

CHAPTER THREE

CONTEXT

The first part of this chapter will discuss the production context historically, dealing with the reasons behind the influx of imported merchandise into South Africa, and the resultant decline of the country's textile manufacturing industry. A further look will be taken at the government's initiative toward supporting local manufacturing, and how this has been implemented in the South African urban context.

The physical context will then be mapped and various aspects analysed, in order to explore the urban conditions within the station precinct area.

OCAL PRODUCTION AND ITS DECLINE

The strong economic and social forces associated with the early manufacturing boom in the early 1900's led to inner cities becoming a dynamic area of occupation within close proximity to housing for the workforce. In the 1920's and 1930's, improvements to both private and public transport led to wealthy urban dwellers moving out of the inner city to the suburbs. This drift of wealth and skills away from the inner city continued around the world, leading to sprawl and the deterioration of these city centres. The 1950's and 1960's witnessed rapid economic growth in the western industrial nations due to international trade and labour migration patterns. Capital intensive exports were sent from developing to developed countries through international trade systems. There was a significant flow of capital investment and manufacturing operations to the developing Asian countries as multinational corporations sought to reduce their costs of production by relocating assembly operations to places with lower labour costs. New manufacturing plants with efficient technologies were relocated to developing countries and competed with existing industries in cities of the developed world. This led to the rapid decline of many cities, accompanied by a sharp decrease in the level of employment. Attempts were made at rejuvenating the traditional economic sectors, but this was short-lived in all western democracies (Cuberes, 2004:4-7].

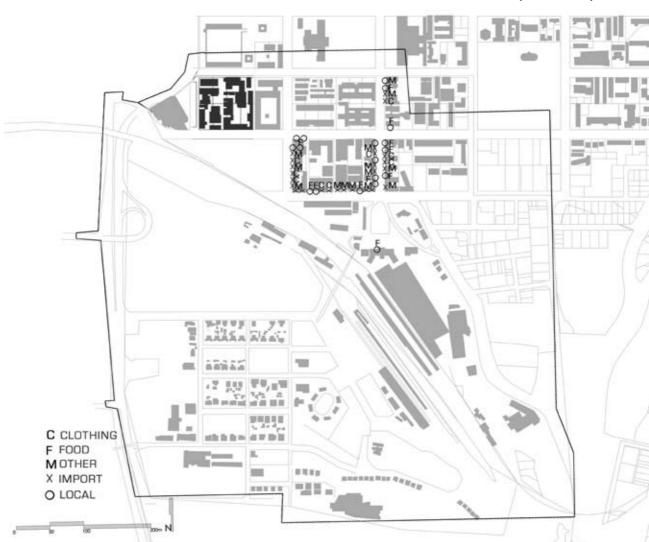
THE INCREASE IN IMPORTED MERCHANDISE

Mapping within the study area (refer to Fig.16) indicates ground-floor commercial activity that consists mainly of imported merchandise.

The clothing and textile industries in South Africa were in a privileged position prior to 1994, due to protection by the government. Post1994, South Africa rejoined the global economy, thus facing escalating competition from both the domestic and international markets.

Over the past decade there has been an increase in the amount of imported clothing merchandise, since the price of imported goods from Asian countries is far lower than that which is manufactured in South Africa. The reasons for this include the lower cost of living in Asia which reduces labour costs, and the economies of scale resulting from large production runs of merchandise in the Asian countries (Republic of South Africa, 2004).

16. COMMERCIAL FUNC-TION MAPPING IN STUDY AREA (AUTHOR 2010).



THE DECLINE IN TEXTILE MANUEACTURE

Due to the influx of imported clothing and fabrics at lower rates, clothing stores benefit by applying a larger mark-up to sale goods. Hence both local clothing and textile manufacturers have borne the brunt of this situation, as South Africa cannot produce merchandise at the same low prices. The South African textile manufacture industry (mainly based in KwaZulu-Natal, the Western Cape, Eastern Cape and Gauteng) contributed to a large percentage of the country's production output and job market. Due to the decline in the textile industry since 2003, both the employment market and the country's economy have suffered (http://www.textfed.co.za).

