

# CONTEXT STUDY

A 3D perspective graphic featuring a grid of lines that recede into the distance. The text 'CONTEXT STUDY' is rendered in a bold, italicized, sans-serif font, appearing to float above the grid. The background is a gradient of grey, and the overall aesthetic is modern and technical.

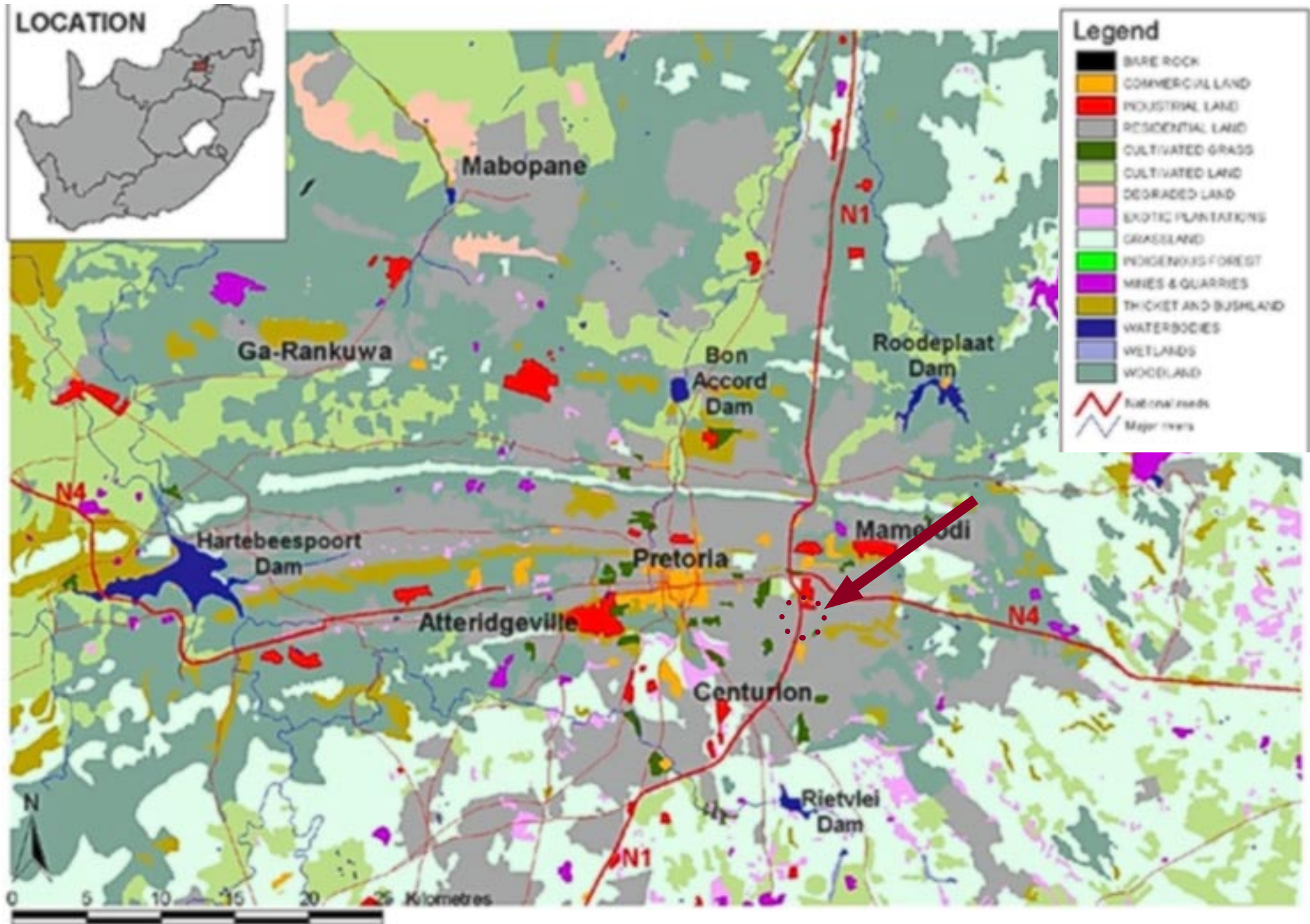


Fig.20

## CITY AND REGIONAL CONTEXT

### **The city: Inner city decay and urban sprawl**

Pretoria has gone through the typical life cycle of a twentieth century city:

