



Fig 2.1 Satellite image of Eersterust + Jan Niemand Park + Silvertondale (Google Earth, 2018)

CHAPTER

02

context + site analysis

02.1 SITE LOCATION

This chapter sought to contextualise problems facing the site by utilising a historical time-line so as to have a greater understanding of the site and what opportunities it presented for this dissertation.

As stated earlier, the area where the old Era brick factory and quarry is located, is known as Eersterust. It is roughly 15km east of the Pretoria CBD. Notable suburbs close to the site include Jan Niemand Park to the west, Silvertondale to the south and Mamelodi to the east. (See figure 2.1)

Eersterust forms part of the Tshwane Metro and is known for being Pretoria's largest so-called Coloured settlement.

02.2 BRIEF HISTORY + CONTEXT OF EERSTERUST

At the start of the 20th century the settlements of Eersterust and Riverside were set out on a portion of the farm Vlakfontein, by JB & IHJ Wolmarans (Potgieter, 2002:32) and (Van der Walt, 1966:32).

With the advent of the 1958 Group areas act, the area was zoned for, a so-called 'Coloured area.' Any residents of the area that were not 'Coloured' were removed from the settlement. As such many of the people settled in the racially mixed settlements of Pretoria were in turn forcibly relocated to Eersterust. To this day the suburb is mostly inhabited by the 'Coloured' community (Potgieter 2004:46) & (Van der Walt 1966:33).

In 1994 Eersterust was assimilated into the City Council of Pretoria and in the year 2000 it was assimilated in-to the City of Tshwane Metropolitan Municipality (Potgieter 2004: 46).

Directly translated, Eersterust means "first-rest". The true source of the suburb's name is not known but the most prevalent theories are:

- It used to be the first-place mail coaches stopped to rest before traveling from Pretoria to Lydenburg (Potgieter 2004: 46).
- The Wolmarans family wanted the Coloured community to settle here as their first place of permanent residency (Potgieter 2004: 46).

02.3 BRIEF HISTORY OF THE ERA BRICK FACTORY

The manufacturing of bricks on site pre-dates the settlement of Eersterust by several years. According to the Companies and Intellectual Property Commission (CIPC) the first company registered was Era Stene (Era Bricks) in 1947. At this time the manufacturing of bricks was done in a very primitive way through the use of a 'veld-oond' -(field oven). Before this the site was merely used for farmland (Enslin, 2018).

From the limited photographic evidence available, it is difficult to determine when the first factory building was constructed. The evidence would suggest the late 1950's to early 1960's (National Geo-Spatial Information Database, 2018).

- During the Anglo-Boer war, the Boer Forces rested at the location after the siege of Pretoria (Van der Walt 1966).

According to the 2011 Census, the suburb (at that time) had just under 30,000 residents, of which approximately 84% of the 'coloured' population group. About 78% of the community identify Afrikaans as their first language. (South African Census, 2011)



Fig. 2.2 Gauteng (Google Earth/Author 2018)



Fig. 2.3 Pretoria (Google Earth/Author 2018)

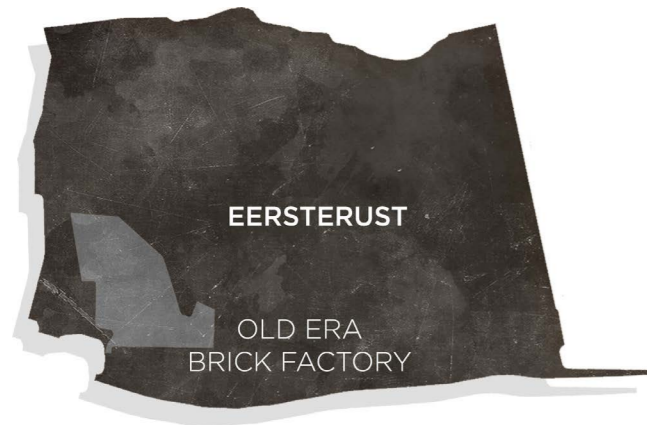


Fig. 2.4 Eersterust (Google Earth/Author 2018)



Fig. 2.5 Era Brick Factory & Sports Fields (Google Earth/Author 2018)



Fig 2.6 The Era Brick Factory in 2013 (Taljaard,2013)



Fig 2.7 The Era Brick Factory in 2013 (Taljaard, 2013)

In the dissertation *Kleurlingbehuising in Eersterust, Pretoria*, by T. Van der Walt (1966), he noted that construction of a sports complex has begun. By 1968, a soccer field is visible east of the Era brick factory. In a photo from 1976, a second brick factory building is visible running parallel to the original building. At this stage the older building was insufficient, being of much older technology. The two factories only produced bricks together over a very short span of time. By the end of the decade the old factory was decommissioned (National Geo-Spatial Information Database, 2018; Enslin, 2018).

