CONTEXT 03:00

Project location

Study area analysis

Site analysis

Historical context

Conclusion

National Scale

fig. 3.1_Map of Africa, South Africa

Regional Scale

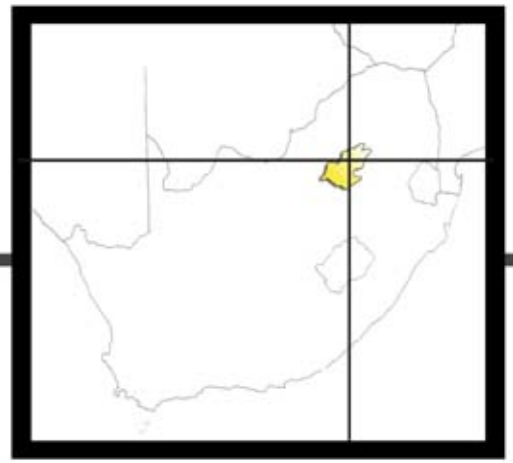


fig. 3.2_Map of South Africa, Gauteng

Metropolitan Scale

Sub Metropolitan Scale

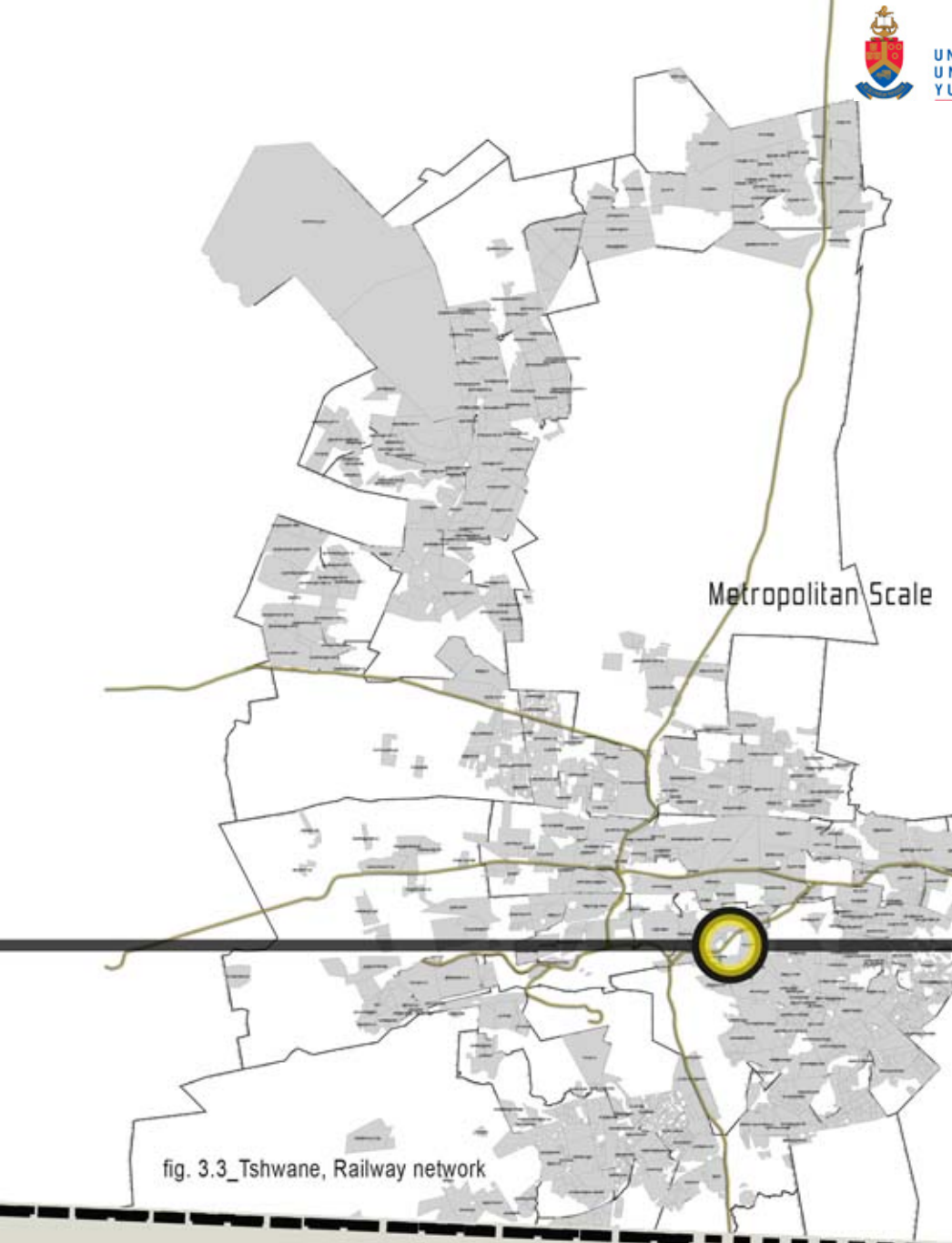


fig. 3.3_Tshwane, Railway network

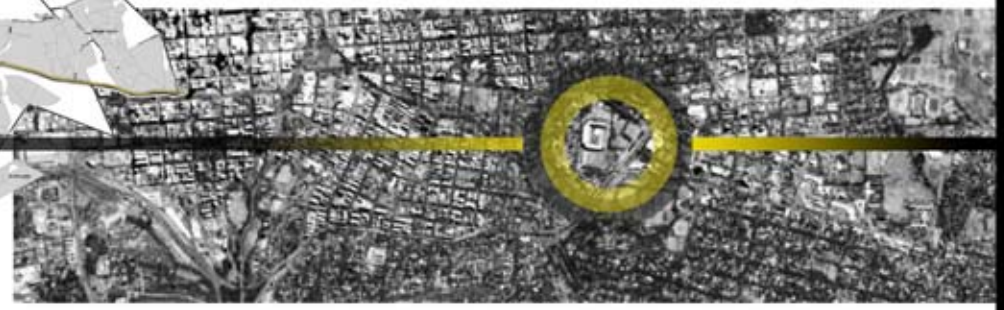
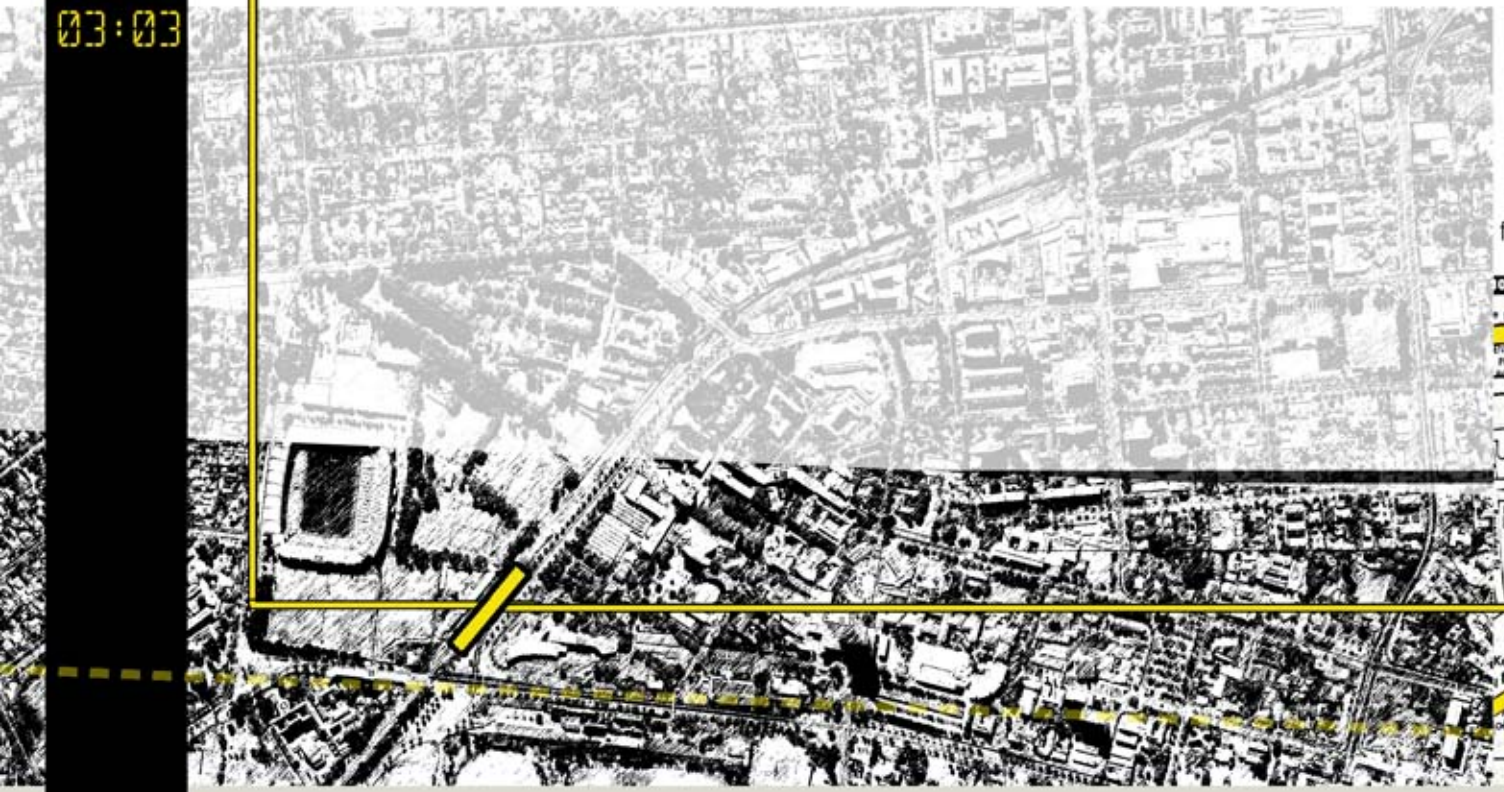


fig. 3.4_Aerial photograph of Pretoria, S 25.750 E 28.167

Project Overview

Study area

The Hatfield area - soon to be home to one of the Gautrain stations - is situated on the crossroad of South Africa, where the N4 highway and the N1 highway connects the North to the South and the East to the West of the country.
The study area of the proposed site stretches to the boundaries of Pretorius Street to the north, Duncan Street to the east, Lynnwood Street to the south and Kirkness Street to the west (fig. 3.6).



