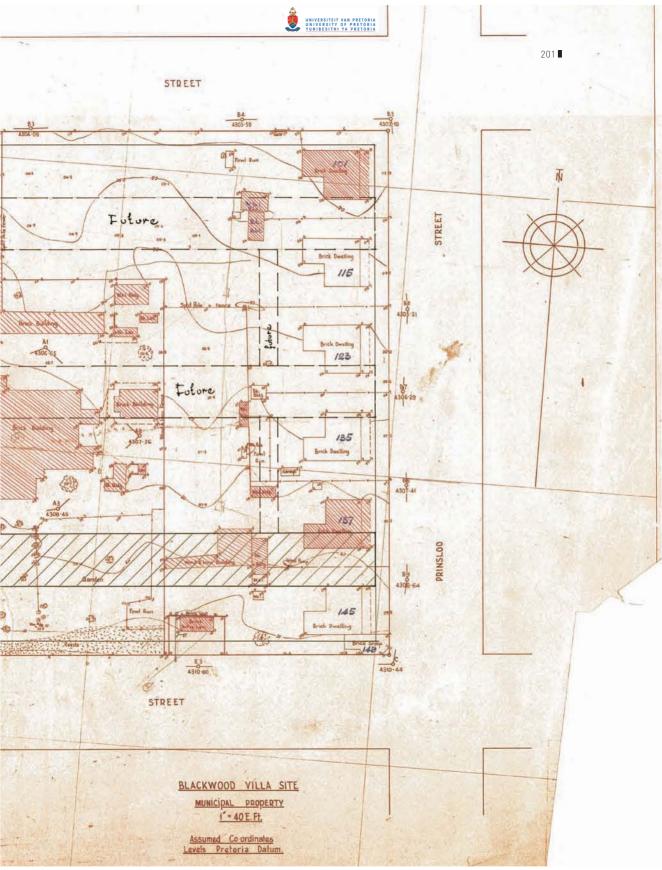
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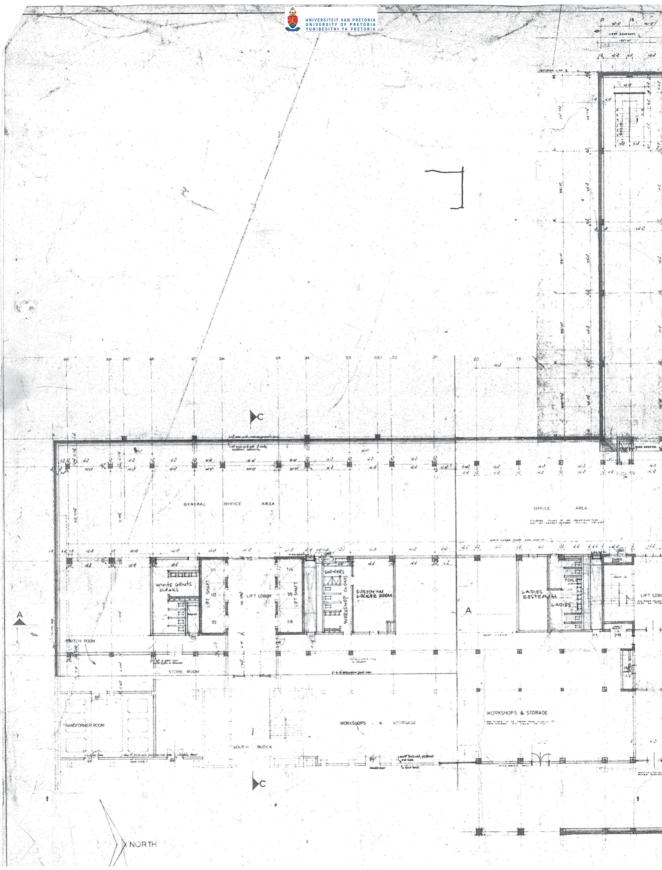
Existing Munitoria drawings 200 Statement of Significance 216