In 1982 the company was bought and registered under the Rosema & Klaver Group (CIPC, 2018) & (Enslin, 2018).

At an unconfirmed date in the 1990's, the clay resources found on site were depleted and clay had to be imported to the site; the main source being the company's other clay site at *Olifantsfontein*. Between 1991 and 2001 the soccer field was upgraded with stands surrounding the field, turning it into a stadium (National Geo-Spatial Information Database, 2018; Enslin, 2018).

In December 2013, the company decommissioned the entire factory and quarry. The factory buildings on site were dismantled. The unusable metal was sold for scrap, and the bricks in the walls were dislodged and sold as 'mampara' bricks (clay stock bricks). In the process the company realised the roof covering contained

asbestos, common for roofs of that era.

The same material that is still visible on the roofs of the surrounding houses south and east of the site. (National Geo-Spatial Information Database, 2018; Enslin, 2018).

At this time the site was sold to the Labucon Resources (Pty) Ltd Group, a civil engineering company that focuses on bulk earthworks, construction of roads and the transportation of commodities. Currently, they transport truckloads of earth from the sites and projects on which they are working to the Era brick factory, filling up the scar left by the clay quarry (Labucon, 2018).

A current proposal is to sell the site to a developer and populate with a housing scheme. The exact extent of the development is unclear, another quarry and factory site previously owned by Era (in Monument-park) has been converted into a retirement village. It is plausible that a similar approach is being considered by potential developers.

02.4 VISUAL HISTORY OF THE ERA BRICK FACTORY

The diagrams (Figures 2.8-2.23) on pages 012-014, depict the site's development over time with the help of aerial photography obtained from the National Geo-Spatial Information Database; the earliest photographs date from 1958 and the most contemporary from 2015, when the last major development took place on site.

Fig. 2.8 + 2.9 Site in 1958 (National Geo-Spatial Information Database, 2018; Author, 2018)

- The first residential area of Eersterust, visible south of future Era brick factory site.
- The suburb of Jan Niemand Park, visible to the west.

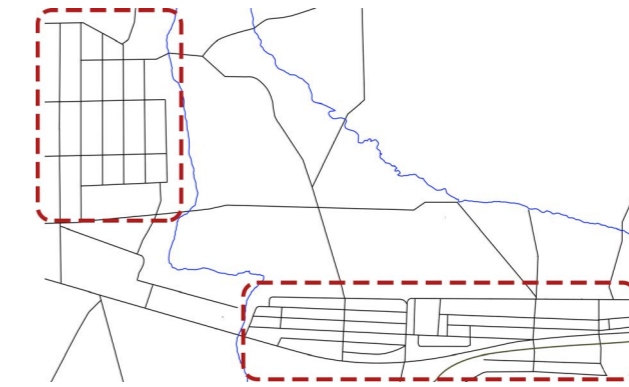


Fig. 2.10 + 2.11 Site in 1968 (National Geo-Spatial Information Database, 2018; Author, 2018)

- First Era-Brick Building is visible.
- Soccer field visible east of Era-Brick factory site.
- Expansion of Eersterust to the east.

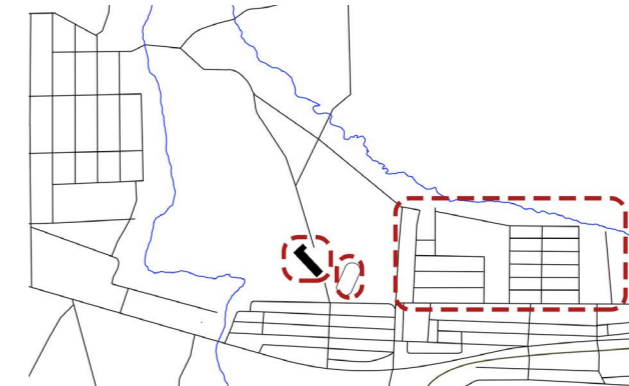


Fig. 2.12 + 2.13 Site in 1976 (National Geo-Spatial Information Database, 2018; Author, 2018)

- Expansion of Era-brick site, additional buildings and demarcated site visible.
- Soccer field east of Era-brick site boundaries visible.
- Expansion of Eersterust to the north.
- Industrial area to the south-west is visible.
- Decommission of oldest oven.



