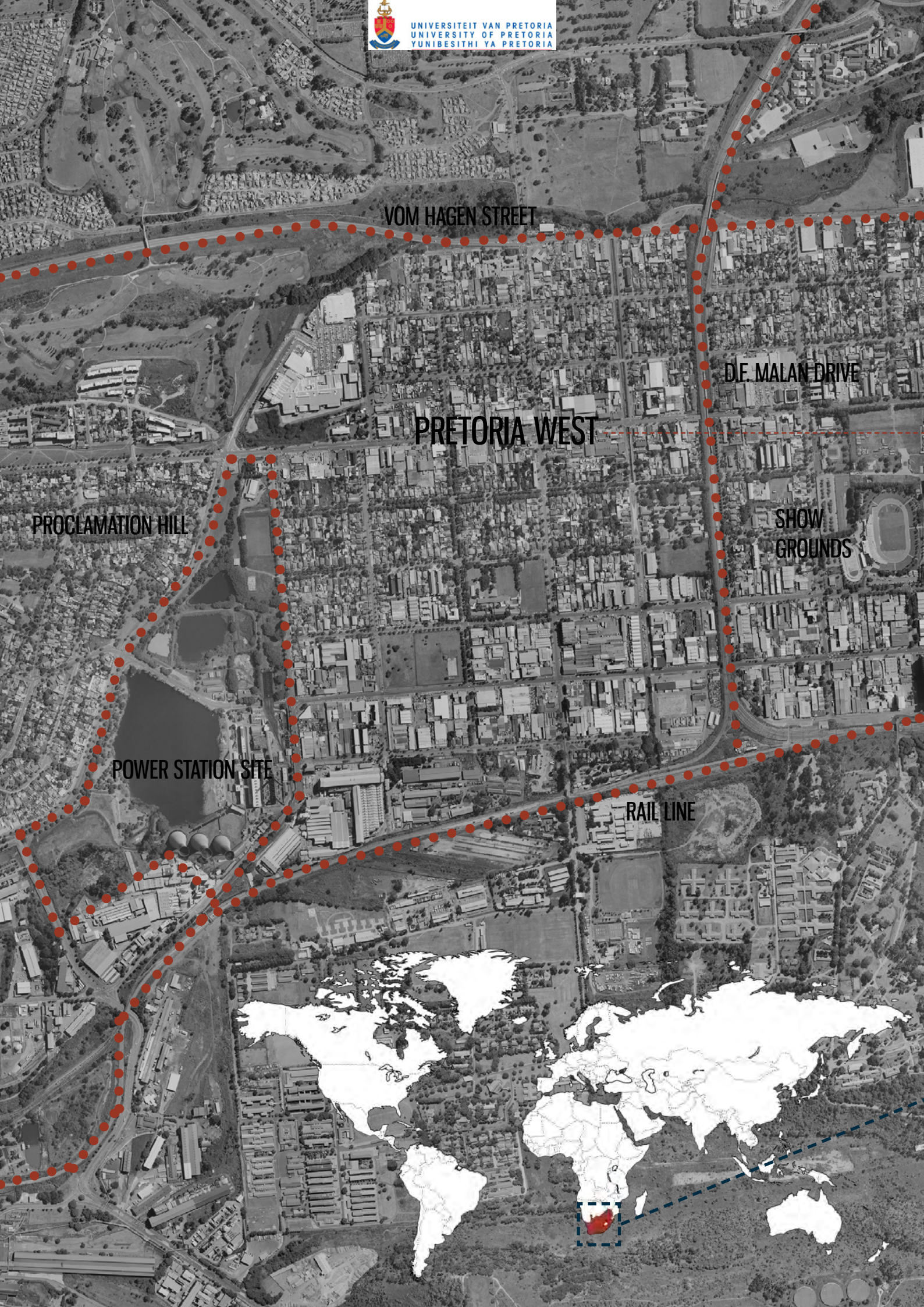


[1]