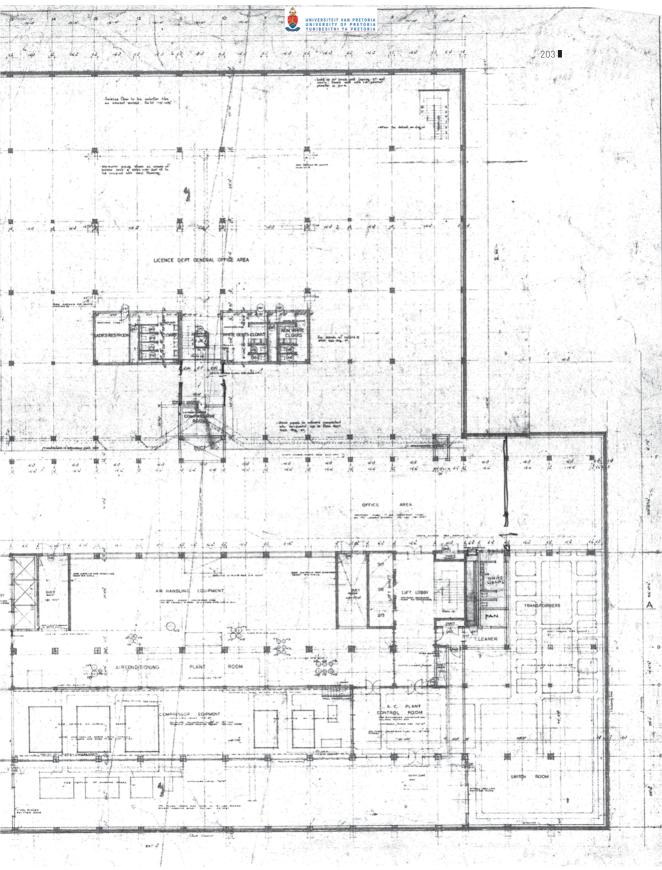


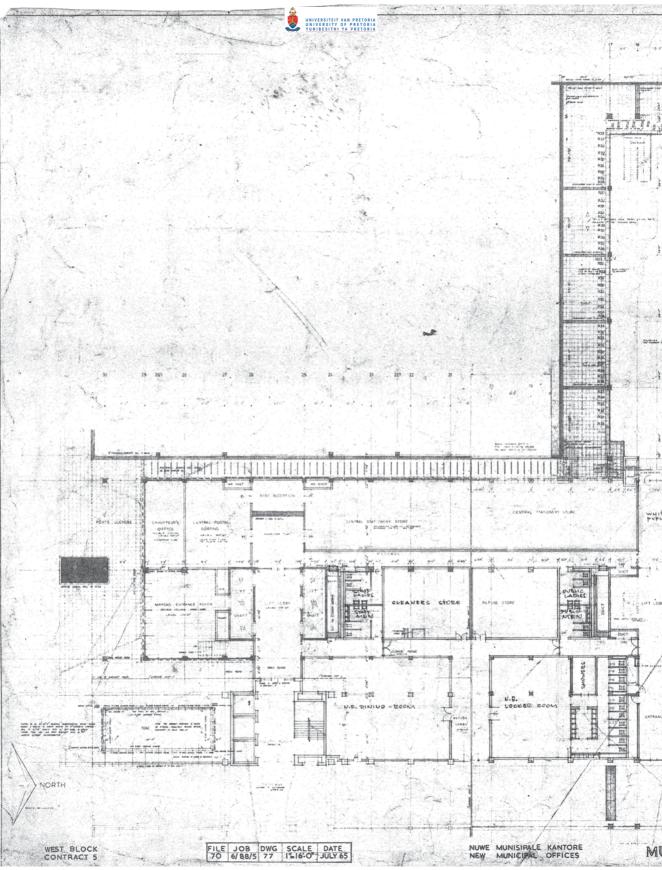


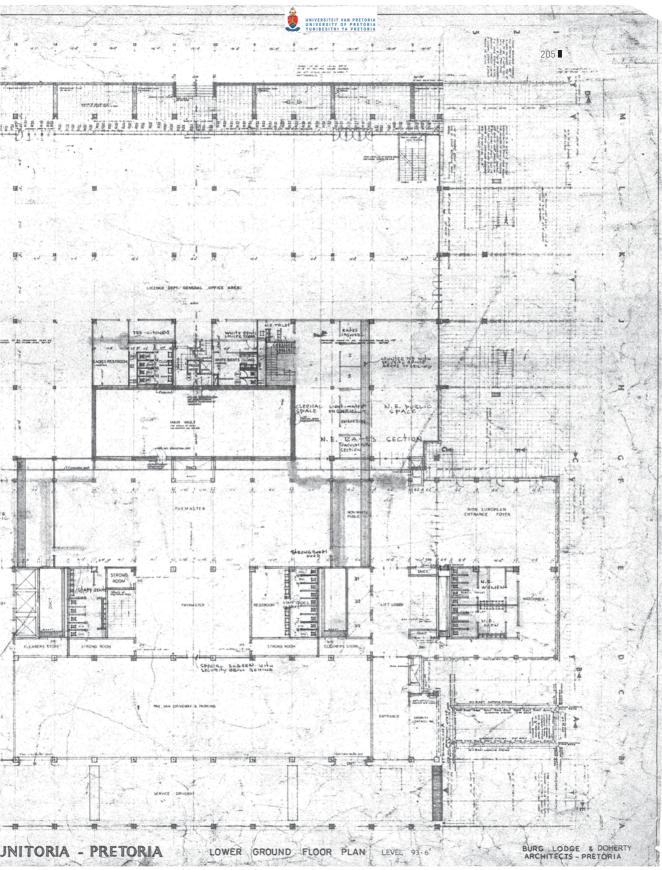




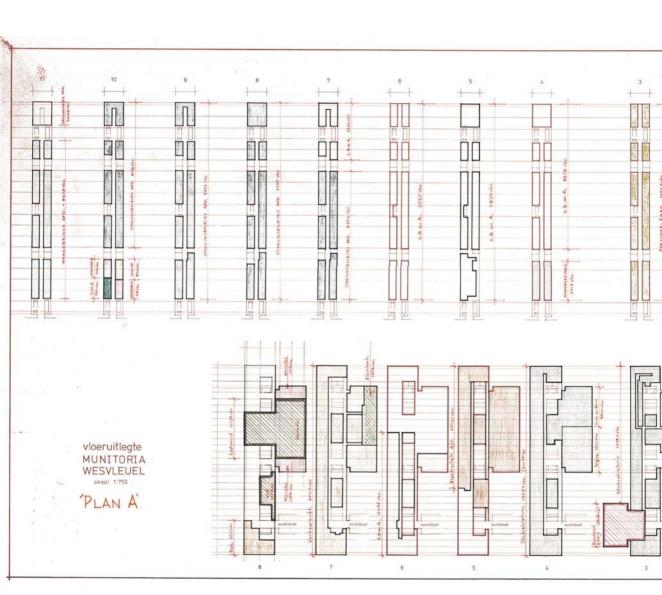




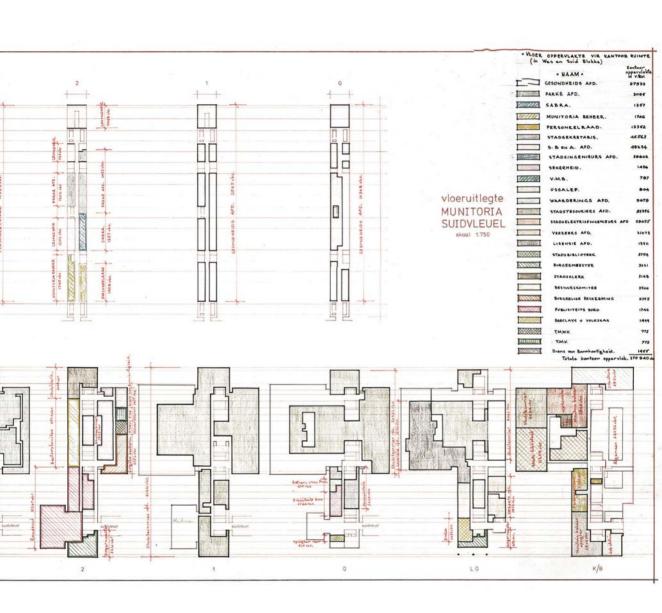


