

CHAPTER

# 6

## **PRECEDENTS & CASE STUDY**

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## 6.1. INTRODUCTION

The precedent study plays an important part in understanding how other designers respond to similar challenges and opportunities identified in the site analysis and framework and will inform the subsequent conceptual development of the project site. The study also tries to ensure that my design response does not repeat similar mistakes, if any, in the projects identified. The author visited the Soweto parks which are also along a river system and went on to do a detailed case study of one of them. The precedents investigated for this study are the Moroka, Thokoza and Dlamini Precinct, Dlamini Wetland Park, Harare Precinct 3 and the Shenyang Architectural University Campus.

## 6.2. MOROKA & THOKOZA PRECINCT

**Project Location:** Soweto, Johannesburg

**Project Designer:** Newtown Landscape Architects (NLA), Johannesburg

**Year of Completion:** 2005

**Owner/ Client:** Johannesburg Parks Department

### 6.2.1. Project Statement

The Moroka and Thokoza Precinct (Figure 56) demonstrate how the river system can be rehabilitated while becoming a recreational area for the public. Soweto lacks recreational spaces, which leaves the areas surrounding the river system as the last resort for public green open spaces.

### 6.2.2. The scope and challenges

Just like in Mamelodi, the river was facing social and ecological problems such as water pollution, siltation, overgrown reeds and public disregard. Apart from the floodlines, the river reserve is also used as a servitude channel which prohibits built structures. The design(s) had to deal with these challenges.

### 6.2.3. The concept

The concept for the parks seeks to integrate ecological and social realities of the site which would result in the appreciation of the open space by the community and an enhanced environmental quality especially the water in the river. These parks allow people to interact with each other while appreciating nature (Figure 54).

### 6.2.4. The major features

Whilst the two parks have shown great response to community needs in the process proposing a few activities and spaces provided include braai and picnic areas, open activity areas and play areas, it is commended for its success in:

## Community involvement

The community was involved in all phases of the project from consultation in the planning process to design of art in the park. Public involvement is achieved in the design of artwork and the use of local labour for the upliftment of the community.

## Water management made visible

Water is treated (Figure 53) through wetlands, siltation ponds and a dam. Flood attenuation has also been achieved by creating wetlands and silt traps upstream of dam.



Figure 53: Treated water at Moroka (Author, 2011)

Figure 54: Wedding pictures at Thokoza (Author, 2011)

Figure 55: Park seating at Dlamini (Author, 2011)



Figure 56: Park precinct materplan (Young, 2008)

This precinct demonstrates an approach to design that responds to both social and ecological aspects in rehabilitating a polluted river system for community use as well as consulting with the users in the design process. The author will approach the design of this study area in the same manner.

### 6.3. DLAMINI WETLAND PARK (detailed case study)

Soweto has fewer green open spaces with only the river, which runs through the township, allowing people to interact while enjoying nature. The Dlamini wetland regional park (Figure 57) in Soweto which was designed by Newtown Landscape Architects (NLA) forms a link between the older Thokosa and Moroka Precinct and the Kliptown Precinct. It addresses the concept of river edge development and responds to the need for passive and active recreational facilities for the community.

This review investigates the role of the Landscape Architect in creating a place that integrates both ecological as well as social realities of the site in creating a park. The protection and enhancement of nature, including wetlands and rivers, cannot ignore the people who live around it. Designed landscapes should therefore integrate the science in natural processes as well as artistic aesthetics and values. From the name of the place we get the sense that the project should address these two norms. As a park, Dlamini responds well to the community needs of recreational spaces. It creates a river edge which is almost the extension of the front yard of the plots facing the river. It therefore avails itself as a more public space in which everyone can come out play and interact with the rest of the community. The ablution facilities, play equipment as well as water features are fenced individually with gates that can be locked by the maintenance contractors which makes the park fully accessible from north edge yet safe for the kids in play areas.