The city had a booming inner city till the mid 1980's when things started to slow down. The middle class and rich grabbed their families and moved into the country ( suburbs ). Soon after many retail businesses and commercial companies did the same. Tshwane municipality responded recently by offering tax incentives to businesses that relocate back to the inner city. Although the tax incentive might lure some larger businesses back, businesses that provide services and goods to middle, upper- middle and upper class clients tend to stay close to their client base: outside the inner city.

Being a capital city, Pretoria has a host of embassies scattered from the Union Buildings in Arcadia east and south east, throughout the older and more affluent eastern suburbs. These suburbs include Eastwood, Colbyn, Brooklyn, Waterkloof and Waterkloof Ridge; all suburbs that are in close proximity ( 5 minutes drive) to the site. The city's upper class and wealthy citizens also tend to live in these suburbs and east of the N1 highway.

The N1 highway ( north - south axis ) divides the city in two distinct regions: The old developed region west of the highway, and the new developing region east of the highway. Similar to development patterns elsewhere in the new world, the region east of the highway developed horizontally at an astounding pace in the last decade.

This growth can be accredited to the following factors:

- < The lack of a clear-cut urban plan by the town council
- < The reluctance of the town council to allow new high density developments in established neighborhoods
- < The lack of a definite city boundary
- < The low cost and seemingly unlimited supply of undeveloped land allow developers to make huge profits
- < South Africans love owning their own little piece of land and generally frown on apartment living
- < The popularity of security estates - No land is available for such developments west of the highway.
- < The upgrading of the Menlyn Node
- < Closeness to various highways - A large portion of Pretoria's population commute to Johannesburg and Midrand on a daily basis.

Fig 20: Pretoria's land use map illustrates the lack of density and the growth of so called edge cities. The arrow indicates the location of the site.