VOM HAGEN STREET

D.F. MALAN DRIVE

PRETORIA WEST

PROCLAMATION HILL

SHOW
GROUNDS

POWER STATION SITE

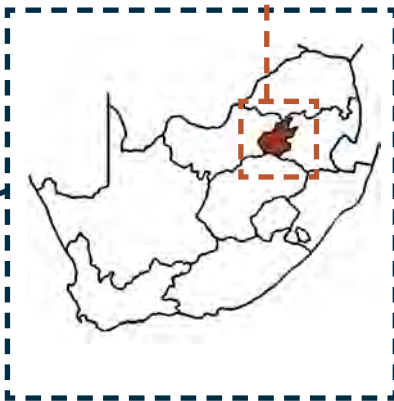
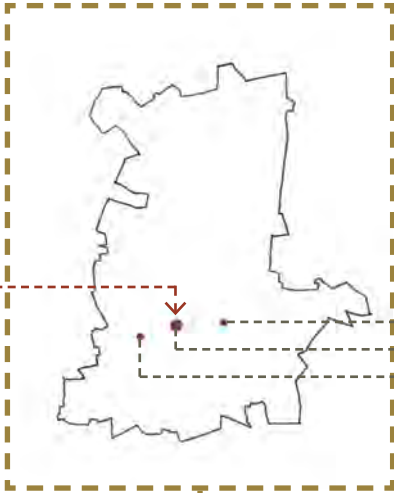
RAIL LINE



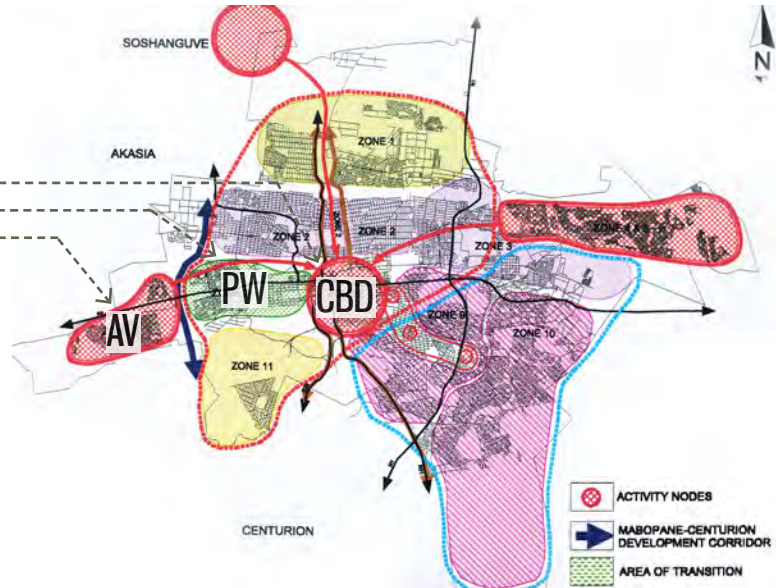
[chapter 1] background: urban framework

[Fig. 2] Aerial photograph of Pretoria West

[Fig. 3] Worldwide locality diagram



This thesis works within a framework that identifies the Pretoria West Power Station as a site of particular interest and potential. The location of the Power Station is directly between the Pretoria CBD and large residential areas, this combined with its proximity to good transport connectivity suggests the site as a good location for an urban support cell which encourages the development of the CBD as well as defining an activity corridor from Atteridgeville all the way to the CBD.



[Fig. 4] Map identifying the Pretoria CBD and Atteridgeville (AV) as activity nodes and showing Pretoria West (PW) as an area of transition between these nodes.

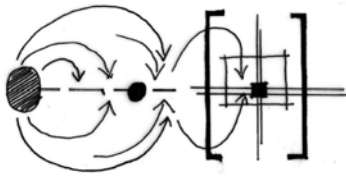
vision and framework

The vision for Pretoria West begins by looking at the whole of Pretoria West and analysing and understanding its context and connections and developing a vision for this area.

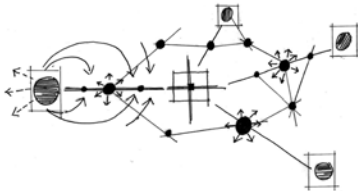
about pretoria west

Pretoria West is the area spanning approximately 3kms between D.F. Malan Drive to the East and the Power Station to the West, to the North Vom Hagen Street borders it and to the South it is defined by the rail line.

