Figure 7.1 Progress model of master plan (Author 2017)
CHAPTER SEVEN

Introduction

The design development from the concept, where movements and eco-service systems form the drivers for pattern is, elaborated on in this chapter.

7.1 Design development

7.1.1 Master plan

In the master planning, as shown in Figure 7.1, the different site programs as mentioned in previous chapters are illustrated in Figure 7.1.

The use of a triangular shape for the water system was generated from the previous concept scenario's and from the tendency for water to level out in and form a triangular shape negated by the contours as illustrated in Figure 7.2. It was established from the contour information that the water bodies will have to excavated due to the flat gradient on site.

Key activity areas as identified in previous chapters, include for programmed sport activities and events areas. The formal nature of the ponds is interrupted by a more organic shapes and are used for the events area as seen in Figure 7.3. The water process by that point is completed and therefore the change to organic forms is validated for the events area. The event space also serves as a flood retention area in times of heavy rain, thus berms are required to protect the infrastructure as well as serving as seating space for event goers. See Figure 7.4 for the progress master plan. The movement on site is dived in to three categories: the primary access route, the promenade and a running track with viewing decks for the adventurous. The purpose of the movement routes are as follows:

- Transportation hub and events area,
- Transportation hub and Landfill reserve,
- Sports recreation and running track,
- The urban area and running track and,
- The water ponds with one another,
Figure 7.5 Master plan - not to scale (Author 2017)
Further more, the running track will also extend into the reserve.

The movement from the urban edge is encouraged by an art installation in the park that forms part of the overall movement on site and that includes the mound, ridge and plain as part of the permanent exhibition. The mound on site as per the beauty in the ugly theory is celebrated and incorporated as spill out space for people from the urban area. The plain is undisturbed to illustrate natural pattern of nature by incorporating an indigenous veldt grass area that is located north of the plain. This will over time distribute seeds onto the plain by wind and water action, depending on the grass specie. See patterns on site and proposed grass succession on site in Figure 7.6.

7.1.2 Design solutions sketch plan
The area surrounding the mound and plain was identified as a sketch plan area as it illustrates the application of the theory and main concepts of water system, remembrance and the main movement types on site. See Figure 7.7 where the area is marked in red.

7.1.2.1 Remembrance on site
The mound, plain and ridge were all approach with the following guiding principles:
1. Contrasting the old with the new
2. Are the remnants celebrated (i.e. not covered up)
3. Sealing of the remembrance to pause the process and thus the pattern that has formed over time (See image 7.5 for patterns currently on site)

The ridge edge is contrasted by the green of trees. The forming of glades at specific points will serve to contrast with the ridge in colour and texture. In Figure 7.8, the exploration of the effectiveness of a glade is explored. These areas will be planted with lawn to provide users with calm spaces where they can appropriate the space as they see fit.
Figure 7.8 Exploration of the use of a glade for emphasis (Author 2017)

Figure 7.9 Exploration of the approach to remnant elements (Author 2017)
The approach of the mound is explored in Figure 7.9 and is a critical element for site. The mound has more formal spaces, contrasted by concrete slabs that form a datum for the mound. A wall around the mound will function as a lean-on wall and is placed in such a manner that the user can have a close look at the mound and also serve as a barrier. The areas around the mound will include low seating walls and benches for users working and living in the area. See Figure 7.9 the authors exploration of these spaces.

### 7.1.2.2 Pattern on site
Movement is linear on site to facilitate the shortest route between to the elements as seen in Figure 7.3.

The promenade movement was instrumental in having users from the transportation node walking next to the water bodies from which they can explore out into the park or to the urban edge. This movement is offset by ‘oasis’ spaces in two forms namely: dimple spaces and plaza or grove spaces. This is to serve as meeting spaces or watching space as well as creating ecologies to curb the effects of urbanisation.

