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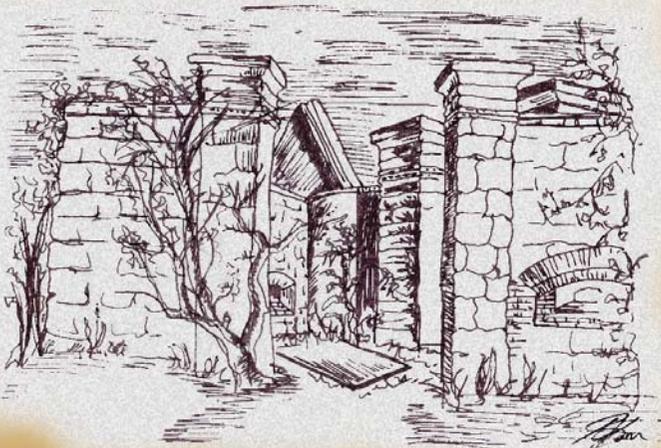


# DESIGN DEVELOPMENT

# 06

1. INTRODUCTION
2. CONCEPT
3. DESIGN GUIDELINES
4. FOCUS AREAS ON DIFFERENT SCALES
5. WONDERBOOM NATURE RESERVE FRAME-  
WORK PLAN DEVELOPMENT
6. WONDERBOOM NATURE RESERVE MASTER  
PLAN DEVELOPMENT
7. CONCLUSION

This chapter will focus on the practical design approach to the site, heritage stance, concept and principles. The development of the frame-  
work- and master plans of the Wonderboom Na-  
ture Reserve will then be discussed.



## 6.1 Introduction

### 6.1.1 Approach to the design

The Burra charter was mainly used to determine how to treat the ruin on the site and the Ename charter was mainly used to decide on how the ruin should relate to the public. This results in a two-pronged approach to the design, namely:

- A. **Heritage** - Preserving the physical through the Burra charter
- B. **Public** - awareness, education, experience, and meaning through the Ename charter

Theory was used to develop the design approach of a narrative in communicating the original meaning and explored through the Ename charter - public awareness, -education, -experience, -meaning and -identity.

The theory themes can be seen and linked in the following way:

- **Semiotics, Narrative, Didactic** - ways of design communication
- **Meaning, Experience, Identity** - user's subconscious reading of the design
- **Interest and discovery (complexity and coherence), Access, Awareness** - user's conscious reading of the design

### 6.1.2 What am I doing?

Strengthening the existing spirit of place (the place's identity and its meaning - that of a refuge – which is intangible and unconscious) through a narrative approach (a tangible approach) that engaged with the cultural and biophysical history of the site (the tangible world) by means of didactics (education) and semiotics (experience with added meaning that gives identity).

Specific design goals - better access, heightened awareness, and heightened interest created through complexity and coherence in design.

Complexity and coherence will engage with the physical/conscious experience (through didactics – teaching about the physical aspects of the site nature and culture) as well as the unconscious experience (through semiotics – use of symbols that give meaning and identity)

### 6.1.3 Heritage conservation stance

The design approach ties in with the Burra Charter approach, namely “changing as much as necessary but as little as possible”

Heritage sites should be presented to the public and the public should be educated to ensure their protection. Awareness and access should be created. To ensure public interest and use, a new use should be incorporated. No intervention should obscure any views of the heritage site, monument or setting. The Genius loci of the place, informs the design, to ensure that the character of the place isn't lost.

Ruins should not be restored to its original state, but left as a ruin. The public should be educated and the ruin should be displayed in an intelligible manner. Some intervention can be used to enhance the ruin's current use and ensure its protection.

### 6.1.4 Vision

A landscape which tells the story of the place, and unveils the heritage and history of the site in such a way that visitors will have an exciting but informative experience of the past events.

The site can become a tourist attraction, a destination, a place everyone would go to and a place to get in contact with nature without being far away from the city. In a larger scheme this site can be the northern link and gateway into the city of Pretoria, and a green corridor for people to experience the city in a different way.

## 6.2 Concept

The concept is a narrative - a design experience - to communicate the idea of refuge, the identity of place through experience. See figure 20.

1. To strengthen the current heritage identity of refuge
2. Structure the design experience into a narrative which makes people aware of the historic layers and significance

A definition for narrative in regards with this design proposal would be:

A landscape which tells the story of the place, and unveils the heritage and history of the site in such a way that visitors will have an exciting but informative experience of the past events. As per discussion on page 86-87.

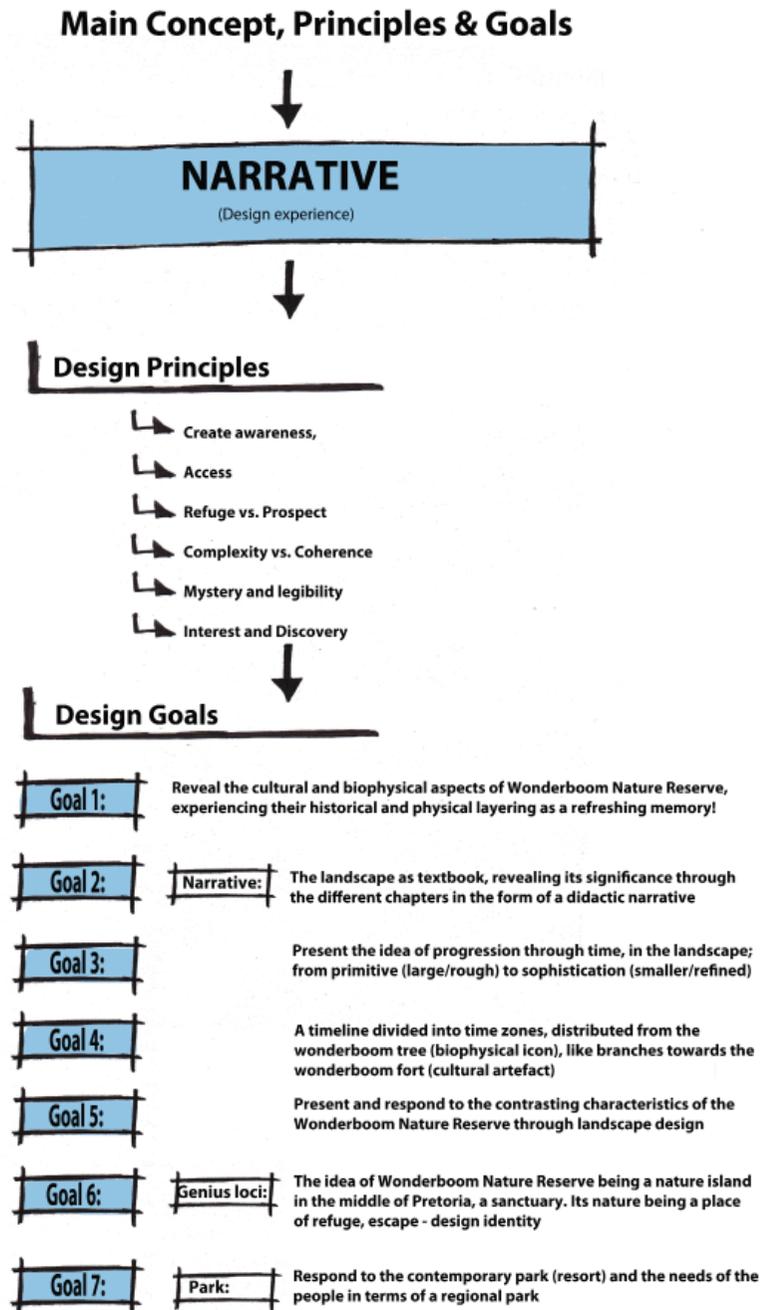


Fig. 20 : Indicating the main concept, design principles and goals

## 6.3 Design guidelines

### 6.3.1 Charters, policy and acts influencing the design approach

The following charters, policy and act were used. They concern the conservation of heritage, interpretation and management thereof.

1. The National Heritage Resources Act, 1999
2. The Gauteng Ridge Policy, 2001
3. Seven charters concerning the conservation of heritage, and their interpretation, as well as management.

The charters can be listed under the following headings:

#### Setting:

- ICOMOS - Xi'an declaration on the conservation of the setting of heritage structures, sites and areas. (21 Oct 2005)
- Burra charter (1999)

#### Interpretation:

- Burra charter (1999) – The Australia ICOMOS charter for the conservation of places of cultural significance.
- ICOMOS – Ename charter: for the interpretation of cultural heritage sites (23 Aug 2004)
- ICOMOS – International cultural tourism charter – managing tourism at places of heritage significance (1999)
- UNESCO convention (intangible cultural heritage) – Conservation for the safeguarding of the intangible cultural heritage (2003)

#### Conservation and management:

- ICOMOS – Principles for the conservation of heritage sites in China
- ICOMOS - Burra charter (1999) – The Australia ICOMOS charter for the conservation of places of cultural significance.
- ICOMOS - The Venice charter (1964): International charter for the conservation and restoration of monument sites,

See Appendix G: Charters, acts and policies summary



*Illus. 127: The landscape along the hiking trail in the Wonderboom Nature Reserve. Note the contrast: nature vs culture (development) (Author: 2011)*

### 6.3.2 The following Heritage principles were taken from the charters and implemented in the design:

1. Integrate historic areas harmoniously into contemporary life
2. In any intervention – the old must be clearly distinguished from the new
3. Any intervention must be sensitive to the character, the setting and the cultural and natural significance of the site, while remaining easily identifiable
4. New use - a socially useful purpose (compatible use)
5. Display - communication, education and understanding of the heritage site
6. No damage to heritage structures – reversible (temporary) interventions
7. Tangible and intangible exploration of Wonderboom fort, tree and reserve

### 6.3.3 Design principles

1. Access
2. Awareness
3. Interest and discovery (complexity and coherence)
4. Refuge vs. prospect

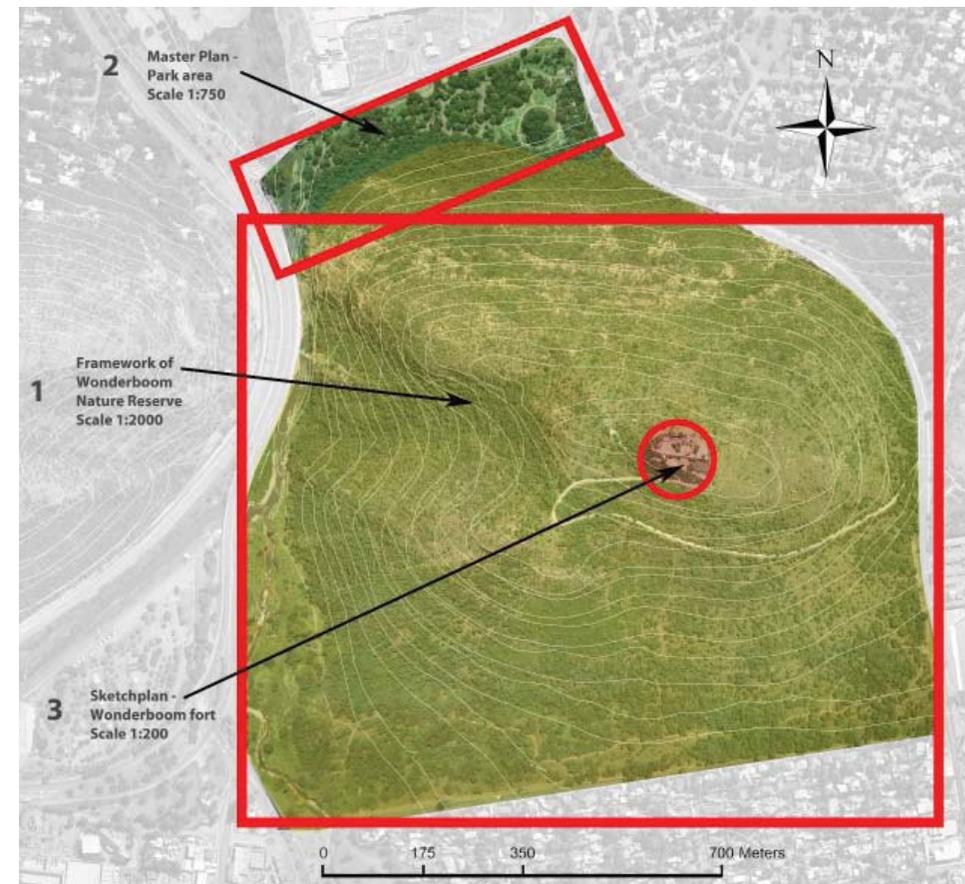
### 6.3.4 Design approach (design concept - refuge)

The design concept is that of a didactic narrative by means of semiotics.