GOVERNMENT INITIATIVES

The Department of Trade and Industry (DTI) has recently embarked on negotiations with China to limit imports of clothing and textiles into South Africa. In addition, and due to the cost of raw materials as a critical component in the clothing and textile supply chain, the South African government and the DTI have raised import tariff structures to protect in-house material inputs, penalising organisations that source inputs from foreign markets.

The development of the small, micro, medium enterprise (SMME) economy has been stated as a core national policy objective, the reason being that SMME's are seen as key in job creation and poverty alleviation. However, studies point to the sector continuing to constitute mainly of survivalist measures such as side-of-the-road hawking, instead of the sector evolving on an increasing scale of enterprise and job creation.

The DTI has formulated a framework for clothing manufacture in South Africa, which recognises competition from both the domestic as well as the international market that is currently crippling both the clothing and textile industries. However, with a reservoir of experience and expertise within the industry, it could be re-established as a force that canchallenge competitors – domestically and internationally – by focusing on added value, exceptional quality and the effective application of all resources through technological application [http://www.dti.gov.za/publications.htm].







Programmatically this proposal supports the implementation of an urban manufacturing component that incorporates light industry within urban environments, and which promotes the abovementioned government initiative, while providing an economic base for achieving ongoing development in an urban centre. This proposal aims to generate wealth through local investment and employment, further producing goods and services that meet needs within an urban context.



THE FASHION DISTRICT

JOHANNESBURG

PRECEDENT STUDY

The Fashion District is a project initiated by the Johannesburg Development Agency (JDA) in line with the city's 2030 long-term economic development strategy.

The district incorporates twenty-six city blocks on the eastern end of the CBD, bounded by Jeppe, End, Commissioner and Von Wielligh Streets (refer to Fig.22). It houses over a hundred fashion-related businesses, which range from larger clothing manufacturers to small-scale fashion-related entrepreneurs.

The area also offers training to fashion practitioners through institutions linked to the Department of Labour, and this allows for continuous training and development within the industry. The agency has upgraded public amenities, which includes roads and telecommunications as well as the refurbishment of old buildings [http://www.jda.gov.za].

The Fashion District contributed economically to the eastern part of the CBD for over half a century until the late 1980's and early 1990's. The local industry went into decline when large businesses moved out of the Johannesburg CBD. The redevelopment and upgrade of this district has helped raise its profile, which in turn benefits young designers and entrepreneurs. The district also includes a training centre, promoting the improvement of skills to entrepreneurs as well as the informal fashion trade.

The manufacturing hub provides space for people entering the industry, which includes access to pooled machinery, equipment, changing rooms and administration facilities.

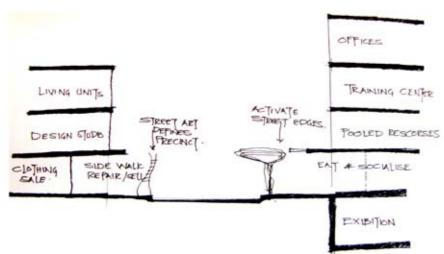
Designers are encouraged to engage with micro cutting, manufacturing and trimming (CMT) businesses in the district, thus developing all aspects of the clothing chain [http://www.joburgnews.co.za/2006/mar/mar23_sewafrica.stm].

The idea of the Fashion District is to encourage local manufacture and job creation at various levels, from design through to equipment repair. The aim is to discourage mass production through focusing on quality output and value-added merchandise (http://www.jda.gov.za).



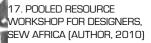








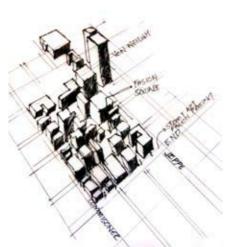




18. SHARED DESIGN STUDIO, SEW AFRICA (AUTHOR, 2010)

19. STREET SECTION IN

SHOW (AUTHOR, 2010)