From the urban edge a reception area serves as orientation space for the user. This is done by raised planter to frame different walkways that is linear so that the end destination is visible to the user. The end destination is that of the running route and ridge. These west east routes are intercepted by the promenade and seen as another meeting areas. Offsetting the west east route is more intimate space for families to picnic and view art that is on routes leading off from the west-east connection.
7.1.2 Sketch plan development

As seen in Figure 7.11, the space making around the mounds is supported by seating planters for comfortable, shaded spaces. Shattered form of the planter-box’s plan view was placed to guide the user through the park, as seen in Figure 7.12: Section CC, and emphasizes the idea that the park progression is that of programmed to unprogrammed. The treatment and management of the storm water on site and especially around the mound area was done in such a manner to create space.

A glade area to showcase the ridge is planned off the west-east route. The area is populated by artwork and utilises the ridge as a backdrop for the art. The scale of the mound is off set with the plain and its vastness.

In Figure 7.15 the access to the mound is improved for park permeability and the sunken garden concept was repeated to aid in stormwater management. The opening of the spaces where two routes meet aid in ‘breathing’ spaces for users to sit and look at people. Plaza areas that offset the promenade provide users with resting spaces and gartering areas.

The plain area now edged by a tree lined plaza serves to receive users from the urban edge and as a threshold area to the plain remembrance.

The creation of more intimate space around the water body was attempted. Tertiary routes that connect the in-between space created by the main movement routes, are proposed.
Figure 7.12 Section CC not to scale

Figure 7.13 Section BB not to scale

Figure 7.14 Sections DD- not to scale (Author 2017)
The mound

Plaza

The plain

Indigenous grasses

Reception area

West-east route

Figure 7.15 final sketch plan not to scale (Author 2017)
Indigenous grasses

Plaza

Glade with artwork

Water body
Section AA
1:50

Detail: Mound drainage detail
1:20

Section CC
1:50

Detail: Rock cladding wall
1:20

Section DD
1:50

Detail: Rock cladding wall
1:20

Figure 7.16 Sections not to scale (Author 2017)
Detail: Mound drainage detail
1:20

Detail: Rock cladding wall
1:20

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7.2 Conclusion

1. Illustrated in Figure 7.14, as the user approaches the area on the main access route from the transit hub, the user is confronted by the vast plain. In the background the mound is visible and framed with eucalyptus trees. On the plain area, erosion caused by the Johannesburg thunderstorm left the grounded eroded but, this in turn, transported seeds. The lines of grass follow the erosion lines across the plain. Creating a new pattern on site as informed by patterns of field.

2. The scale of the mound next to the grove of trees invites the user to the mound, either by crossing the plain or walking round the mound. The uncomfortable heat of the plain is quickly subdued by the shade of the eucalyptus trees and the grove of indigenous trees that many come to sit and enjoy nature as a break away from the urban environment. It may also function as a meeting place for family and friends.

3. The promenade leads the user from the mound area deeper into the park. The viewing deck is visible from the promenade and the user is lead onto the west-east route to be confronted by a large water body buzzing with bird life. Between the trees the faint vision of artwork is visible and the intimate walkway leads the user to explore. The artwork is placed in an glade and is backdropped by the ridge. Families gather here for the day to picnic under the trees.

4. The progression with stairs up to the ridge lets the user view the site from the viewing deck. It is here that the users can see the process of water from the red acid type water to more the clean natural colour. The colour however, is variable in terms of the season were the highest acid levels will occur in the dry seasons and thus turning the water more red. This is due to the water levels that are maintained by shaft water pumped to site. The water is constantly reticulated.

Pattern of field and figure, as coined by M’Closkey, was utilised on site. The pattern making of existing processes on site was utilised as well as the more prominent patterns like that of the water system. This attempted at a richness on site that combines the existing identity and proposed functions for site.

Beauty in the ugly was directly translated in the retention of the mound, plain and ridge. These elements are not the ‘conventionally beauty’ for existing parks like the Walter Sisulu Botanical gardens. The retention of the mound plain and ridge challenges the user’s idea of beauty and can evoke memory and emotion as Herrington identified in the redevelopment of industrial sites.
Figure 7.17 Axonometric view of ketch plan area not to scale (Author 2017)