The above mentioned Heritage principles, design principles and approaches will be used as guidelines in the design development. The use of these guidelines will be indicated clearly in the respective discussions of the framework, masterplan and sketchplan. The framework and masterplan will be discussed further in this chapter and the sketchplan in chapter 7.

### 6.4 The specific focus areas on different scales

It was decided to divide the Wonderboom Nature Reserve into three different scales and focus areas. The Wonderboom Nature Reserve was considered as a whole at framework level on a large scale to provide some guidelines for further development. The park area at the entrance to the reserve was looked at at masterplan scale - where the author provided solutions to the area and a program which follows the guidelines and principles set out at the beginning. The fort on the hilltop was looked at at sketchplan level and explored in more detail. In the end all three level plans serve as a new proposal for Wonderboom Nature Reserve informed by theory, site and charters. Refer to illus. 128



Illus. 128: The three focus areas on different scale levels (Author: 2011)

## 6.5 Wonderboom Nature Reserve framework plan development

### 6.5.1 Introduction

The entire nature reserve was considered at a framework scale. This framework serves as a guide for developing the nature reserve in such a way that all its historic layers can be accessible to and enjoyed by the public and be protected through their knowledge about the site's significance.

#### The Wonderboom Nature Reserve framework will aim to:

1. Reveal the cultural and biophysical aspects of Wonderboom Nature Reserve; experiencing the historical and physical layering as a refreshing memory!
2. Use landscape as a textbook, revealing its significance through the different chapters in the form of a didactic narrative.
3. Present the idea of progression through time, in the landscape; from primitive (large/rough) to sophistication (smaller/refined)
4. A timeline divided into time zones, distributed from the wonderboom tree (biophysical icon), like branches towards the wonderboom fort (cultural artefact).
5. Present and respond to the contrasting characteristics of the Wonderboom Nature Reserve through landscape design.
6. Promoting the idea of Wonderboom Nature Reserve being a nature island in the middle of Pretoria, a sanctuary. Its nature being a place of refuge and escape.
7. Conserve and rehabilitate the reserve.
8. Facilitate access to the wonderboom fort on top.

#### The framework will be explained under the following subheadings:

- A summary of guidelines from the analysis chapter (chapter 5)
- Program (activities) for the reserve (zoning)
- Conservation guidelines
- Proposal to reveal the cultural and biophysical aspects of Wonderboom Nature Reserve and approach to the heritage layers

### 6.5.2 Analysis summary

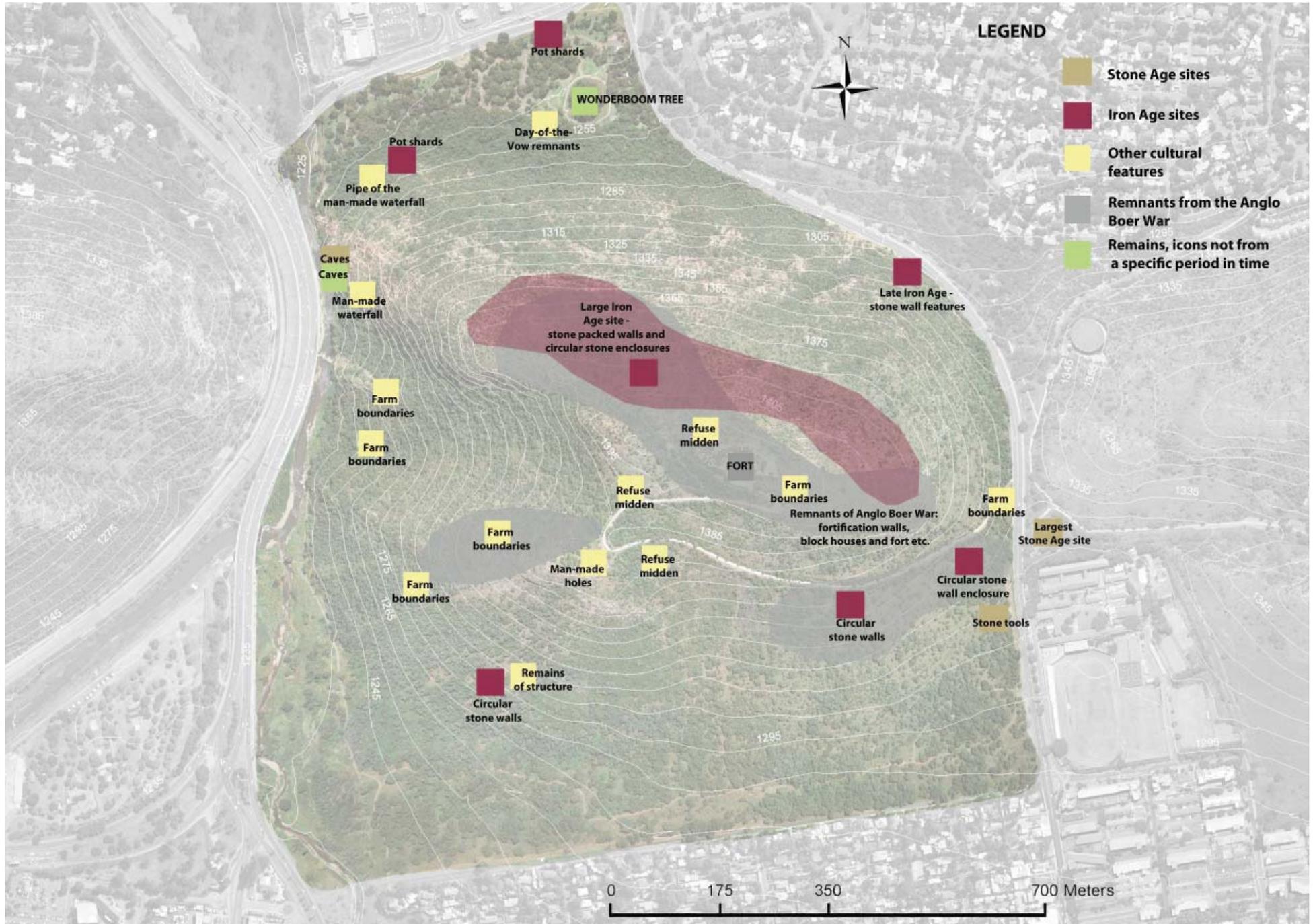
Each historic layer was explored and analysed in the previous chapters. See chapter 5. All the heritage sites were mapped out. (Refer to illus 125, 126, 129 and 130.) (Refer to appendix E & F for more information)

The following historic layers were mapped out by the author:

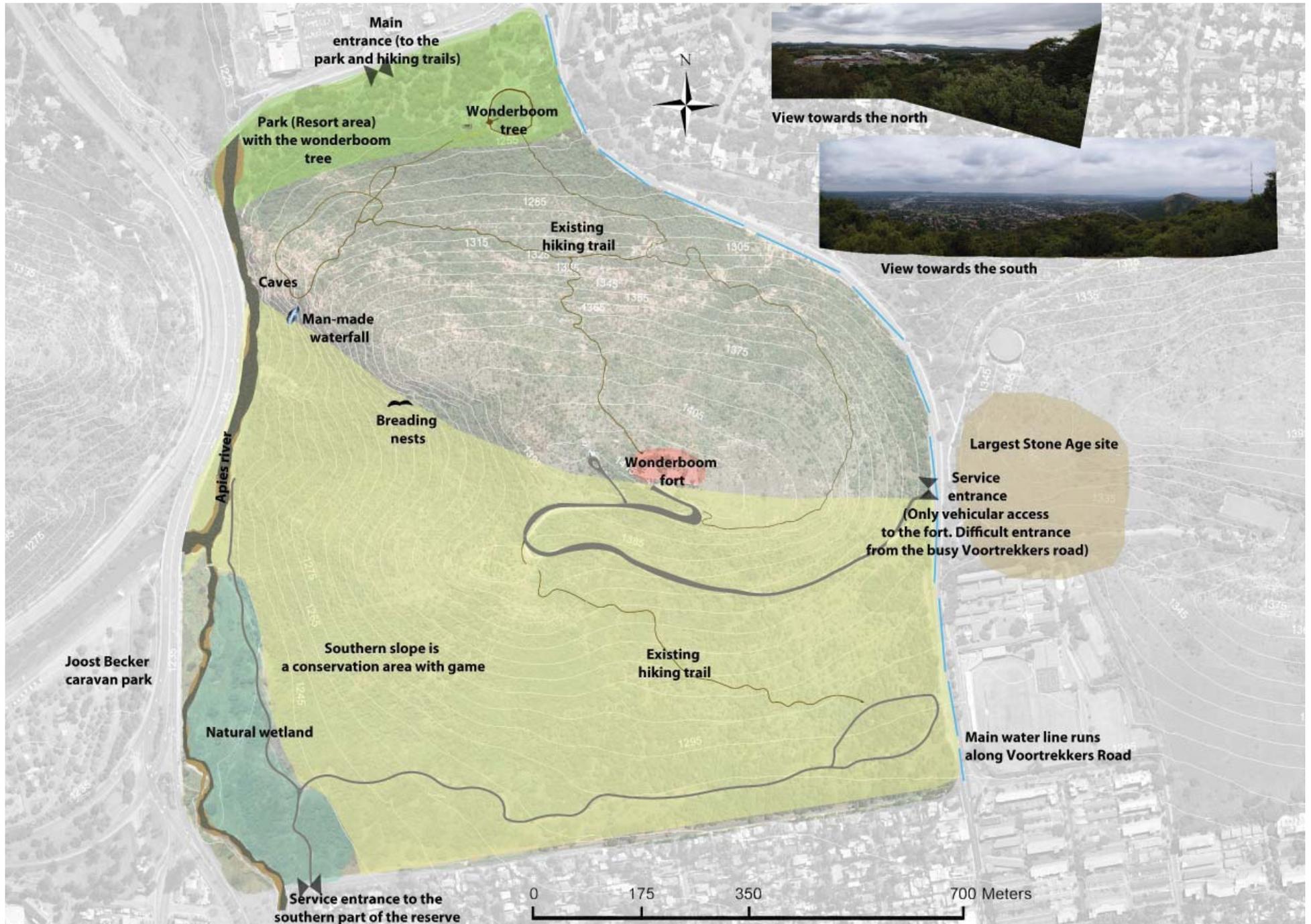
1. Stone age (2mil yrs ago – 1500 yrs ago) and
2. Iron age sites (1500 yrs ago – 1800's)
3. Remnants of the Anglo Boer War (fort ruin, etc) (1900's)
4. Two caves
5. The Wonderboom Tree (1000+ yrs ago) - this includes Ndebele celebrations
6. Historic features (1800's)
7. A man-made waterfall in celebration of the union of Pretoria
8. 'Day of the Vow' celebrations

Other aspects on the site were noticed, such as:

1. The location of a naturally occurring wetland which has dried up. (South western corner of the reserve near the river)
2. The fort is difficult to access by vehicles
3. People with disabilities' access to the fort is difficult to non existing
4. The southern slope is a conservation area. The White cross eagle breeding nest is at the peak. The Verreauxs' eagles (black eagle) breed regularly on the reserve. Endangered porcupine species also lives in the caves as well as two bat species and the violin spider.
5. The only service car access to the fort is from the busy Voortrekker road
6. There is some existing game on the reserve
7. The Apies River passes through the poort on the western side
8. Vehicle access to the rest of the southern side of the reserve is via Joubert street.
9. Locations for amazing viewpoints were identified by the author through personal site investigation. Some of these sites were chosen because of heritage site locations.
10. The largest Stone Age site is located to the eastern side just across Voortrekkerweg
11. Joost Becker caravan park lies to the south-west of Wonderboom Nature Reserve, with overnight accommodation.
12. A main waterline runs along Voortrekker road