(AUTHOR, 2010) 22. LOCATION OF DEFINED FASHION DISTRICT IN JOHAN-NESBURG CBD (AUTHOR,

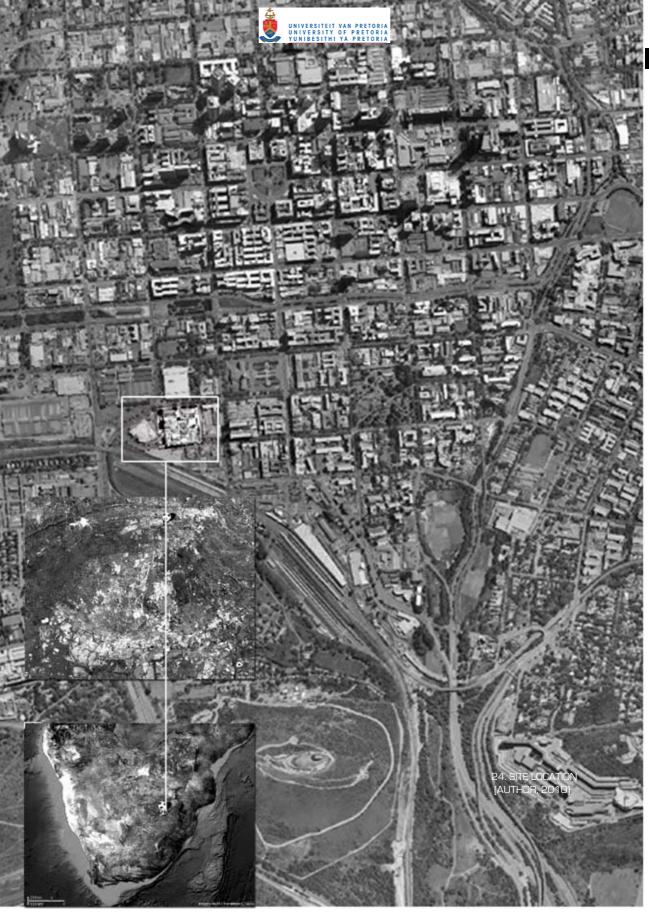
2010) 23. APPAREL RELATED COM-



HE URBAN CONTEXT

The term "context", as described by Nan Ellin, comes from the Latin word conextere, meaning "to weave together or make connections". Architecture and urban environments thus exist because they are part of a context; a network of flows resembling an organism thriving in a mutualist relationship with its host. A clear understanding of a building's context and the various webs and flows therein, as opposed to an object-based, insular, static architecture, is of prime importance in achieving an architecture born of its environment (Ellin, 2006:5-7).

Pretoria is today the historic core of the larger City of Tshwane, and forms part of the larger Gauteng Province, which is the economic heart of the country. Gauteng's position is based on its natural resources. The discovery of gold on the Witwatersrand in the year 1886 caused an influx of people that transformed the rural community into an urban society. Today this area hosts many of the country's industries and commercial functions. The city of Tshwane forms the administrative capital of the country, and presently contains approximately 1, 6 million inhabitants [http://Tswhane.gov.za].



HISTORICAL CONTEXT

The economic and social transformation underlying Pretoria's growth and morphological changes during the second half of the 19th century, caused political tensions within the Republic of South Africa resulting in military conflict. The first half of the 20th century was a period of political stability and economic growth. The city prospered especially after 1910, when Pretoria became the capital city of the new Union of South Africa under the British Crown. As industrialisation took off, developments caused further urbanisation and a building boom (Corten & Van Dun, 2009:11-12). One of the significant reasons for economic growth in Pretoria was the introduction of a railway system to the town and its environs. This had a significant impact on the expansion of commerce, the building industry, and other related trades. The eventual impact was greatest on municipal services and the expansion of the town's boundaries.

Among the production industries recorded within the inner city were Van Erkom's cigar and snuff factory on the western banks of the Apies River, a tobacco factory, a cold-drink factory, a bakery,the Union soap works, as well as various workshops and blacksmith's premises on Andries Street (Naudé, 2007:45-49). Within Pretoria city, places of production are currently mainly situated on the edges of the inner core, and are related to the motor industry (refer to Fig.25). Small-scale clothing-related manufacture through NGO partnerships (refer to Fig.26) is located at various points within the city.