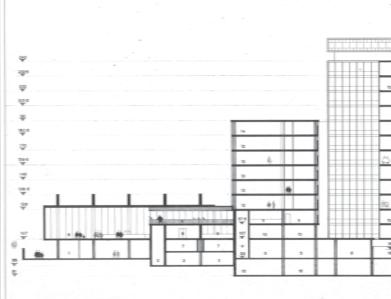


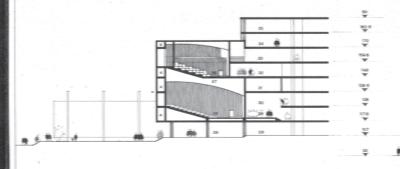










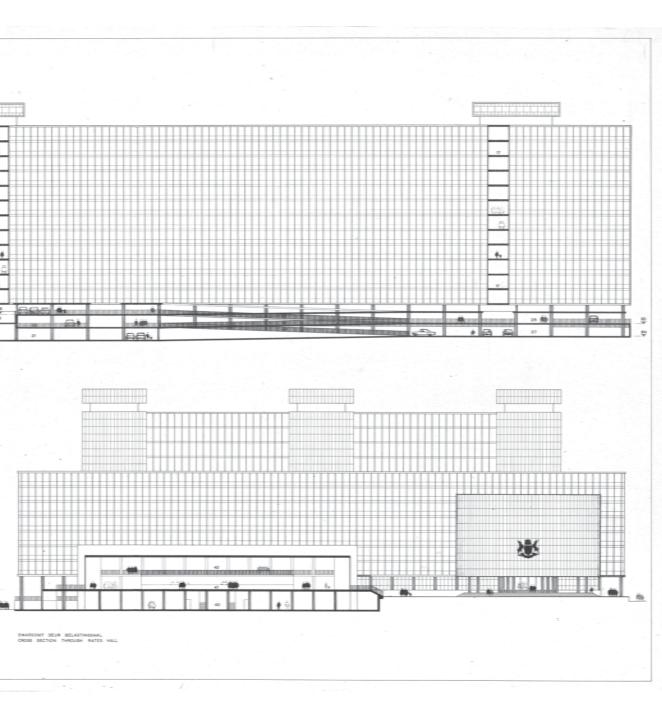


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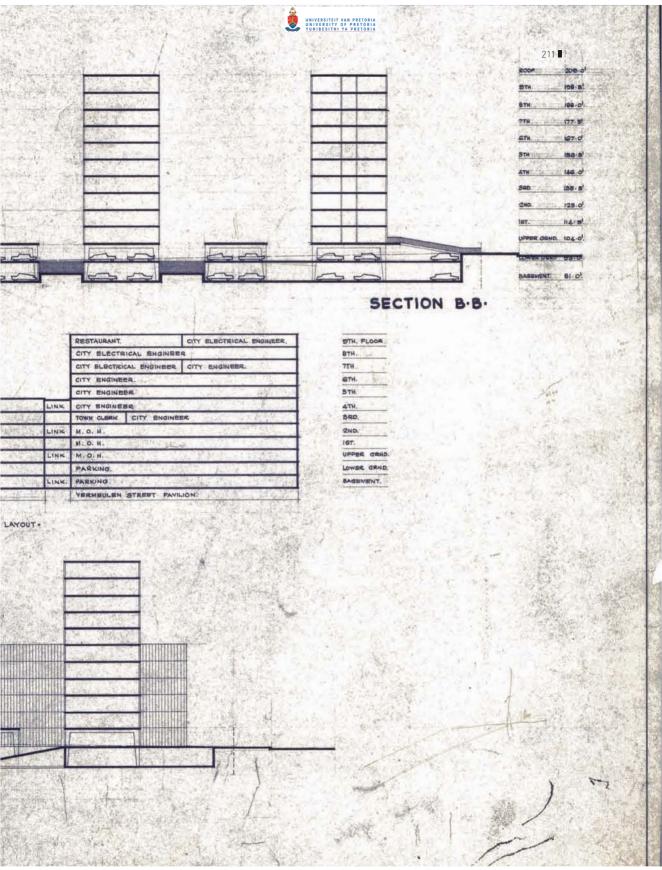