Illus. 129: Analysis plan indicating the different historical layers (Author: 2011)



Illus.130: General site analysis framework plan of the different aspects noticed on site. (Author: 2011)





*Illus. 132: Hiking trail at the Wonderboom Nature Reserve leading to the top where the Wonderboom fort is sunken into the landscape (Author: 2011)*

### 6.5.4 Program (Zoning)

1. Hiking trails (Cultural and biophysical - linking the different time zones (heritage sites))
2. View points along the hiking trail
3. Conservation/rehabilitation
4. Service road for golf carts
5. Cable car
6. Bird watching (existing)
7. Game watching (existing)

### 6.5.5 Conservation guidelines

#### Southern slope

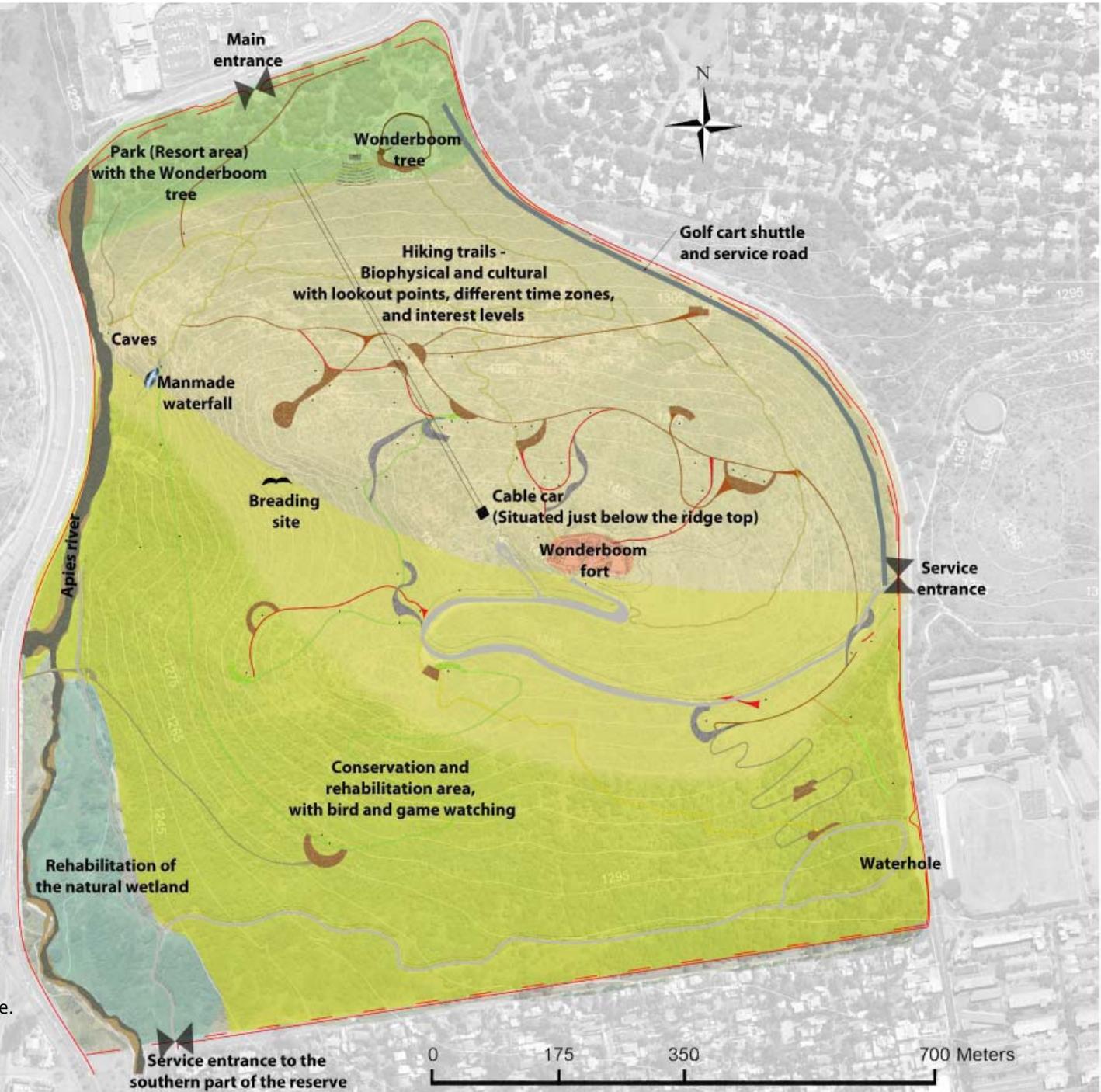
The southern side of the reserve would be rehabilitated over time, replacing all the invading species. To create more space for locally indigenous plants to flourish. This side is more sensitive to development because of all the different animal species occurring mostly on the southern slope. No major intervention will be conducted on this slope except for the hiking trails and some lookout points.

#### Wetland

Rehabilitate to reintroduce a wetland (see illus 133). This will add value to the reserve.

This location was a naturally formed wetland in the past. It is a natural attenuation area. The Mootspruit east and west joins here, and the Apies river breaks away at that point. There is a head cut of 3-4m deep in sediment. In the event of a flood the water will accumulate. The whole area is sedimented.

Illus. 133: Zoning plan (Author: 2011)





*Illus. 134: Nature's detail along the hiking trail strengthens and informs the identity and character of the place (Author: 2011)*

## Narrative

### 6.5.6 Proposal to reveal the cultural and biophysical aspects of Wonderboom Nature Reserve and approach to the heritage layers

One of the aims for the reserve is to create access and awareness of the site's historic layers mentioned earlier. To accomplish this the author looked at hiking trails that connect the different heritage sites. There are two different types of trails focusing on two different aspects of the site. The one being the biophysical aspects - this includes the natural phenomena of the site as well as people interested to be educated in the different plant species on site. This trail will also stimulate the interest of the nature lovers and active people who love to walk. Then there is the cultural aspects - this includes the heritage sites of the different time eras with regards to culture. (See heading 6.5.6.3 The different time zones and landscape progression)

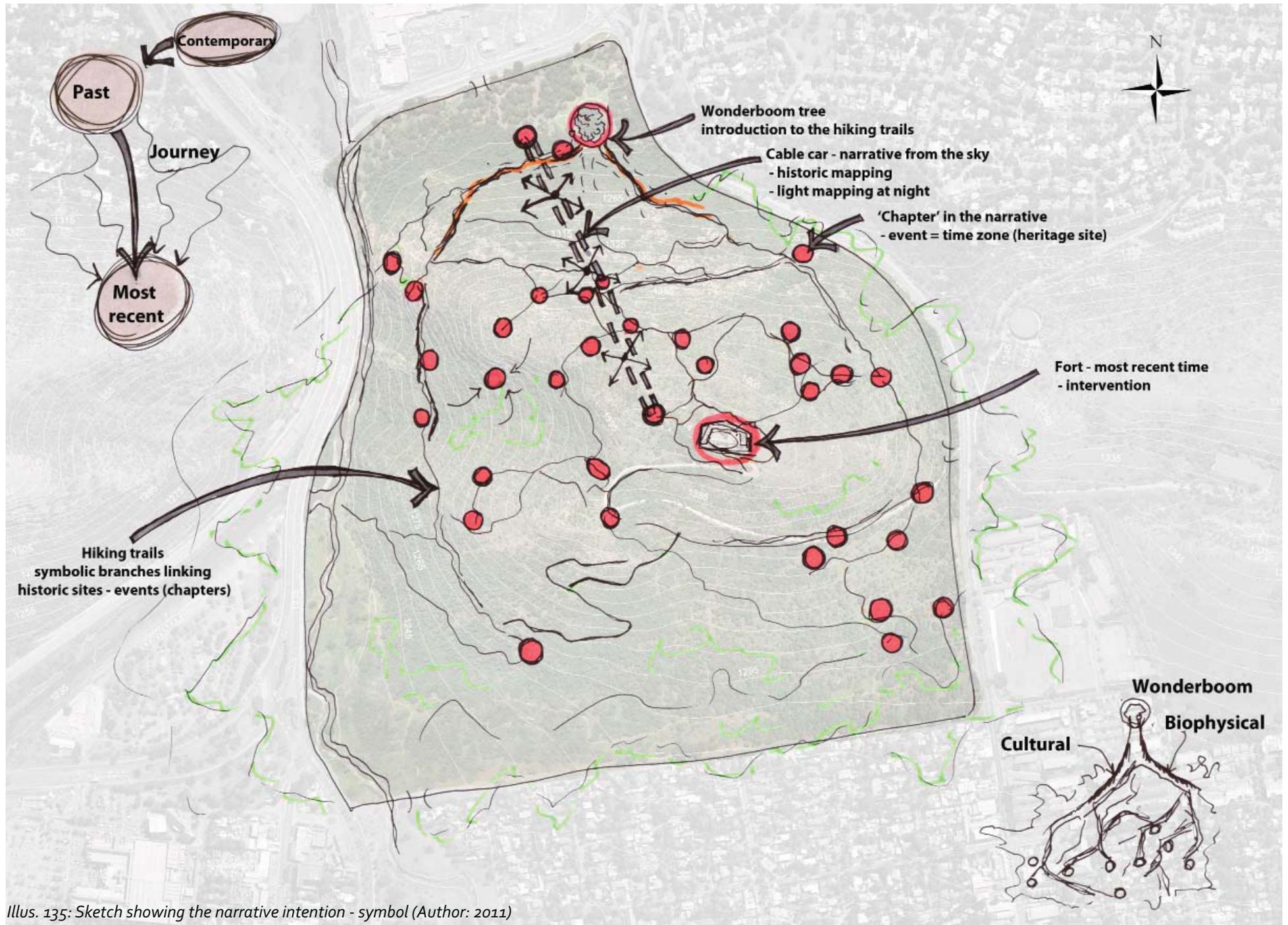
The author's approach to these hiking trails is that of a narrative, and communicates the different heritage aspects through a semiotic and didactic approach. The trail can be read as a textbook with the different time zones on the hiking trail (heritage sites) being the chapters which the visitor can choose to read, discover and unveil.

On these trails the visitor will discover and experience the different time zones, namely; Iron Age, Stone Age, Military history, and other historic aspects of the site. The progression in the landscape would be clearly visible as each time zone will be dealt with separately with the time era in mind. For example the Stone Age sites will come over as a more rough, unsophisticated and large elements and as one moves to the Iron Age sites, one will notice the change in material, texture, sophistication etc. This revelation of the historic layers teaches the visitor about the history of the site.

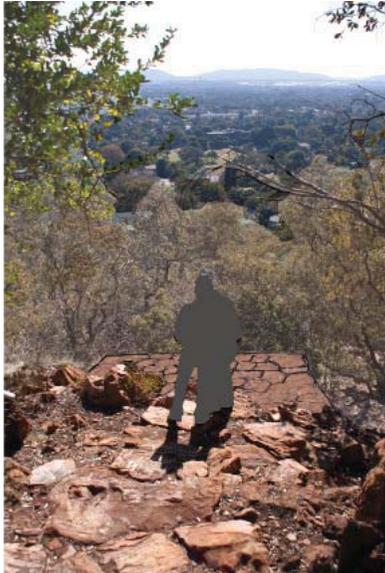
## Symbol (tree)

The proposed hiking trails start at the Wonderboom tree. Walking from the tree which is now contemporary into the past, and back to the present, most recent time, with the tree still being part of it, one can say that the branching of the hiking trails symbolises the branches of the tree which links history with the present. See illus 135.

Thus, the hiking trails take the shape of the Wonderboom tree (an icon of history, time and nature) which branches out from the location of the Wonderboom tree (revealing the historical layers with the different time zones) towards the more recent time era (the fort on top with the new landscape intervention - most recent).