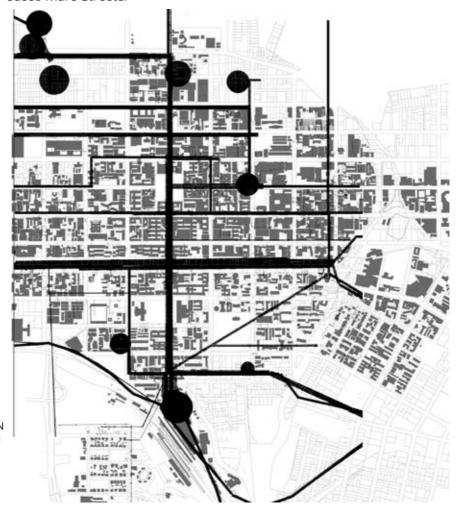




The area of investigation is the station precinct within the southern quadrants of Pretoria linking to Salvokop. This precinct is identified as the southern gateway into the city for various commuters that for example use train, bus, taxi or Gautrain transport, thus implying a place of multi-modal interchange, (refer to Fig. 27).

Pedestrian activity at peak hours generally results in a north-south movement through the city. The major pedestrian activity happens along Paul Kruger and across the pedestrian bridge connecting to Salvokop; secondary routes are down Bosman Street and Andries Street, parallel to Paul Kruger, (refer to Fig. 28).

Commercial activity within the station precinct involves both the formal and informal sector, occurring mainly along Paul Kruger, Bosman, Schieding and Jacob Mare Streets.

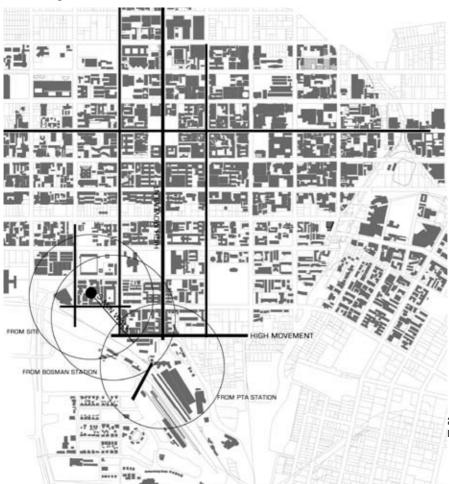


27. TRANSPORT ROUTES IN PRETORIA (AUTHOR, 2010)



Formal trade consist mainly of food and imported clothing. The Informal trade is well established in the area and vends mainly food, catering to the commuters moving within the precinct, throughout the day. Informal trade occurs on the sidewalks along the street edges, allowing for a limited space for pedestrians to move efficiently through the city. Informal trade is part of a South African urban context, and should be accommodated for when designing street edges.

Minnaar Street, located to the north of the site, forms the spine of the museum park development, which is well situated close to a number of transport nodes. Museum Park is an organisation that develops and markets the heritage activities of several museums and prominent historical sites in Pretoria. The road closure of the western end of Minnaar Street and the lack of public facilities provide little incentive for pedestrians to move down the street to and from Burgers Park.



28. PEDESTRIAN MOVEMENT IN PRETORIA (AUTHOR, 2010)

URBAN MAPPING

Putting data on a map can reveal new spaces for action, and new options for intervention, as the often unseen shapes and forms of life in the city become visible (Spatial Information Design Lab, 2009).

The activity of mapping as a creative practice with the capacity of simultaneously concealing and revealing potential, allows us to distinguish what is from what is not. The act of mapping is an agency that helps us to engender and remodel the world. With this understanding, mapping is then less related to a 'mirror of reality' than to the reshaping the world in which we live. Maps are performative, pragmatic instruments that emancipate potentials, which encompass durational experiences, thus generating effects, unfolding potential, and re-making territory. It must be acknowledged that the contemporary world constantly changes at such a speed and complexity that nothing remains certain or stable. Space is subjectively interpreted, which makes the map more intuitive than that of an empirical description.

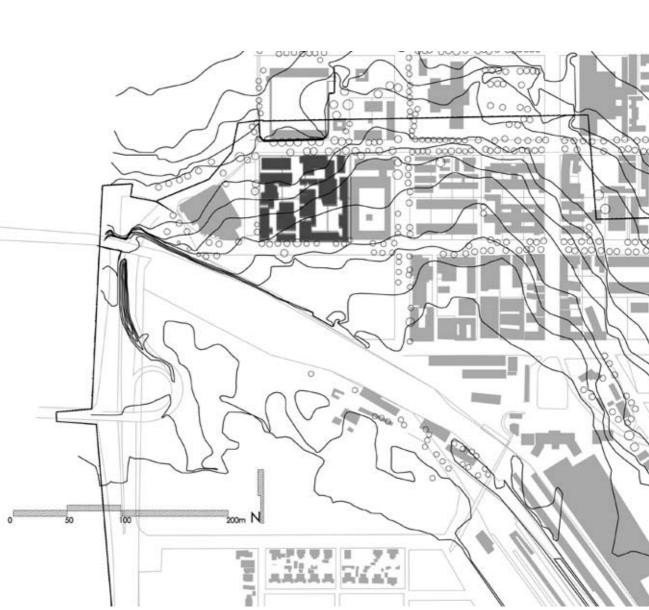
The Station precinct was mapped in a variety of ways in order to understand the urban context, which informs design decisions. The mapping looks at three levels of analysis, the natural urban landscape, the built environment and users of the city.