According to NLA (2010), complicating factors to be taken into account were the flood line on the northern side of the park and the additional Rand Water servitude on the southern edge of the park. Although the designers have managed to stay away from the servitude with only pathways going across while by avoiding the flood lines they have missed the opportunity to design a didactic wetland landscape. The park does not demonstrate ecological processes as one would expect. The stormwater outlets (culverts) display minimal attempt to avoid soil erosion and deposition of debris from the neighbourhood. There is no visible water or treatment in the wetland where reeds cover the whole system. The artificial water feature does not seem to be attracting kids. The park was originally open but later on fenced so that children can not use it during school hours as they stayed away from school (NLA, 2010). The palisade fence is too close to the play equipment which include swings and this is a safety hazard. The choice of materials is limited to mild steel, concrete, and drought tolerant planting. Tree species include popular river bank specie *rhus lancea* which bears edible sour fruits. Groundcovers include the colourful *dentis grandiflora* while the sculptural *aloe ferrae* has been used in the far west end. Park furniture includes bright coloured concrete seating and exposed aggregate bollards that also double up as seating. Where thinner bollards have been used they are already being knocked down by cars. The braai stands seem haphazardly placed with no shade and seating around them.





Figure 57: Dlamini park masterplan by NLA (Wiskins, 2011)

Figure 58: Desire lines  
(Author, 2011)



Figure 59: Play area  
fencing (Author, 2011)



Figure 60: Zero depth  
water feature (Author,  
2011)



Figure 61: Park seating  
(Author, 2011)



The designer missed the opportunity to use the only two large trees on site to create a sense of place. One also wonders why the sculptured lighting is almost ten meters high and whether they are not going to be covered by tree canopies in the future. The circulation paths are limited to the southern side, furthermore the designer failed to anticipate the tendency of pedestrians to take short cuts which has resulted in a foot path developing and already signs of erosion showing. During a time when water is a scarce and expensive commodity, the whole park is covered with lawn that needs to be watered regularly. The author feels that a more sustainable veld grass could have been used and the money spent on irrigation used somewhere else like on a shade structure that could accommodate weddings and family parties.

The park as a whole has been successful in addressing this river edge landscape and bringing people out and close to nature but has failed in taking this further by integrating natural processes with social activities like at Thokoza and Moroka parks where people are allowed to come in contact with water at river crossings and at the Moroka dam which is a popular spot for wedding pictures. The park has been welcome by the community evident as schools use the formal soccer field for practices and the play areas are popular kids meeting places.



## 6.4. HARARE PRECINCT 3

**Project Location:** Khayelitsha, Cape Town

**Project Landscape architects:** KALA Landscape Architects, Cape Town

**Year of Completion:** 2009

**Owner/ Client:** City of Cape Town

### 6.4.1. Project Statement

Harare Precinct 3 (Figure 62) project expresses how improving public open spaces can be used to reduce the rate of urban violence and crime. Townships in South Africa are known for high rates of violence and this project targets the notorious Harare Precinct in Khayelitsha.

### 6.4.2. The scope and challenges

The project links small open spaces which were severely affected by crime to create a safer and well lit commuter parkway across the township. The site was characterised by a neglected, badly lit and polluted open land with buildings facing away from it.

### 6.4.3. The concept

The park is located along an open drainage way and provides a safe recreational, play and gathering space. Four ideas have been key in the making of VPUU's success (Cooke, 2011: 19):

- Process is as important as the product;
- The approach has been area wide;
- It has been integrated in spatial, social, economic and management terms;
- Measures have been put in place to sustain what has been set up. These includes markets and a community centre.



Figure 62: Harare Safe Node framework (Cooke, 2011: 19)

These concepts are very important in community design and creation of lively and meaningful places as the project works with the community to address an issue (safety) that affect the whole precinct and builds facilities (e.g. markets) to ensure continued sustenance of the project.

