

06

Design

6.1 Introduction

Nektropio is a narrated landscape that leads people through different kind of sustainable corpse disposal methods, with the purpose of making them aware of their own mortality and their part in the greater cosmos. The previous chapter discussed this narrative as well as the concept of having a landscape shaped through cutting into it. The conceptual form was generated through juxtaposing the hilly topography of the site. This chapter explores the application of the narrative, concept, and conceptual form on the site to develop the design of Nektropio.

Figure 75 shows the proposed area for the design within the DNR.

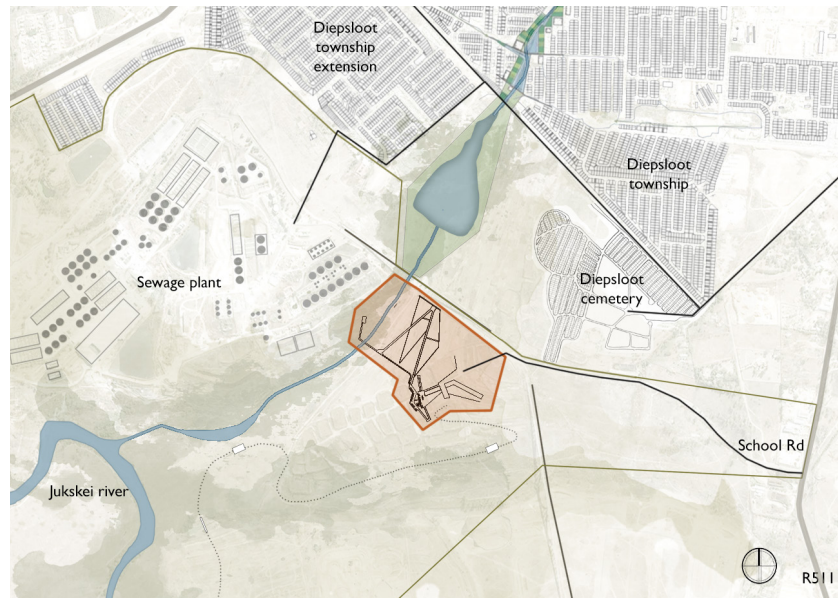


Figure 75. Orange area indicates the place of intervention/ the core of the DNR (Author 2015).

6.2 Conceptual form to physical form

Following the conceptual form model, Figure 76 and concept drawing, it was applied to site. Figure 77 illustrates the first attempt at organizing Nektropio as a clustered organization consisting of repetitive spaces sharing a mutual shape. This first attempt was necessary, but is overcomplicated, goes against the contours of,

and lacks the idea of cutting into the landscape to shape it.

6.3 Development of the core/ activity hub

The activity hub was designed first. The activity hub is the core of the DNR, as discussed in the framework for the reserve in chapter four. The programme of the hub accommodates both the nature reserve as well as the burial site. The programme was divided according to sacredness, refer to table on page 54 in Chapter four. The sacred activities needed a physical separation from the non-sacred activities. The ridge line acted as the point of separation; everything east of the ridge is non-sacred public and everything west of it sacred public, Figure 78. On the ridge itself, the sacred private activities were placed, Figure 79. This basic layout paved the way for a comprehensive functional diagram, Figure 80, circulation diagram, Figure 81, and model, Figure 82.

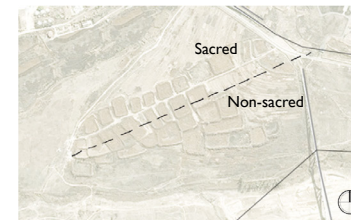


Figure 78. The ridge line separates the sacred from the non-sacred activities (Author 2015).

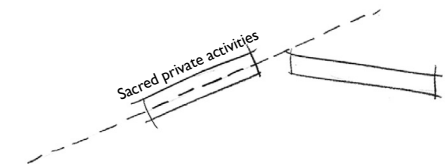


Figure 79. The ridge line separates the sacred from the non-sacred activities (Author 2015).

Figure 83 illustrates a large cut, resembling the repetitive shapes of the conceptual model, was made in the landscape to accommodate two buildings. Between the two buildings, there is an orientation space with a view over the reserve. The building to the east of the ridge contains an information center, a workshop where the caskets are woven, a restaurant, and a venue. The building on the ridge contains the procession facilities, a chamber where the corpse is placed inside of the casket, a room where the deceased's body can be viewed for the last time, and a chapel. Nektropio, which is not part of the hub lies west of the ridge. The circulation of the hub's different users is illustrated in Figure 84, the users include a funeral attendee, a nature reserve visitor, and a corpse. The core allows for a variety of people to use the site at once for different functions without any of them clashing.

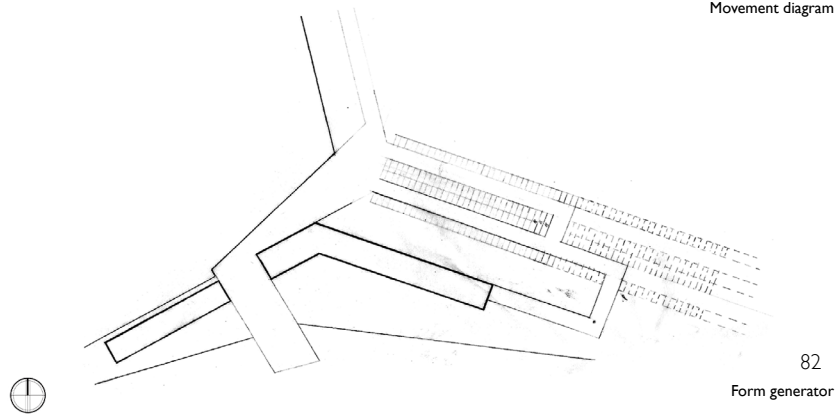
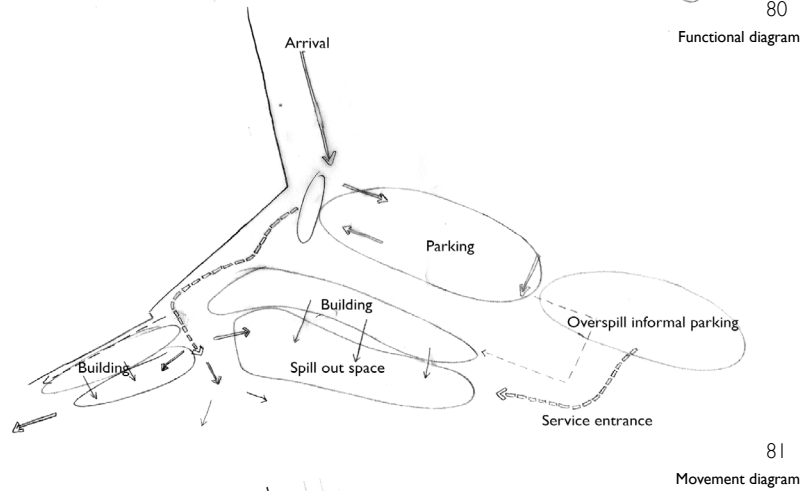
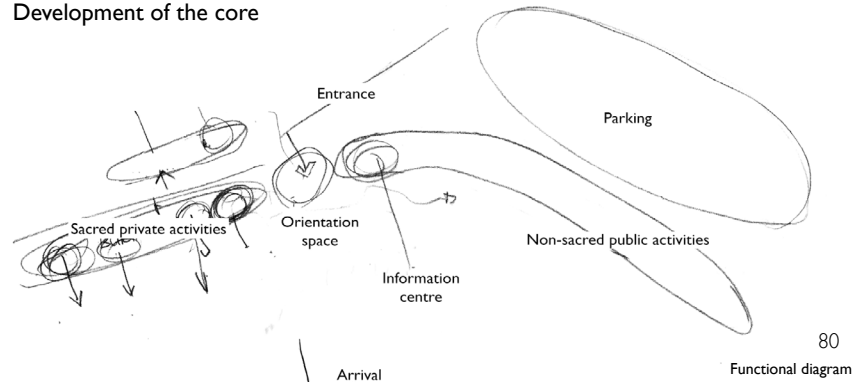
Refer to Appendix A for the core's water calculations.