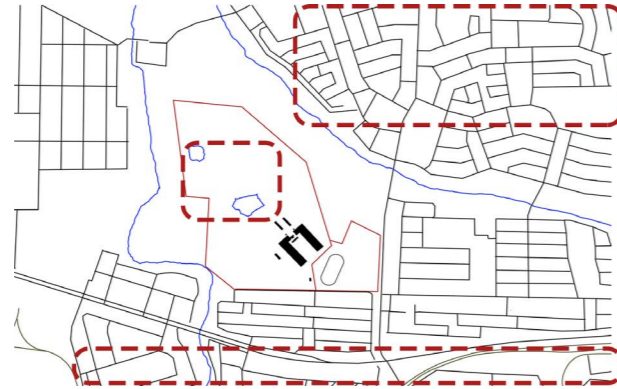


Fig. 2.14; 2.15 Site in 1984
(National Geo-Spatial Information Database, 2018 + Author, 2018)

- Further expansion of Eersterust to the north.
- Water is visible on site, because of quarry.
- Industrial sites expand to the south.

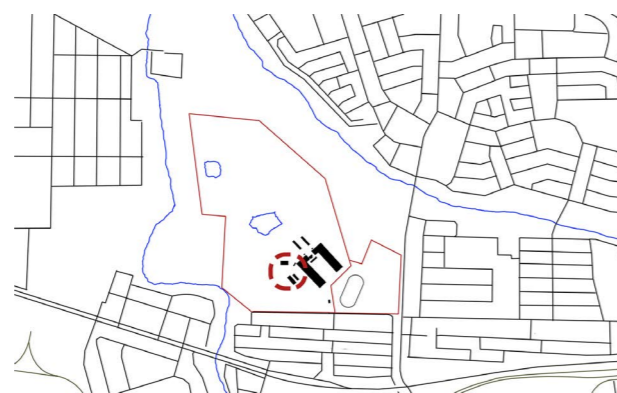


Fig. 2.16; 2.17 Site in 1991
(National Geo-Spatial Information Database, 2018 + Author, 2018)

- Auxiliary buildings added to site.

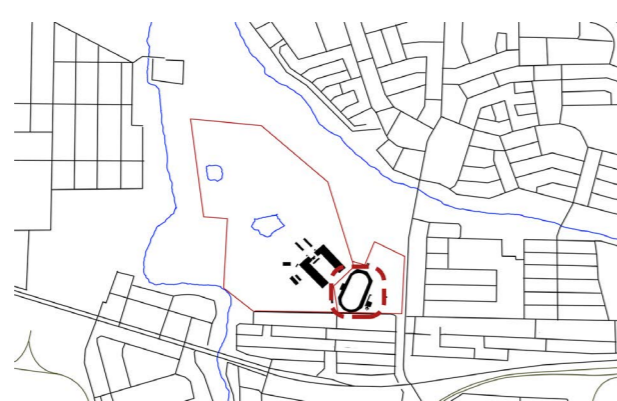


Fig. 2.18; 2.19 Site in 2001
(National Geo-Spatial Information Database, 2018 + Author, 2018)

- Major upgrades to soccer stadium and surrounding site.

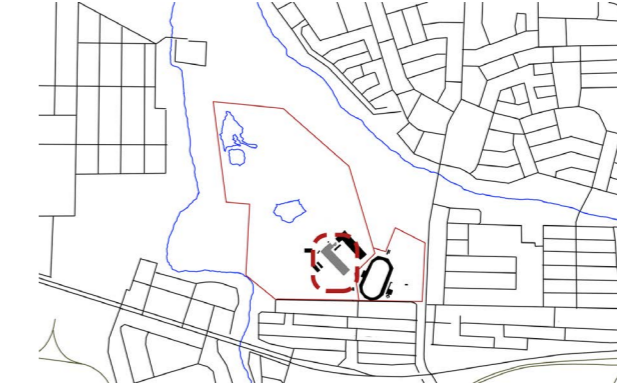


Fig. 2.20; 2.21 Site in 2014
(National Geo-Spatial Information Database, 2018 + Author, 2018)

- Demolition of oldest brick oven.

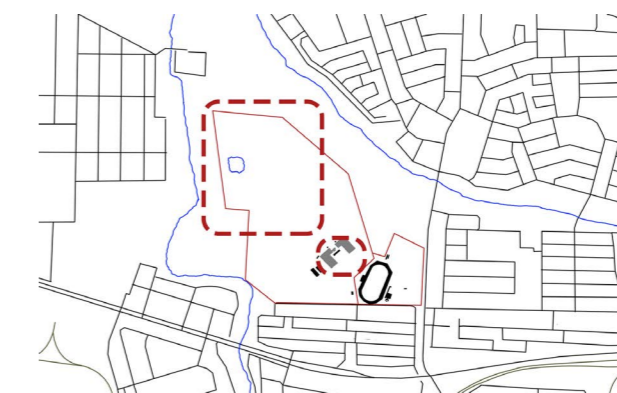


Fig. 2.22; 2.23 Site in 2015
(National Geo-Spatial Information Database, 2018 + Author, 2018)

- Entire brick factory now decommissioned, various buildings now demolished.
- New owners of the site using it as a dumping ground, most of the ponds on site have been filled up with imported soil and building rubble.

