



“To anticipate developments from outside, a city-wide integral accommodation plan has now been made in Arnham, Netherlands. A prognosis is made of which school’s turn it is for renovation, the state of the school’s premises, and how a school fits in with urban development trends. We want to be a step ahead of the developments. The next stage is to draw up priorities and then the plan goes to council, which has to release the funds”.

Gerard Bonte
Verstegen (2009: 184)

02



South Africa / Gauteng / Tshwane



fig.2.1. Eastern precinct of inner city Pretoria



fig.2.2. Map of the Republic of South Africa indicating the location Gauteng

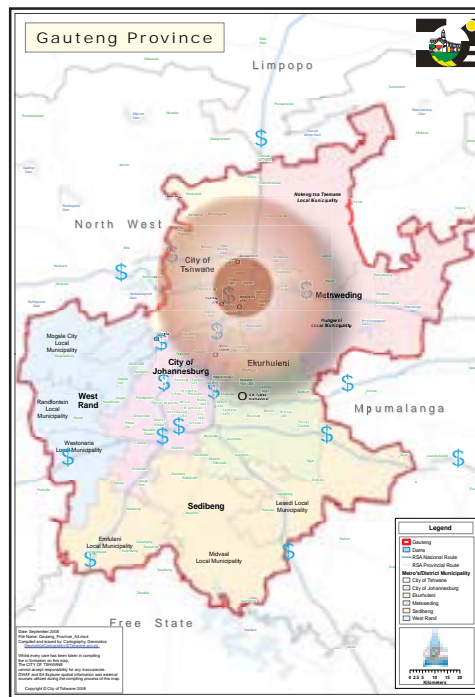


fig.2.3. Map of Gauteng Province indicating the location of Tshwane

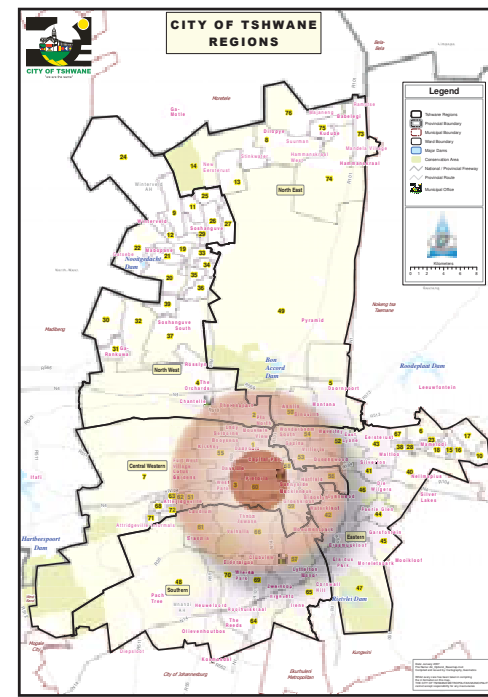


fig.2.4. Map of Tshwane indicating the location of Pretoria

Chapter 2

Context

Pretoria

The city of Pretoria is the capital of the Republic of South Africa. Its predominant function is to facilitate the administrative functions of the Republic. Various government departments occupy buildings within the city for this purpose.

Landmark attractions within the city of Pretoria, which can be observed from the rooftop of the proposed site of intervention, include the Union Buildings, Loftus Versfeld, the University of Pretoria (UP), the Telkom Tower, UNISA, Freedom Park, the Voortrekker Monument, the ABSA building, the Reserve Bank building, and the Pretoria Zoo.




-  - The Apollo Centre
-  - Main Vehicular Routes
-  - Railway Routes and Stations
- UB - Union Buildings
- L - Loftus Versfeld
- UP - University of Pretoria
- T - Telkom Tower
- U - UNISA
- F - Freedom Park
- V - Voortrekker Monument
- AB - Absa Building
- C - Caledonian Stadium
- RB - Reserve Bank
- Z - Pretoria Zoo



fig.2.5. Diagrammatic Analysis of Pretoria

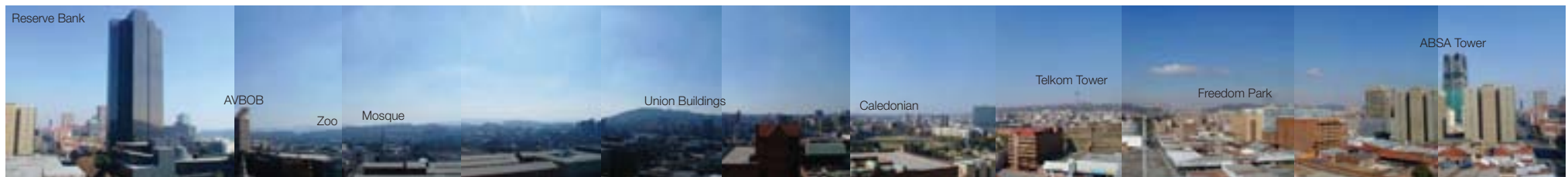


fig.2.6. Panoramic view of the city of Pretoria from a rooftop within the precinct investigated



- The Apollo Centre
- Independent Private Schools
- Tertiary Educational Institutions (FET Colleges)



fig.2.7. Educational Institutions within precinct investigated.
Specific block of intervention also identified

Urban Framework Analysis and Proposal



fig.2.8. Bird's Eye View of Existing Urban Fabric in Precinct

The Urban Design Framework is an attempt at establishing an architectural model for the numerous educational institutions within the inner city of Pretoria. It is proposed that the educational component of the city be a catalyst for future development within the inner city.