OPPOSITE PAGE Figure 76. Concept mode: A landscape shaped through cutting into it (Author 2015).
Figure 77. Marquette showing a clustered organisation applied to the landscape of the DNR (Author 2015).



Development of the core



TOP Figure 80. Core's functional diagram (Author 2015).
MIDDLE Figure 81. Movement diagram. Showing arrival at core and dispersal (Author 2015).
BOTTOM Figure 82. Design of the core based on the ridge, functional diagram, and movement pattern (Author 2015).

OPPOSITE PAGE Figure 83. Model of core/activity hub showing places of different activities, sacred and non-sacred (Author 2015).

Chapel

Final body viewing by family

Body placed in woven casket/ urn

Promession room

Orientation space with view

Information centre

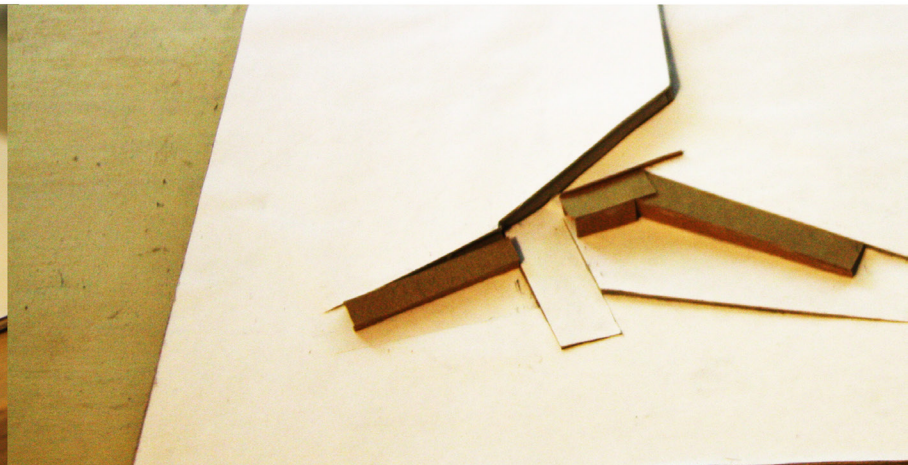
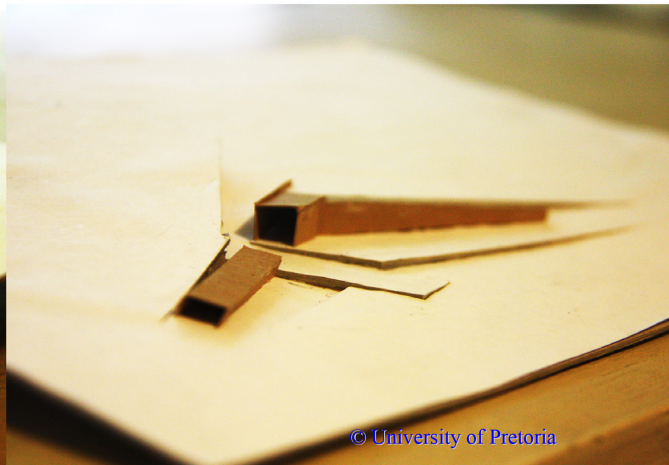
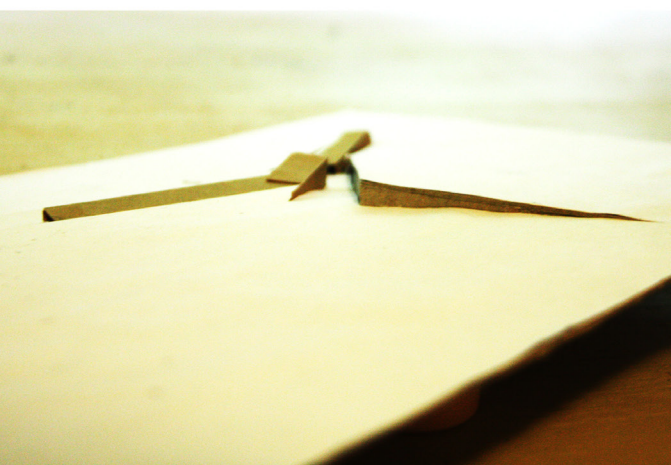
Workshop