Illus. 135: Sketch showing the narrative intention - symbol (Author: 2011)



Illus. 136: Concept image of a look-out point on the hiking trail (Author: 2011)

### 6.5.6.1 Hiking trails

#### Biophysical hiking trail

The biophysical hiking trail informs the visitor of the site's natural phenomena.

It foccusses the attention on the specific vegetation which grows in this Gold Reef Bushveld biome, and on the geology of the site.

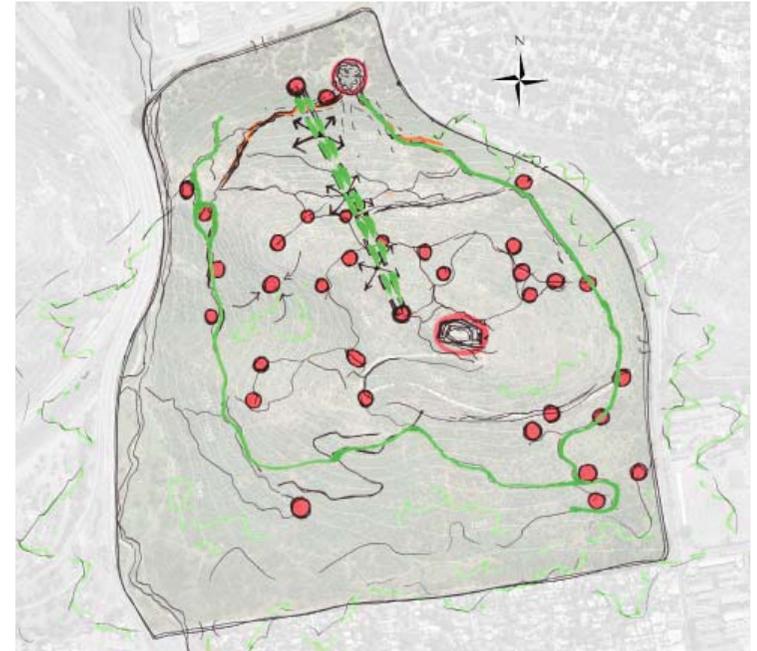
Trees with interesting facts and cultural significance can be seen along this trail. The *Sclerocarye birrea subsp. caffra*, *zisiphus mucronata*, *Ficus salicifolia*, *Senegalia nilotica*, *Dichrostachys cinerea*, *Pappea capensis* and *Searsia lancea* to name a few. Refer to page 80-83 heading 5.3.1.6.1 for information on the different trees and their cultural significance.

View points along the way direct the visitor's view to the intended view or information which the designer wanted to convey. Other view points will clearly show the contrasting elements such as the nature vs. city aspect.

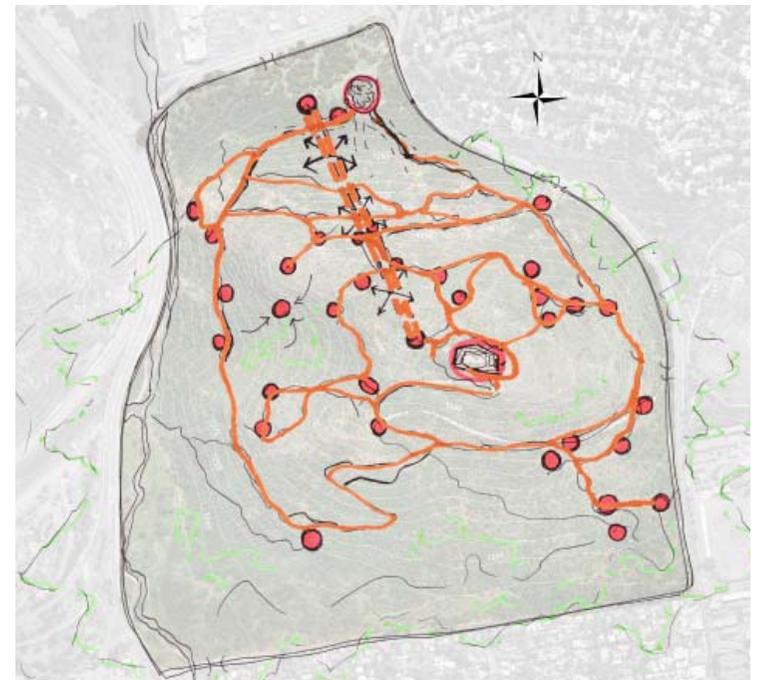
#### Cultural hiking trail

The cultural hiking trail creates awareness of the different time eras on site. The visitor can decide whether he wants to discover all the time eras on the hiking trail or whether he just wants to experience a specific time era, namely Military history.

This possibility of choosing what you want to experience provides for the accommodation of different interest groups. The trail is educational and informs the visitor of the different historic layers.



Illus.137: Biophysical hiking trail plan (Author: 2011)



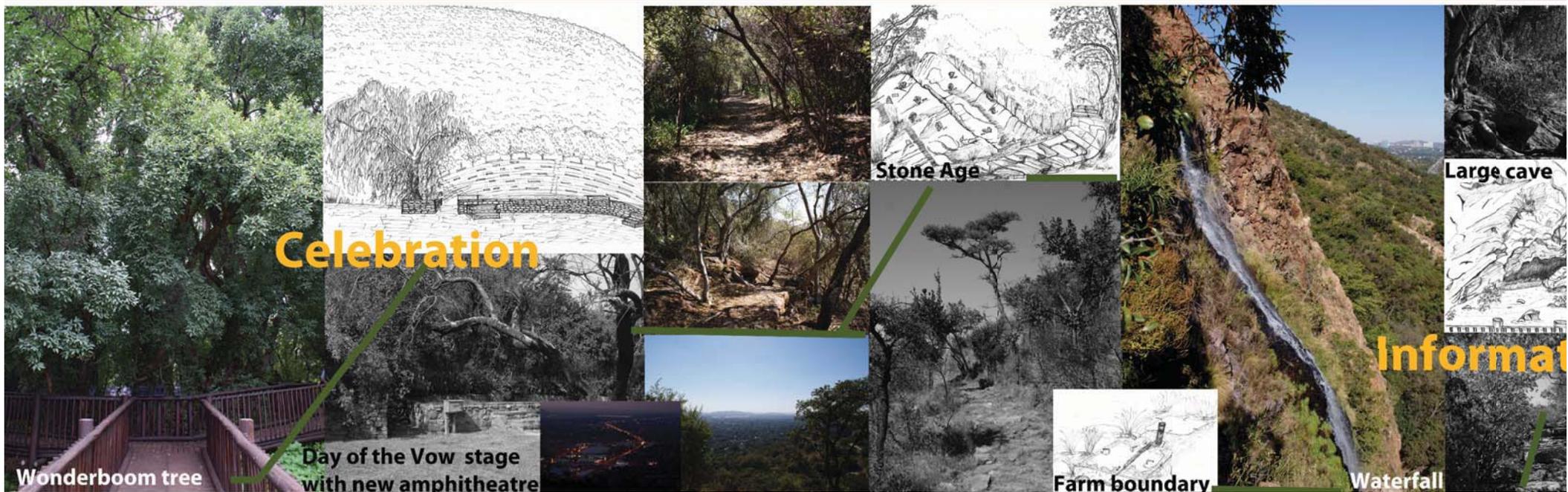
Illus. 138: Cultural hiking trail plan (Author: 2011)



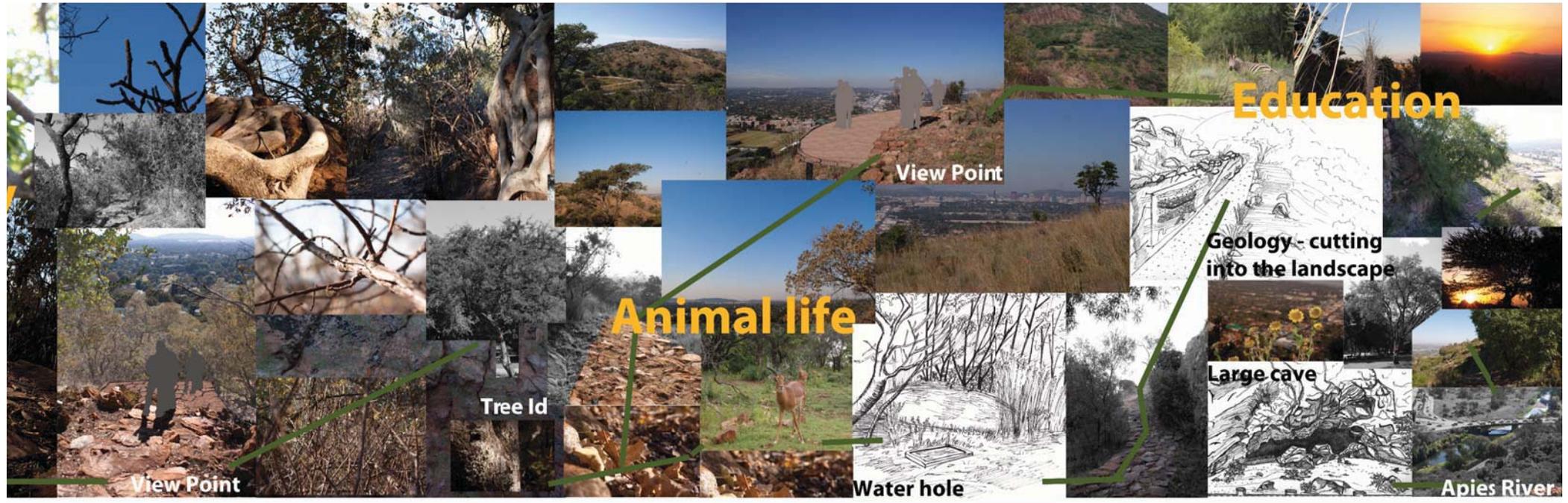
Ilus. 139: Concept image of a viewpoint along the new proposed hiking trail (Author: 2011)

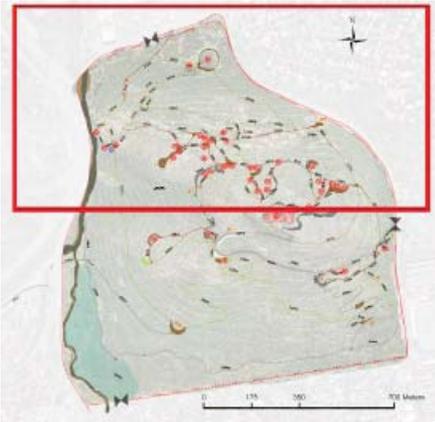


*Illus. 140: Concept image of a viewpoint along the new proposed hiking trail (Author: 2011)*



Illus. 141: Visual presentation of the two proposed hiking trails, namely; biophysical and cultural hiking trail (Author: 2011)





**LEGEND**

- Lookout points and nodes
- Existing 1974 hiking trail (2.64Km = 47min)
- Walkway in the air

- Military features hiking trail (3.2Km = 1hr 12min)
- Other historical features hiking trail (4.62Km = 1hr 32min)
- Existing hiking trail (3Km = 1hr)
- Existing dirt roads (2.07Km = 40min)

- Iron Age features hiking trail (3.24Km = 1hr 5min)
- Stone Age features hiking trail (2.7Km = 54min)
- Hiking trails linking other trails
- Apies River