Local Scale

fig. 3.5_Aerial photograph of the University of Pretoria and surrounding area

fig. 3.7_Direction of main routes

Study Area

fig. 3.6_Road map of the study area

fig. 3.8_Aerial photograph of Loftus Station

The site is at the centre of the rapidly developing Hatfield precinct, covering an area of 3.25 hectares.

Context

Loftus Station

University of Pretoria

Loftus Versfeld Stadium

Girls High School

Municipal Depot

03:05

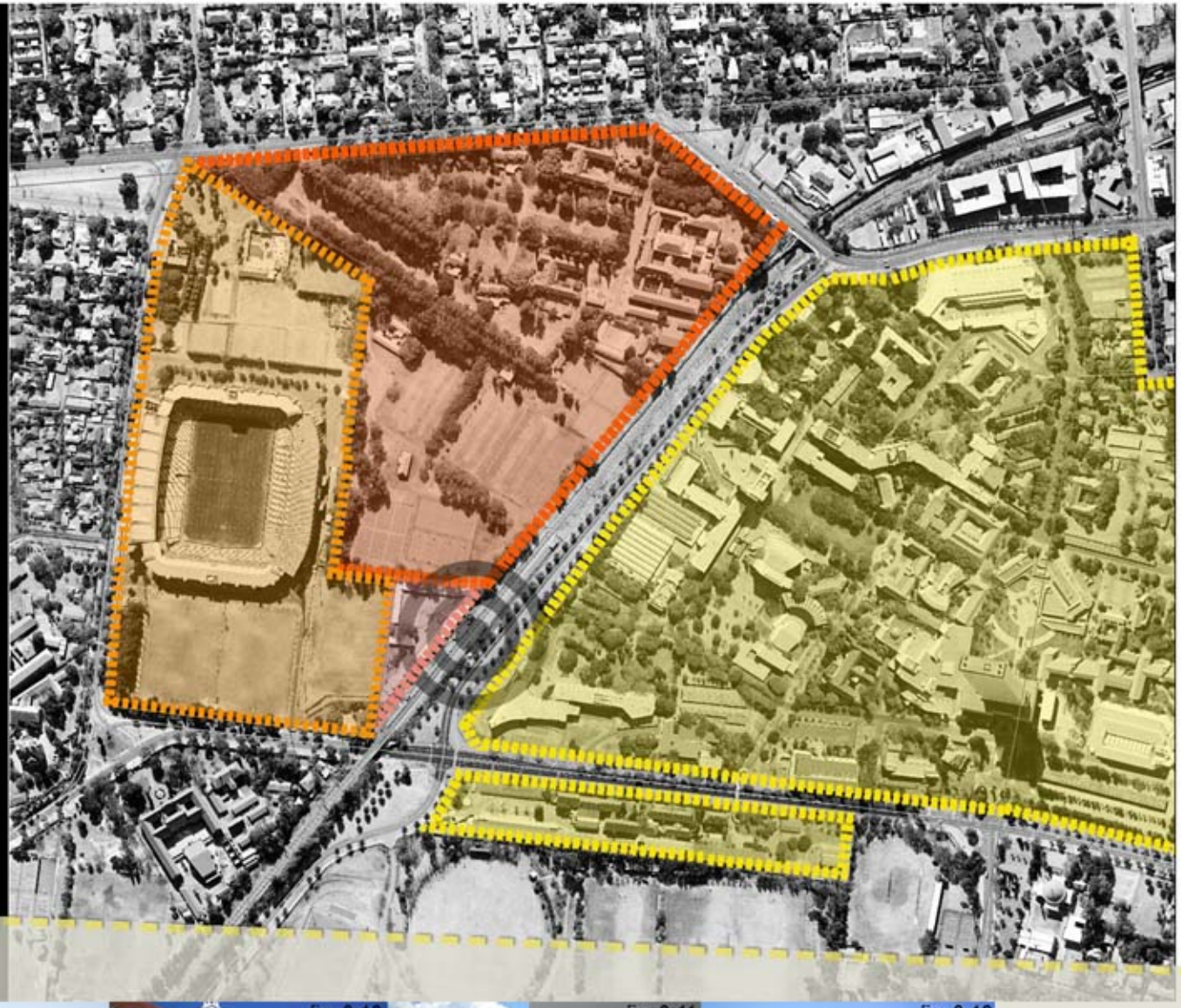



fig. 3.9


fig. 3.10


fig. 3.11


fig. 3.12

fig. 3.9_Loftus Versfeld Stadium
fig. 3.10_Pretoria Girls High (Heritage)
fig. 3.11_Administration building (UP)
fig. 3.12_Municipal depot

Public & Private

public

private

proposed site

03:06

1 Loftus Versfeld

2 Mixed-use

3 Restaurant

4 University of Pretoria

There are very little public facilities within the study area. These facilities are mono functional and are restricted to time constraints. Such as Loftus Versfeld stadium - only occupied during match times on weekends. It is apparent that the study area lacks diversity.

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Building Heights

The street perimeter lacks continuity that building heights and placements offer. There are too many under utilized open spaces inaccessible to the public. These open spaces need to be defined by the placement of walls, landscaping or buildings (4-6 levels). Ground floor edge treatment to relate to a pedestrian scale through facade design.