Coffee shop

Venue

Lawn picnic area

RECEIVING
SHEET
1-12-50



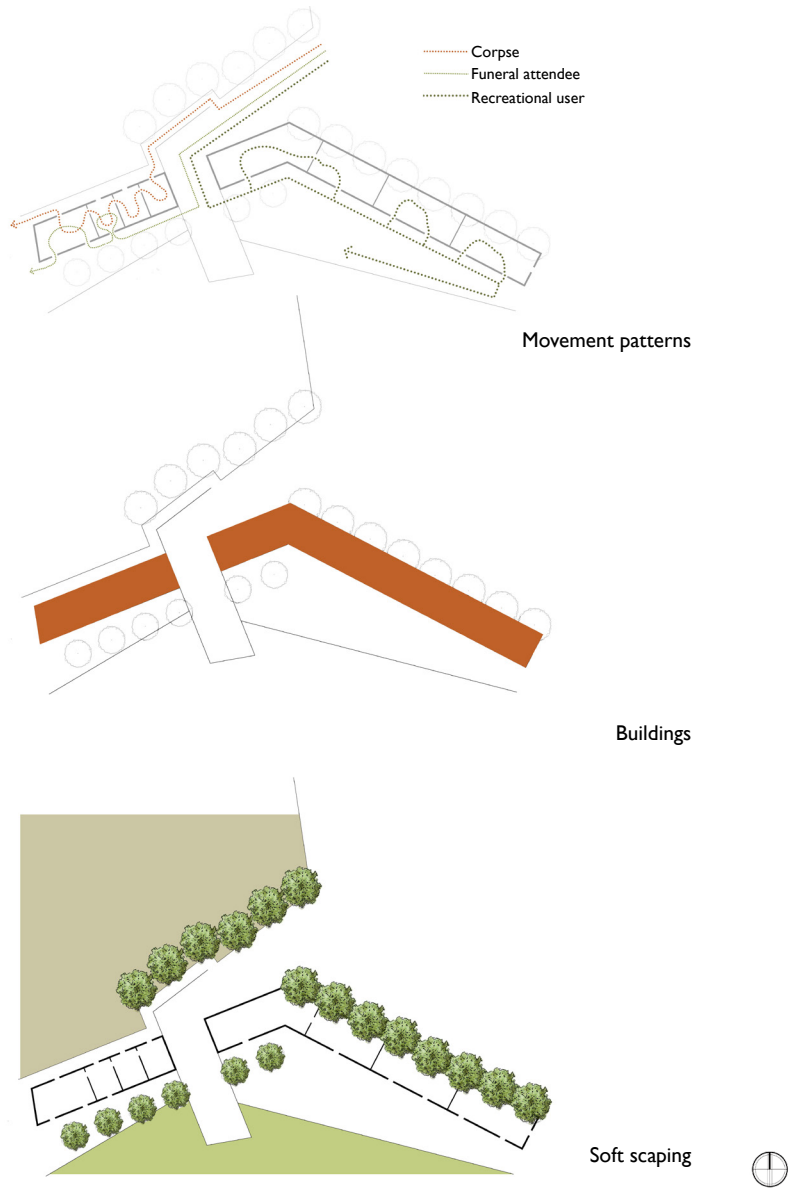


Figure 84. Diagrams illustrating the core's user movement, buildings, and soft-scaping (Author 2015).

6.4 Nekrotopio

Nekrotopio (the burial site) is adjacent to the core of the site. It forms part of the sacred public classified program. The ridge separates the sacred and non-sacred. Nekrotopio is located west of the ridge. The vision for Nekrotopio is a sequence of spaces. These spaces are grouped in a predetermined order along the main path of the burial site. Before designing the path, a functional diagram is required to give an overall layout of the burial site. According to the narrative, the user starts at the composting chambers, then moves through the green burial veldt, and then the promession forest. Lastly, the user crosses the stream and moved to the top of the viewing tower. The burial site's functional diagram illustrates the sequencing of the spaces and the general area for each event of the narrative, Figure 85.

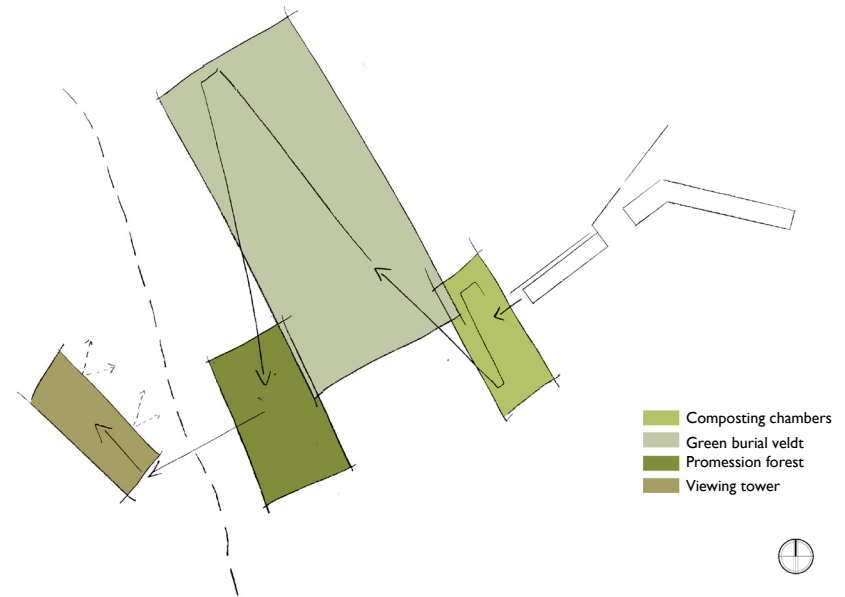


Figure 85. Functional diagram of Nekrotopio burial site. Showing location and sequencing of events of the landscape narrative (Author 2015).

With the functional diagram in place, the walkway/ path, which leads the user through the narrated burial site, was designed. Due to the sloped topography of the site, the walkway is a ramp. In accordance with SANS 10400-S: 2011 (South African National Standard part S: Facilities for persons with disabilities) a ramp may not have a gradient steeper than 1:15, may not be less than 1100mm wide, and

must have a landing every ten meters of at least 1200mm. The ramp and platforms cutting into and protruding from the landscape is shown in Figure 86 and Figure 87. The three platforms form the green burial veldt, which requires a surface with a flat to subtle slope.



TOP Figure 86. Marquette of Nekrotopio showing the ramp and green burial veldt platforms (Author 2015).

BOTTOM Figure 87. Marquette of Nekrotopio showing refined ramp and platforms (Author 2015).



The design of the promession forest, composting chambers, and viewing tower followed. Figure 88 shows the evolution of the Nekrotopio design.

6.5 Master plan

Figure 89 illustrates the final design of Nekrotopio, and Figure 90 indicate and explain the different components.

6.6 Sketch plan

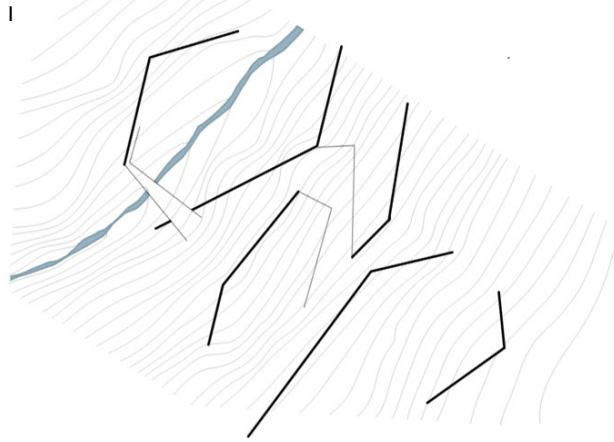
The composting chambers are the focus area. It is fully discussed and detailed in chapter seven. The development of the chambers is illustrated in Figure 93 and Figure 94. Figure 93 is a series of rough drawings exploring the arranging of the chambers around the ridgeline. The form refinement is illustrated in Figure 94

Keeping to the concept of having a shaped landscape, the chambers are designed to appear carved from the landscape. The notion of repetitive shapes and the extension of the walkway through all three of the burial places (composting chambers, green burial veldt, and the promession forest) ties the composting chambers into the rest of the design.

