



Figure6.1 Mound remnants in Vida Nova Park

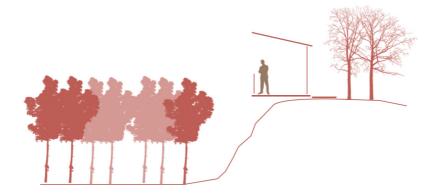


Figure6.2 Ridge remnants in Vida Nova Park



Figure6.3 Plain remnants in Vida Nova Park



# CHAPTER SIX

# Introduction

This chapter is an outline of the approach to the design concept, the concept generators and final conceptual idea and conceptual scenarios.

# 6.1 Conceptual generators

The author's approach to concept is a reactive one, based on the requirements of the site, its future users as envisaged the urban development framework and the theory of pattern and picturesque ideals. The use of program, site and form in concept will be the generators of the concept. (See Figure 7.1)

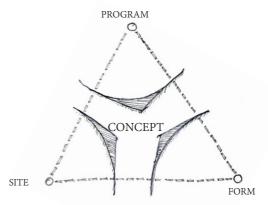


Figure6.4 Concept driver (Author 2017)

### 6.1.1 Site

"A site deals with three elements: the pattern of activity, the pattern of circulation, and the pattern of sensible form that support them" (Lynch 1984:24).

The area of interest is a relatively flat area with a fall of three metres over a distance of 200 metres, thus it has an average surface slope of 1.5%. The significant ridge of the eastern edge creates a design opportunity and is one of the unique features on site. Similarly, the mound and plain on site will be incorporated into the layout to good effect. The urban area, the mound, plain and ridge identified create a potential for contrast with softer landscape interventions, thereby the visual experience for the user is intensified.

#### 6.1.2 Program

#### 6.1.2.1 Water system

The proposed purification system on site forms the backbone of the project as it serves a critical function in the feasibility of the project. The direction of water



flow on-site dictates the direction in which the series of ponds will be arranged to connect two existing water bodies on site. See Figure 6.5.

From case studies and research, it was established that a minimum of six ponds is required. These need to have a surface area of at least 500m<sup>2</sup> each to work effectively and to host the variety of species needed. This is in line with the Vintondale case study where the average surface area of the wetland ponds was also 500m<sup>2</sup> (AMD&ART 2016). However, these proposed site ponds will have to be excavated as the construction of berms to contain the water is not possible due to relatively flat site.

# 6.1.2.2 Movement system

The movement on site will be from the transportation node, just north of the first retention pond, to the east of site with an events area and sports facilities as a recreational space for the residents of the new urban node and for commuters traveling through the area. See Figure 6.5 for a diagram illustrating movement over the site.

The movement in an east-west direction is to facilitate a connection to the ridge and a secondary route to the transportation node from the urban area. These routes will also connect to the pond system where more intimate spaces are planned. The progression encourages the user to move from the urban area to the more softer landscape and culminating in the landfill park or events area in the east as illustrated in Figure 6.6.

The edge of the site bordering on the proposed urban edge presents possibilities for more activities to happen. The transition of the edge between the urban zone and the park is also important as it serves as a reception space to the park. The edge is also the energy driver for the park as the proposed commercial activities will occur here.



Figure6.5 Existing water bodies and drainage on site (Author 2017)

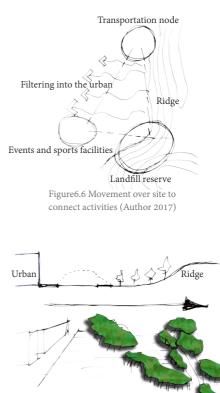


Figure6.7 From urban to natural landscape (Author 2017)



As seen in Figure 6.8 the fading of the edge into the landscape, or the extension of the urban grid into the park will create different effects on the park. The extension from the urban grid leads the users to more specific points in the park and more opportunities for visual anchors and activities to happen.

# 6.1.2.3 Remembrance on site

The heritage of site can be sub-categorised into three categories, namely: the ridge, the plain and the mound. (See figure 6.9)

The mounds on site are unique and formed through the previous and ongoing processes on site. The erosion of these mounds, ridges, and plains create unique shapes and textures that can feature in the park. The texture of these three elements is also different. The ridge material is different to that of the rest of the site because crusher materials were used in creating the edge berms for the slurry dams (Vermeulen 2001).

The approach to these elements is to highlight them, as done in the Picturesque movement (Herrington 2006), with contrast and framing certain views as users move through site. Figure 6.6 illustrates the approach for a mound: trees or walls are used as a background for the mound, the plain or indigenous grasses create a foreground to the mound and habitable spaces will be placed around it to stand in contrast to the harshness of the plain and mound.

# 6.1.3 Form

The site has, over time, been cut out with processes, thus the approach to form will be that of cut out or carving out material and fill where required. Dimple spaces will be created by cutting out intimate spaces to be located at the transition of urban to park areas. Raised beds to contrast with the sunken areas will lead the users into the park. Sunken spaces can also act as stormwater collectors and subsequent bio-filter action as explored with an

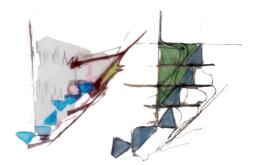


Figure 6.8 Urban edge and park exploration (Author 2017)

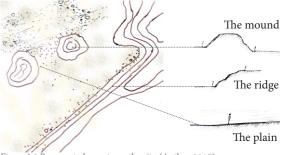


Figure6.9 Remnant elements on the site (Author 2017)

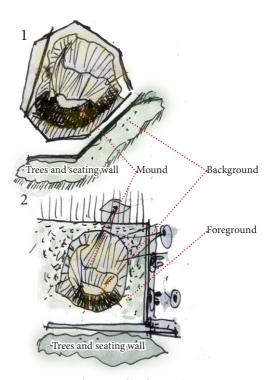


Figure6.10 Approach to mound(Author 2017)



electronic model as seen in Figure 6.11.