2015



Fig 2.24 The Era Brick Factory in August 2013 (Enslin, 2013)



Fig 2.25 The Era Brick Factory in 2013 (Taljaard, 2013)



Fig 2.26 The Era Brick Factory in 2013 (Taljaard, 2013)



Fig 2.27 The Era Brick Factory in 2013 (Taljaard, 2013)



Fig 2.28 The Era Brick Factory in 2013 (Taljaard, 2013)



Fig 2.29 The Era Brick Factory in 2013 (Taljaard, 2013)



Fig 2.30 The Era Brick Factory in 2013 (Taljaard, 2013)



Fig 2.31 The Era Brick Factory in 2013 (Taljaard, 2013)



Fig 2.32 The Era Brick Factory in 2013 (Taljaard, 2013)



Fig 2.33 The Era Brick Factory in 2013 (Taljaard, 2013)

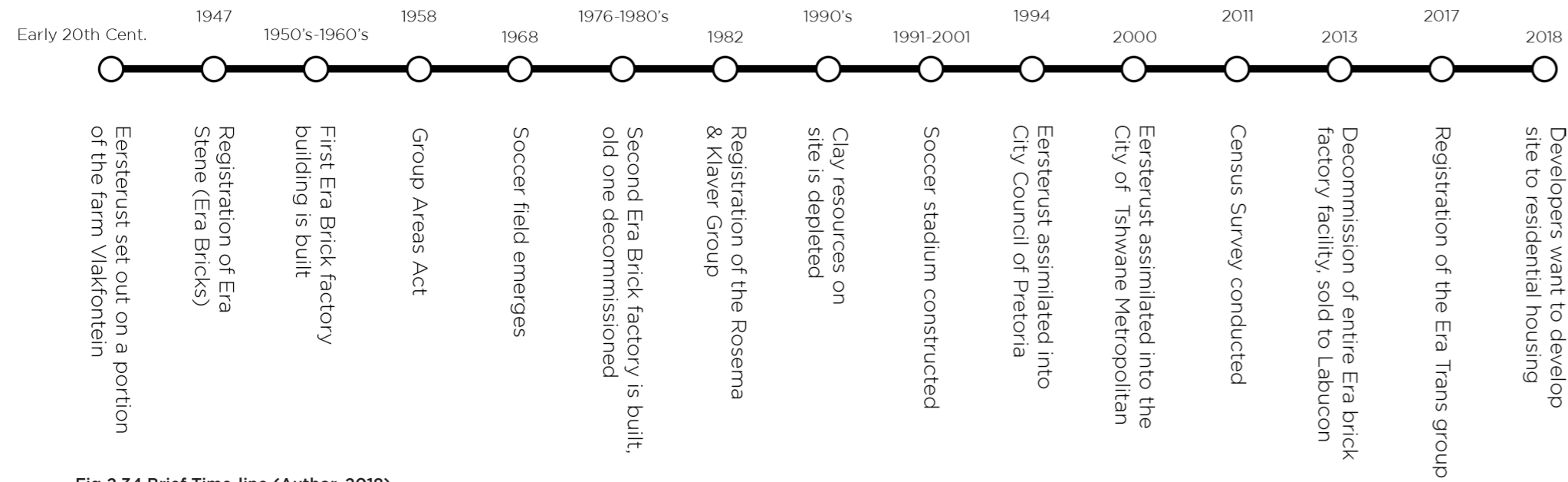


Fig 2.34 Brief Time-line (Author, 2018)

02.5 SITE ANALYSIS

From an appreciation of the history of the site, it is important to understand the current conditions and challenges facing it. The following section is an investigation into the current state of the site.

The diagrams to the right depict the various states the site has been in, from a totally natural state before the factory or quarry existed (Fig. 2.35), to a disturbed "nature" when production was at its peak. (Fig. 2.36)

As seen in Fig. 2.36, at this stage, the clay resources were extracted from the site, processed, baked and sold as bricks; natural resources were used to produce the bricks.

Figure 2.37 represents the current condition of the site, where soil extracted from sites in and around Pretoria is transported and deposited on site, by the current owners, Labucon. On site, there are visible deposits of building rubble. Although the intention was to rehabilitate the site after the closure of the quarry (see section 02.3), it seems that this intention has fallen by the wayside in recent times.

This dissertation argues that the desired condition would rather be to have a state of equilibrium, where resources are extracted and brought back on equal terms as in Figure 2.38.