**CONTEXT**

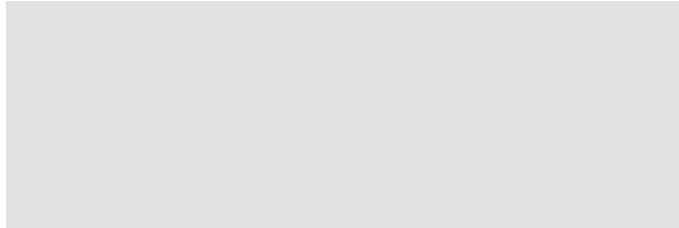
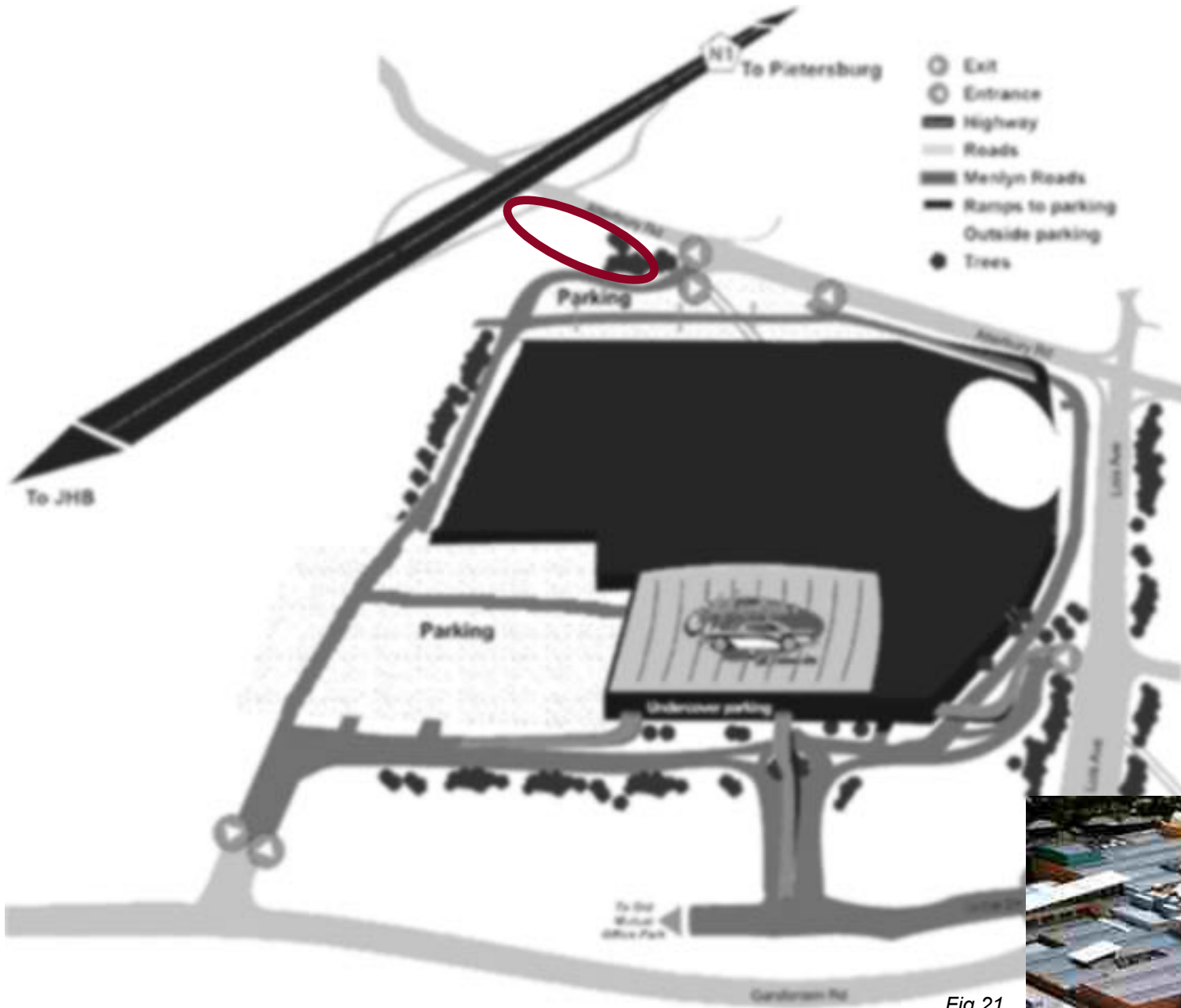


Fig.21

### **Private and public transport**

Like most new world cities public transport is nonexistent. Most people use taxi's and the rest use private transport. Although many people live east of the highway, most work west of the highway or in Johannesburg. This daily migration causes heavy traffic on the four bridges (Atterbury, Lynwood, Garsfontein and Rigel) crossing the highway, and on all the highways. The Gautrain rapid rail link that's going to connect Johannesburg International Airport, Sandton and Pretoria will definitely take some of the load of these roads.

Gautrain is planning a satellite station at the Menlyn Node, next to the Heliport site, on the other side of the highway.

### **Regional airport facilities**

The four major airports around Pretoria are: Johannesburg International, Grand Central, Lanseria and Wonderboom.

Wonderboom is the closest, it is not in the same class as the other airports (equipment and facility wise).

Most helicopter owners store their helicopters at Grand Central and Lanseria.

### **Roads network**

Major highways close to the site are the N1(north / south), N4 (going east towards Nelspruit), R21( towards Johannesburg International Airport) and the R28(west towards Krugersdorp).

### **The Menlyn commercial hub.**

The Menlyn commercial hub can be defined as the area between Generaal Louis Botha road in the east, the N1 highway in the west, Garsfontein road in the South and Atterbury road in the North. This area's main feature is undoubtedly the Menlyn Park Shopping Center, a highly visible, ten storey high, colorful building catering for every need the consumer might have (including a world first drive inn on the roof).