Merging the systematic parameters, remnants and movement on site, the form then follows the patterns created as mentioned above.

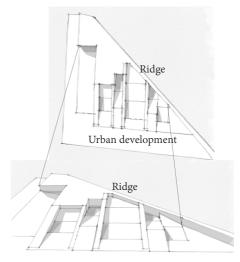
The exploration of what the form might be is illustrated in Figure 6.12. Here the systematic requirement for the system was translated to basic shapes. This shows the number of ponds that can be fitted within that space and the movement which is possible between the ponds. According to M'Closkey theory on pattern making, process forms pattern, the expression of the water system into a pattern will also influence the form.

### 6.2 Final concept

The final concept is an amalgamation of the abovementioned elements to form a park that will serve the people in the community as well as the commuters traveling to the area. The concept of process as pattern and dimpled landscape will contribute to the systematic requirements and the user experience. The water pattern is held together by the red line as seen in Figure 6.9.

Creating a pattern from the above concepts also implies repetition with variation. As stated by M'Closkey, patterned landscapes do not need to be in a twodimensional plan only, but rather be explored on all dimensions as a reaction to existing or proposed forces (M'Closkey 2013). Here the concept diagram attempt at variation and imagining desire lines (in red) that can become overhead structures or pathways. The inbetween spaces to dimple will create the intimate spaces.

The proposed look and feel of the site is illustrated in Figure 6.14 and 6.15. Contrasting the mound and plain with user activities to emphasis the mounds in an attempt at an emotive response for the users of the park. Contrasting the harsh plain space with "oasis" spaces will enhance the experience of both.



Urban development

Figure6. 11 Dimple effect concept model (Author 2017)



Figure6.12 Urban edge and park exploration (Author 2017)



Figure6.13 Concept overlaid onto model (Author 2017)





Figure6.14 Collage of 'look and feel' for proposed park: a view of the urban edge (Author 2017)



Figure6.15 Collage of look and feel for proposed park: a view of viewing decks and ponds (Author 2017)

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# 6.3 Conceptual scenarios

#### 6.3.1 Conceptual scenario one:

As a response to the movement on site, the main walkway on the urban edge is supported by a secondary walkway on the ridge and these are connected by three major walkways, thereby extending the urban grid into the park. The proposed water system forms part of a bigger segment that represents the natural meandering pattern with which water tends to flow. The water system is also an attempt at pattern making by applying figure approach. The pedestrian routes passing the water bodies complete the pattern to form water-like "DNA strings". However, this scenario of pattern was forced onto site and deemed unsuccessful with the shapes being unpractical in constructing. See Figure 6.16.

### 6.3.2 Conceptual scenario two:

This scenario, Figure 6.17, is based on dam shapes. When a river is intercepted by a weir, the water dams up in an approximately triangular shape. The incorporation of the heritage elements is more successful in this scenario as based on the theory of the beautiful in the ugly but the proportions of the open spaces were deemed impractical.

### 6.3.3 Conceptual scenario three

This scenario, Figure 6.18, makes use of a main route for pedestrians on the urban edge to lead users around the first water body and into the park. This movement was an attempt at pattern making with the movement on site. The incorporation of a tertiary running track with viewing decks provides the user an opportunity to view the process as the water is cleansed. The progression from urban to a softer landscape is considered more successful in this scenario to emphasise the beautiful in the ugly.

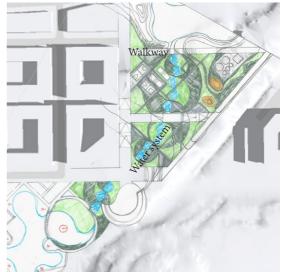


Figure6.16 Conceptual scenario 1 (Author 2017)



Figure6.17 Conceptual scenario 2 (Author 2017)



Figure6.18 Conceptual scenario 3 (Author 2017)



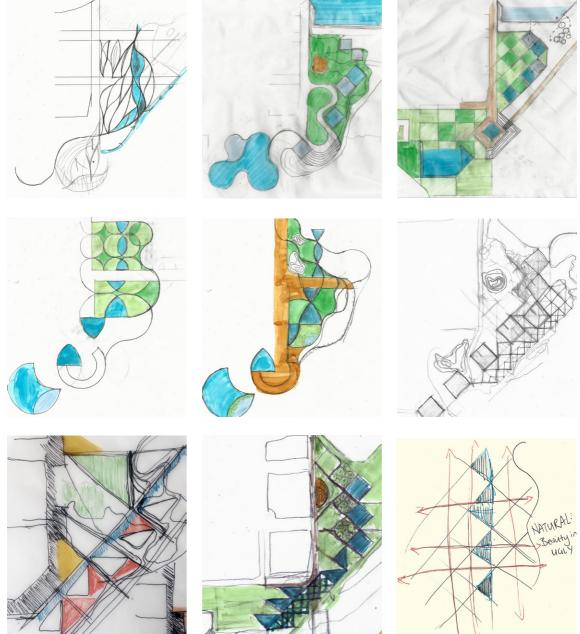


Figure6.19 Concept process drawings (Author 2017)