**Walking time per distance**

Average walking speed: 3.2km/h = 30min per km and 3min per 100m

Average walking speed of : 4.8km/h = 20min per km and 2min per 100m

Brisk walking speed: 6.4km/h = 15min per km and 1.5min per 100m

Average jogging speed: 12.8km/h = 7.5min per km and 0.75min per 100m

**Cultural significance of the historical artifacts/features**

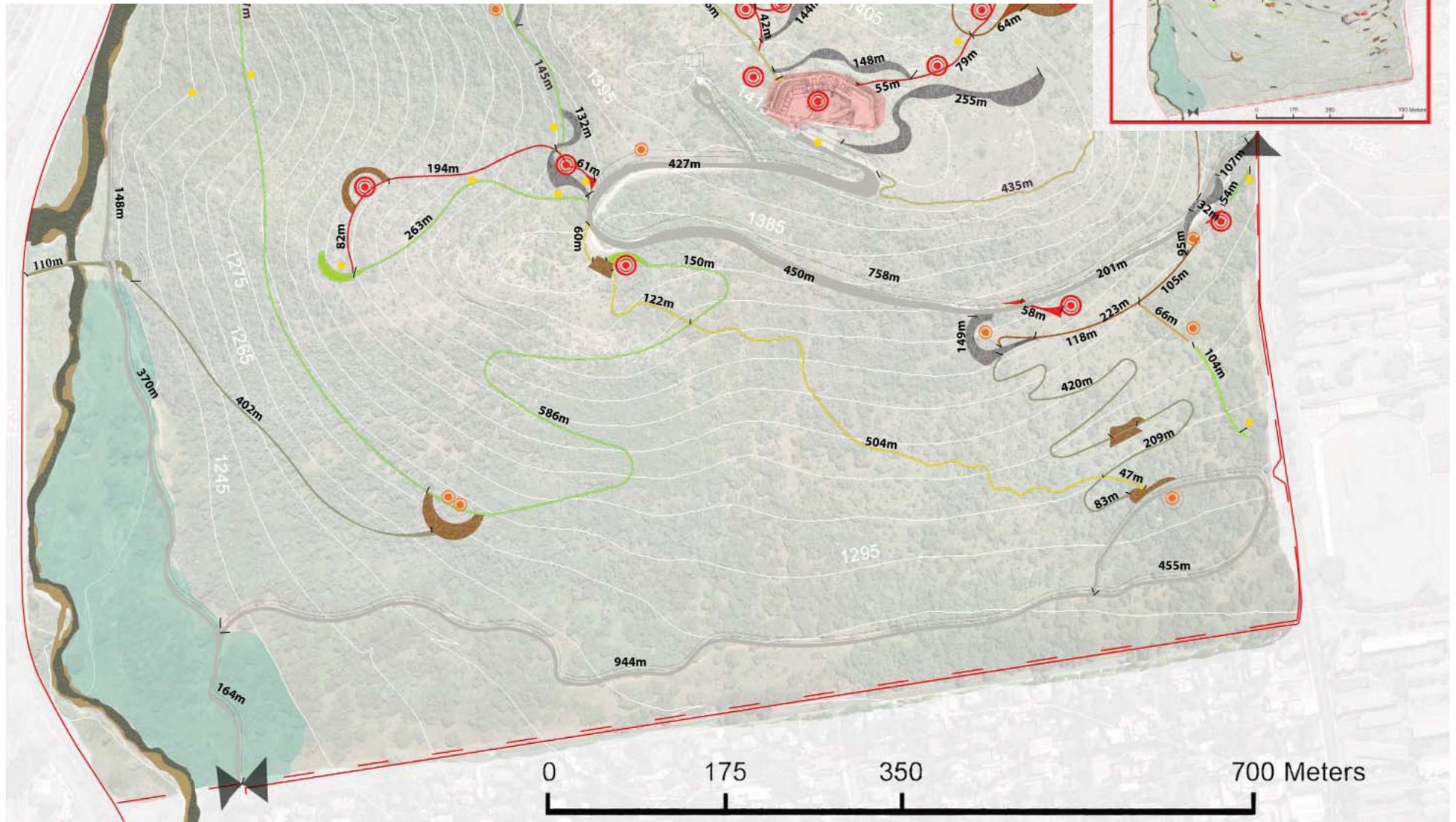
- High cultural significance
- Medium cultural significance
- Low cultural significance

Illus. 142: Proposed hiking trails, namely; biophysical and cultural hiking trail. Top part. (Author: 2011)

## New proposed hiking trail

See both illus. 142 & 143. The entire map was divided into two parts for it to fit on the page and to enhance legibility.

The map indicates the different heritage sites, their cultural significance levels, the new proposed hiking trails with their distances and average walking times. Viewpoints and rest areas have also been indicated on the map.



Illus. 143: Proposed hiking trails, namely; biophysical and cultural hiking trail. Bottom part. (Author: 2011)



*Illus. 144: Aesthetic detail provided by nature forms the character of the site and inspired the designer. These details will be discovered by the visitor on the hiking trails (Author: 2011)*

### 6.5.6.2 Signage and text

The author aims to tread lightly and, in a discreet manner, inform the visitor through the landscape. The visitor would be made aware of the hiking trail he is on by means of small steel plates on the ground or against rocks along the pathway, with the time era and date engraved on it. Refer to illus. 145.

To ensure that the visitor is fully informed of what is on site and how to experience it, a brochure would be handed to the visitor at the entrance.



*Illus. 145: Example of the signage steel plate on the hiking trails. This is an example for the military artefacts sites. It differs for each time zone. (Author: 2011)*

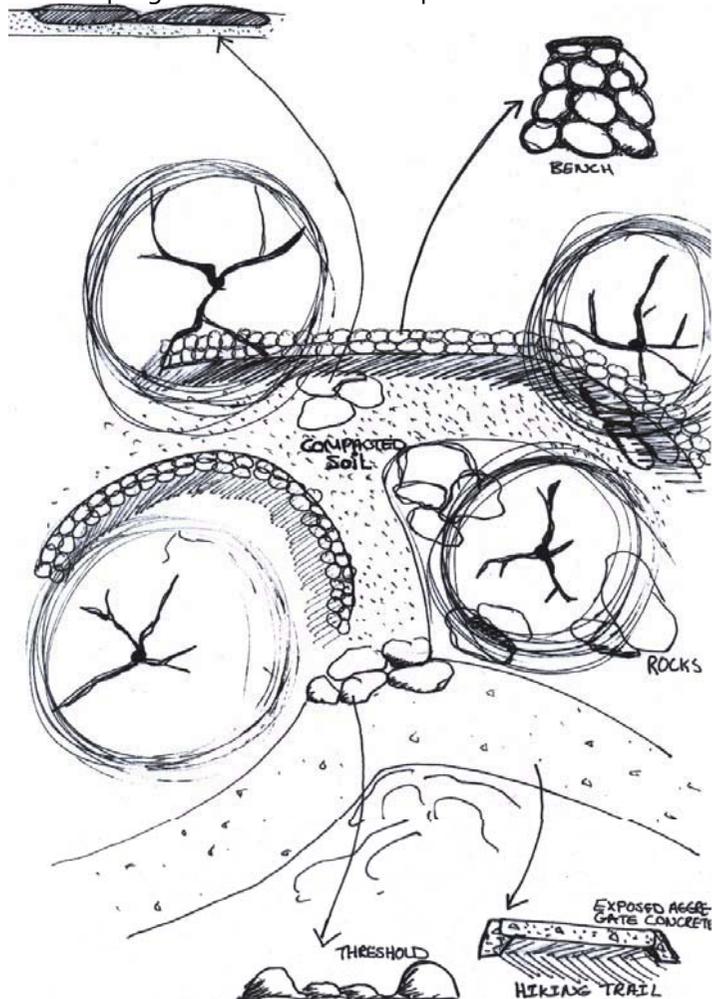


*Illus. 14.6: The contrasting aspects of city and nature; culture and nature can be clearly distinguished in this photograph (Author: 2011)*

### 6.5.6.3 The different time zones and landscape progression

#### Stone Age sites

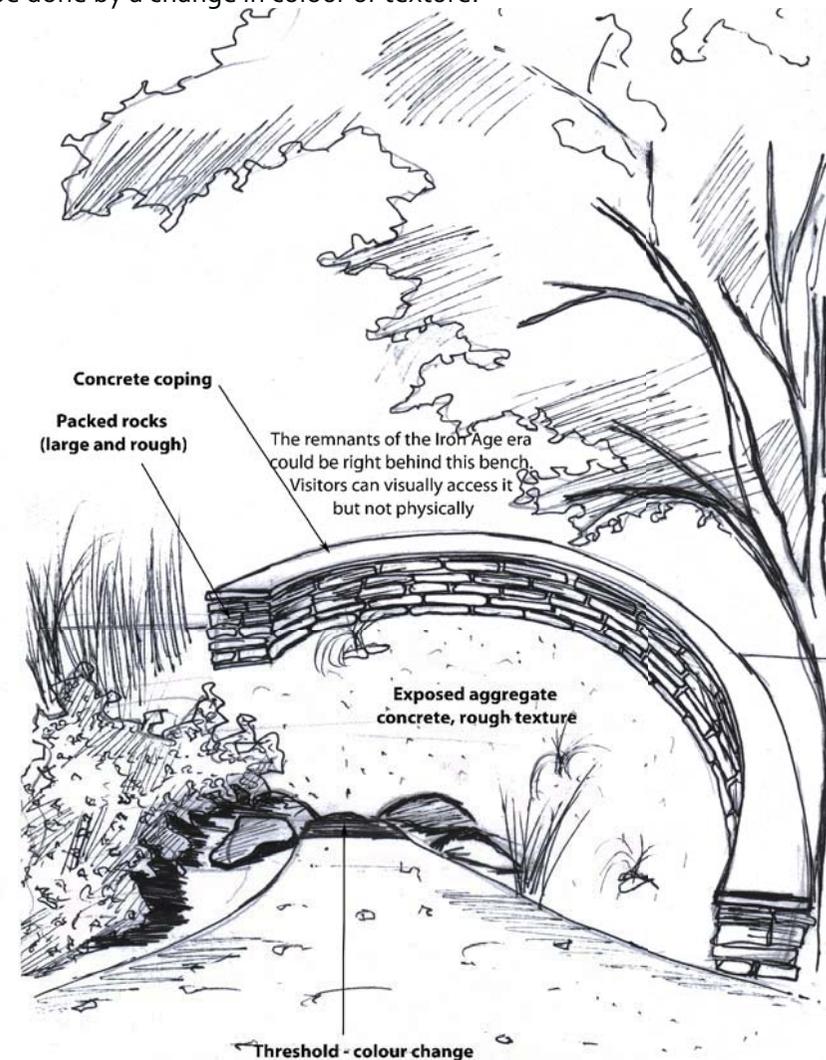
This is an example of the approach to one of the numerous stone age sites on site. Large rocks with rough textures can be used in the landscape elements such as seating walls and signage etc. The rocks are roughly packed with concrete poured on top to create seating surfaces. A change in surface material such as compacted soil will announce that the visitor is entering a specific time zone. This can, for example, be a stone threshold that the visitor crosses. This celebrates the progression in the landscape



Illus. 147: Example of the design approach to the Stone Age sites (Author: 2011)

#### Iron Age sites

This is an example of the approach to one of the numerous Iron Age sites on site. The circular seating wall symbolises the indigenous people's circular enclosures. The rocks are neatly packed and a concrete coping is placed on top. The rocks are large and rough. The threshold can announce the change in time eras - this can be done by a change in colour or texture.



Illus. 148: Example of the design approach to the Iron Age sites (Author: 2011)



*Illus. 149: Presentation of one of the fortification walls (Author: 2011)*

## Military historic sites and features

This is only one example of approaching the military features. Refer to illus. 149 which indicates a fortification wall.

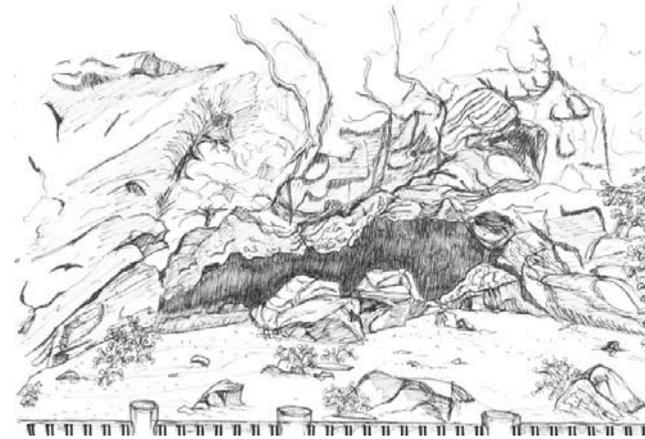
This is an example of one of the new proposed spaces at the Wonderboom fort. The approach to the fort was more contemporary to indicate the progression in the landscape over time. In this area elegant steel profiles are used with eucalyptus lathes to form a pergola structure. The benches were made from steel angles and steel mesh with rocks crushed into smaller pieces and neatly packed inside the steel mesh basket. A smooth concrete coping is cast on top. The surfaces are all exposed aggregate concrete which varies in texture and colour.