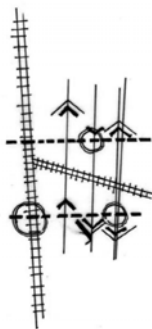
This area is characterised by light industrial activity; mostly focussed on the motor industry, as well as small residential houses and a few low-rise flats. Also of significance is that this area is a direct extension of the CBD grid and has very good access to public transport, especially via rail. Places of significance in Pretoria West are the Pretoria Show grounds



[Fig. 5] Sub-support system for the city of Pretoria; diagram demonstrates the location of Pretoria West along an activity spine between the CBD and Atteridgeville.



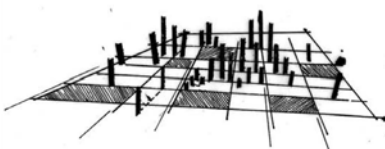
[Fig. 6] Diagram Demonstrating a network of sub-support cells around the CBD.



[Fig. 7] Existing urban infrastructure.



[Fig. 8] Regional and national connectivity.



[Fig. 9] Urban fabric of multiplicity.

and the Pretoria West Power Station, which is a prominent landmark of the area.

However what is most notable about Pretoria West is that, in theory, considering its extremely close proximity to the CBD and its excellent transport links, one would expect it to be an area of much higher density and activity than what, in reality, it actually is. Pretoria West most definitely appears to be a lost and forgotten part of Pretoria, while there are numerous spatial frameworks and development plans laid out for the city and many of the surrounding townships, Pretoria West has yet to feature in any of them.

vision for pretoria west

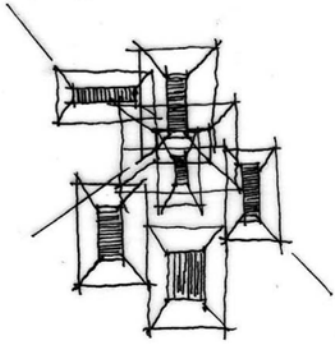
Part of the vision for Pretoria West is to develop it as a **sub-support system for the city of Pretoria** (fig. 1.5), sprawling weakens the city fabric and the city core cannot be developed without urban support cells. The location of the Pretoria West industrial cell can assist in the focus of energy from Atteridgeville towards the city and the development of an activity spine. This cell is ideally placed to aid in the densification and support of other frameworks that have been developed in and around the city and the vision is for this productive cell to eventually form part of a **network of various sub-support cells** (fig. 1.6) around the CBD.

Pretoria West already has strong **existing urban infrastructure** (fig. 1.7), with good rail connections and is located along existing and future bus and taxi routes, the existing grid is even a direct extension of the city core. These things imply that this area can far exceed its current densities and makes it a direct and manageable cell for support and densification to the CBD.

This cell can support a range of programs because of its direct connection via rail to provincial and nation systems of production and distribution, thus achieving **regional and national connectivity** (fig. 1.8) for this cell. This unique character should be cultivated in order to reach this cell's full potential as a productive quarter.

Across the study area there is the **potential for hybridity** in program, urban spaces and infrastructure and there is vast potential for economic, social and sustainable urban growth. The existing area has a large focus on production and the vision is to carry this essence of production throughout the vision for Pretoria West and to encourage the development of an **urban fabric of multiplicity** (fig. 1.9).

The **perception** people already have about the Pretoria West

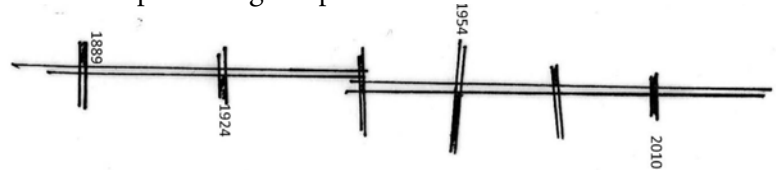


[Fig. 10] Perceptions

[Fig. 11] Industrial heritage

area is one of its largest downfalls, whereas the truth about levels of danger and crime, pollution and poverty are in large contrast to reality. Even based on nothing else but its excellent proximity to the CBD Pretoria West should be a very sought after place to be, with a lot of opportunity for positive development such as smart industry and housing, landscape urbanism and various other hybrid design theories can be applied to **develop a more positive image** for the area.