Fig 2.35 Original Condition of site - Natural (Author, 2018)

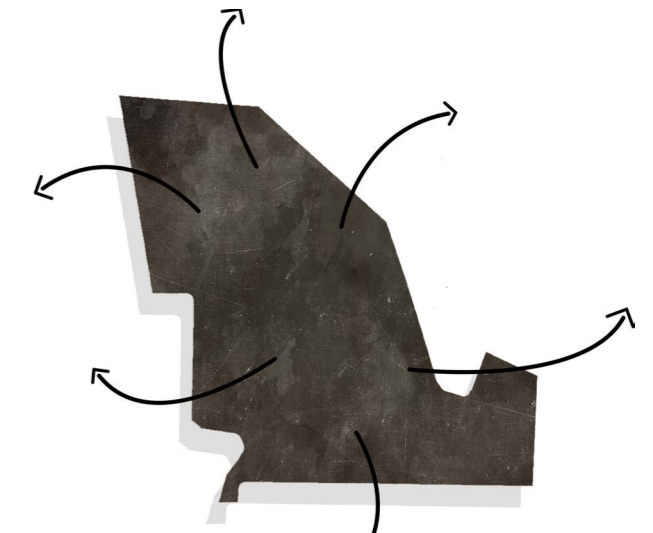


Fig 2.36 Quarry & Factory Condition - Extraction (Author, 2018)

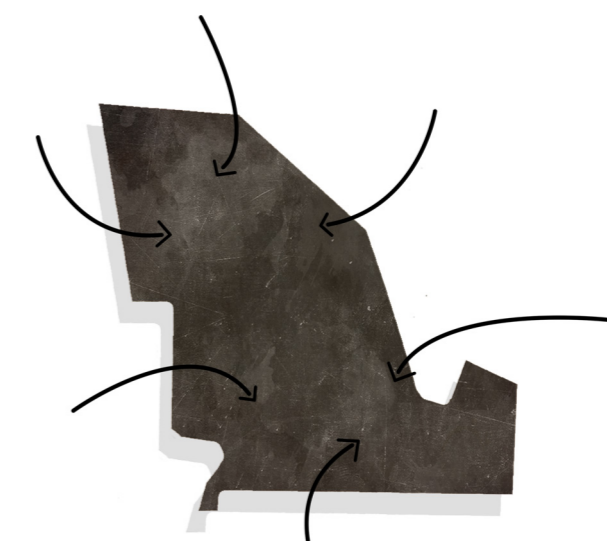


Fig 2.37 Current Condition of site - Insertion (Author, 2018)

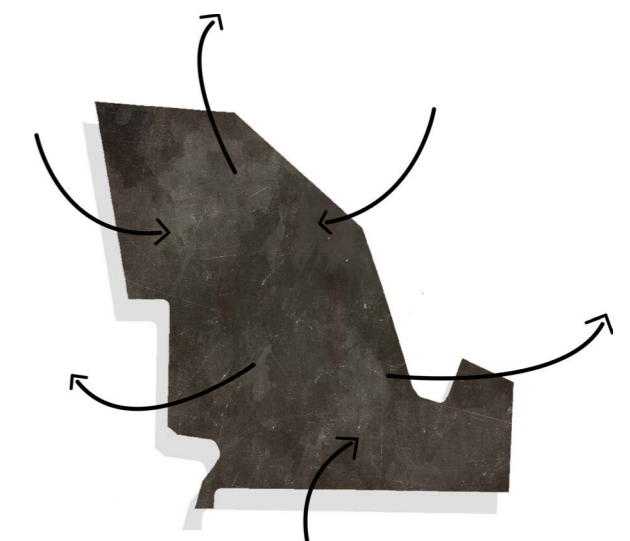


Fig 2.38 Desired Condition - Equilibrium (Author, 2018)

02 context + site analysis

02.6 CLIMATIC ANALYSIS

The site is located on the borders of Pretoria, as such climate data of Pretoria will be used in the following section to inform the design of the proposed intervention. Figure 2.39 depicts the climate zones of South Africa, with Pretoria falling in zone 2, the temperate interior zone (Wegelin, 2009:25).

The city lies on an altitude of about 1,350m above sea level, as such it has a hot to temperate climate, Pretoria and indeed Eersterust is surrounded by hills from the Magalies mountain range, the valleys between the hills are quite fertile (Pretoria, 2018).

Pretoria falls in a summer rainfall zone, with rain reaching its peak from November to January, during the winter months there is little to no precipitation. (Figure 2.39-2.40) The city has an average of 8.8 daily sunshine hours, with winter days being predominantly sunny (Meteoblue, 2018) & (Avg Sunshine Hours, 2018).

With the above-mentioned information - it is clear that the site is quite arable, ideal to harvest solar energy, through PV panels, daylighting and space heating and rain water harvesting.