Up and until 5 years ago the Menlyn commercial hub would probably not have been called a "hub" at all. The small to medium sized Menlyn shopping center was surrounded by a couple of dreary looking and relatively sparsely space office blocks, car showrooms and dilapidated townhouses. Then Old Mutual decided to renovate and increase the size of the shopping center substantially. The renovation of the Menlyn Park Shopping center was the catalyst the Menlyn Node was waiting for. New office buildings, showrooms and retail complexes soon followed. Menlyn Park shopping center now has two million visitors a year and is one of the biggest shopping centers in the Southern hemisphere. It is a vibrant area catering for everybody from housewives to young people socializing in one of the nightspots. The area seem to be busy 24 hours a day, seven days a week.

The Menlyn hub has three major flaws at present. There is definite lack of high density residential buildings, no provision has been made for pedestrian circulation between different buildings and there is lack of integration between the hub and the surrounding suburbs. Most of these flaws can be accredited to incompetence, lack

Fig 21: Menlyn Park Shopping center, one of the largest shopping centers in the hemisphere with two million visitors a year.



Fig.22

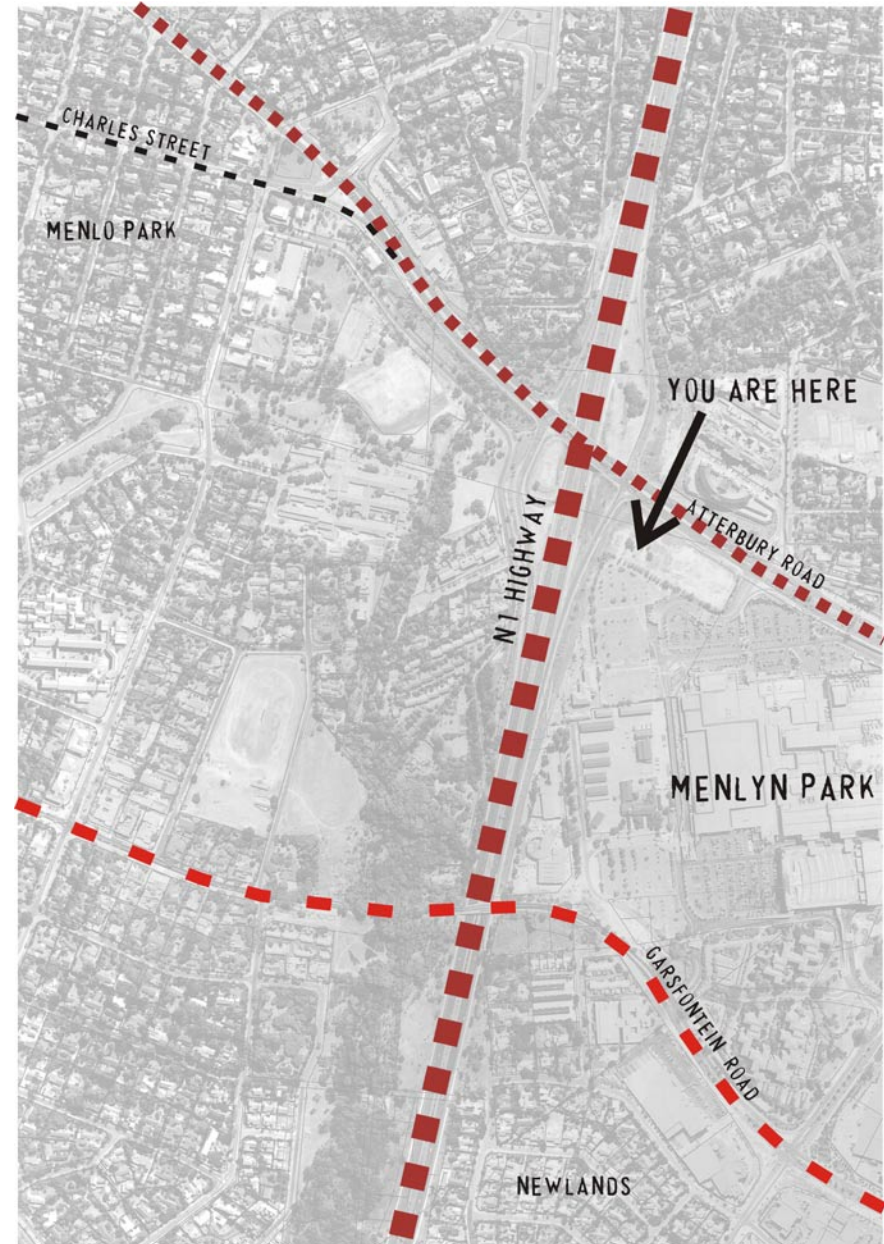


Fig.23

of vision, and the lack of backbone on the side of the municipality's townplanning office. The only planning the townplanning office did on this region was to give it the boundaries mentioned above, and to refuse any high density residential developments. Pedestrian circulation, buss stops and taxi ranks should have been discussed and planned for before approving the plans for the proposed renovation of Menlyn Park. Now taxis block Atterbury road during peak hours and crossing the road is life threatening for pedestrians. Employees at office blocks across the street from Menlyn Park, rather drive to the shopping center than try and cross the road. At present none of the buildings in the area address the street, or encourage pedestrian circulation.

Other commercial hubs and shopping centers in the region (10 -15 minutes drive) are Brooklyn, Hatfield, Boardwalk (Fairie Glen), and the new Woodhill shopping center.

