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History of Production in Pretoria

The town Pretoria was named on the 16th of November 1855 by Marthinus Pretorius in honour of his father, the Voortrekker leader, Andries Pretorius. This was during the same time as the start of the second industrial revolution in England and America. Originally the towns industries and business were related to agriculture and functioned as a node for the farmers to be able to sell their produce and for further processing of agrarian goods, such as the leather industry established in 1890. During this period the Anglo-Boer War broke out in 1899-1902 and British forces under Lord Roberts occupied the town. Later the town became the capital of Transvaal in 1910 and after independence in 1961 became the administrative capital of the Republic of South Africa. (Naudé and Naudé 2007)

In 1853 the valley next to the Apies River was chosen as the location of a church village. This valley is flanked by mountain ranges, running in east west directions, in the north and the south. Along with the Apies River and Steenhoven Spruit forming the borders for the first expansion of the town. A grid layout was implemented as the city model with Church Square forming the central point of the Cardo-Decomanus. The cardo, Church Street running through Church Square was the main arterial and connects Pretoria to Rustenburg in the west and later with Maputo in the East. The decumanis, Paul Kruger Street forms the connection of the Pretoria Station, built in 1908, towards the north. The railway in Pretoria was established in 1893 connecting Pretoria with most of the larger towns and harbours, most importantly Maputo, to strengthen trade routes. Pretoria was also the first to use electrical lighting in its streets in 1890.

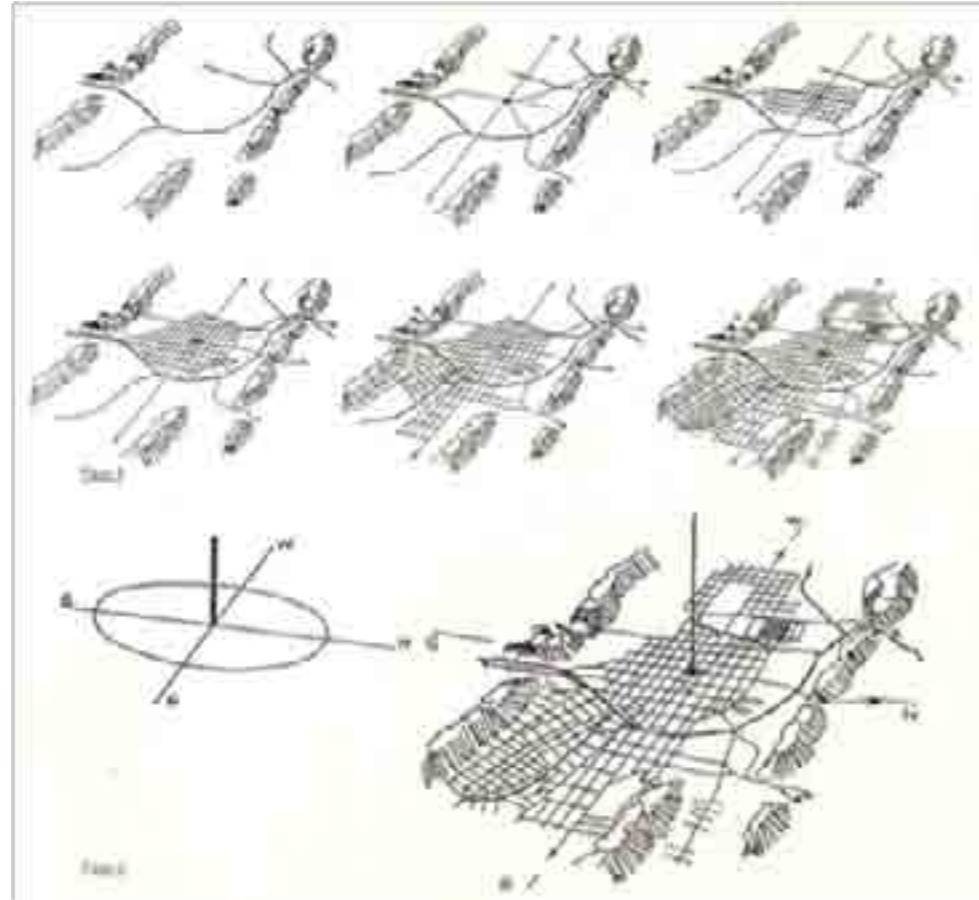


fig. 162_ Development of the city of Pretoria (Jordaan, 1989)

History of Pretoria West

Pretoria West is the low lying area that forms part of the central valley running east-west, it is situated between Weskoppies and Magazine Hill on the south and the Daspoort Ridge on the north. The area is further bordered on 3 sides by the Steenhoven Spruit in the east, Skinner Spruit to the north and an unnamed spruit to the west, which joins with Skinner Spruit.

Pretoria West is located in close proximity to the CBD of Pretoria and shares a similar grid with the inner city. This extension of the grid was laid out between the late 19th to early 20th century.

Within a small amount of time various large industries settled in the area such as the Pretoria West Power Station (1924) and Iscor established by the Delfos brothers, They started an engineering works in 1892 in Andries Street. Later they established the Coal Power and Iron Syndicate, supposed to supply the power station for Pretoria's electricity needs. In 1916 the Delfos brothers were granted the opportunity to establish an iron industry on the site which Iscor occupies at present and in 1934 they delivered the first steel. The effects of the steel industry ushered in the industrial revolution of South Africa and sparked the development multiple factories along Mitchell Street (Engelbrecht, et al. 1952, 103). This was during the same time when Henry Ford developed the assembly line.