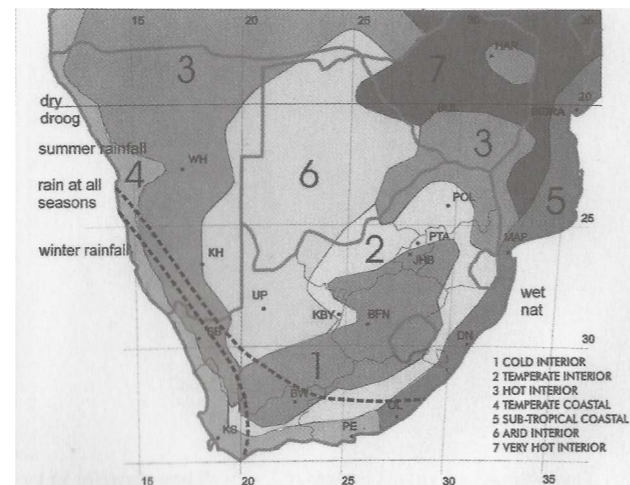


Fig 2.39 Climate Zones in SA (Wegelin, 2009:25).

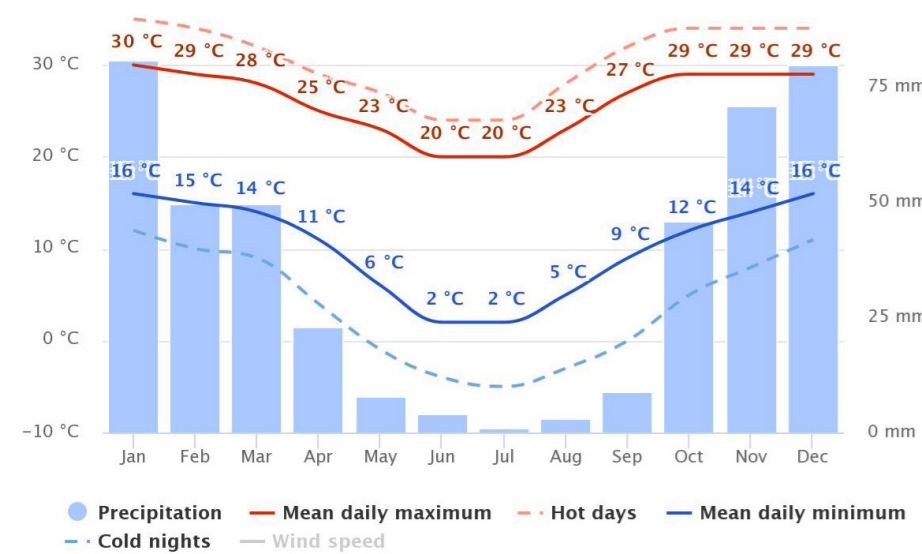


Fig 2.40 Average temperatures & precipitation of Pretoria (Meteoblue, 2018).

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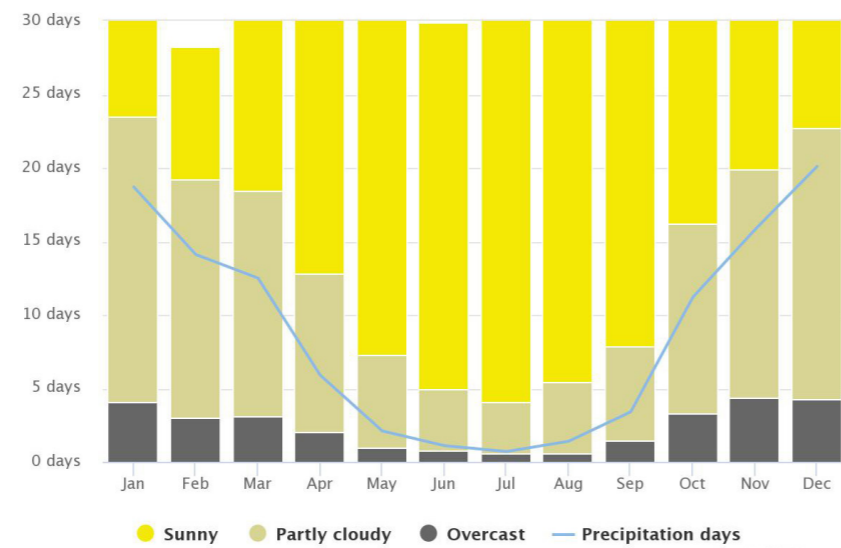


Fig 2.41 Average daily sunshine hours of Pretoria (Meteoblue, 2018).

02.7 GEOLOGICAL ANALYSIS

As the site's history would suggest, the soil of the site contain major clay deposits making building new buildings on the site a difficult and expensive process.