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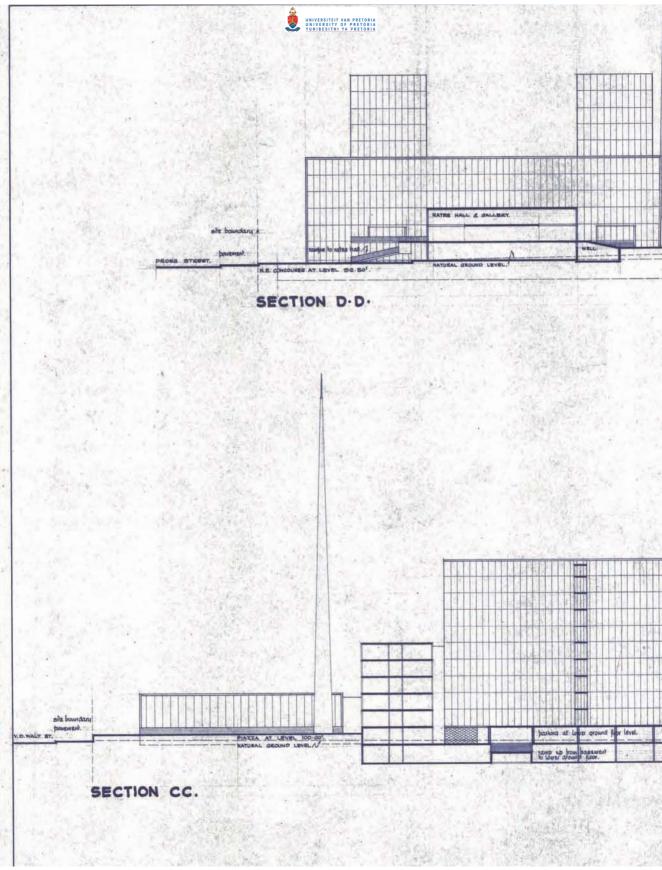
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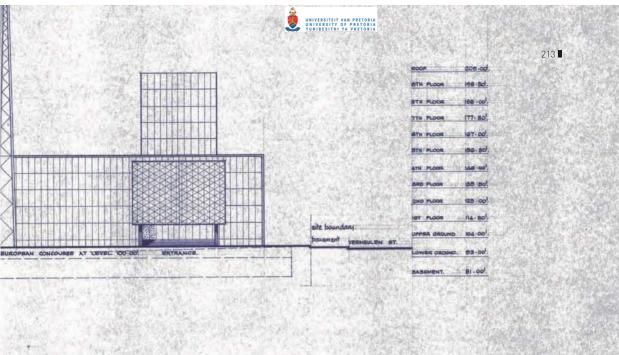
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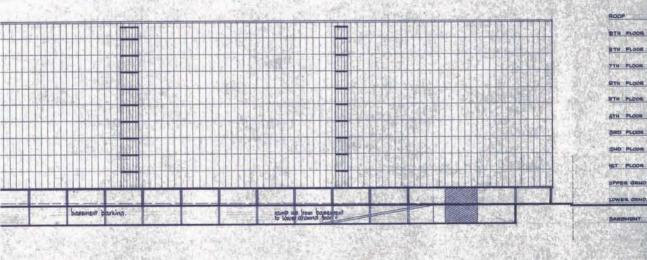