An attempt has been made to map all of the existing primary, secondary and tertiary educational institutions within the inner city of Pretoria (fig.1.13). This shows that there are a great amount of institutions present within the city.

The framework proposes that all of the educational institutions present within the inner city should be

linked to one another (fig.2.13). These linkages may be created through the mere sharing of resources, but also through physical connections by way of pedestrian routes. It is proposed that an urban campus for education and recreation might in fact be achieved. This will not be achieved by one broad intervention though. Critical clusters of educational institutions should be evaluated and included into a precinct scale urban development framework. A cluster to the east of the inner city has been identified as one such precinct that contains a prominent amount of educational institutions (fig.2.7).

The identified precinct contains a many industrial/automotive building typologies that are proportion-



fig.2.9. Industrial / Automotive building types in precinct



fig.2.10. Industrial / Automotive building types in precinct



fig.2.11. Industrial / Automotive building types in precinct



fig.2.12. Industrial / Automotive building types in precinct

ally out of scale compared to the rest of the city. The condition of these buildings are generally poor, dilapidated, and is not of any note worthy importance (figs.2.9 - 2.12). The majority of central areas of each city block in this precinct are occupied by either a very low density of similar building typologies or open parking areas (figs.2.9 - 2.12). It is thus proposed that new development should focus here and replace the existing industrial/automotive character by one of denser mixed use development, aimed at not only increasing residential and office uses, but also at increasing pedestrian activity. All this should be done according to the following prescribed urban framework guidelines that utilizes the existing educational institutions as catalysts for development.

Architectural guidelines for the implementation of the proposed urban framework includes:

Movement

- The main North/South vehicular movement should happen along Nelson Mandela Drive on the eastern edge of the precinct and along Van der Walt Street on the western edge (fig.2.13).
- East/West movement is already articulated by Pretorius and Schoeman Streets. This should remain the main movement (fig.2.13)
- Pedestrian movement through the precinct should be encouraged. The main routes currently consist of Du Toit and Prinsloo Streets. These movement

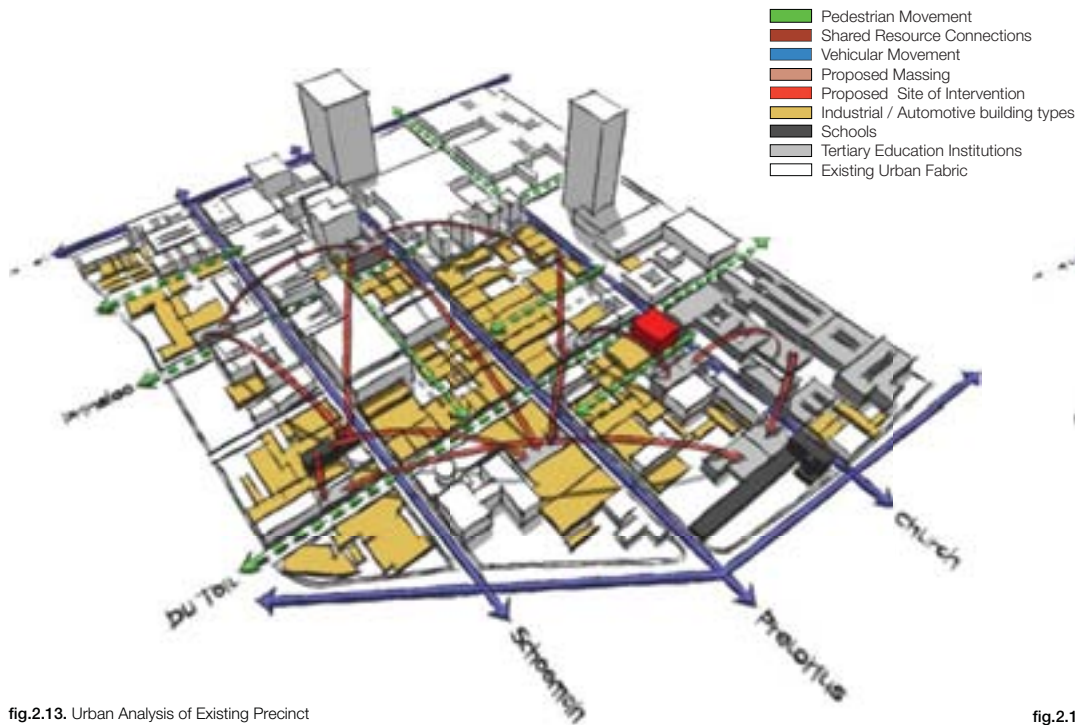


fig.2.13. Urban Analysis of Existing Precinct



fig.2.14. Urban Framework Proposal for Precinct

corridors should be upgraded with better street crossings and sidewalks, but pedestrian arcades through city blocks should be introduced where possible (fig.2.15).