#### **SITE LOCATION & CURRENT OWNERS**

The site is located in Menlyn, Pretoria, Gauteng province, South Africa. The boundaries are the N1 highway, Atterbury road, Garsfontein road and Menlyn Park shopping center. Old Mutual is the existing owners of the site and there are no immediate plans to develop the site at present.

#### **ACCESS & CIRCULATION**

Access to the site is possible from Atterbury road, directly north of the site, or Garsfontein road, about a kilometer south of the site. Direct access from Atterbury road will

not be possible, as there is not enough space between the off-ramp and the Menlyn Park access road for another road entrance.

A access road built by the developers of Menlyn Park is adjacent to the site on the east. This access road is mainly used by visitors of Menlyn Park and has parking ticket systems installed for visitors entering and leaving the parking lot of the shopping center. The opportunity exist to enter the site from this access road before encountering the ticket system, but vegetation and a turn in the road will leave motorists leaving Menlyn Park unsighted, and collisions might occur. It is therefor envisioned that visitors will access the site via the ticket booms, from the south. Pedestrians from Menlyn Park will access the site and building from the east by extending the existing pathway from the Ocean Basket entrance.

As stated before, the new Gautrain station planned on the opposite side of the highway offers the opportunity to channel pedestrians through the site. Pedestrians can cross a ( new ) pedestrian bridge or the existing vehicular bridge and move past or across the site to Menlyn Park and beyond.

Fig 22: The existing commercial zones are islands in the residential sprawl of Pretoria East

Fig 23: The site is located next to a national highway, and a major regional road, giving it good access to Pretoria and beyond.



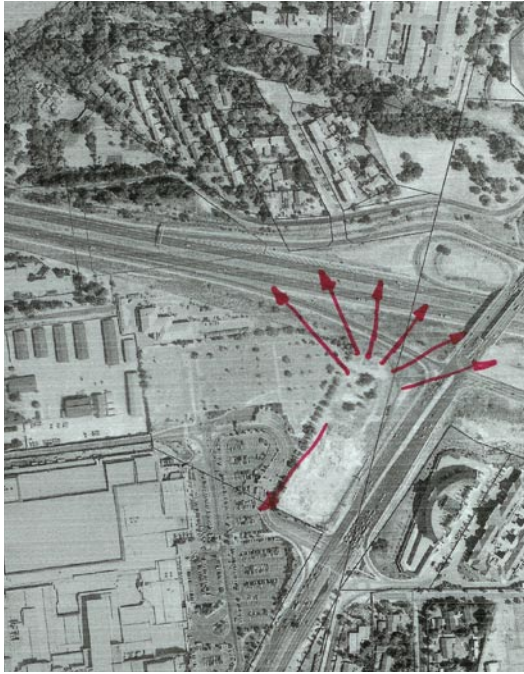


Fig.24



Fig.25



Fig.26

### **VISUAL IMPACT**

*With thousands of people driving past the site on a daily basis, any future building that will be built on this site will have a strong visual impact.*