A very important part of the vision for Pretoria West is **managing the industrial heritage** (fig. 1.11) of the area and integrating valuable existing building stock into the urban fabric and preserving the productive nature of the area.



The vision for Pretoria West has a very long-term scope, with the goal being to greatly improve the area so that it effectively serves as a support to the city and a connection to outer lying areas. Maintaining the area as a light industrial area is also very important as well as finding hybrid functions that compliment the productive nature of the cell. The Power Plant was identified as an icon in this area and the framework for development that has been designed for it has been developed to support the vision for Pretoria West and use the Power Plant as a catalyst, anchor point and model for development throughout the Pretoria West area.



[Fig. 12] Photograph of how the power station looks today, highlighting the old part of the plant that is shown in the historical photograph (fig. 13), one can see how much the plant has grown over the years.



[Fig. 13] Old photograph of the Old Power Plant from 1932

[Fig. 14] Aerial Photograph with outline highlighting Old Power Plant Site.

the old power plant

The Pretoria West Power Plant is located on a large (approximately 1.5kms from north to south), mostly open site, on the eastern edge of Pretoria West, the Power Station is a large and prominent building that contributes character to the area.

Municipal Power owns the power station and the land around it. The original power station was built and first occupied in 1924. In 1952 an entirely new power station was built on the site alongside the old power station. Due to the fact that it would have been too expensive to demolish the old buildings they were simply abandoned and left vacant, they still stand to this day, derelict and falling further into disrepair.

The power station that was built in 1952 is still operating to this day. The station was temporarily decommissioned but was brought back into service when Eskom started to have problems with their service delivery, however the technology running at the power station is still the same as what was installed in 1952 and is becoming increasingly financially viable to keep running, which is why in the next 10 years the power station will be decommissioned permanently. Unfortunately it is not viable to refit a power station with modern power generating technology, so without creative intervention the power station is destined to meet the same fate as the early 1924 buildings and be left to stand vacant and unused.



development framework for the old power plant

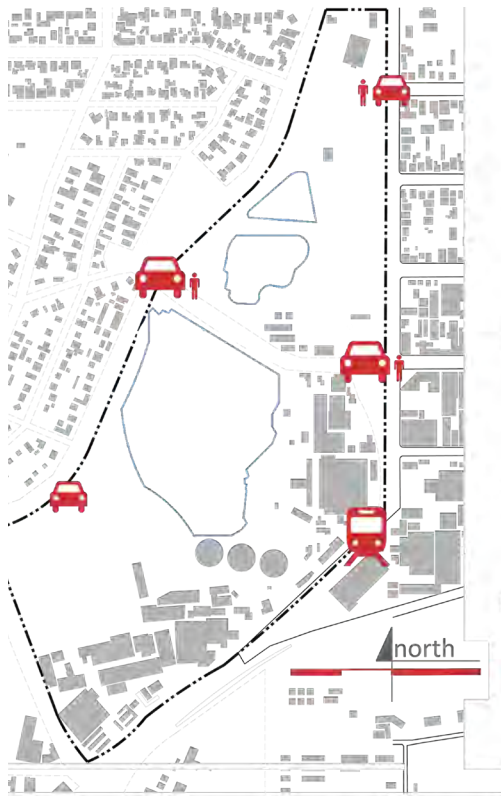
The intentions of this framework is to develop The Old Power Plant site as a node along a spine of activity between Atteridgeville and the CBD, to use the site as a gateway that acts as a funnel for people towards the city. The intention is to take advantage of existing good rail and road connection to the site for this purpose.

Having been owned by the municipality this large site has always been inaccessible to the public, the framework moved to make the site as permeable as possible and entirely open to the public, essential give the space back to the people, and in this way fulfill the existing public curiosity about this mysterious large piece of land.

One of the most important characteristics of this site is its industrial nature, it is very important that new development emphasizes and takes advantage of the opportunity for diversity that this site presents, from industrial to agricultural.