1. Girls High-Sport Fields
2. Loftus Rugby Fields
3. Loftus Additional Parking
4. University Staff Parking
5. University Green Space

fig 3.13 - 3.18_Contextual photographs

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Links to the site

Most Direct:

★ ★ ★ ★ ★ ★

Least Direct

★

03:09

Ⓐ ★ ★

Ⓑ ★

Ⓒ ★ ★ ★

Ⓓ ★ ★ ★

Ⓔ ★

Ⓕ ★ ★ ★ ★ ★ ★

Ⓖ ★ ★ ★ ★ ★ ★

Ⓗ ★

A

Main vehicle and pedestrian link to the south, and ultimately Johannesburg. Existing pedestrian route between Hatfield and Brooklyn.

B

Important vehicular and pedestrian link to the site. Linking the east (Menlyn) to the site and ultimately Johannesburg.

Note: Most commuters currently use this road to the Brooklyn area

C

Important vehicular and pedestrian link to the site. Linking the east (Menlyn) to the site and ultimately Johannesburg.

Most commuters currently use this road to the Brooklyn area

F

Currently a visual link with Loftus Versfeld Stadium, with great potential of becoming a physical link.

E

Currently this is a link via Metrorail towards Hatfield but in future this will become a link to the Gautrain station. Therefor this is an important link to the rest of South Africa.
Embracing this link in future for pedestrians presents itself as an opportunity

G

Once a physical link to Loftus Versfeld Stadium - now a visual link only due to fenced off community.

H

Direct link to the University of Pretoria. By facilitating students with cost effective travelling, the commuter rail will gain strenth and diversity.

D

Locally, linking the Hatfield CBD to the site.

Major vehicular link leading to the N1 highway - thus the rest of South Africa.

fig. 3.19 - 3.26_Contextual photographs

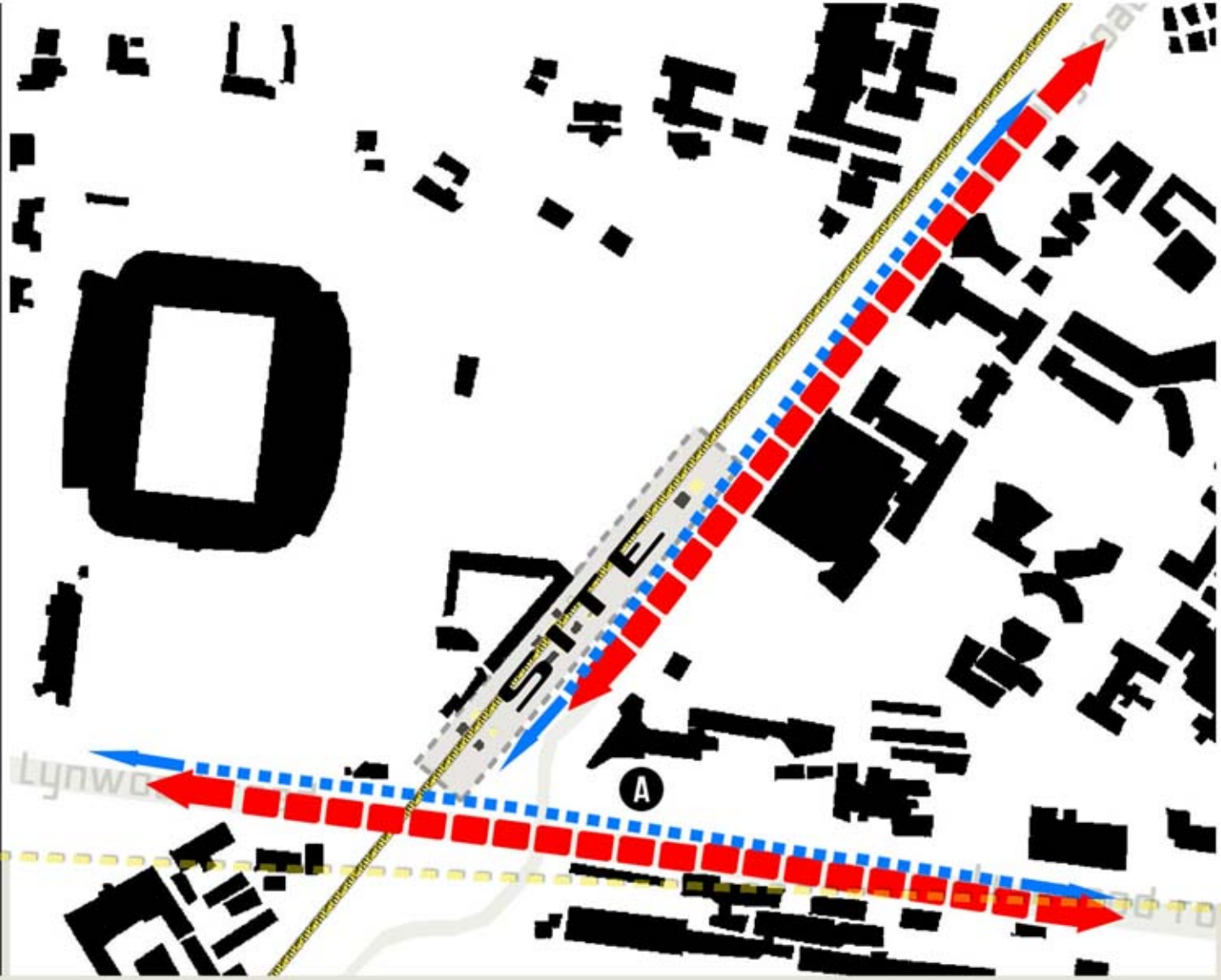
Paths

According to Lynch:
"channels along which the observer customarily, occasionally or potentially moves."
(Lynch, 1960:47)

03:11

Main Pedestrian route

Main Vehicular route



The path of the user is determined by the layout of the city grid. Pedestrians are forced to walk around large city blocks - no through fare exists. Vehicles dominate roads, sidewalks are inadequate and the walking distance radius to large.