A range of health issues gradually made the area socially less desirable to live in than other areas such as Arcadia, Sunnyside and Muckleneuk to the east of the inner city, thus leading to the abandonment of further development towards the west. However, due to the steel industry (ISCOR) a few suburbs were set out, namely Pretoria Industrial (1934), Proclamation Hill (1936) and Westpark (1939).

Statement of Significance

The site was developed in the 1920's and has been producing electricity till today. The site sparked the beginnings of the Industrial Revolution of South Africa and till today stands as a testament of the industrial age. The site comprises of two large structures 'A' Station and 'B' Station, constructed out of concrete/ steel framing with brick infill. 'A' Station was built first in 1924 and a series of additions followed in the following years from the 1930's up to 1940's. The structures are hollow shells with no electricity generating equipment remaining of that time. 'B' Station was built in 1952 and is currently operational with all the equipment being maintained and running. As stated before the latter will be shut down in 10 years time. (Fio)

According to the National Heritage Resources Act (NHRA) any structure older than 60 years may not be altered or demolished without consent from the national administrative body responsible for the protection of South Africa's cultural heritage. This administrative body is the South African Heritage Resources Agency (SAHRA). (SAHRA 2010)

The site of the Pretoria Power Station has no formal recognition from SAHRA, but falls under the general protection guidelines as the site dates back to the 1920's with it's current age being 90 years old. Although most of the structures fall under the general protection guidelines the current structures producing electricity is still 2 years from getting heritage protection. Thus the structure should be treated as heritage along with the rest of the site.

"Our heritage celebrates our achievements and contributes to redressing past inequities. It educates, it deepens our understanding of society and encourages us to empathise with the experience of others. It facilitates healing and material and symbolic restitution and it promotes new and previously neglected research into our rich oral traditions and customs."

-NHRA
(1999)

The Appleton Charter that acknowledges the Venice Charter (1964) and the Burra Charter (1981) is investigated to assist in the conservation strategy for interventions on site. The charter states that interventions in the built environment occurs at many levels and scales, but before one can choose the level of intervention the following merits have to be considered.

- Cultural Significance – Statement of Significance
- Condition of the fabric
- Contextual value
- Appropriate use of the physical, social and economic resource

Statement of Significance as stated previously, states that the building has heritage value. The existing fabric of the site is in tact due to the site still being in operation as well as not being accessible by the public, thus allowing the buildings to decay without possible negative impacts of vandalism. It is also too expensive for the Municipality to demolish the structures thus they have been left as is. Creating the opportunity for conservation through reuse that will be an appropriate response to the physical, social and economic condition of the area.

The charter indicates various levels of intervention followed with associated activities. For the purposes of this study only two levels of intervention are applicable as well as two intervention activities.

Heritage Charter

| Levels of Intervention

- Rehabilitation: A resource can be modified to suite a new use/function through adaptation.
- Redevelopment: Any new structures can be inserted or added, sensitive to the existing heritage, thus enhancing heritage resource. Through dealing with the whole as well as the parts.

| Intervention Activities

- Removal: Modifications made by removing surfaces, layers or volumes and/or elements.
- Addition: Modifications made through to the introduction of new elements or materials that respect and enhance the original quality of the existing

	Start	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Avg Yearly yield	Run-off Coefficient:
Monthly Avg	0	112,0	106,0	91,0	33,0	22,0	6,0	10,0	10,0	21,0	60,0	117,0	117,0		564 m ³ /year/1000m ²	Steel
Sum	0	112,0	218,0	309,0	342,0	364,0	370,0	380,0	390,0	411,0	471,0	588,0	705,0		Avg Montly yield	
Sum x 0,8	0	89,6	174,4	247,2	273,6	291,2	296,0	304,0	312,0	328,8	376,8	470,4	564,0		47,0 m ³ /month/1000m ²	
Avg yeild	0	47,0	94,0	141,0	188,0	235,0	282,0	329,0	376,0	423,0	470,0	517,0	564,0		Storage Required	
Max	106	153	200	247	294	341	388	435	482	529	576	623	670		200 m ³ /1000m ²	
Min	-94	-47	0	47	94	141	188	235	282	329	376	423	470			

	Start	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Avg Yearly yield	Run-off Coefficient:
Monthly Avg	0	112,0	106,0	91,0	33,0	22,0	6,0	10,0	10,0	21,0	60,0	117,0	117,0		437,1 m ³ /year/1000m ²	Concrete
Sum	0	112,0	218,0	309,0	342,0	364,0	370,0	380,0	390,0	411,0	471,0	588,0	705,0		Avg Montly yield	
Sum x 0,8	0	69,4	135,2	191,6	212,0	225,7	229,4	235,6	241,8	254,8	292,0	364,6	437,1		36,4 m ³ /month/1000m ²	
Avg yeild	0	36,4	72,9	109,3	145,7	182,1	218,6	255,0	291,4	327,8	364,3	400,7	437,1		Storage Required	
Max	82	118,43	154,85	191,275	227,7	264,125	300,55	336,975	373,4	409,825	446,25	482,675	519,1		154 m ³ /1000m ²	
Min	-72	-35,58	0,85	37,275	73,7	110,125	146,55	182,975	219,4	255,825	292,25	328,675	365,1			