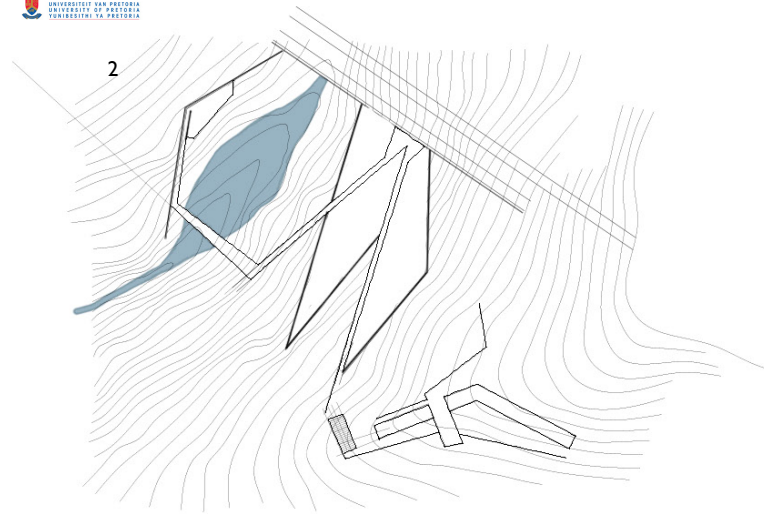
6.6 Conclusion

The landscape was shaped through cutting to create the narrated landscape of Nekrotopio. The main structuring element is the prominent ramp. It leads the user through the composting chambers, the green burial veldt, the promession forest, and to the viewing tower.

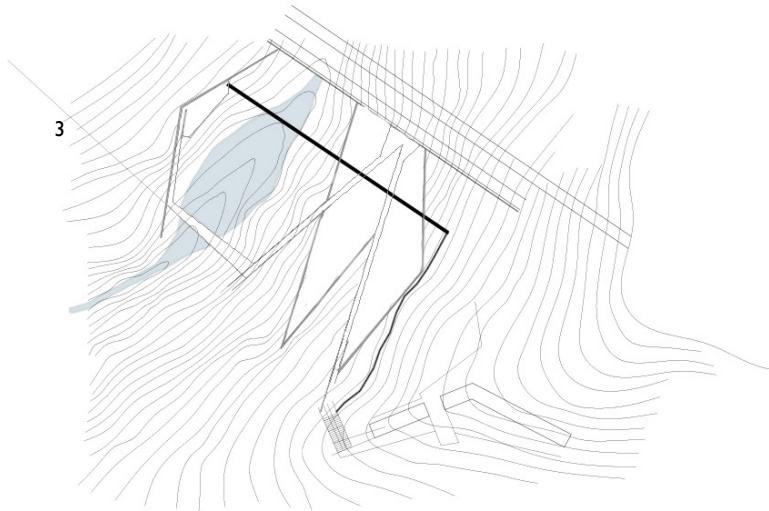
The composting chambers is the area of focus for the next chapter; chapter seven: Technification. Other aspects such as ecology and water systems are also discussed.



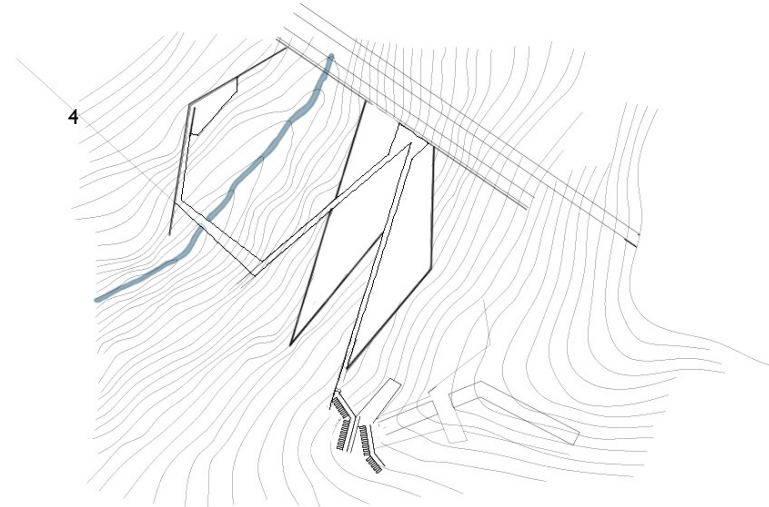
- First attempt to create a clustered organization on site
- Composition lacks structure and logic
- Repetitive shapes works against the contours



- Core/ activity hub is designed
- Ramp is used to structure design
- Platforms are cut from the landscape and protrude from it
- The stream is dammed up to create a reflective pool
- Moses bridge designed to take users through the stream onto a reflective platform overlooking Nekrotopio