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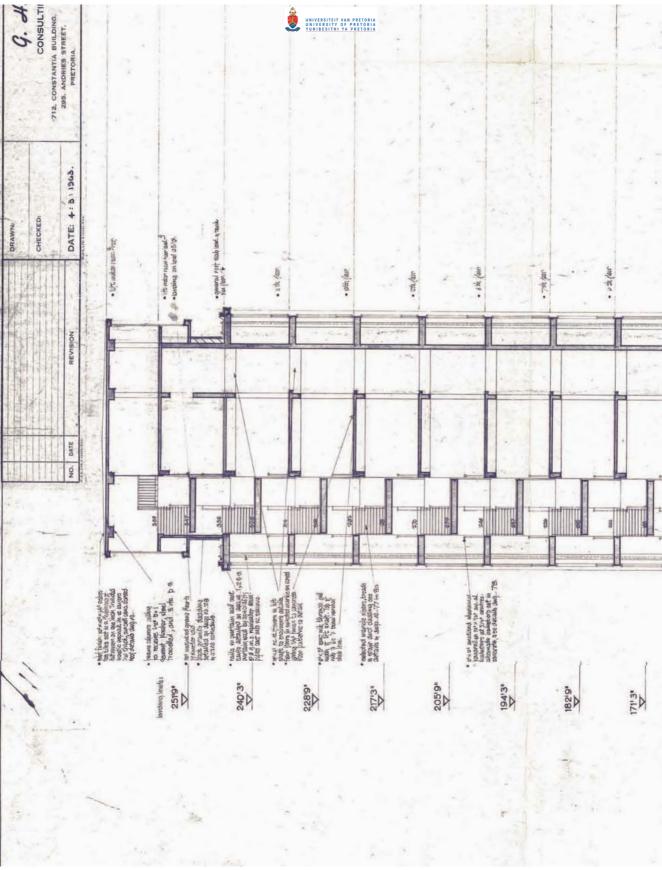
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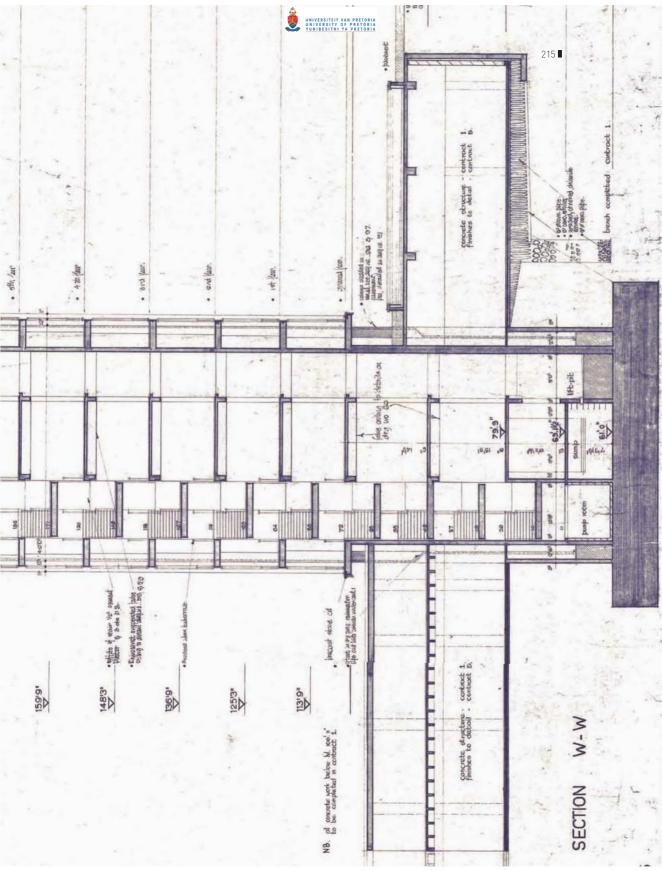
