The two rivers, Moretele and Rietspruit, each contribute to the site morphology, the Moretele flowing west of the site is much wider and stronger when compared to the Rietspruit, that flows east of the site creates a wetland area. The two rivers meet at the north end of the site.

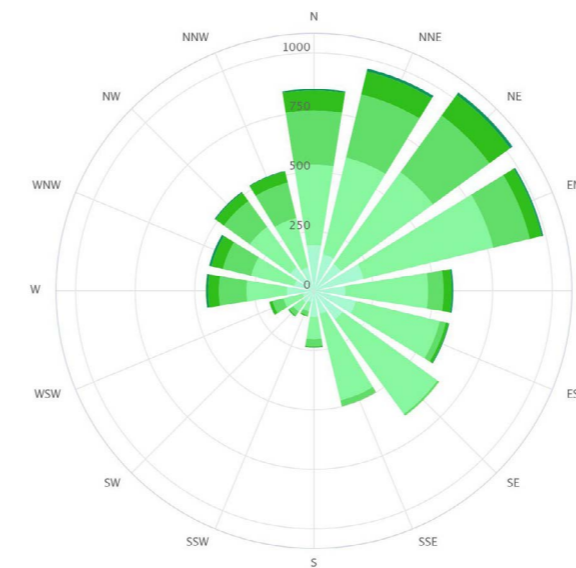


Fig 2.42 Wind rose diagram of Pretoria (Meteoblue, 2018).

02.8 ZONING

According to current zoning the site is zoned as undetermined, most likely because the previously industrial site has been unused since the end 2013. The Tshwane Regional Spatial Development Framework (RSDF) indicated that the site has to be zoned at a suburban density (see Figures 2.43 and 2.44). This makes sense for a prospective housing development as is currently at a proposal stage. (Tshwane GIS, 2018).



Fig 2.43 Zoning of Eersterust (Tshwane GIS, 2018).

02.9 FAUNA + FLORA ANALYSIS

The site form part of a long green belt - thanks to the rivers, the footprints of the old factories are overgrown by grass and weeds. On the quarry area, foliage has slowly taken over the areas that has been filled up by imported soil by Labucon.

The border of the site is exaggerated and set out by alien trees planted many years ago, as fences were regularly stolen. No animals were found on site while doing site visits.

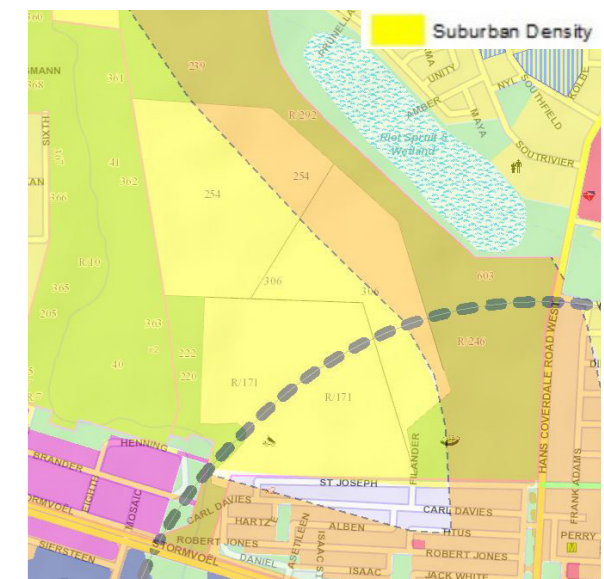


Fig 2.44 Tshwane RSDF (Tshwane GIS, 2018).