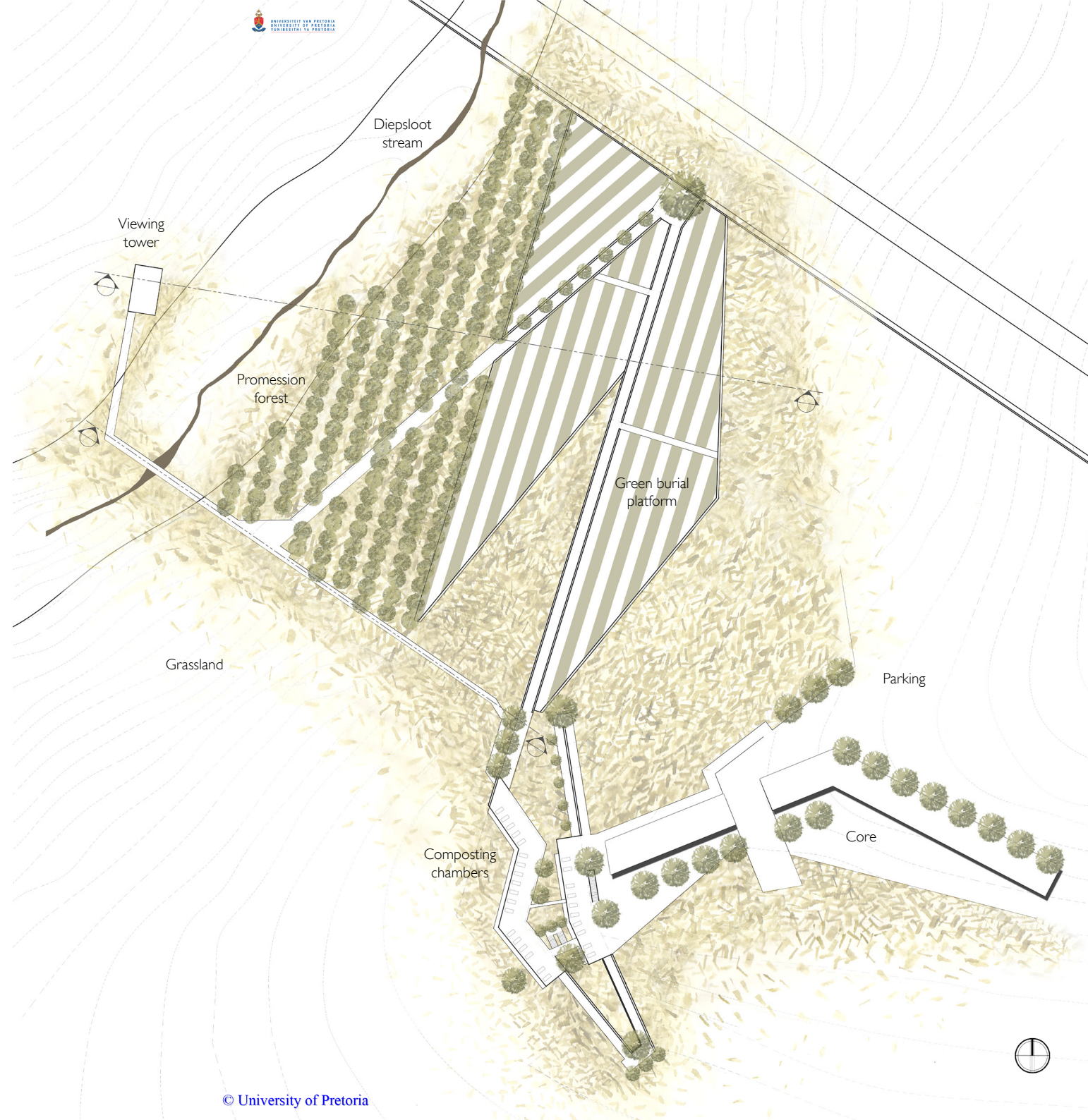
- Viewing tower with bridge added to return users to the start of the narrative.



- Dam removed and Moses bridge removed due to unpredictable flash floods of the Diepsloot stream
- Bridge removed due to unfeasibility
- Composting chambers altered to protrude from the ridge



Figure 88. Design evolution of Nekrotopio's master plan (Author 2015).



Master plan
Nekrotopio
(Figure 89; Author 2015)

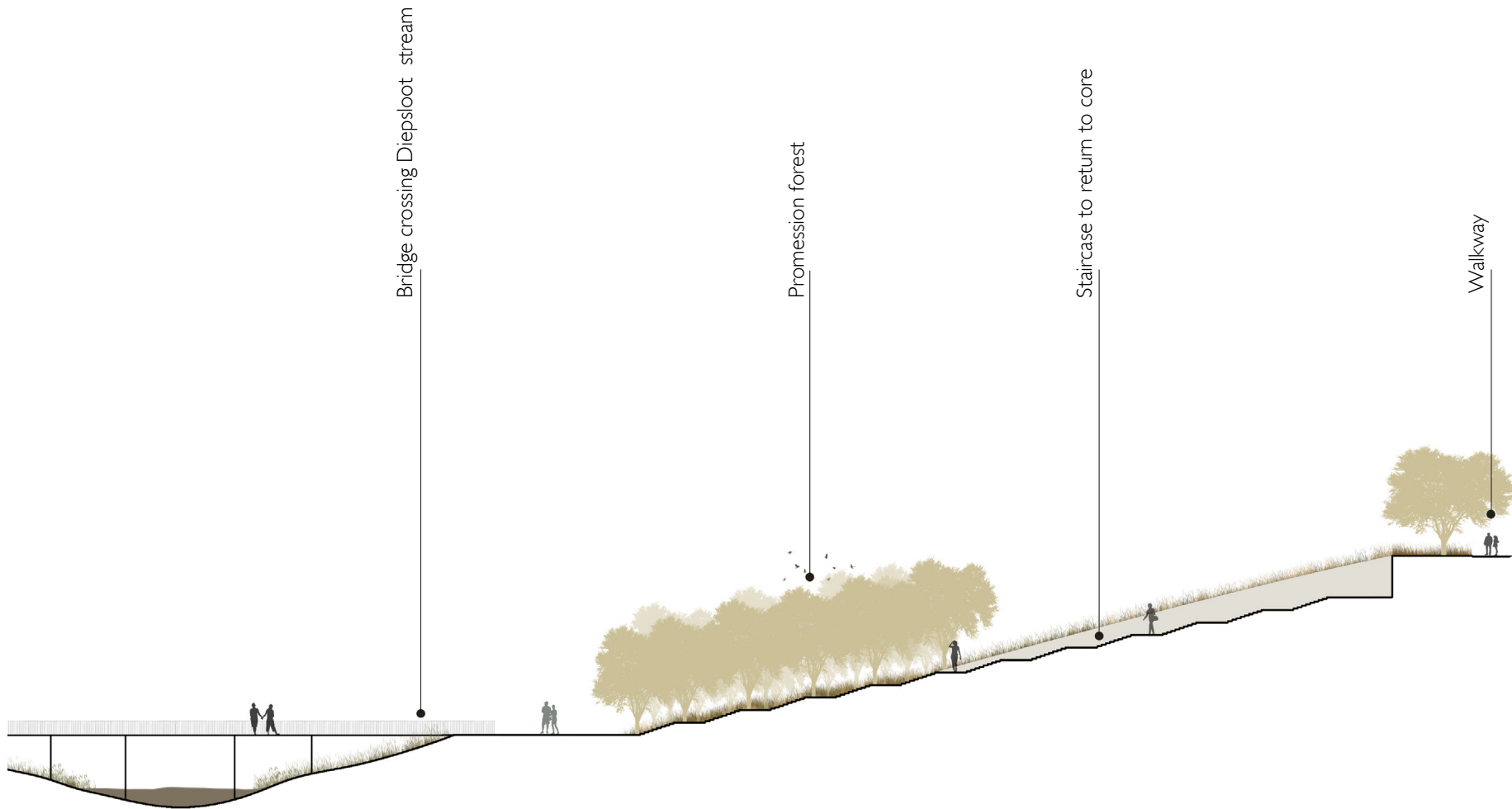


Figure 90. Section A-A showing the bridge crossing Diepsloot stream and the staircase back to the core. (Author 2015).

