

DESIGN DEVELOPMENT

- 5.1 Introduction
- 5.2 The path
- 5.3 Parti diagrams and site programme
- 5.4 The landscape revealed
- 5.5 Justification of built form
- 5.6 Wall in the landscape
- 5.7 Concept diagrams
- 5.8 Storytelling place
 - 5.8.1 Plan
 - 5.8.2 Occupation
 - 5.8.3 Concept development
 - 5.8.4 Development of the section
- 5.9 Multimedia experience and restaurant
 - 5.9.1 Plan
 - 5.9.2 Circulation
 - 5.9.3 Occupation
 - 5.9.4 Concept development multimedia experience
 - 5.9.5 Concept development restaurant space
 - 5.9.6 Development of the section

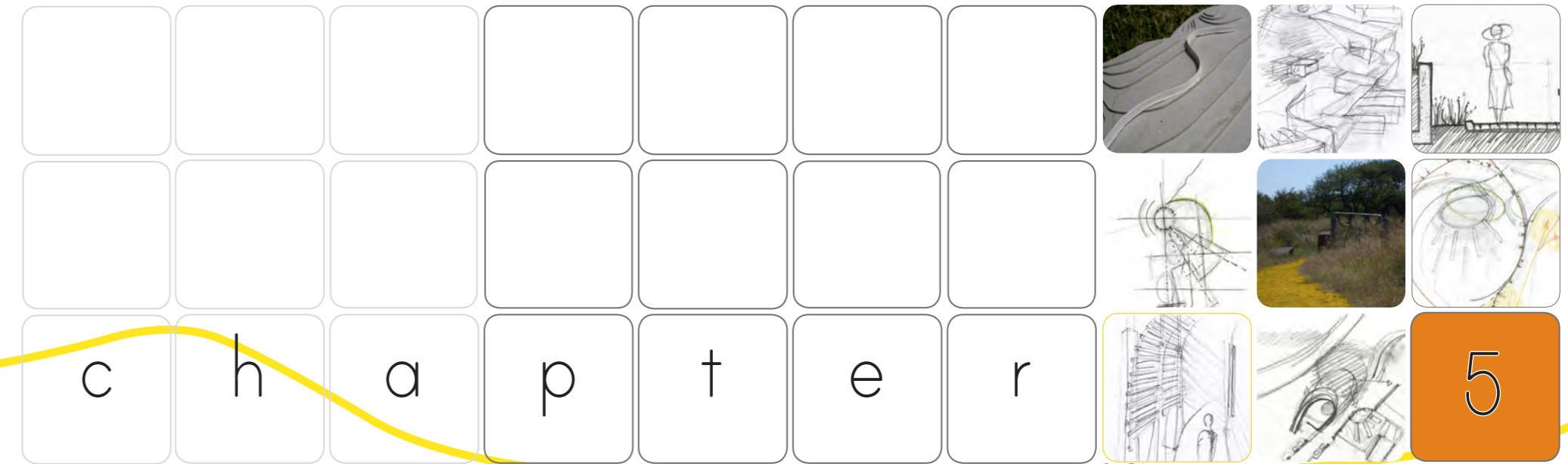
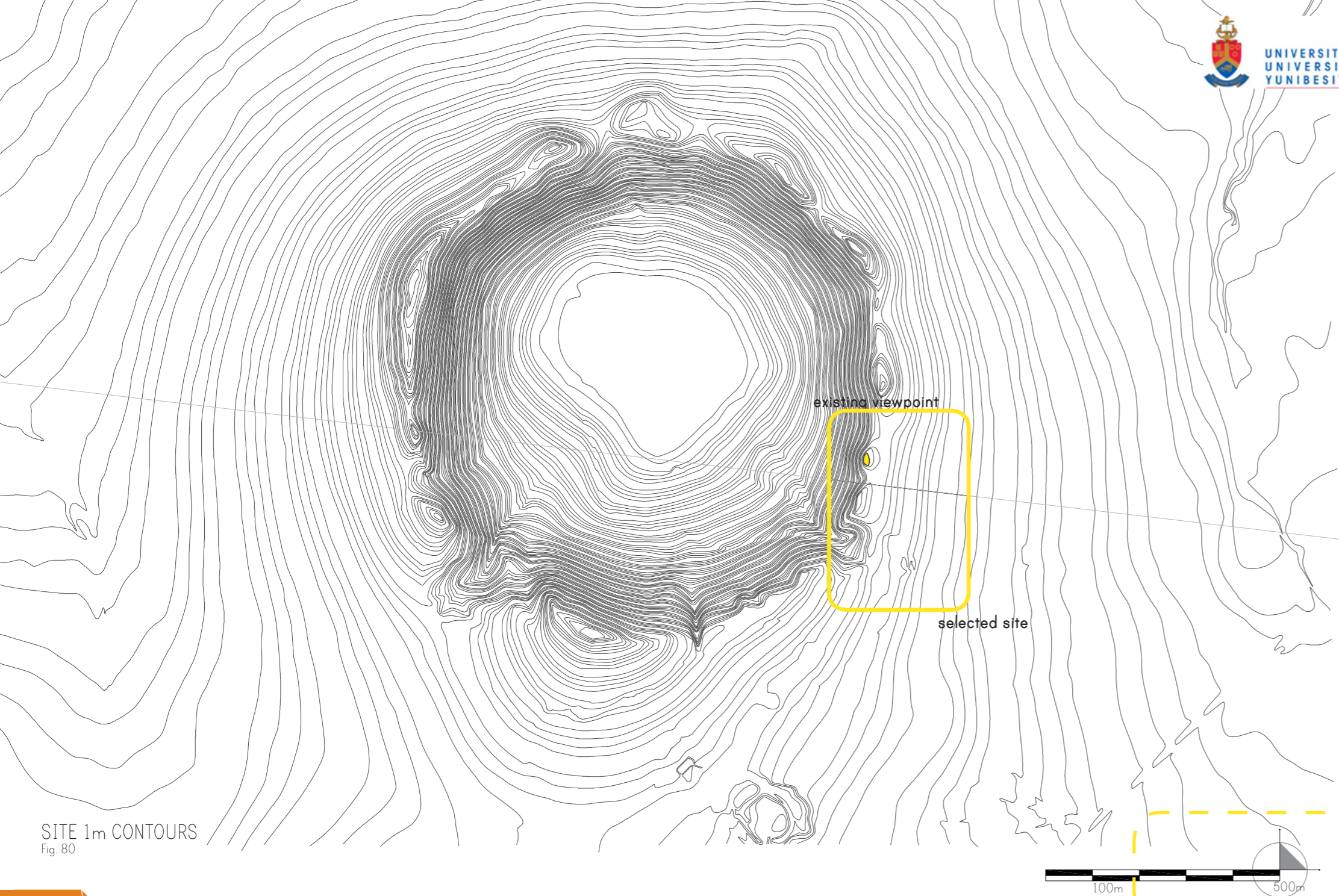