Nodes

According to Lynch:
"strategic spots in a city into which an observer can enter, and which are intensive foci to and from which he is travelling."
(Lynch, 1960:47)

03:12

- Loftus Metrorail Station
- Loftus Versfeld Stadium
- University of Pretoria
- Hatfield Core
- Magnolia Dell Urban Park

Existing nodes are dependant on each other, yet these nodes are not physically linked.

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Landmarks

According to Lynch:
"Landmarks are another type of point-reference, but in this case the observer does not enter within them, they are external."
(Lynch, 1960:48)

03:13

Pretoria

① Loftus Versfeld Stadium

② Pretoria Girls High (Heritage)

University of Pretoria

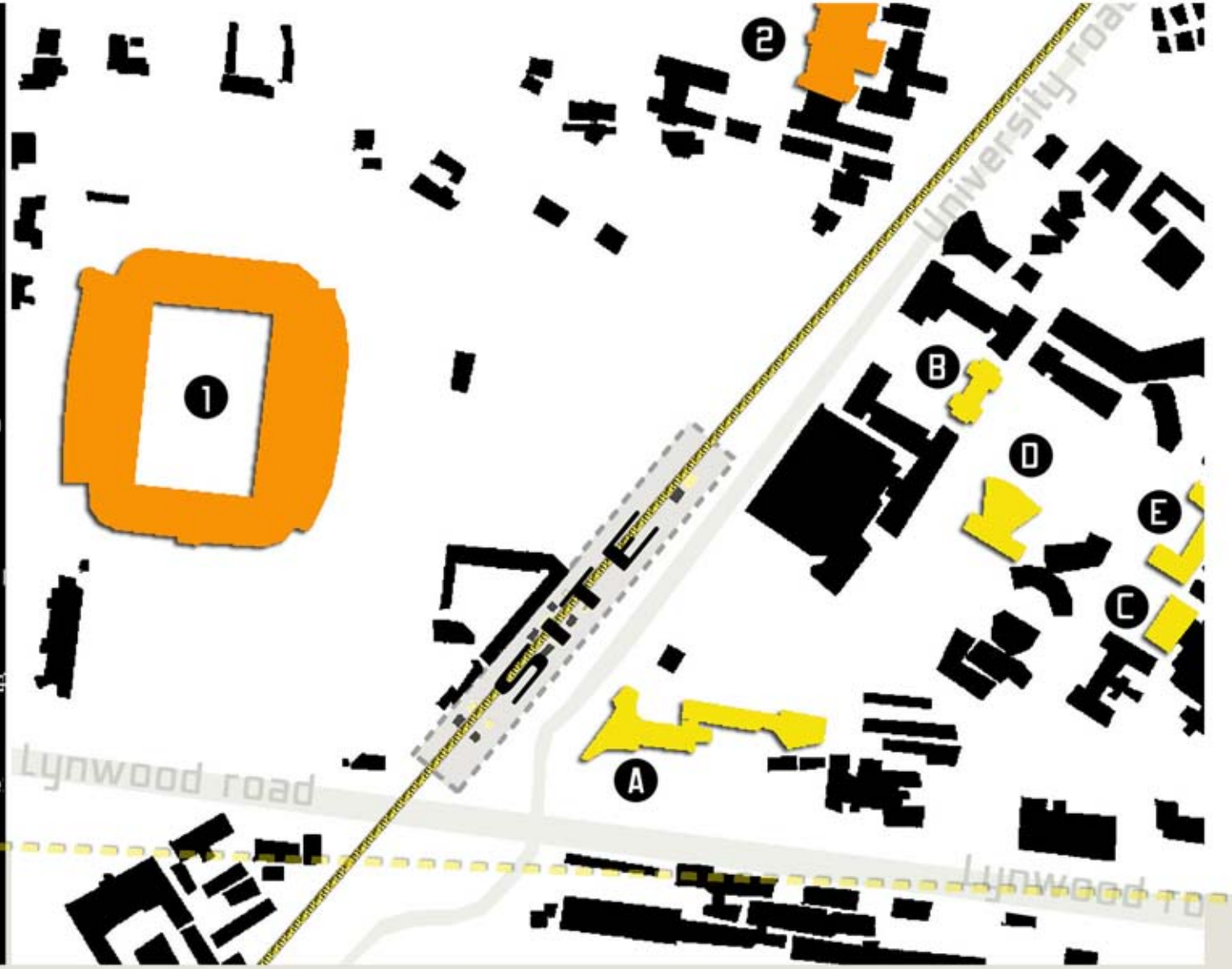
Ⓐ Administration building

Ⓑ Engineering Tower

Ⓒ Du Merensky Library (Heritag

Ⓓ Aula Theatre

Ⓔ Du Lettere building (Heritage



The study area contains many significant landmarks symbolic of Hatfield area. These landmarks are visible throughout the area and act as points of reference. The accessibility of these landmarks are an issue and need attention.