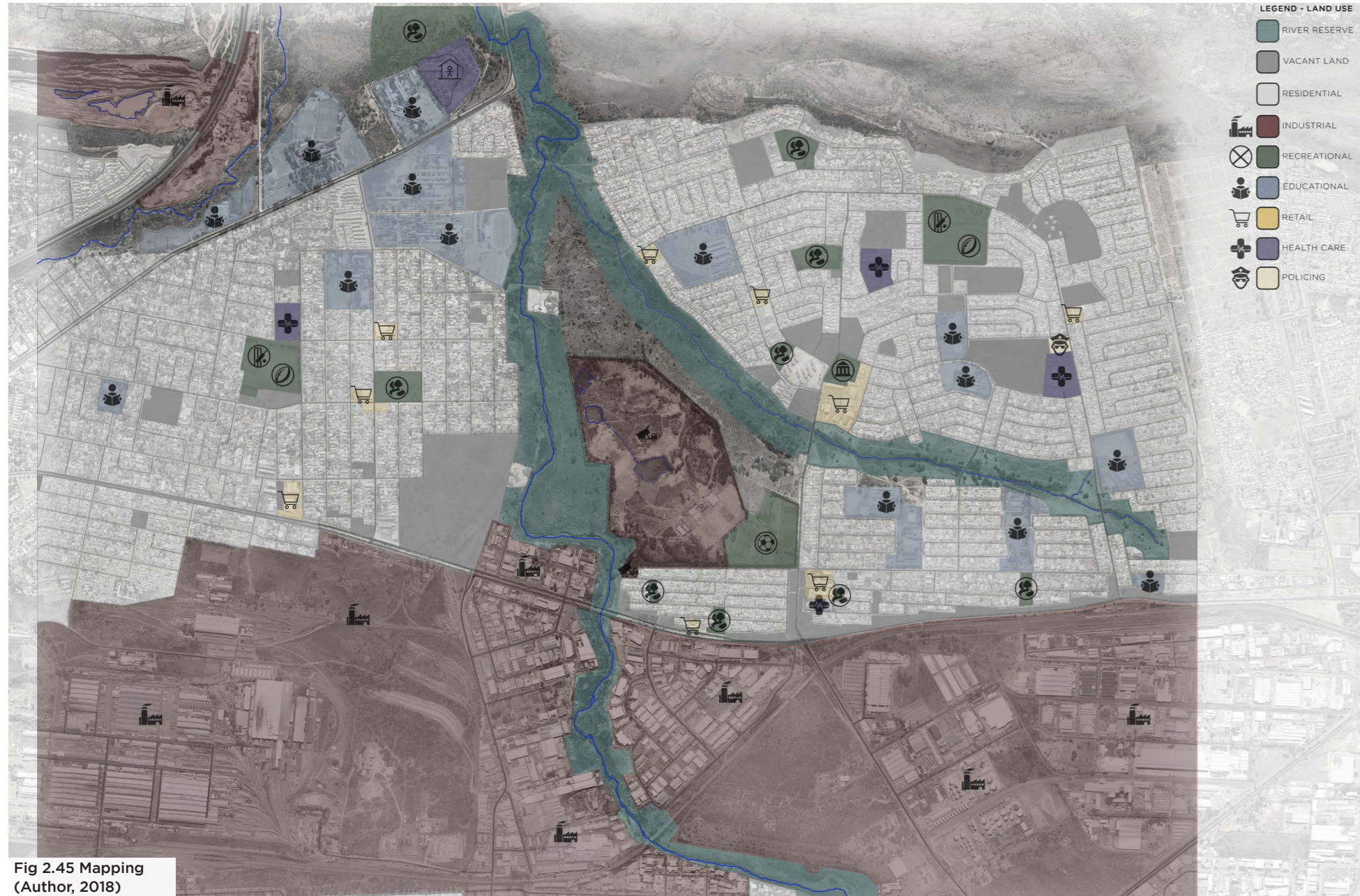


Fig 2.45 Mapping (Author, 2018)

02.11 MAPPING + OBSERVATIONS

While mapping the area, it became clear that there are many schools surrounding the site (marked in light blue in Figure 2.45). The pupils attending school in Jan Niemand park are often from Eersterust, as better school facilities are available in this area.

Because, as explained, there are very few connecting roads between Eersterust and Jan Niemand park, it is very difficult for pupils to travel between their homes and the various campuses, the only road available being Stormvoël road, making travel time much longer.

The vacant land available for further development and densification is marked in dark grey (Fig. 2.31). Eersterust is only 12km away from the Pretoria CBD, making it much better for settlement than the informal settlements forming further to the east, in places like Mamelodi.

Because Eersterust is so close to the large industrial area to the south, (marked in red) economic opportunities are available to residents, without the need to commute long distances to work - as opposed to those travelling from the further eastern settlements.

As illustrated in the diagram to the left, the flood plains and reserved land beside the rivers form quite a barrier between the two settlements. At the same time the rivers offer a connection between the settlements where the areas can be cleaned up and linked.

The eastern portion of the Rietspruit river has been cleaned with footpaths connecting Eersterust south and north. This is an ideal example to apply to the rest of the river reserves.

There are very little recreational opportunities for residents from both Eersterust and Jan Niemand park, the most prominent in the area include shebeens, bars and sports facilities. There is at least a community centre in Eersterust, but there are not enough facilities to accommodate the large amount of school pupils and young adults in the area. A worrying observation is the lack of healthcare and policing facilities in the area.

From the above-mentioned observations it can be argued that the Era brick factory site should not simply be converted to a residential compound as there is more than enough other vacant land to use for that purpose.

The site affords a much greater opportunity if converted into something that will beneficially serve both neighbouring communities and the school pupils.



Fig 2.46 View from stadium towards the existing ruins. Old factory footprint overgrown with grass and weeds. (Author, 2018)