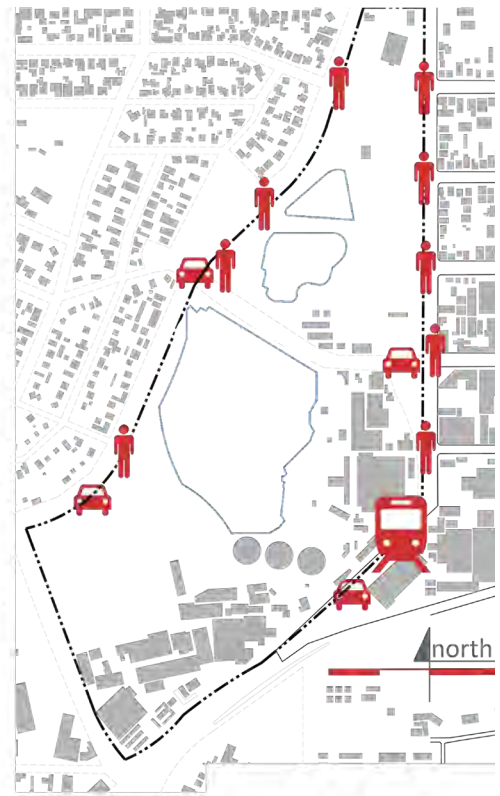


[Fig. 15] Framework for Old Power Plant Site



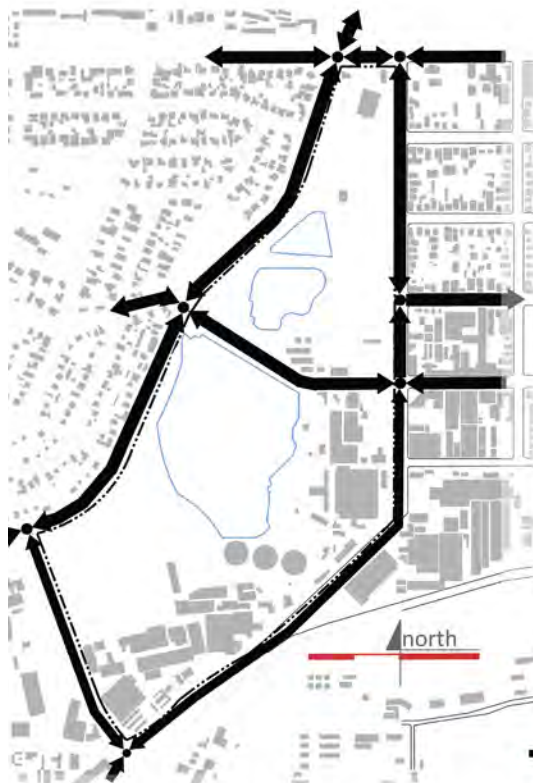
existing access

- activate
24hour amenities
- increase
pedestrian activity
rail activity
- slow down
motorist manouvers
- breach
park and campus access
- develop
produce and trade access



new access

[Fig. 16] Increasing access to the site as proposed by the framework.