- Pedestrian crossings should be upgraded (. Pedestrian movement should be enhanced by regulating traffic at new arcade intersections (fig.2.19).

Street Edges and Sidewalks

- The existing system of parallel parking on street edges should remain, but off-street parking should be introduced in new developments where possible (fig.2.16 and fig .2.18)

- All sidewalks in the precinct should be upgraded

using inclusive design principals so that there will be no sudden level differences along the routes. The sidewalks should be a minimum of 3m wide. Green structure that includes trees and planters should be introduced along new and existing pedestrian routes (fig.2.20).

- Street furniture that includes dustbins, benches and lighting should be provided along pedestrian routes. The street lighting provided should be on a pedestrian scale where possible (fig.2.20).

- Sidewalks should be covered by canopies that protrude a minimum of 1.5m out of the building facades (fig.2.20).

- Different textures can be introduced to define different spaces along the sidewalks (fig.2.20).

- Excessive signage along pedestrian routes should be introduced for information and orientation purposes, including educational information (fig.2.20).

Buildings

- All new development should respond to, or try to enhance the existing, as well as proposed educational infrastructure.

- The ground floor of buildings should be used for retail purposes.

- Buildings placed adjacent to one another should form continuous street facades, but the corners at traffic intersections should step back to provide a better visual line of movement and create spaces for

vendors and pedestrians to reside.

- All buildings should be built to a minimum height of 3-stories. Buildings lower than 6-stories may have a flush facade, but anything higher that should step back a minimum distance of 1.5m from the 4th floor upward (fig.2.15).

- Courtyard building typologies are encouraged.

An upgrade of the Caledonian Sports Grounds is proposed. The facility should become a semi-public venue for recreation purposes and allow educational institutions to gain access to it on an organized manner.



fig.2.15. Pedestrian orientated routes, introduction of green structure, continuous street facades and excessive signage



fig.2.18. Off-street basement parking



fig.2.19. Pedestrian crossings



fig.2.16. Extended sidewalk space, and parallel parking



fig.2.17. Covered sidewalk space



fig.2.20. Different floor materials, street furniture, and signage



Block Analysis



Education

Offices + Partially Vacant



Vacant



Light Industrial

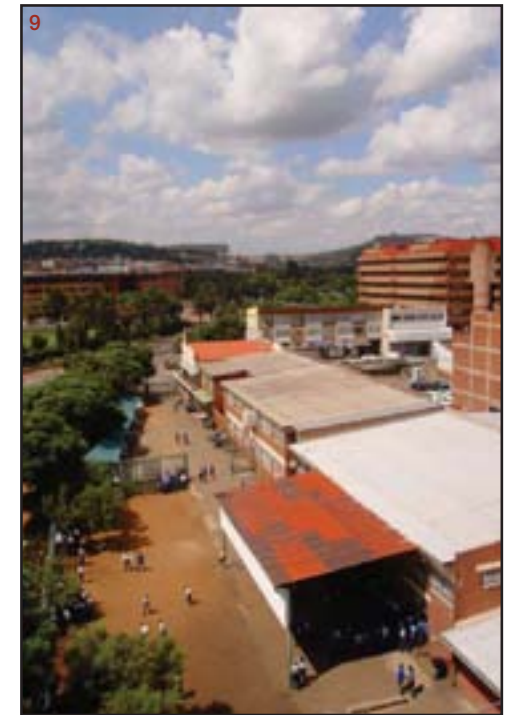
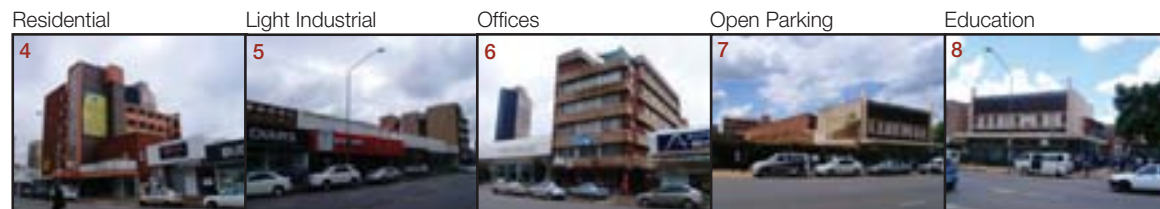


fig.2.21. Aerial photograph of block containing intervention





Proposed Block Demolishment Plan



*(All Educational Functions should remain in precinct, either within existing structure or housed within new development according to urban framework proposal. These institutions, as well as any programmes that adds to the educational character of the precinct should be the catalysts for the proposed new development.)



fig.2.22. Proposed Block Demolishment Plan

(Drawing not to scale)



Proposed Block Development Plan



*(All Educational Functions should remain in precinct, either within existing structure or housed within new development according to urban framework proposal. These institutions, as well as any programmes that adds to the educational character of the precinct should be the catalysts for the proposed new development.)



fig.2.23. Proposed Block Development Plan

(Drawing not to scale)