Fig 5.1



SITE 1m CONTOURS
Fig. 80

5 . 1 I N T R O D U C T I O N

Throughout the thesis, the theme of reconnection has been emphasised and discussed at length. The programme of storytelling has been selected as the vessel for discovery. Here, the theoretical concepts will be pursued in the physical design of the project. Firstly, a careful consideration of the landscape is essential in order to reveal that which already exists on the site. The story of Tswaing, within its historical and contemporary context can be told by every design decision. From the material selection to the form and technology employed, the relationship of the built environment to the cultural environment, the earth and the universe is implied. Here the logic of the design decisions will be explained at the hand of the contextual determinants.

Although the topography and vegetation in general has been discussed, a thorough analysis of the experience requires the careful study of the landform and specific landscape elements that reveal the character of the site.

THE EXISTING VIEWPOINT

Located on the ridge of the crater, the viewpoint offers the first view of the crater in its entirety.

THE BUILT INTERVENTION

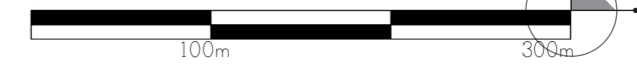
The built intervention along a new path is constructed, sloping gently away from the crater. The characteristic vegetation consists of grassland that is less sensitive as it can easily be re-established if disturbed.

1,14 km diameter

1145

1075

Fig. 81



5.2 THE PATH

The existing path to the viewpoint indicates a possibility for a meaningful experience of the landscape. The topography and vegetation obscures the view of the crater, thus building anticipation for the eventual revelation of the view. This also results in the experience of the surrounding landscape, where the focus would be on the crater itself if it were visible. Thus, the visitor is led along a path that reveals different aspects of the character of the site, instead of a single visual image. The path is thus a powerful mechanism to convey a meaningful experience to the visitor.