Edges

According to Lynch -
edges are the linear elements not used or considered as paths by the observer.
(Lynch, 1960:47)

Well defined edge

Poor edge condition

03:14

Buildings are set back too far from the street. No continuous edge exists, resulting in a poor street interface and passive surveillance.

03:15

Study area conclusion

From the analysis of the project area, one can clearly see that one of the main problems with the site is the large scale of the city block. The city block is too large and results in inadequate pedestrian movement around a vacant area which is inaccessible and detrimental to the proposed train station. Therefore the proposed site will be divided into typical size city blocks (fig. 3.27) with defined edges, activating and reinforcing existing pedestrian routes in the area.

fig. 3.27_Diagram illustrating proposed division of city grid

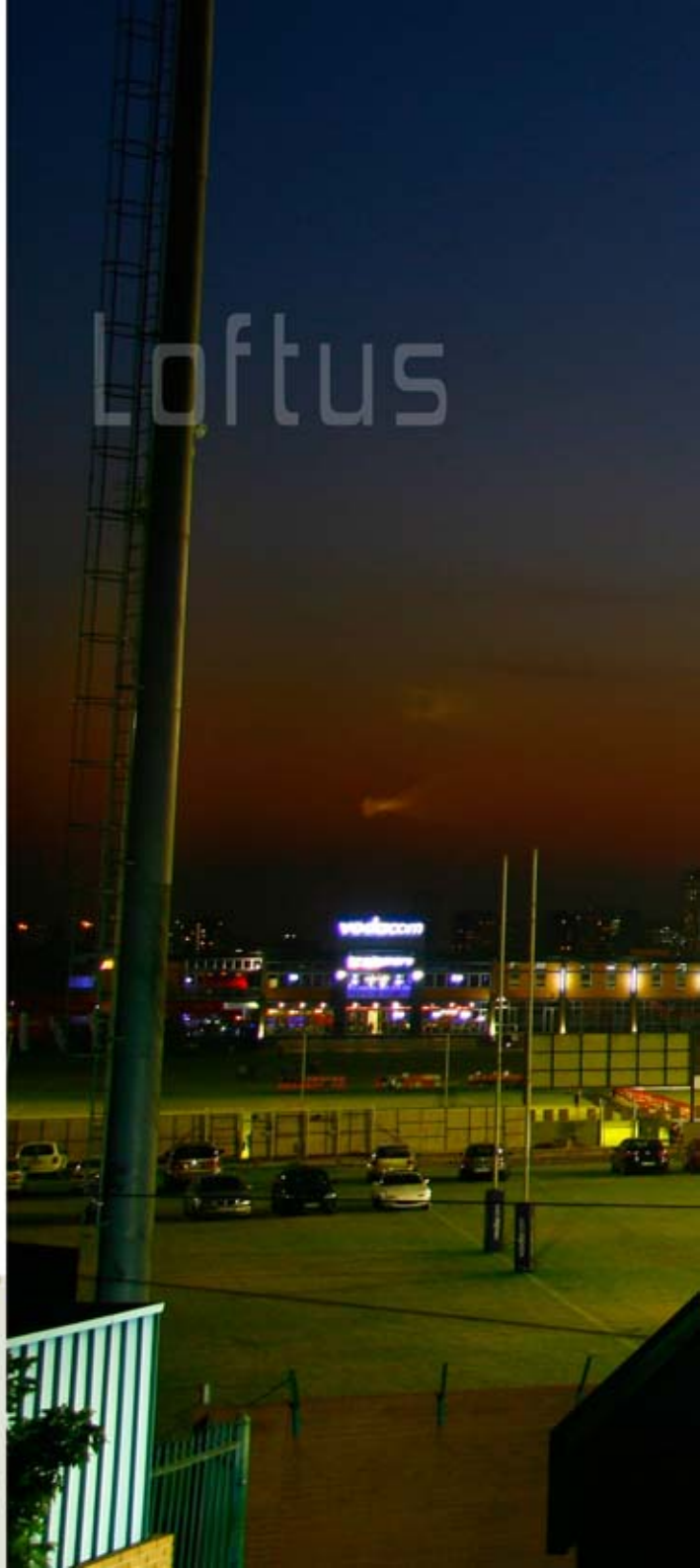


fig. 3.28_Loftus Versfeld Stadium, Game night, 20:05

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Versfeld Stadium

03:16

Site Analysis

Currently Loftus Metrorail Station consists only of a platform, with a length of 250m, and under utilized staircases leading to various neighbouring facilities such as Loftus Versfeld Stadium, Pretoria Girls High School and the municipal depot (fig. 3.38).
All of these facilities are fenced off for safety reasons.
Thus, there is no direct route to the surrounding areas and the only entrance to the station is from University road. The entrance consists of a tunnel underneath the train tracks that terminates with staircases onto the respective platforms (fig. 3.28).
There are no ticket, control or security offices at this point (fig. 3.33). The provided synthetic lighting is out of order and the ablutions are vandalized and not fit for use (fig. 3.40).
This creates an unsafe and hostile environment.