LANDSCAPE

Through mapping it is evident that, when approaching the edges of the city fabric, there is a reduced amount of green structure, increasing the heat island effect usually generated along railway track. It is also evident that there is a reduced amount of green structure within the city blocks.



29. NATURAL LANDSCAPE MAPPING: CONTOURS AND TREES (AUTHOR 2010).





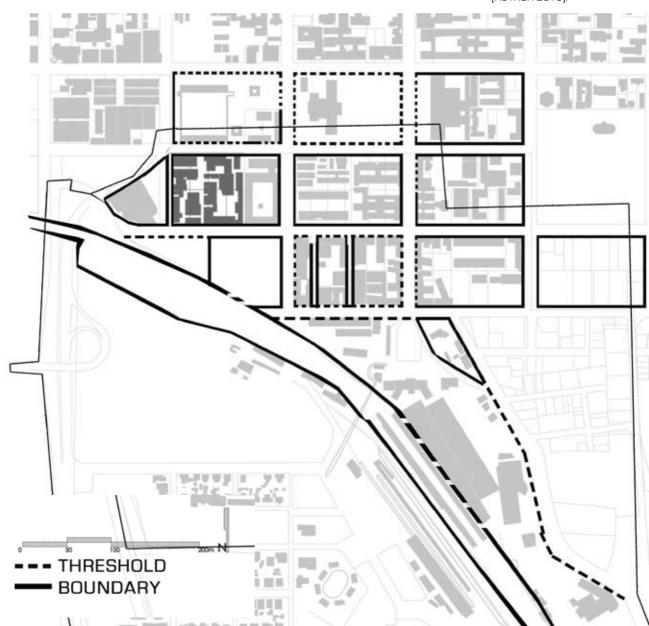
Here, the street blocks were analysed in terms of public accessibility; the solid lines indicate no access or public interface, where the dashed lines indicate ground floor public accessibility.

Nan Ellin describes urban porosity as a spatial porosity within the city, achieved when the built fabric dissolves away at the edges, in order to blur the boundary between built fabric and the surrounding context (nan ellin 2006, integral urbanism).

Here the reintegration of the boundary or threshold into context is imperative in order to explore what exists, and what begins to overlap on urban thresholds. Furthermore, it addresses how architecture can be used as a tool for understanding the edge, allowing for embracing, defining or ignoring the boundary. (nan ellin 2006, integral urbanism).



30. EDGE AND THRESHOLD MAPPING (AUTHOR 2010).



URBAN INTENSITY

Streets with the highest vehicular and pedestrian movement were identified, and then mapped according to movement intensity; the darker areas depict nodes with slow dense movement, where the lighter areas indicate faster, uninterrupted movement patterns.

Jacob Maré and Bosman streets have a high urban intensity, but do not accommodate for public accessibility, or for favourable street conditions to accommodate for urban intensity. [show images of theses streets].

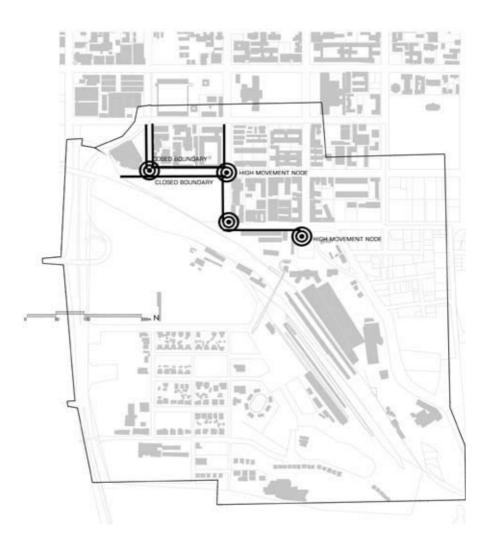
'Take a small sample of a city, cut a small section out of its flux, watch the processes that create the flux, their product is the horizon of the second skin as we see it' (Bunschoten, 2001: 160)