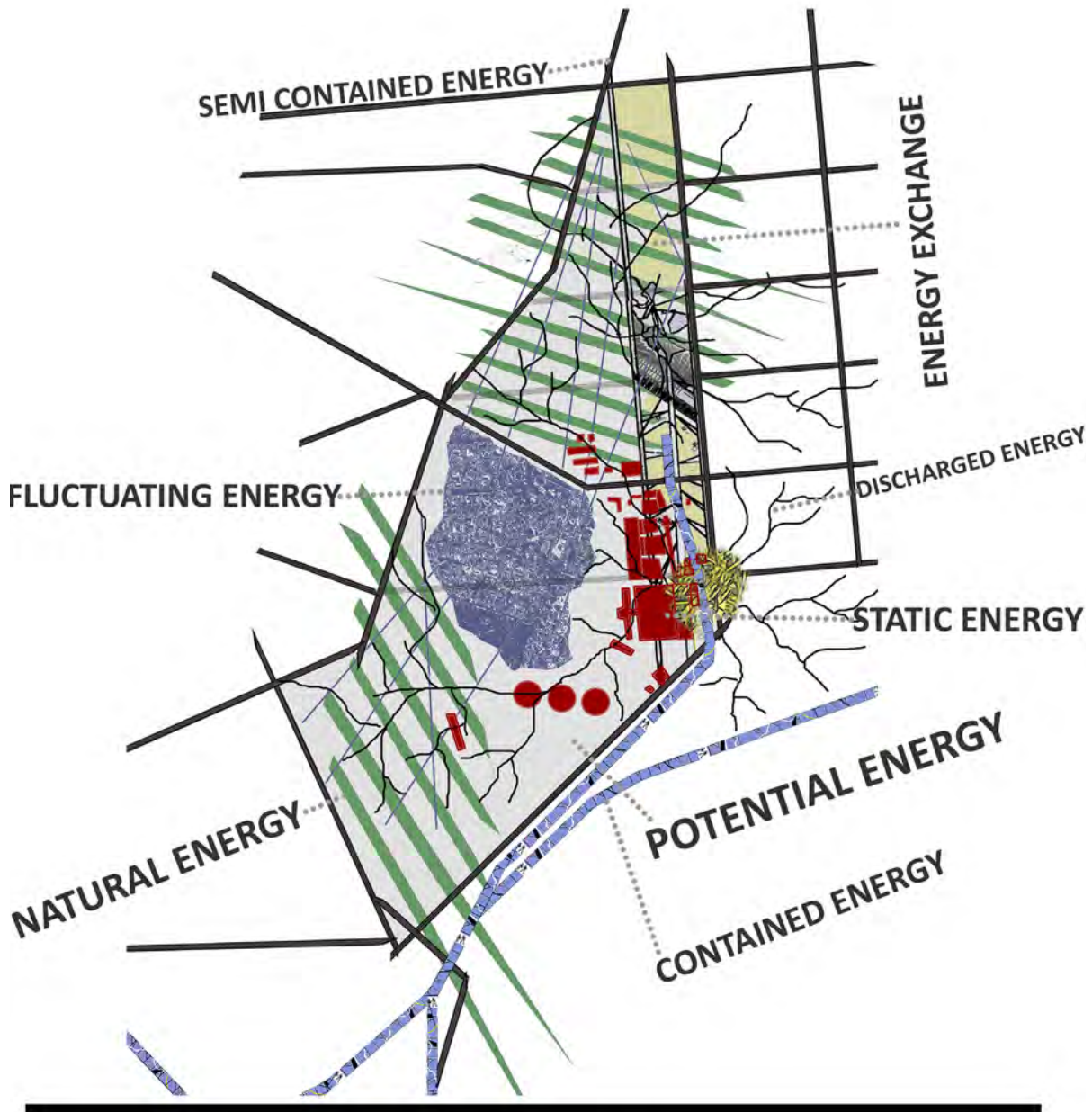
existing movement

- activate
24hour amenities
- increase
pedestrian activity
rail activity
- slow down
motorist manouvers
- breach
park and campus access
- develop
produce and trade access



new movement

[Fig. 17] Showing proposed permeability of the site.



[Fig. 18] Diagram of new energy inputs to the site.

phasing of development

The operating power plant is only likely to be shut down completely in the next 10 years, however while it is still running certain work can begin to rehabilitate the site and prepare it for development.

Phase 1 - Repair

This phase would begin the rehabilitation of the site. In the past a small triathlon event has been held on the site, this development phase would refurbish the sporting facility adjacent to the site and begin rehabilitating the ground through urban agriculture. This phase would also begin to open up the site to the public and begin to develop public spaces, for this purpose it is important that existing derelict buildings and dangerous areas of the site are secured while still left visually accessible. All this can be achieved while the power station continues to operate, but begins to put the Old Power Plant on display and create public interest in development that is to follow.

Phase 2 - Define

This phase begins when the power station ceases to run and the reuse of existing buildings can begin. This phase is about defining the site and its new functions, developing a housing framework for around the site and creating an urban edge, integrating urban agriculture with light industrial and public functions, encouraging active and passive recreation and creating 24hr activity.

Phase 3 - Connect

This phase builds on the previous phase and focuses on connecting the site to its larger context and linking it as a node on an activity spine which was the intention of the Vision for Pretoria West. Primarily through the construction of a train station for pedestrians and freight, this will give people and goods quick and easy local and regional access, this combined with links to local bus routes starts to develop the site as a transport interchange which not only brings focussed energy to the site but then starts to channel energy out into the surrounding areas.