*Ultimately the speed and direction of travel and whether the viewer is below or above the site determines the visual impact:*

- < *A multi storey building will be visible for an extended period of time for motorists traveling north on the N1 albeit at high speed.*
- < *Motorists traveling south on the N1 will only have glimpses of a multi storey building, as the view angles driving south will not allow a clear view of the building.*
- < *Motorists traveling east or west on Atterbury road will have clear views of the building for an extended period of time at slow to medium speed.*
- < *Pedestrians in the open car park at Menlyn Park Shopping center will have clear views of the building for extended periods of time at slow to standstill speed.*

### **VIEWS FROM THE SITE**

*The highway will offer spectacular views for the building occupants, especially from the western edge of the site where views along the highway to the south and north can be exploited.*

*Views from the middle of the site to the south and north can be described as depressing: The new eclectic Price Waterhouse Coopers building blocks the view to the north. While the service area of Menlyn Park, more eclectic office buildings and blacktop parking make up the view to the south.*

*Fig 24: Pretoria's land use map illustrates the lack of density and the growth of the so called edge cities.*

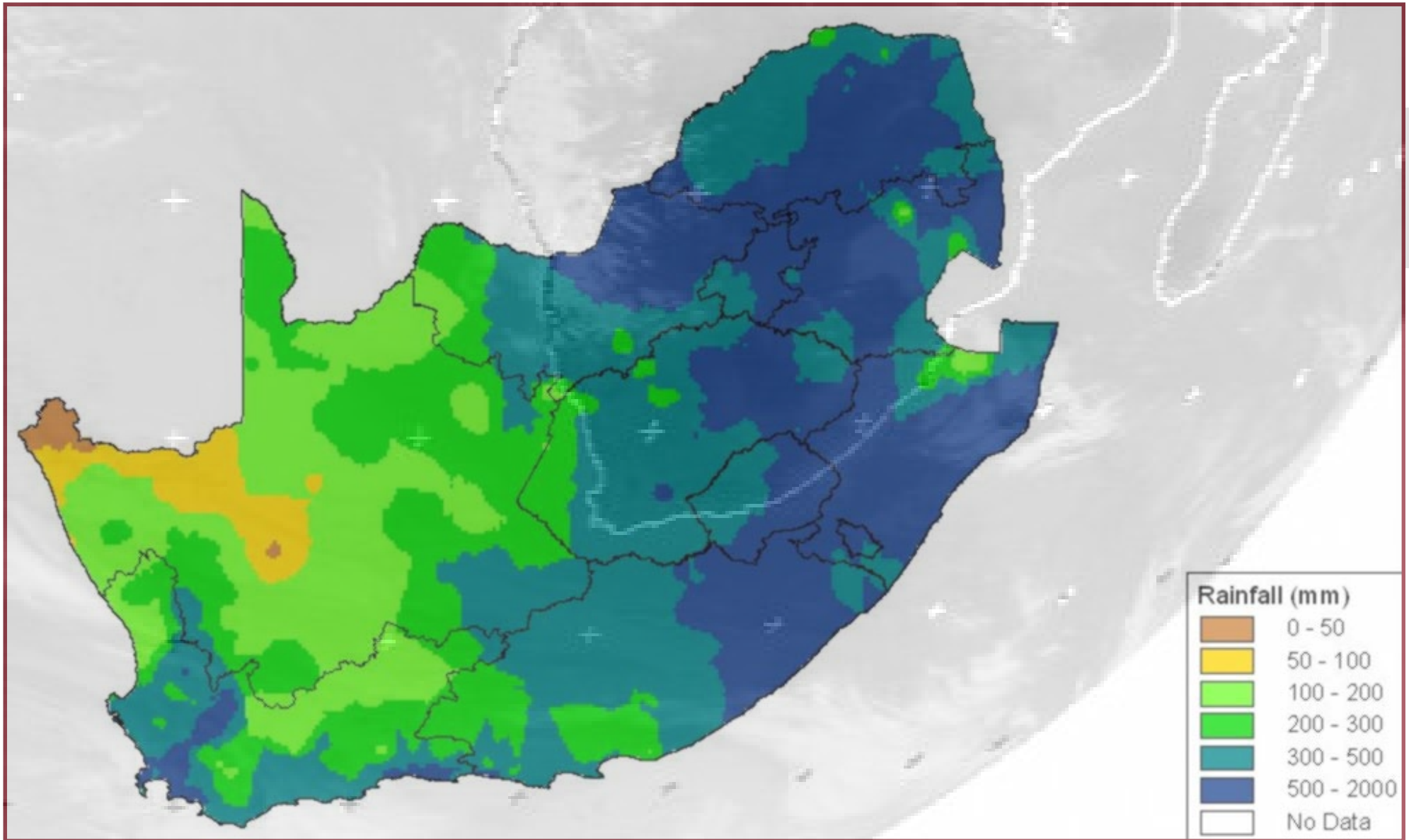
### **PHYSICAL CHARACTERISTICS**

*The site is flat with no significant topographical features and a constant 3 degree fall from east to west. The site is 2 to 3m lower than Atterbury road on the northern boundary and level with the parking area on the southern boundary. It is obvious that the site was cleared and leveled sometime in the past.*

*A row of indigenous trees was planted on the southern boundary and a single wattle tree grows in the middle of the site. Otherwise the existing vegetation is negligible.*