31. URBAN INTENSITY MAPPING (AUTHOR 2010).



It is evident through the mapping processes, that the built environment does not respond to the contextual events that occur on the edges of city blocks, or between the built fabric; buildings act as borders, rather than thresholds within the precinct. The edges inhibit people from pausing and embracing the cityinstead they encourage fast through-movement making the city an interchange, rather than a destination or gateway. Furthermore, toward the edge of the city, it is clear that green structure diminishes, giving way to brown field sites on the edges of the railway tracks, and it is here that landscape/ green structure should become part of or interweave into the built fabric.



32.URBAN MAPPING INTERPRETATION (AUTHOR 2010).



The study area into which this proposal will be inserted (refer to Fig.32) mainly hosts a lower to middle income demographic of people working in the inner city as well as residing in the neighbouring Salvokop area; the closest community to the inner city core. It also contains a major tourist attraction, Freedom Park. Also contained within the station precinct is an influx of immigrants from Asian and African countries. The current urban proposal for this area envisions attracting higher income groups for economic investment. In order to avoid gentrification of the area, functions should allow for the semi-formal sector to benefit from larger sector investors, permitting a symbiotic relationship to form.

PHYSICAL CONTEXT_ SITE SELECTION

The proposed site was selected due to the following factors:

- The existing buildings are symbolic of a production typology as understood by western culture.
- The possibility to re-use existing building fabric in the city rather than demolishing it.
- The ground-floor commercial functions of the surrounding city blocks are stocked with imported merchandise.
- The site is currently isolated from its context, as observed through mapping processes.
- The site is in close proximity to a major transport node, i.e. Pretoria Station, as well as residential functions at Berea Park and Salvokop.

33. VIEW OF THE SITE FROM EAST (AUTHOR 2010).



SITE LOCATION

The site is located towards the edges of the south-western quadrant of the inner city core within the Pretoria Station precinct. It neighbours the Pretoria Fire Station to the east and the Post Office headquarters to the west. It is bounded by Minnaar Street to the north and Jacob Maré Street to the south (refer to Fig 34).

SITE CONDITIONS

Historically the site consisted of eight erven, demarcated in 1925. The initial structures on the site were used as horse stables. During the 1940's the site was appropriated by the Department of Public Works to house workshops and offices for government departments.

The size of the site is approximately 20 650 square meters, and it currently consists mainly of one-storey storage buildings, with a few structures being utilised for furniture manufacture, equipment repair and offices for the Department of Public Works (refer to figure). The site has a 1:20 meter slope in a northerly direction. Views toward Freedom Park and the centre of Pretoria form the background to the site, whereas the bell tower of the City Hall as well as the Department of Land Affairs makes up the visual foreground.

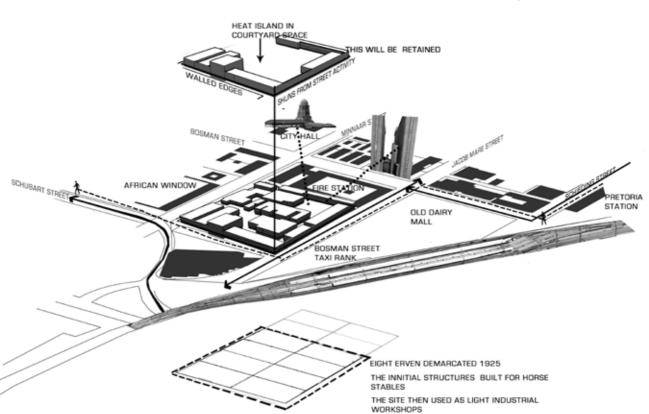
Minnaar Street to the north of the site forms the backbone of the Museum Park development. Having a more pedestrian responsive character, it also provides primary access to the site.