#### 6.4.4. The major features

Harare Precinct 3 project demonstrate the use of:

##### Safety principles

According to Cooke (2011: 23), crime has been reduced by 20% and murder by 33% and this method of crime prevention is being applied to informal settlements in Cape Town. An active community centre (including trade at a tuck shop, also known as a spaza shop) and well lit (Figure 64) park help in ensuring constant surveillance.

##### Connection and linkage

The linear park system activates the area hosting community activities and linking popular recreational spots.

##### Multiple activities and multifunctional space

The design provides a stormwater detention system, while also being a social place (Figure 63). The caretaker's house also has meeting rooms, spaza shops and a clinic for the community. This project creates a safe, healthier and active environment that has become a stage for different community activities (Figures 65-66). It has also attracted tourist who now feel at ease to visit the area to help kids from this disadvantaged community.

Figure 63: Social responsibility (Klitzner, 2010)



Figure 64: Safety: lights on (Klitzner, 2010)



Figure 65: Market in Harare Square (Erasmus in Cooke, 2011: 19)



Figure 66: Social issues (Klitzner, 2010)





## 6.5. SHENYANG ARCHITECTURAL UNIVERSITY CAMPUS

**Project Location:** Shenyang City, China

**Project Landscape architects:** Turenscape

**Year of Completion:** 2004

**Owner/ Client:** Shenyang Architectural University

### 6.5.1. Project Statement

According to Turenscape (2011) this project demonstrates how an agricultural landscape can become part of the urbanized environment and how cultural identity can be created through an ordinary productive landscape. Due to the increased rate of urbanisation, the city is encroaching into arable land reducing food production and wiping an important part of the history of China.

### 6.5.2. The scope and challenges

The design presents a part of a campus landscape proposal (Figure 69) for a site that has a rich agricultural history as it lies on what used to be a rice field that brought the community together and was the pride of the people. The project had to be developed within stringent budgetary and time constraints challenging and limiting design.

### 6.5.3. The concept

The concept of this design seeks to use rice, native plants and crops to keep the landscape productive while also fulfilling its new role as an environment for learning (Turenscape, 2011). It addresses issues of food production as well sustainability practice and education. It provides an opportunity for the students to learn from this productive landscape as the design brings them closer to the rice paddies where they can take walks, sit to study or have their breaks.

### 6.5.4. The major features

The project features:

- The productive campus rice paddy (Figures 67-68);
- Other native crops;
- The productive aspect of the landscape draws both students and faculty into the dialogue of sustainable development and food production;
- Golden Rice became an university icon (Turenscape, 2011).

These elements combine to create a meaningful landscape intervention socially, ecologically and economically as it re-establishes an identity for the school, reduces the use of non-renewable energy used in importing food while also creating employment for the surrounding community.

Figure 67: Landscape use (Turenscape, 2010)



Figure 68: Productive landscape (Turenscape, 2010)