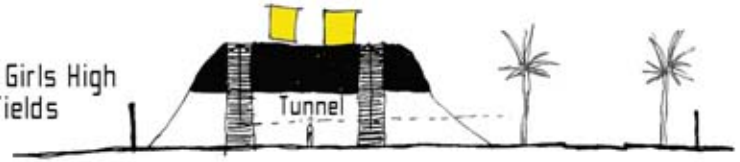


fig. 3.29_Illustration
of tunnel and staircases

fig. 3.31_View of Loftus Stadium

fig. 3.30_Signage on site,
vandalised

fig. 3.32_Shelter on platform

fig. 3.33_Exits not in use

fig. 3.34_Current entrance
from University road

fig. 3.43_Current Station plan

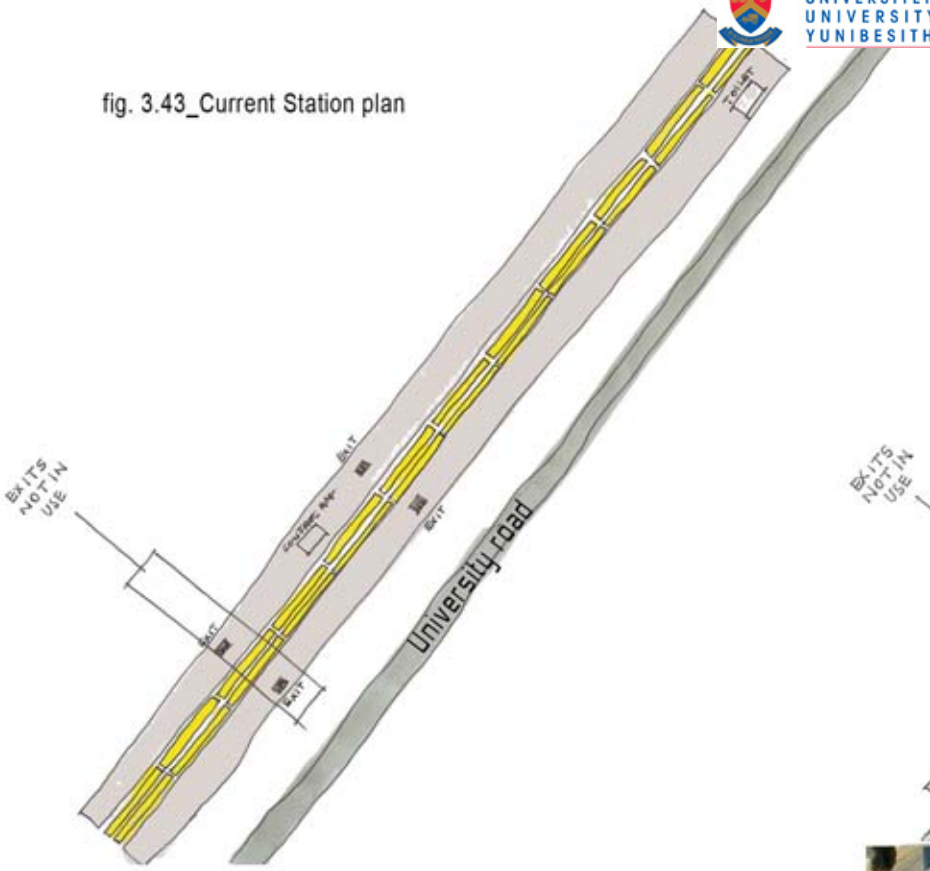


fig. 3.44_Current Station exit plan

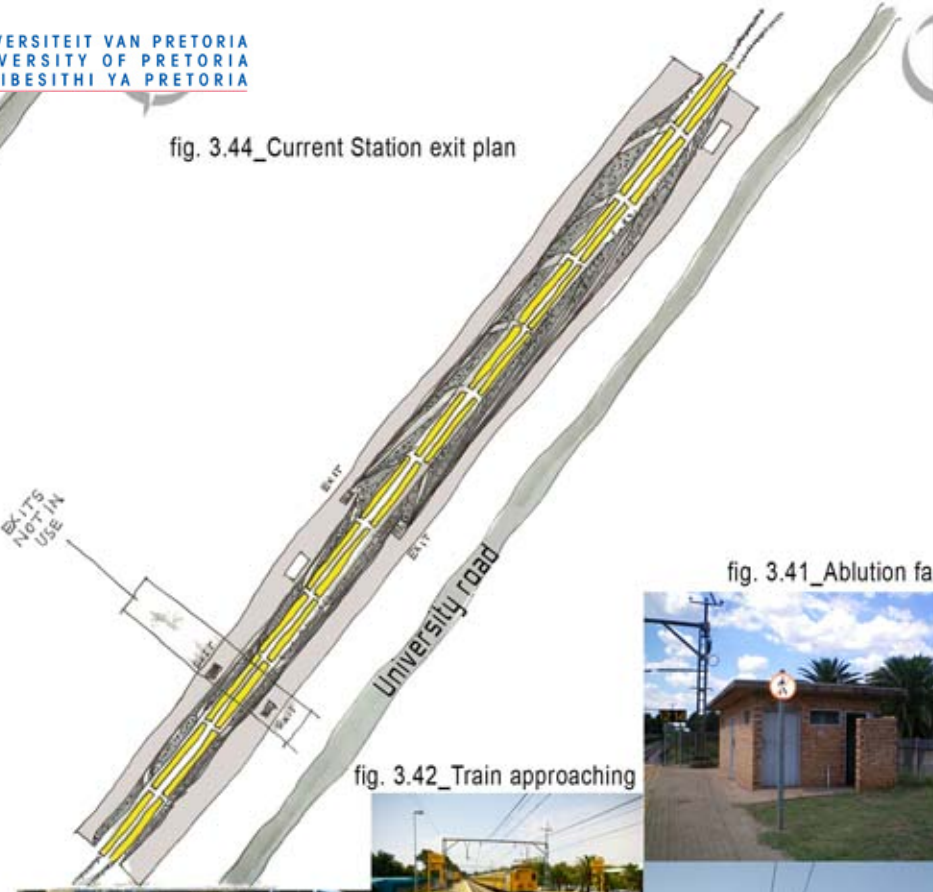


fig. 3.41_Ablution facilities

fig. 3.42_Train approaching

fig. 3.35_Pedestrian pass under railway

fig. 3.36_ Stairway to platform

fig. 3.37_ Stairway from platform

fig. 3.38_ Stairway not in use

fig. 3.39_ Stairway to Loftus not in use

fig. 3.40_ Platform embankment, vandalized litter bin

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Historical Context

03:19

1850 — Concept for rail in Cape and Natal - PVT companies owned 1st rail of 92km from Cape Town to Wellington and Durban-Point line

1859 — Farm of koedoespoort 289 (323JR) was split up in portions forming the University's boundaries

1860 — 32km rail from Market Square to customs Point Durban. 800 people transported that day.

1863 — 1st Cape passenger rail - Wellington section via eerste rivier.

1867 — Discovery of gold in Kimberley boost the planning of railway. SA government took over railways initiatives. After rumours of discovery of gold in the Transvaal - railway was developed in the new economic hub named the Republic North.

1890 — Passenger rail from Maputo to Pretoria. "Rand - Tram" In Transvaal passenger train was opened between Braamfontein and Boksburg - 20km.

1901 — The currently named Pretoria High School for Girls was named the 'Staatsmeisieskool'.

1910 — Railways and harbours were used to unify and develop the country. Rail developed rapidly resulting in 11 000km track for commuters and freight transport. Urbanization led to the further expansion of the already busy lines.

1908 — University of Pretoria established

1910 — Early 20th Century marked the first method of traction power through steam-driven engines (later diesel andthen electrical traction).

1910 — The new railway was constructed next to university along University road.

1923 — The first concrete stadiums structure was built at the site by the City Council and had a capacity of 2000 people. Named after Mr. Robert Owen Loftus Versfeld.

1930's — No more "fast" engines pulling coach like a horse cart. The new technology allowed for the "rail car" to be engineered exclusively on "branch lines".

1937 — Electrical traction introduced in the Rand. The advantage of electrical integration provides lighting in the coaches.

University and Surrounding history

Railway history

1960's — Around this time the station was constructed on the current site.

1970 — Urbanization out of control. Railways overloaded. Pressure resulted in SARTH changing to South African Transport Services (SATS) in 1981.