Illus. 150: Example of the design approach to the military historic features (Author: 2011)

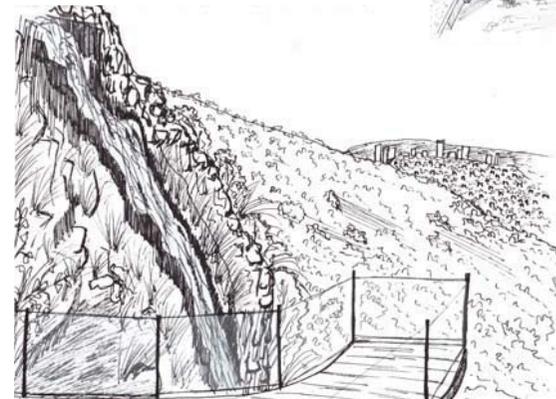
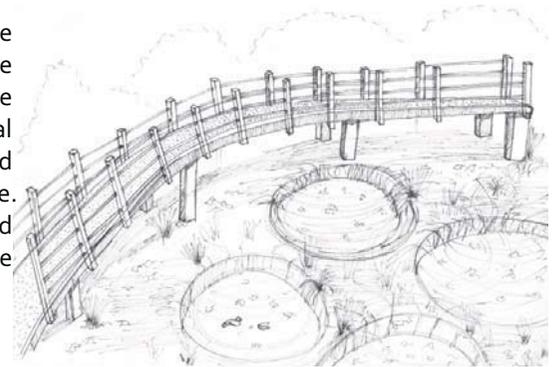
## Historic features

The following are examples of the author's approach to different historical features. These are only a few examples.



Illus. 151: Example of the design approach to the large cave. Visitors can come close to the cave but they can't enter it. Only visual access is provided. People are guided by a timber boardwalk. Notice the rough look of the boardwalk. (Author: 2011)

Historic features such as man-made holes as seen on the right, created the opportunity to take the visitor into the air on an elevated boardwalk. Visual access from all angles is provided, and a better understanding of the feature. Notice the rough, large bulky look and feel of the raised walkway (landscape progression).



A boardwalk is curved and is designed in such a way that the visitor can fully experience the waterfall. Notice how much lighter and more elegant the boardwalk is in comparison to the one at the four man-made holes (landscape progression).

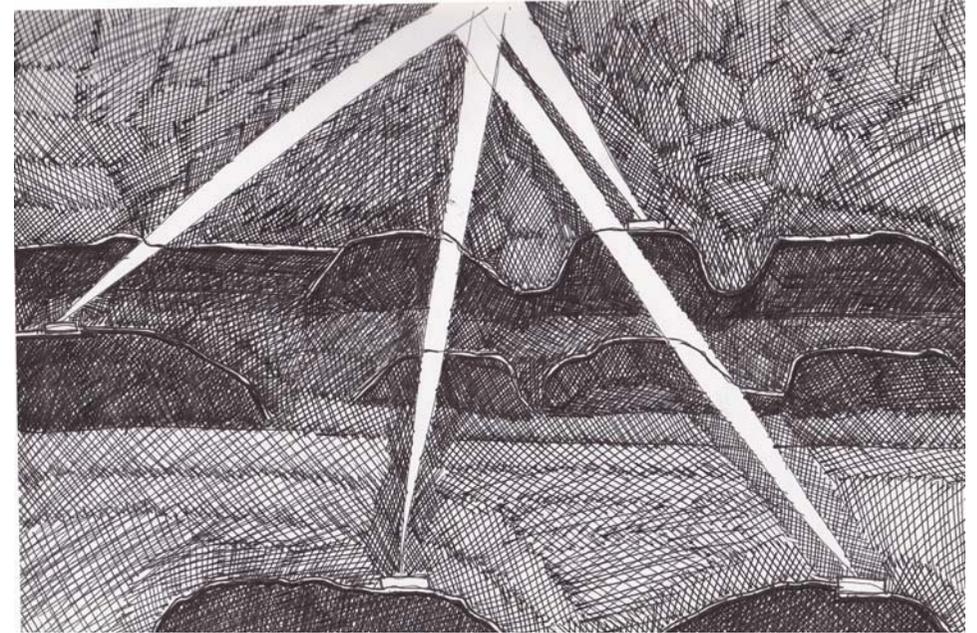
Illus. 152: Example of the design approach to the man-made waterfall (Author: 2011)



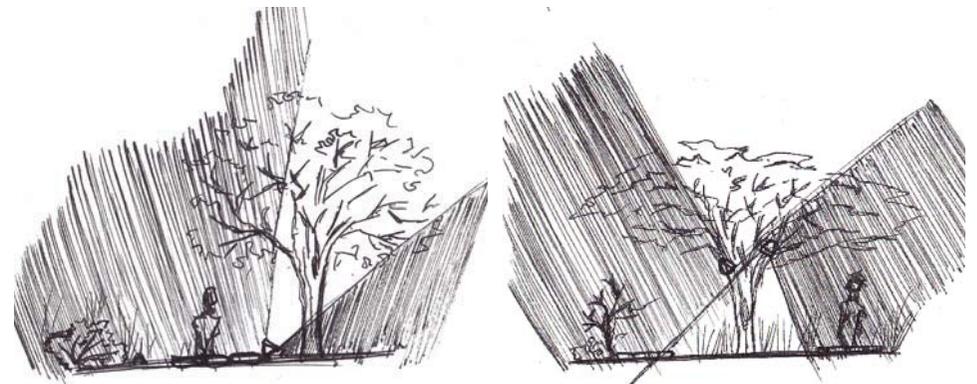
*Illus. 153: View towards the largest Stone Age site from Wonderboom Nature Reserve (Author: 2011)*

## 6.5.8 Design considerations

1. The historic heritage sites (history layers) - People should be made aware of the sites and different time eras as well as the significance thereof.
2. Access to the heritage sites - The visitor can come close to the sites and be informed of what the significance is.
3. Design thresholds - The different time eras are presented through a landscape progression to enhance the visitor's experience and create a clear distinction between time zones as well as old and new.
4. Conservation of the nature reserve.
5. Rehabilitation of the natural attenuation area into a wetland again.
6. Access for people with disabilities - Consider a cable car and golf cart road and possible ferri-culars between some view points.
7. A different access point than Voortrekker Road - Voortrekker should only be used as a service road.
8. To ensure awareness and experience during the proposed moon walks - light mapping (experience from the cable car) and floodlights can be used. Refer to illus. 254-256
9. Enhance the awareness of its environmental significance and the protection thereof.
10. The heritage features should be unobscured so that people can notice and access them.
11. Access to the different heritage sites is important to create awareness and interest.
12. Education and communication of the history and different aspects on site.
13. The site is random and disconnected, one can apply the following principles; coherence - with the directed pathways and view points - and complexity - with the detail, different texture and colour pathways, signage etc. Which will evoke interest and discovery.



*Illus. 154: The floodlights which shine from each fort once a year on reconciliation day to create awareness of the four forts of Pretoria (Author: 2011)*



*Illus. 155: Lighting up into the trees and moonlighting to create awareness and give some mystery (Author: 2011)*



*Illus. 156: View of the Wonderboom tree during the winter months. (Author: 2011)*

## 6.6 Wonderboom Nature Reserve master plan development

### 6.6.1 Introduction

#### The master plan will aim to:

1. Respond to the contemporary park (resort) and
2. Respond to the needs of the people in terms of a regional park
3. Present the idea of progression through time, in the landscape; from primitive (large/rough) to sophistication (smaller/refined)
4. A timeline within the park area, which starts to tell the story of the site
5. The idea of Wonderboom Nature Reserve being a nature island in the middle of Pretoria, a sanctuary. Its nature being a place of refuge, escape
6. Create access to the biophysical icon, namely the Wonderboom tree
7. Give access to the Wonderboom Nature Reserve and fort on top
8. Create awareness of the historic layers (starting at the park)

#### What is a regional park?

A regional park can be defined as a larger park that provides active and passive recreational opportunities for all city and regional residents. Accommodate large group activities.

It serves an entire region. A regional park is 202m<sup>2</sup> or more in size.

#### The master plan will be explained under the following subheadings:

- A summary of the guidelines from the context analysis
- Site exploration (past and present)
- Program for the park
- Zoning of the different spaces (nodes)
- The different spaces/zones
- Pedestrian movement
- Vehicle movement
- Master plan development plans
- Final master plan

Table 5: Materials of the different time eras. (Author, 2011)

### 6.6.2 Analysis summary

1. The park also known as the resort is where the Wonderboom tree is located. This tree has both cultural and biophysical significance. (Refer to chapter 2 & appendix E)
2. There is an existing timber boardwalk in and around the tree with information plates.
3. The park is used as a regional park (refer to chapter 1).
4. This area is already disturbed and developed.
5. The current facilities should be upgraded. (Refer to chapter 5)
6. The remnants of the old Day-of-the-Vow stage is located near the wonderboom tree.
7. The park is accessed from Lavender road.
8. The service gate is also accessed from Lavender road. There are two gates.

Refer to illus. 158 (analysis plan of the park area)

#### Site exploration (past and present)

##### The material used in the past:

If one looks at the materials used during the different time eras, one can clearly see the change in sophistication or type of material being used. These same materials can be used in the landscape to place emphasis on the past materials and stimulate memory of past events, cultures etc. The knowledge of this change of sophistication or use in material can also be incorporated in the design. Refer to page 129 (park narrative) and see table 5 for the materials listed according to the different time eras.

Stone Age Materials	Iron Age Materials	Materials used during the Pretoria fortification (1800's)	Existing materials on site
Stone tools from quartzite	Iron ore	Sand stone	Quartzite rocks
Use the artefacts found on site (display)	Crops growing/agriculture	Metal (doors, window hatches, structures etc.)	Indigenous trees
Tools: hand axes, cleavers, scrapers, stone flakes, stone	Huts small villages, Charcoal furnaces	Raw bricks	Invader plant species
Expression of art, rock art, ostrich eggshell beads, flasks, pendants.	Huts were cylindrical, mud plastered, coarsely thatched conical roof	Aggregate concrete, cement	Planting – with cultural significance – use in the design to educate and stimulate memory.
Bone points and stone inserts used in composite poisoned arrows	Thorn tree cattle enclosures branches	Lime (white, pink and beige)	
	Stone walls	Red polish	
	Pottery thinner, pattern of notches around the lip and broad bands of different colouring around the circumference		
	Ornaments - religious or superstitious significance		
	Basket weave, pottery, wooden spoons, iron knives		



*Illus. 157: Part of the park next to the Wonderboom tree and the material pallet of the existing materials on site. (Author: 2011)*