STATEMENT OF SIGNIFICANCE: MUNITORIA (1969)

Architects: BURG DOHERTY BRYANT & PARTNERS Design Architect: DOHERTY, Anthony Carden (Tony)

144 Van Der Walt Street, c/o Vermeulen, Erf 3200, Pretoria, City of Tshwane

Munitoria, an L-shaped building comprising of a west and south wing, was completed in 1969, at the time one of the most modern buildings in the city. It became home to the City Council of Pretoria in February of that year. While badly damaged in the devastating fire of March 3, 1997, the building continues to be a landmark in the city today. Not only is it exemplary of the Modern Movement in architecture, it was also designed by one of the sons of Modern Architecture in Pretoria, Anthony Doherty (1930 – 2010). The firm Burg, Lodge & Doherty was renowned for their contribution to the rich inheritance of Modern Architecture in the city: the Administration Building of the SABS, the Pretoria Art Museum and the Reserve Bank Head Quarters to name a few.

Modern architecture is characterized by simplification of form and rational design, where ornament is replaced with the structure of the building. The first variants were conceived early in the 20th century. Modern architecture was adopted by many influential architects and architectural educators, gained popularity after the Second World War, and continued as a dominant international architectural style for institutional and corporate buildings in the 20th century. Many examples, like the Seagram Building in New York (1958) by pioneer Mies van der Rohe (1886 – 1969), are open to public visits today while continuing to be used for the original intended function, becoming living museums and testimony to the architectural layering of the city. Similarly, recognition of the contribution of Modern Architecture to the character of



Pretoria should be a major consideration prior to demolition or alteration of any representative structure.

Described as "Miesian-modernist" by Prof Schalk le Roux (1991:40-41), the nine storey structure of the Munitoria is characterized by stark functionality with much emphasis on glazed envelope and vertical articulation – typical of the Modern Movement. The Munitoria building was also one of the first ambitious interventions in the planning of the "new" Pretoria whereby commercial arteries of the city was traversed. According to Le Roux (1991: 41), the significance of the building lies in its prominent location and function.

Conclusion

In short, the Munitoria is significant for

- 1. Its contribution to the architectural heritage of the Modern Movement of the city
- 2. Being designed by a prominent local architect of the 20th century
- 3. And has been a prominent landmark in the collective frame of reference in the city.

Therefore, any alteration or intervention to the structure should be carefully considered *in lieu* of the above statement of significance.

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In accordance with Regulation 4(e) of the General Regulations (G.57) for dissertations and theses, I declare that this thesis, which I hereby submit for the degree Master of Architecture (Professional) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

I further state that no part of my thesis has already been, or is currently being, submitted for any such degree, diploma or other qualification.

I further declare that this thesis is substantially my own work. Where reference is made to the works of others, the extent to which that work has been used is indicated and fully acknowledged in the text and list of references.

Ahmed Alkayyali

October 2011