Phase 4 - Continue

Phase 4 is about continuing to build on the previous phases, continuing and reinforcing connections, continuing to define urban edges and encourage mixed use development that increases densities and reduces urban sprawl, continuing to establish a sense of place and cultivating the culture of industry and production and trade.



repair

repair

rehabilitate available grounds and soils

introduce

local and regional community to site via sport/ recreation triathlons, races, etc

establish

a positive perception of the site

retain

restore valuable buildings for new uses

live

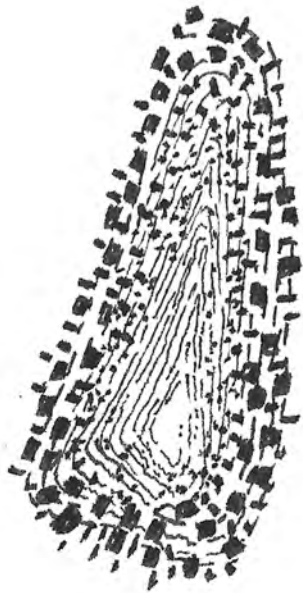
power station still running before decommission within next 10 years

made safe and showed "on display" for educational purposes



phase I

[Fig. 19] Phase 1 - Repair



define place

define

urban edge conditions with appropriate building stock

mix

mixed-use; smart housing; smart industry; recreation

breach

permeable urban developments

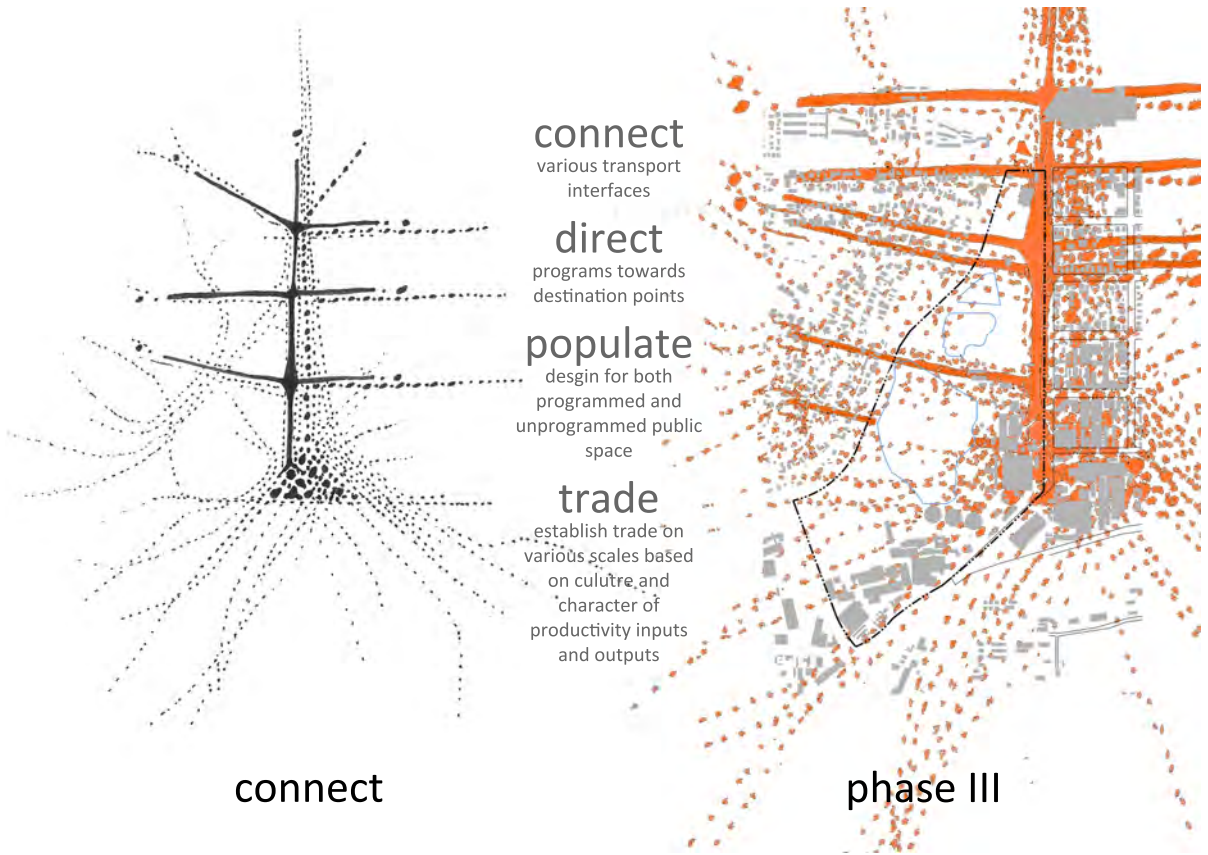
activate

24hour amenities

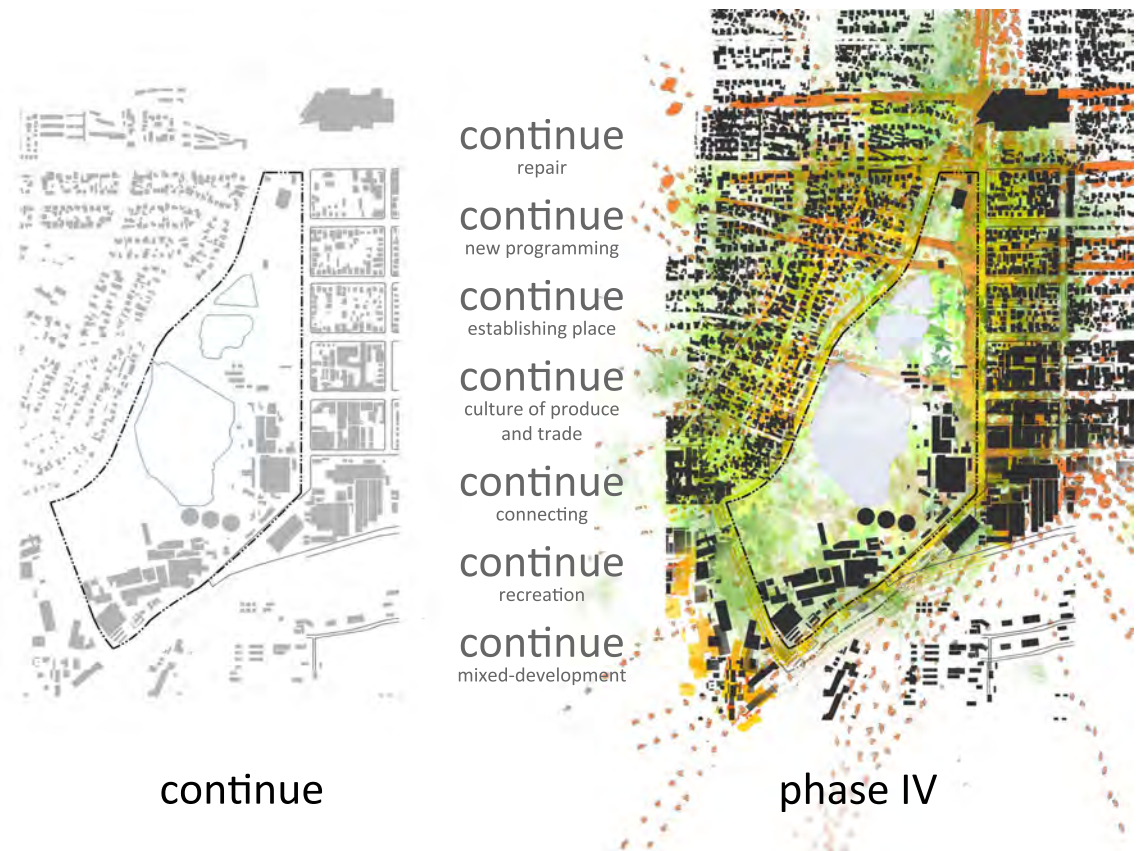


phase II

[Fig. 20] Phase 2 - Define



[Fig. 21] Phase 3 - Connect



[Fig. 22] Phase 4 - Continue