Quartzite

Quartzite

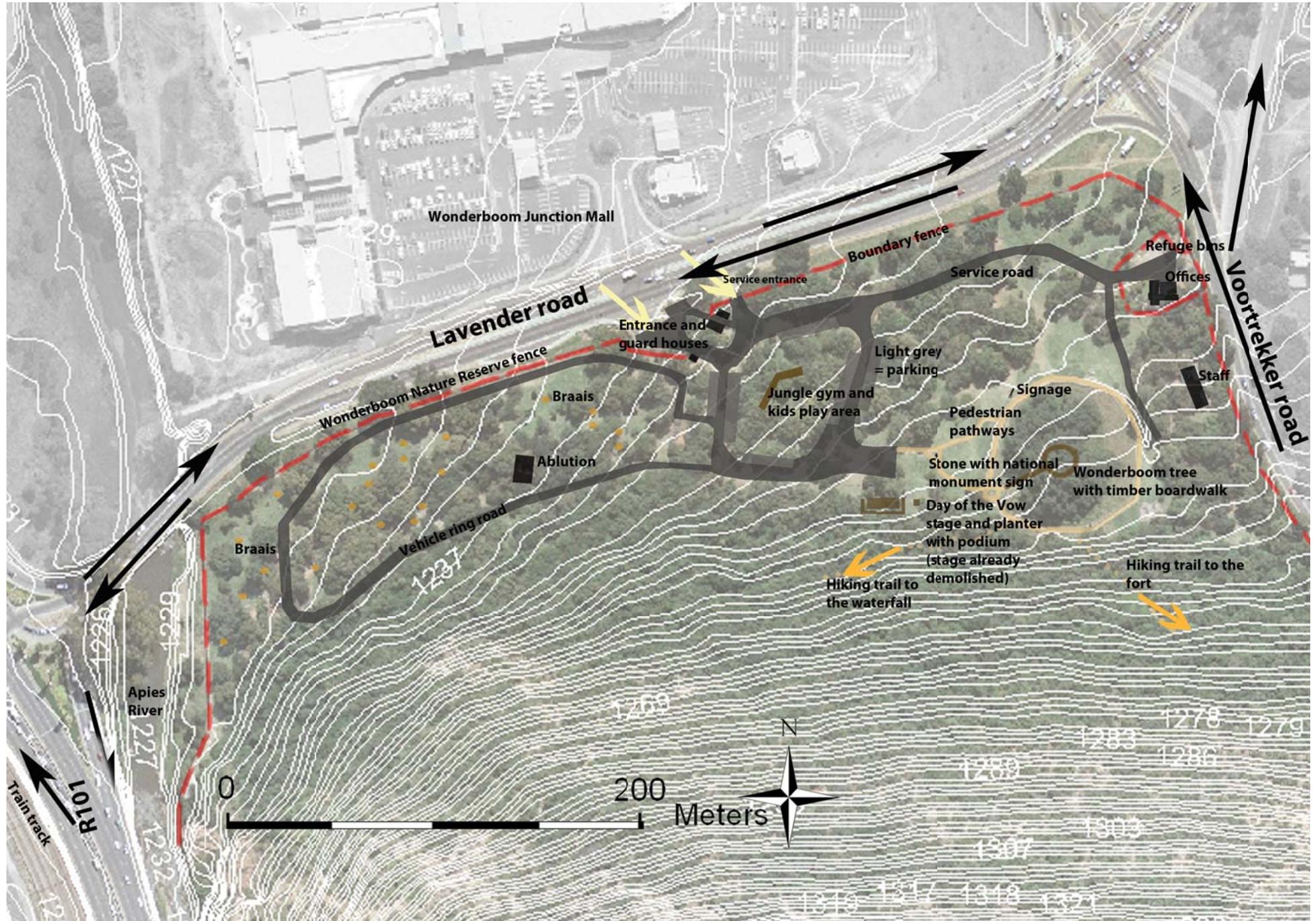
Thatch grass

Shale and sandstone rocks

Steel

Concrete

Raw bricks



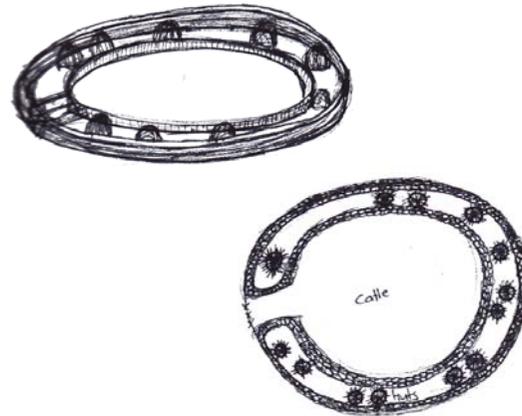
Illus. 158: Analysis plan (Author: 2011)



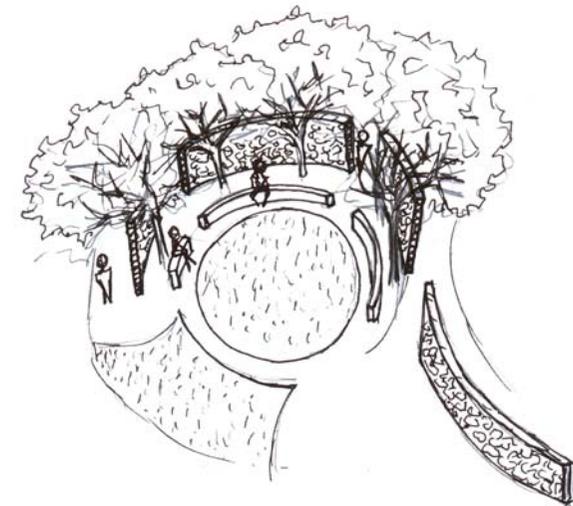
Semiotics

6.6.6 Examples of the different spaces in the park and the principles and approaches used

6.6.6.1 Entrance, parking and arrival area



*Illus. 160: Shape of circular enclosure which informed the design at the entrance and market space. It consists of two circles forming a ring. The cattle was in the middle with the huts on the outer circle. (Author: 2011)*

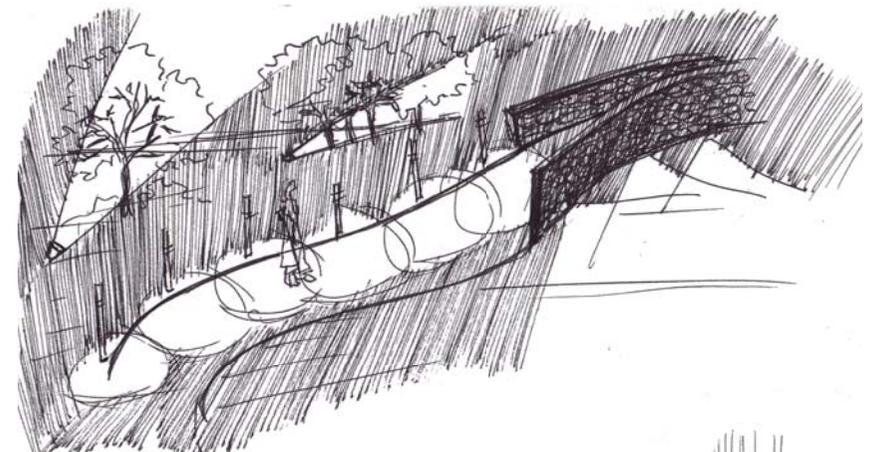


*Illus. 161: Arrival area with the two circular shapes. The visitor enter through the one and the second one is formed by a low circular bench wall. From here the visitor distribute further into the park. (Author: 2011)*

Access & Awareness



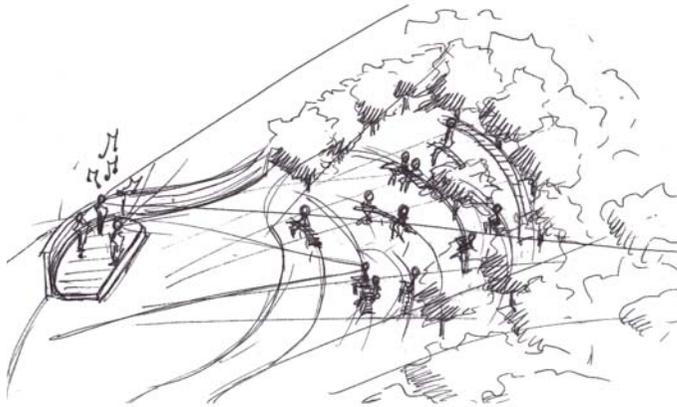
*Illus. 162: Lighting along the pathways (wall lighting) (Author: 2011)*



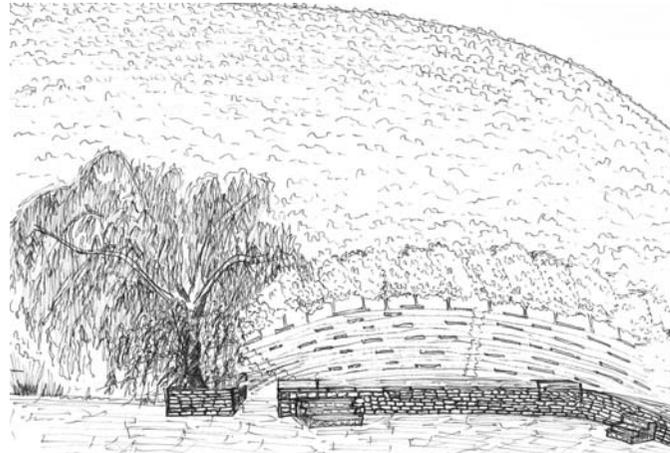
*Illus. 163: Lighting along the pathways (wall lighting) and lighting into the trees (Author: 2011)*

### 6.6.6.5 Amphi theatre

## Refuge & Semiotic

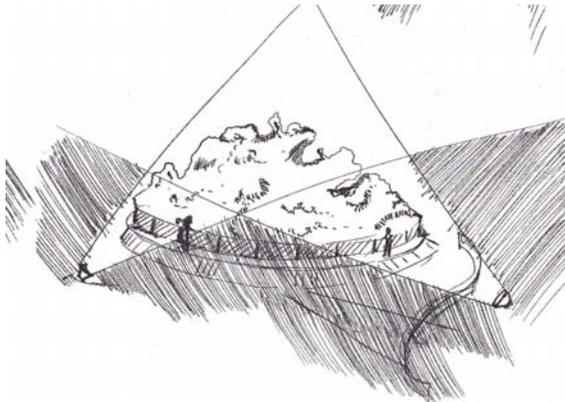


*Illus. 164: New proposed amphi theatre at the park at the location of the old Day-of-the-Vow stage. This drawing indicates the idea of refuge vs. prospect at the amphi theatre (Author: 2011)*

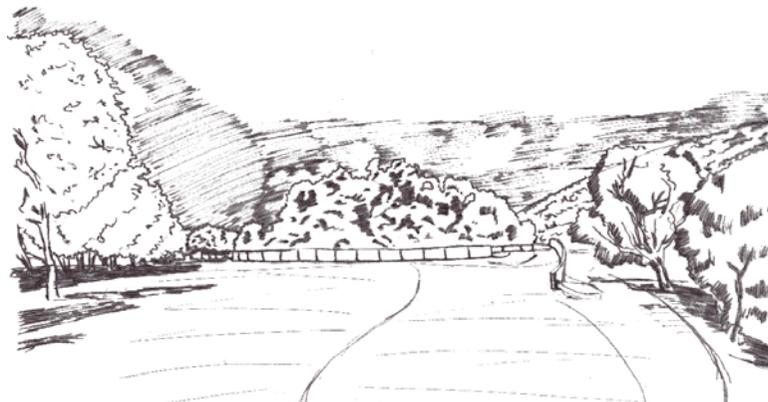


*Illus. 165: New proposed amphi theatre at the park at the location of the old Day-of-the-Vow stage. (Author: 2011)*

### 6.6.6.6 Wonderboom tree



*Illus. 166: Thumbnail indicating the spot lighting used at certain times to light up the Wonderboom tree to place emphasis on the natural icon and create awareness thereof (Author: 2011)*

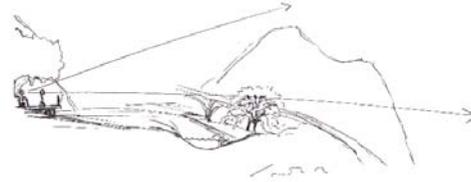


*Illus.167: Thumbnail indicating the view towards the Wonderboom tree is open and without obstruction (Author: 2011)*