*Fig 25: Pretoria's land use map illustrates the lack of density and the growth of the so called edge cities.*

*Fig 26: Pretoria's land use map illustrates the lack of density and the growth of the so called edge cities.*



MET7 23 OCT 2004 0900 IR2 D Fig.27 & 28

**CLIMATE**

**REGIONAL CLIMATE**

The site lies in a typical semi-lowveld climate with hot summers and mild winters. Rain mostly occurs during the summer months as rainstorms of high intensity and is generally accompanied by gustily south-westerly winds. Winter months are generally dry and mild to cold.

The site is in the southern hemisphere and the sun orientation is north. The sun angle is 5deg at noon in the summer (22 December) and 43deg at noon in the winter (22 June ).

Month	24hr max (mm)	average (mm)	Ave. temp max	Ave. temp max
Jan.	116.0	133.8	27.9	15.7
Feb	87.7	75.8	27.4	15.7
Mar	72.5	82.6	26.1	14.0
Apr	76.8	57.8	23.8	10.5
May	44.3	12.1	21.1	5.8
Jun	38.0	9.9	18.7	2.6
Jul	11.5	1.9	19.1	2.6
Aug	15.8	4.9	21.8	5.4
Sep	40.4	22.1	25.1	9.3
Oct	63.0	70.9	26.7	12.7
Nov	48.0	104.0	26.9	14.1
Dec	78.7	117.6	27.6	15.3

**MICRO CLIMATE**

Passing traffic cause sites next to busy highways to have more wind than the surrounding areas, and this site is no different.

The council planted a dense screen of Eucalyptus trees on the opposite side of the highway to screen the suburbs from wind and dust, but for some reason, did not do the same on the eastern side of the highway. The site is therefor unprotected from wind, noise and dust.

All slopes on the site face are neutral (flat) and receive sunlight for most part of the day, as none of the surrounding buildings are close enough or high enough to cast any shadows on the site.

Conclusion: The site has an unpleasant micro climate, and unless a courtyard building is designed, the building must not open up to the outside.

Fig 27 & 28: Pretoria receives mostly summer rainfall in the form of afternoon thunder showers.