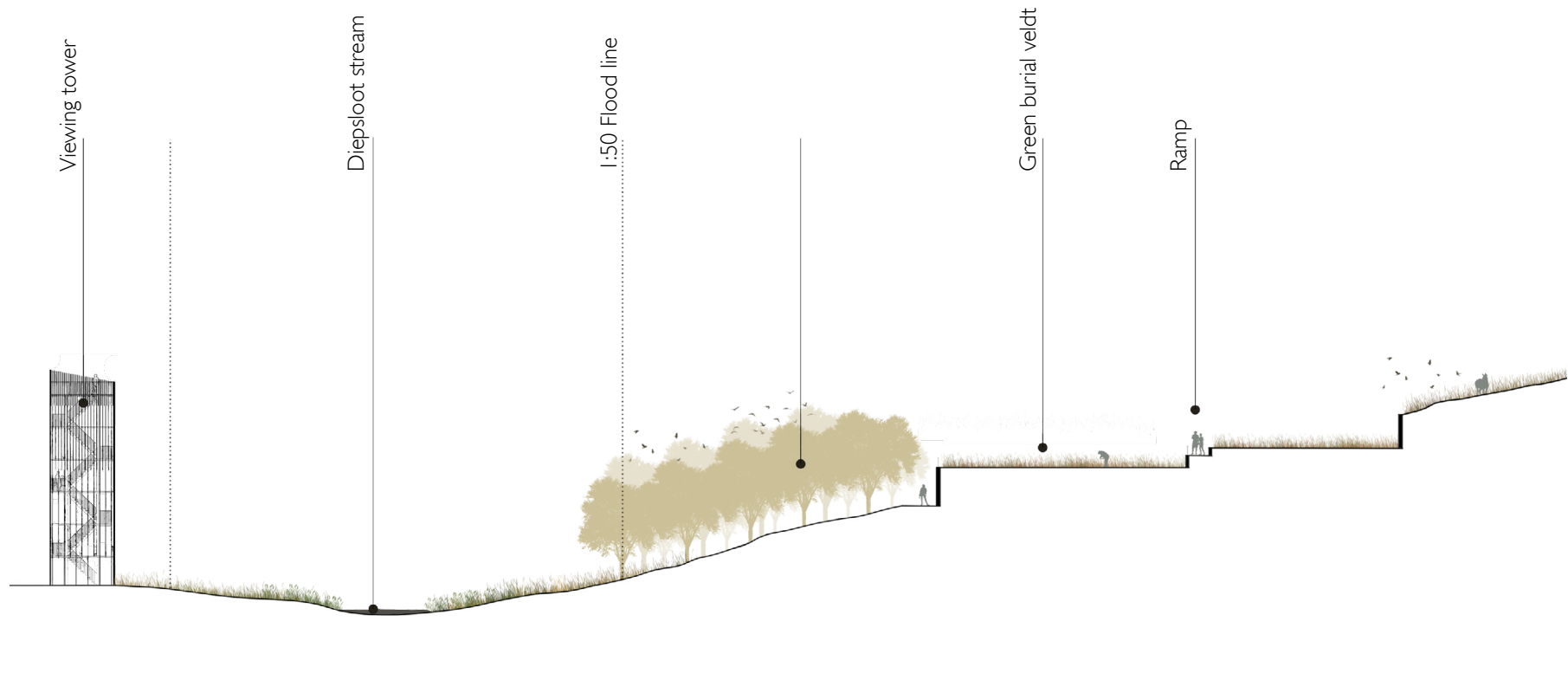
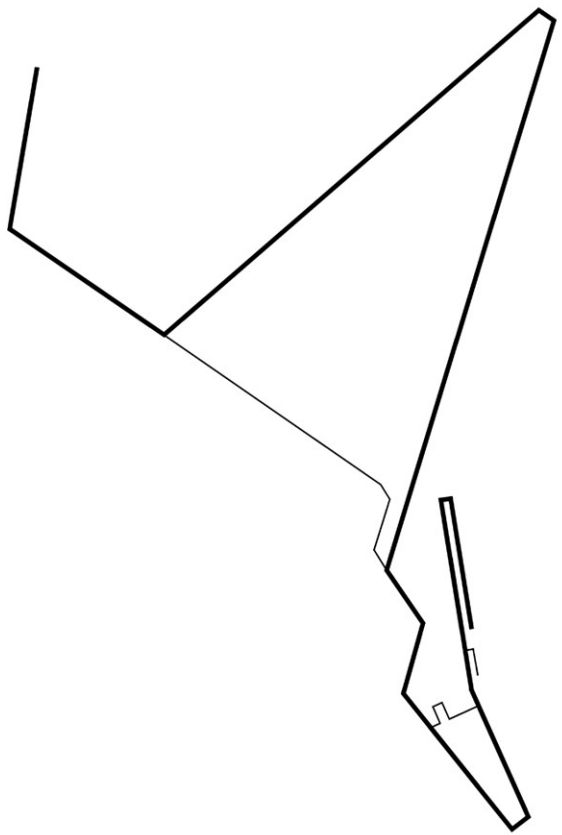
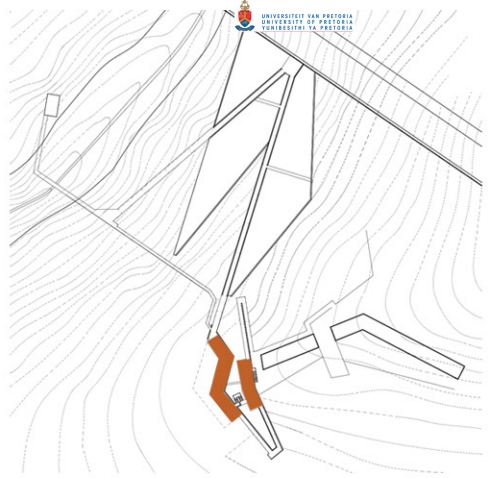


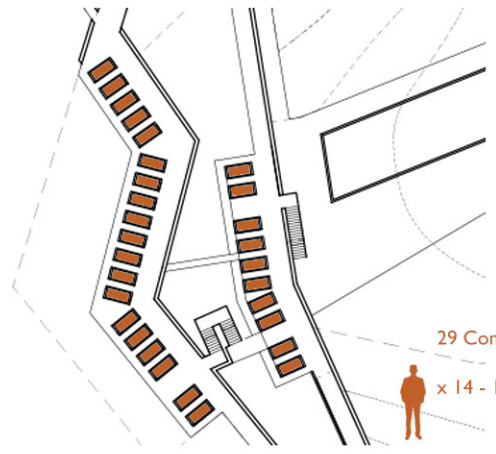
Figure 91. Section B-B showing green burial veldt, procession forest and viewing tower.
(Author 2015).