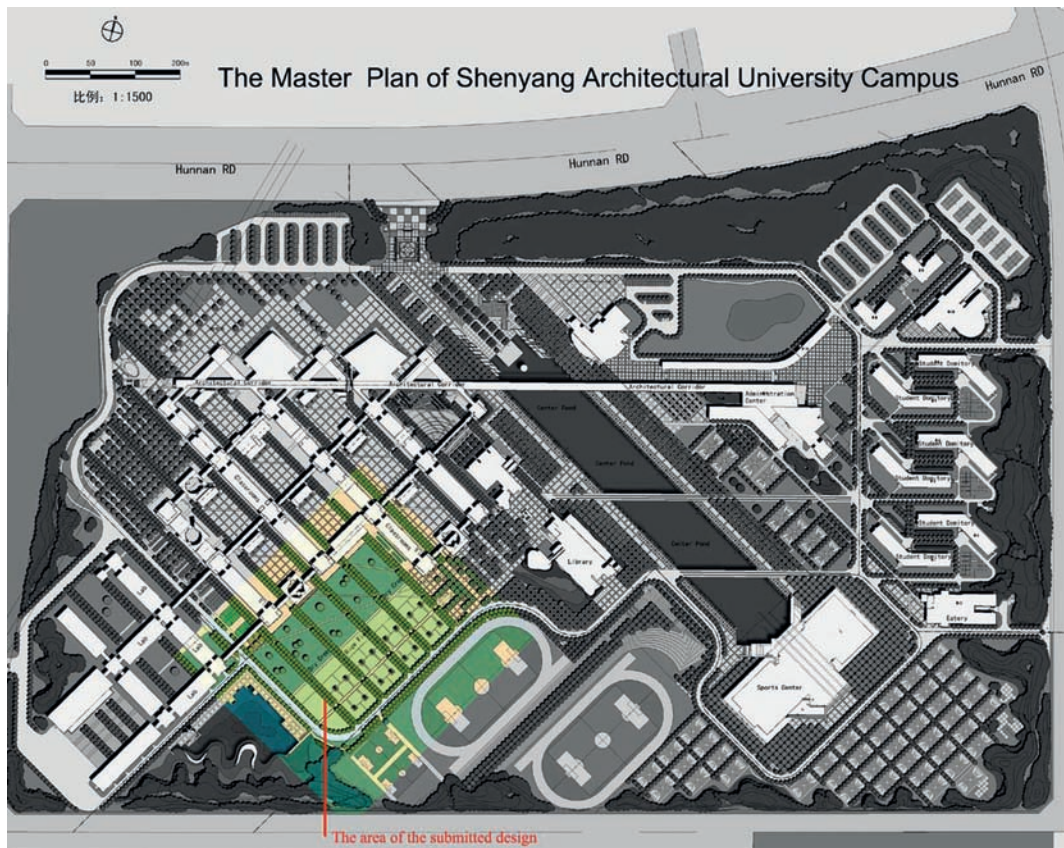


Figure 69: Landscape masterplan (Turenscape, 2010)

## 6.6. DESIGN PRINCIPLES

Design will focus on the following principles as compiled over the last chapters but also demonstrated in the above precedent study. Some of the principles overlap but all-in-all the author postulates that they could lead to a ‘community meaningful-place’:

### 6.6.1 Community design

- public involvement encouraged in all phases
- Create a invitational spaces and a sense of arrival
- Landscape elements to maintain a sense of history associated with place
- Spaces to re-establish the spirit of togetherness and *Ubuntu*.

### **6.6.2. Safety**

- Improve surveillance and visibility so that the users can feel free to use the spaces without feeling vulnerable especially at night when lighting is needed.
- Public spaces to have security
- Spaces to be accessible and safe to use

### **6.6.3. Connection and linkage**

- Create well sheltered seating spaces along the movement network
- Re-establish visual integrity of river edge
- Ensure clear linkage to cultural and historical elements/ places.

### **6.6.4. Integration of uses**

- Multiple activities and multifunctional space
- Spaces to be able to activate the community
- orientation of spaces to respond to buildings frontage and the river edge

### **6.6.5. Robustness**

- robust materials and construction details as well as the use indigenous water wise planting in stream rehabilitation
- design for deconstruction where possible
- design to last

### **6.6.6. Sustainability**

- Integration of spatial, socio-cultural, economic and environmental design. This must be made known to the users.
- Water management - collect and reuse rain water and greywater
- Productive landscapes - promote agriculture as poverty alleviation solution

## **6.7. CONCLUSION**

It is evident that the problem of shortage of green public open spaces in both our urban and rural settlements is forcing developers especially the government to look at the open spaces along rivers to provide for this. Unfortunately polluted water is a problem in these rivers making them a hazard to people's lives. The examples of works from Soweto demonstrate how ecological and social challenges can be tackled simultaneously in these river systems. The parks generally try to improve the ecological value of the river while creating recreational spaces for the locals. The Harare project demonstrate how surveillance along movement corridors can improve safety and community linkage. Whereas there are not so many built projects on designed urban agricultural and community farming, the Shenyang Architectural University campus design demonstrates how agricultural landscapes can also be usable space integrating production and pleasure.