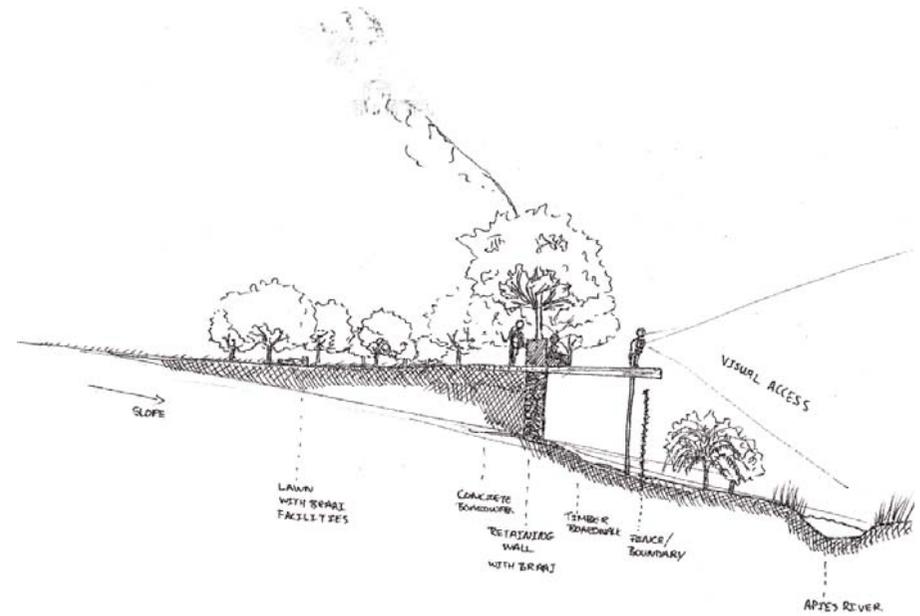
Access

6.6.6.8 River boardwalk

*Illus. 168: Thumbnail of the boardwalk at the river indicating the visual access without the physical access (Author: 2011)*



*Illus. 169: Thumbnail explaining the refuge vs. prospect theory (Author: 2011)*



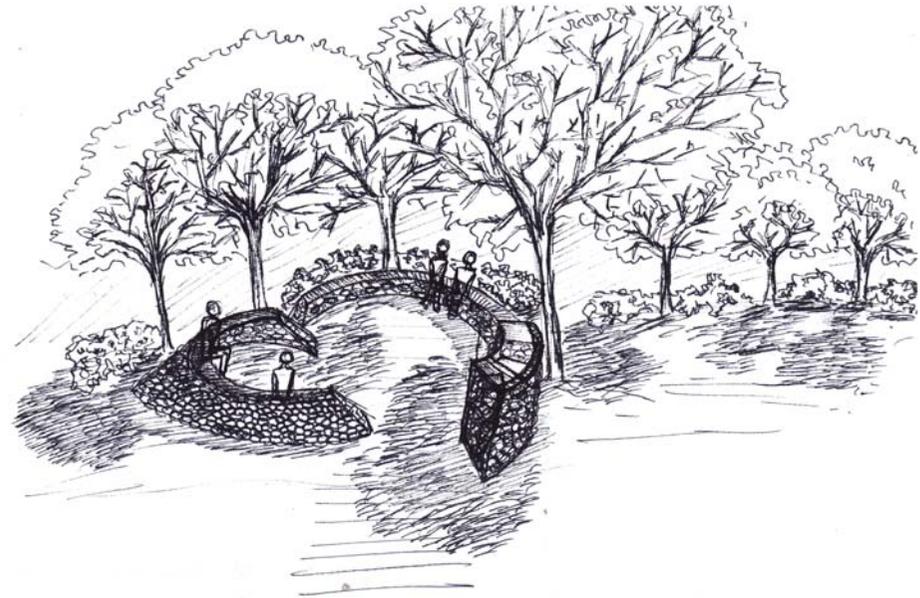
Semiotic

6.6.6.9 Braai and picnic



*Illus. 170: The circular enclosure which inspired the author to use the shape as semiotic resource in the design. (Author: 2011)*

*Illus. 171: Braai areas. The braai areas take the shape of the circular enclosures of the indigenous people, to stimulate the visitor's memory. This is used as a semiotic resource in the landscape. It creates meaning, identity and awareness. (Author: 2011)*



### 6.6.6.3 Timeline

The timeline runs through the park and starts at the gathering area. The timeline is constructed from rock walls which differ in height and texture (namely large rocks or packed etc) to indicate the landscape progression (different time eras). The timeline splits into two, namely the biophysical history and the cultural history. Information will be displayed on these walls.



Illus. 172: Master plan (Park area) - timeline (Author: 2011)

**Park narrative**

Nature of the park area = Seen as a picnic place, escape from the city for the Voortrekkers - links to its original meaning and association – this is why the park area will cater for people to escape from the city, come and relax to enjoy a picnic or braai.

But at the same time experience the history of the area through a timeline which will start from the arrival area and continue to the Wonderboom tree and new proposed amphi theatre. From there the two hiking trails, namely the biophysical trail and cultural trail will start.

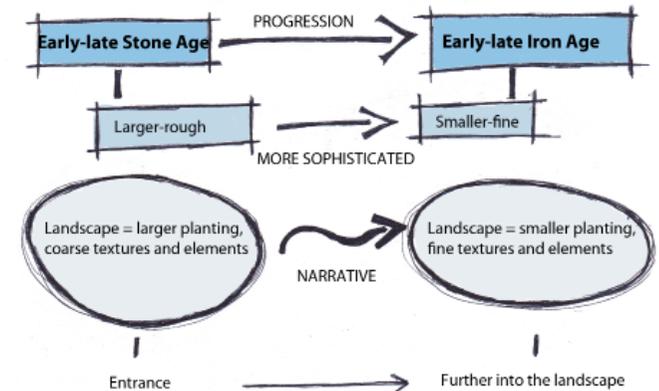
Shapes and forms of the indigenous people are used to create the spaces and experience of the visitor. One will experience the passing of time through the landscape progression (elements used), in the park, up the mountain until one reaches the fort on top which will highlight the most recent times. The circular enclosure forms the sheltered areas, braais and pathways as well as market space.

**The park can be divided into two zones:**

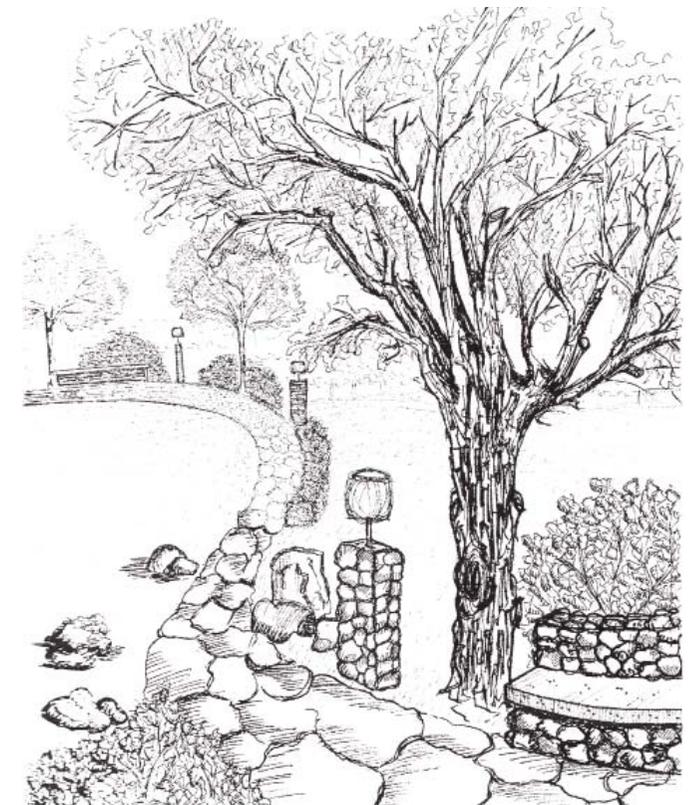
1. Recreation
2. History (narrative)

**Two narratives:**

1. Timeline extending through the park, ending at the Wonderboom tree (climax) and from there the narrative splits into two stories, namely the biophysical and cultural trails.
2. 'Skyline' narrative - the cable car:
  - The visitor can explore the northern slope of the mountain from the sky.
  - Certain historic information and directed views can be provided in the cable car (the view towards the outside of the cable car can be intentionally directed through design and openings.)
  - The cable car will stop just below the plateau to prevent the visitor from experiencing the southern slope as well. The visitor can later discover the rest of the views at the fort viewpoints and on the biophysical hiking trail.



*Illus. 173: Explaining the progression in the landscape concept (Author: 2011)*



*Illus. 174: Sketch to explain the progression in the landscape concept (Author: 2011)*

## 6.6.7 Pedestrian movement

Pedestrians have the opportunity to have a fun stroll, walk directly to the braai facilities or follow the timeline for educational information. Depending on their interest.



Illus. 175: Pedestrian movement (Author: 2011)

## 6.6.8 Vehicle movement

The visitor can access the parking and braai facilities by motor vehicle. The golf cart shuttle has a service route which goes all the way to the fort or takes the visitor to the cable car building. The service car has the same designated service road. Enough space is provided for large busses to enter the reserve (park) and drop the visitors at the drop-off area and exit the reserve. Refer to plan below.



Illus. 176: Vehicle movement (Author: 2011)

## 6.6.9 Master plan development: Concept plans



*Illus. 177: Master plan concept plan 1. (Author: 2011)*



Illus. 178: Master plan concept plan 2 (Author: 2011)



## 6.6.11 Conclusion

The aims mentioned earlier for the framework of Wonderboom Nature Reserve were accomplished as follows:

The cultural and biophysical aspects of Wonderboom Nature Reserve were revealed by providing access to the different aspects namely, the two caves, Stone Age- and Iron Age sites, Wonderboom tree, the waterfall, fort and surrounding military remnants. In this way the visitor was made aware of each historic site. The author made use of a didactic narrative to reveal the site's significance and tie the different 'chapters' - time zones - together to form a unity; a sequence of events. Hiking trails lead to the different heritage sites (time zones). Each time era is addressed differently to present the idea of progression in the landscape (there can be a clear distinction between, for example Stone Age and Iron Age because some progression took place, the culture became more sophisticated) and gives a clear distinction of where one time era ends and the next begins. This is also done by thresholds (change in pathway texture, colour, shape and size of material). The visitor is made aware of the different contrast of the site by means of the hiking trail, different emphasis on different views and element. For example the visitor will be aware of the contrast between nature and cultural elements, the city and development vs. the nature reserve in which the visitor finds himself etc.) The 'timeline' running through the site with the different time zones which reads as different 'chapters' in a book, is symbolically distributed from the Wonderboom tree (a past element, representing past and contemporary) and branching out linking all the time zones towards the fort, which represents the military time era and also the most recent time with the new intervention. The visitor is completely aware of the Wonderboom Nature Reserve being an island surrounded by cultural development. The framework proposal provides access to the fort via a cable car (skyline narrative where the visitor will be educated about the heritage and history within the cable car and directed to certain important views), hiking trails and a golf cart shuttle, depending on the visitor's interest. Conservation and rehabilitation of the southern slope will be implemented as well as the rehabilitation of the natural attenuation area to become a wetland.

The aims mentioned earlier for the master plan of Wonderboom Nature Reserve were accomplished as follows:

The focus was to respond to the contemporary park in terms of a regional park to cater for the visitor's needs. This was done by upgrading the existing facilities, and to provide for more parking and bus access. A golf cart shuttle was introduced to get people to the fort and as service car for the Wonderboom Nature Reserve. A cable car was also introduced to create access to the fort, heighten visitor interest etc. Braai and picnic facilities are provided, a market place (once again the semiotic resource of circular walls and enclosures were used to shape the market place and stimulate the visitor's memory and experience) as well as visual access to the Apies River via a boardwalk. Semiotic resources are introduced by means of landscape elements such as the braai element – a circular enclosure shape stimulates the visitor's memory of past eras. The idea of pro-

gression is also introduced in the park area. This was done by means of circular shapes (different from the fort which used straight lines), material, texture, shape and size used in the timeline wall representing the different time eras. Planting textures and shapes can also be used to indicate progression. The park is designed so that the visitor can come to relax away from the city as was intended for the reserve's past existence. The place can be experienced as being a refuge and an escape. The visitor is educated and made aware of the different historic layers on site by means of a timeline, a wall running through the park leads the visitor on a historic journey.