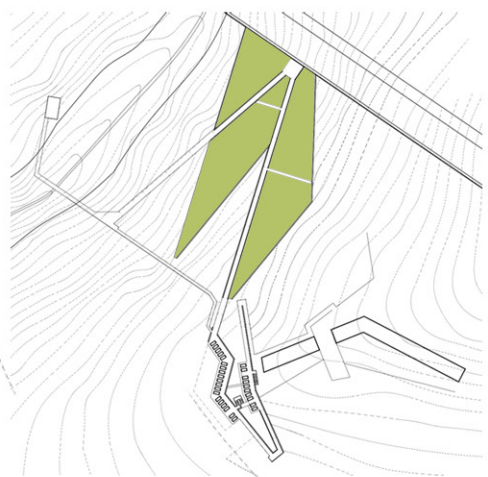
Main ramped walkway through Nekrotopio



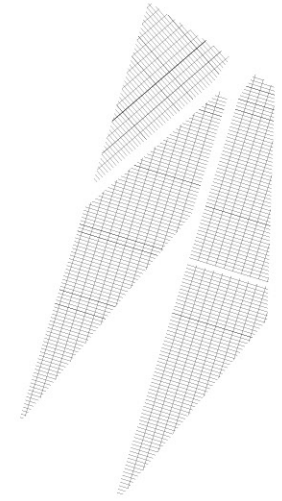
Composting chambers



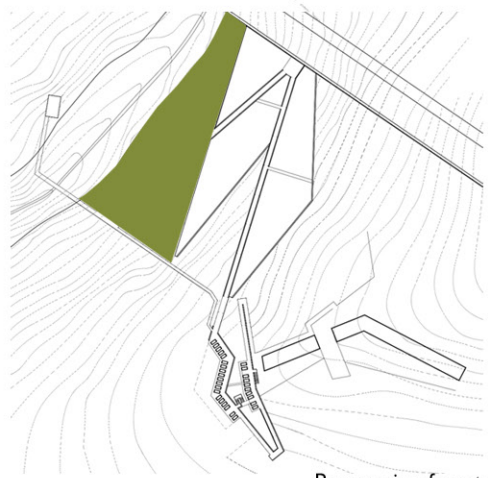
29 Composting chambers
x 14 - 15 per month



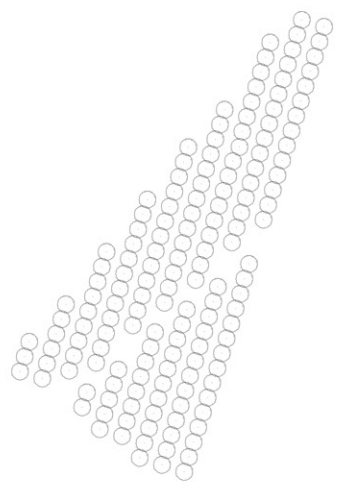
Green burial veld



4800 graves
x 40 per month



Promession forest



160 Tree spaces indicated
x 13 per month

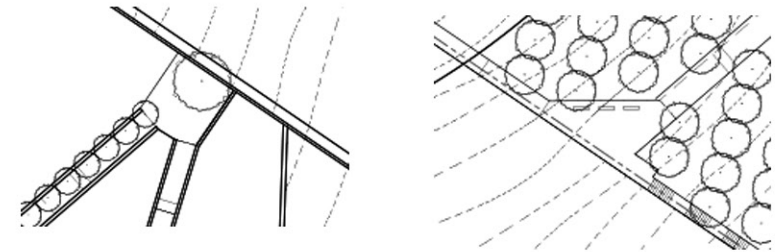
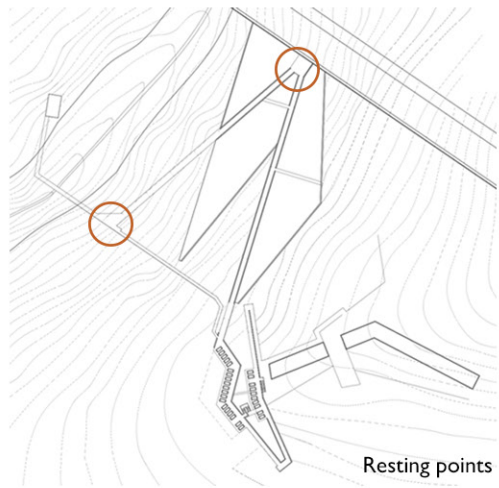
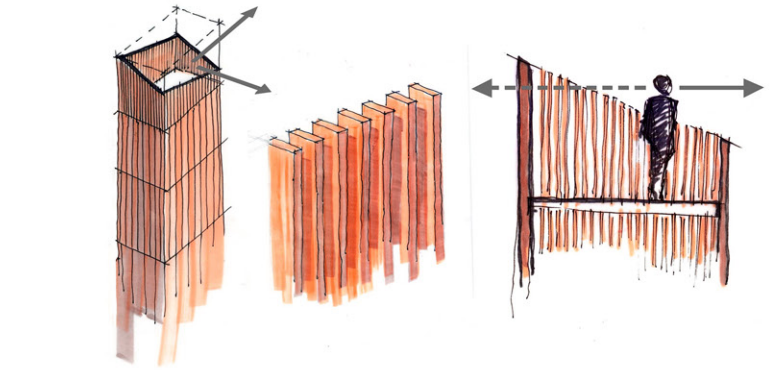
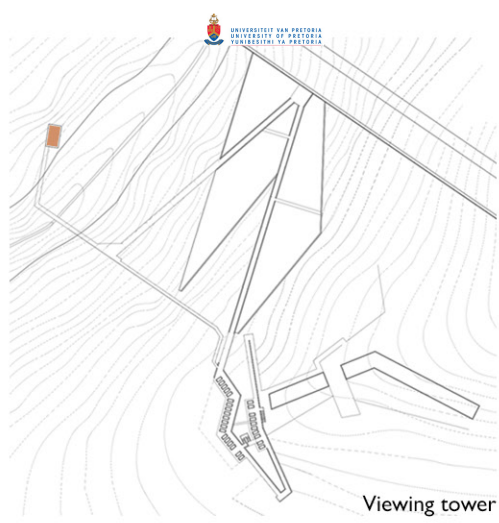


Figure 90. Master plan design explanation (Author 2015).