1978 — SATS transported nearly 500 million commuters, but due to political problems in the 80's and 90's, the market share for rail declined.

1989 — SATS transfered its functions to a newly formed company called Transnet, with various main businesses such as Spoornet, Portnet and SAA.

1990 — Transnet shedded its commuter services to the South African Commuter Corporation (SARCC). The SARCC inherited land and properties in and around stations and corridors for the purpose of commercialising these areas for financially contributing to a reduction in subsidisation of the social commuter rail service.

1992 — A wholly-owned subsidiary company of the SARCC, Intersite Property Management Services (IPMS) was formed to perform this function for the corporation.

2004 — Transport Minister Jeff Radebe announced that the SARCC is to lead and drive the consolidation of passenger rail entities to form a single passenger rail entity. Consolodation of Metrorail in 2006 will be the first phase:

Today — Due to the lack of investment in rail infrastructure and shortage in managemnet and technical skills the rail is facing challenges. Limited coverage also meant the loss in market share.

2010 — The Loftus stadium is currently being upgraded to Soccer World Cup standards with 51,762 seats.

03:22

2. The specific urban fabric is too large a scale, limiting pedestrian movement.

The gated community of the University is another issue. Pedestrians are forced to walk around the block. This cuts off the Hatfield Business Core from the South of the precinct. The same goes for the Loftus Stadium Urban block which is according to many urban principals simply too large to function correctly with the urban fabric.

Drawbacks
- The University grounds, Loftus Versfeld and Pretoria High School for Girls create a pedestrian barrier due to its palisade fence enclosing the grounds.
- Above mentioned institutions will not easily remove these fences due to its security importance.
- The lack of pedestrian arcades through the large city block.

Opportunities
- To provide security to the above mentioned institutions through means of other architecturally designed elements, other than a mere palisade fence.
- The creation of secured pedestrian arcades through these city blocks

3. The area needs to be sensitive to the lowest common denominator: the pedestrian

Drawbacks
- The lack of accommodating other transport/movement systems
- Current physical context does not cater for pedestrians

Opportunities
- Creating tree planted boulevards with sidewalks for pedestrians
- Calming traffic by means of focussing on pedestrian design
- Softening the urbanity through pedestrian scaled design
- Influx of pedestrian movement to the area feeding the Metrorail Station and its accommodating functions.