The southern edge of the site forms a back wall to the bustling street activities on Jacob Maré Street, where informal sidewalk restaurants form part of a high-movement pedestrian zone, fed by the Bosman Street taxi rank and its close proximity to the major public transport hub of Pretoria Station.

The western edge between the Post Office and the proposed site, functions as a pedestrian throughway. In the morning it hosts high volumes of pedestrian movement in a northerly direction towards the Pretoria CBD, which in the afternoon shifts southward toward the Bosman Street taxi interchange and Pretoria Station.



34. SITE ANALYSIS (AUTHOR, 2010)









35. VIEW WEST ON JACOB MARE STREET (AUTHOR, 2010).

36. PEDESTRIAN THOR-OUGHFARE AND JACOB MARE INTERSECTION (AUTHOR, 2010).

37. CURRENT TAXI INTER-CHANGE BOSMAN STREET (AUTHOR, 2010).















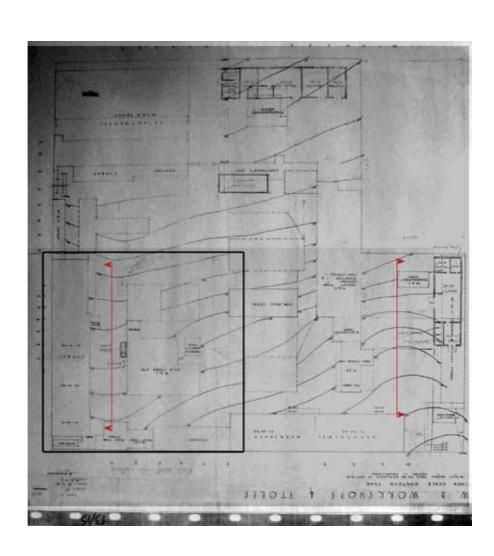


38. INTERNAL COURTYARD SPACE ON SITE (AUTHOR, 2010).

39. EXISTING FURNITURE WORKSHOP (AUTHOR, 2010).

40. MANAGERS OFFICE IN WORKSHOP, PANOPTICON [AUTHOR, 2010].

41. OLD MATERIAL STORAGE ON JACOB MARE BOUNDARY (AUTHOR, 2010).







43. EAST ELEVATION OF EXISTING WORKSHOP BUILD-ING (AUTHOR, 2010).

44. WEST ELEVATION OF EXISTING OFFICES (AUTHOR, 2010).



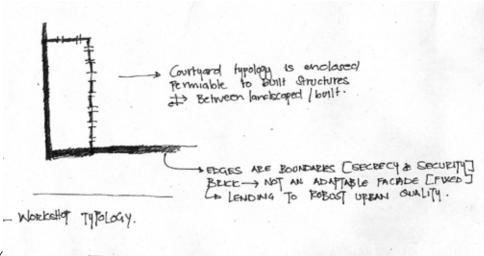
Due to the typology of the existing buildings, which is closed off to the public, windows are placed high up so that activities within are not visible from street level.

The existing surface material of the vehicle-orientated courtyard is tarmac, contributing to the heat island effect on site (refer to Fig. 33).

SIGNIFICANCE

This building being older than sixty years, would be classified as heritage due to its age, however it is not a protected structure. The western and southern edge of the site comprise of face brick walls, and the east facade which faces onto the courtyard, is painted over in white. Doors and windows mimic that of the initial structures on site, with the use of arched openings. The roof construction consists of pitched timber trusses, gables, and corrugated metal sheeting.

Other existing structures on the southern boundary consist of individual storage rooms for oil and gas, but are no longer in use.



45. EXISTING TYPOLOGY OF EXISTING WORKSHOP BUILDING (AUTHOR, 2010).







This chapter, through employing mapping sequences and analysis, shows that the inner city can derive the most economic and social benefit from catalytic projects that connect various networks within the urban fabric. From an environmental, economic and social point of view, it is generally acknowledged that within the city there lies the potential for an intervention that acknowledges and stimulates the circumstances that have created the current situation.

PROPOSAL

On an urban scale, this proposal aims to explore edges and threshold spaces, in response to the network of flows, which form and support the context. This proposal starts to address porosity of built fabric both spatially and functionally within the city. Nan Ellin describes urban porosity as a spatial porosity at the scale of the city, achieved when permeable membranes separate and unite buildings from and with the surrounding physical and cultural landscapes. (Ellin, 2006:82-85).