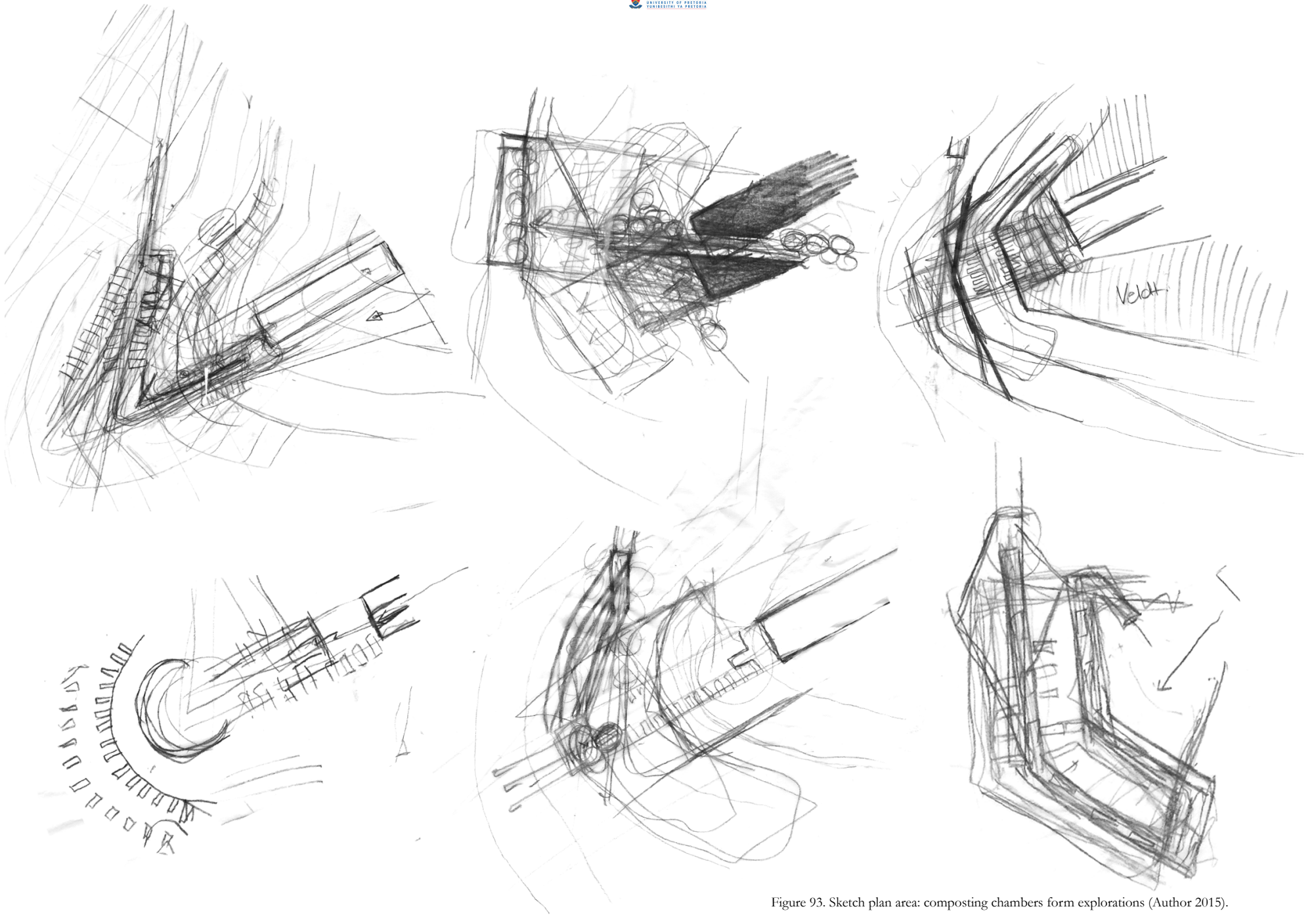


Figure 93. Sketch plan area: composing chambers form explorations (Author 2015).

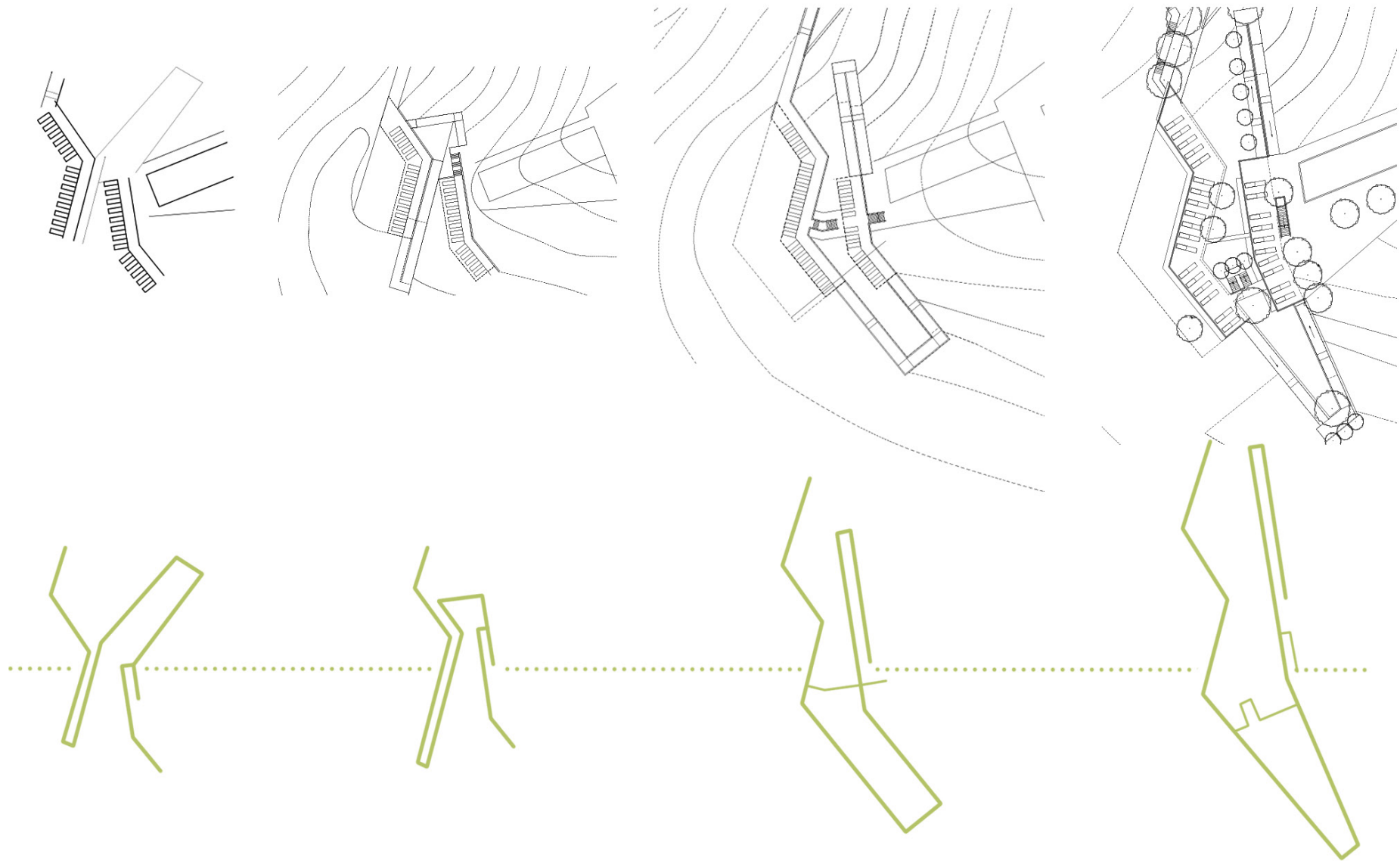


Figure 94. Sketch plan area: composting chambers form development, left to right, into the final design (Author 2015).