The proposal of an urban manufacturing centre would look at strengthening local connections between manufacturer and end user, as well as establishing connections through program to unrelated functions, such as the site's response to the taxi interchange across it. Rem Koolhaas mentions that within cities, connectivity is constituted by 'exacerbated difference' or a permanent hybridity. Programmatic hybridity, begins to allow for complexity, density, congestion, and contamination in order to create new events (Koolhaas,1978: 10-12)



This dissertation proposes an investigation of the manner in which a production facility would manifest in a South African urban context.

Here, at the government workshops in Pretoria, an intervention is required which super-imposes a new ideology of the workhouse typology, while posing a reaction to the building's exclusive history towards its context. This intervention would focus on elevating the idea of production as a process driven, rather than a product driven facility; a hybrid production facility is advocated, which localises networks of consumption and distribution within the city.

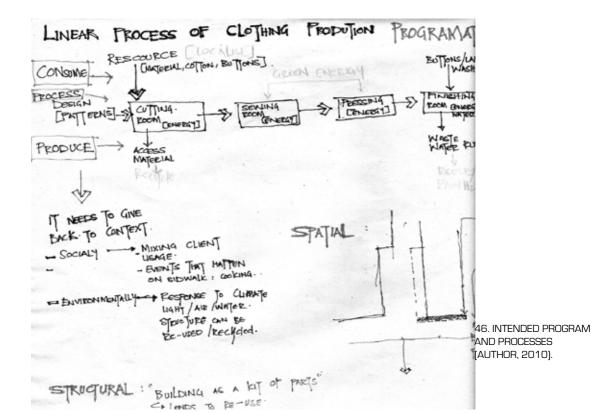
The workhouse was conceived as a place of control and industrial secrecy, promoting a facility that was exclusive toward its surrounding urban environment. This dissertation proposes an inversion of the panopticon, through a shift in ownership of the production facility from a private owned entity to a cooperative between the private and public sector, encouraging the public to physically engage and benefit from the process of manufacture.

The program supports the theoretical premise of cyclic processes contributing to the context, through extending the current production line of apparel wear. Here the process does not end at an item of clothing, but accommodates for further processes of washing, repair, re-use and recycling of clothes, promoting a more inclusive facility within an urban context.



The building should function as a contributor within the urban context, thus the architectural brief is as follows:

- Insert a new facility which engages with the existing building fabric
- The new building should respond to the existing contextual flux identified within urban mapping, by engaging with street edge and the pedestrian thoroughfare .
- Permit a public interface to the production facility, as a reverse of the panopticon.
- Unlock parts of the building that become infrastructure within the city and those parts which can adapt to change within the life span of the building.
- The building should recognise its part in a process, from conception through to being taken apart and re-used.
- Future possibility that the site can be sub-divided due to densification of city, allowing the building to function as separate programs.
- Consider the buildings role within the station precinct, and how its responds to commuters as well as people living within the precinct.



FUNCTIONS



The primary function of this building is a clothing manufacturing facility.

The secondary function supports the main function through:

- -Localising Clothing distribution
- -Repair and recycling
- -Apparel and accessory retail

The ancillary functions respond to the context in order to spatially and functionally connect the urban fabric:

- -Urban laundry,
- -Semi formal trade/ repair
- -Recycle collection centre.

USERS

Two user types can be identified:

Regular users would include:

- People working in the facility
- Clients related to the apparel industry
- Commuters that pass through the station precinct on a daily basis,
- Residents within the city
- Informal traders within the station precinct

Periodic users include:

- Commuters that visit the city intermittently
- Apparel related professionals
- General public within the greater Tshwane area





GROUND FLOOR

- -Delivery and distribution
- -Storage
- -Manufacturing space
- -Packaging
- -Clothing distribution
- -Second hand clothing store
- -Recycling collection centre
- -Refuse
- -Repair
- -Commercial
- -Urban laundry
- -Semi formal trade/repair
- -Courtyard / event spaces

FIRST FLOOR

- -Administration/ marketing
- -Studio space
- -Workshop as pooled services
- -Material and pattern libraries
- -Consultation rooms
- -Alternative energy plant room
- -Food preparation
- -Cafeteria/ event space