A path is proposed that leads the visitor along the desired topographical route, as well as focusing on important landscape elements along the way. The series of built interventions will take place along the path, creating different spatial and programmatic experiences along the way to the viewpoint.

The organisation of activities also drew from the idea of a storyline. Storyline, as well as the typical structure of African oral literature has been discussed and the influence can be seen in certain subtle aspects of the design.

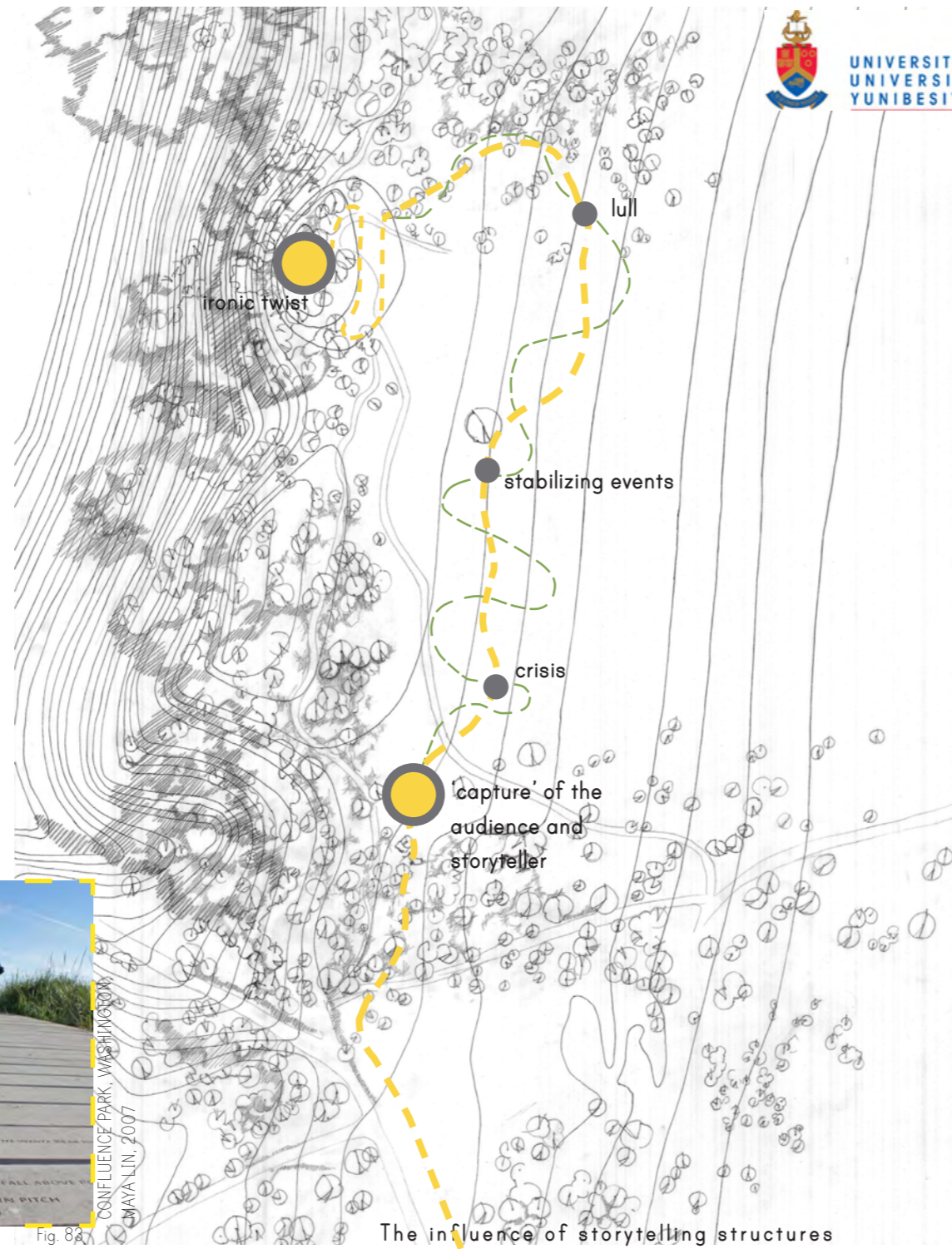
The existing path houses many instances of revelation of the landscape and is therefore left in its current layout. The path can then offer a different experience when



Fig. 82



Fig. 83



The influence of storytelling structures

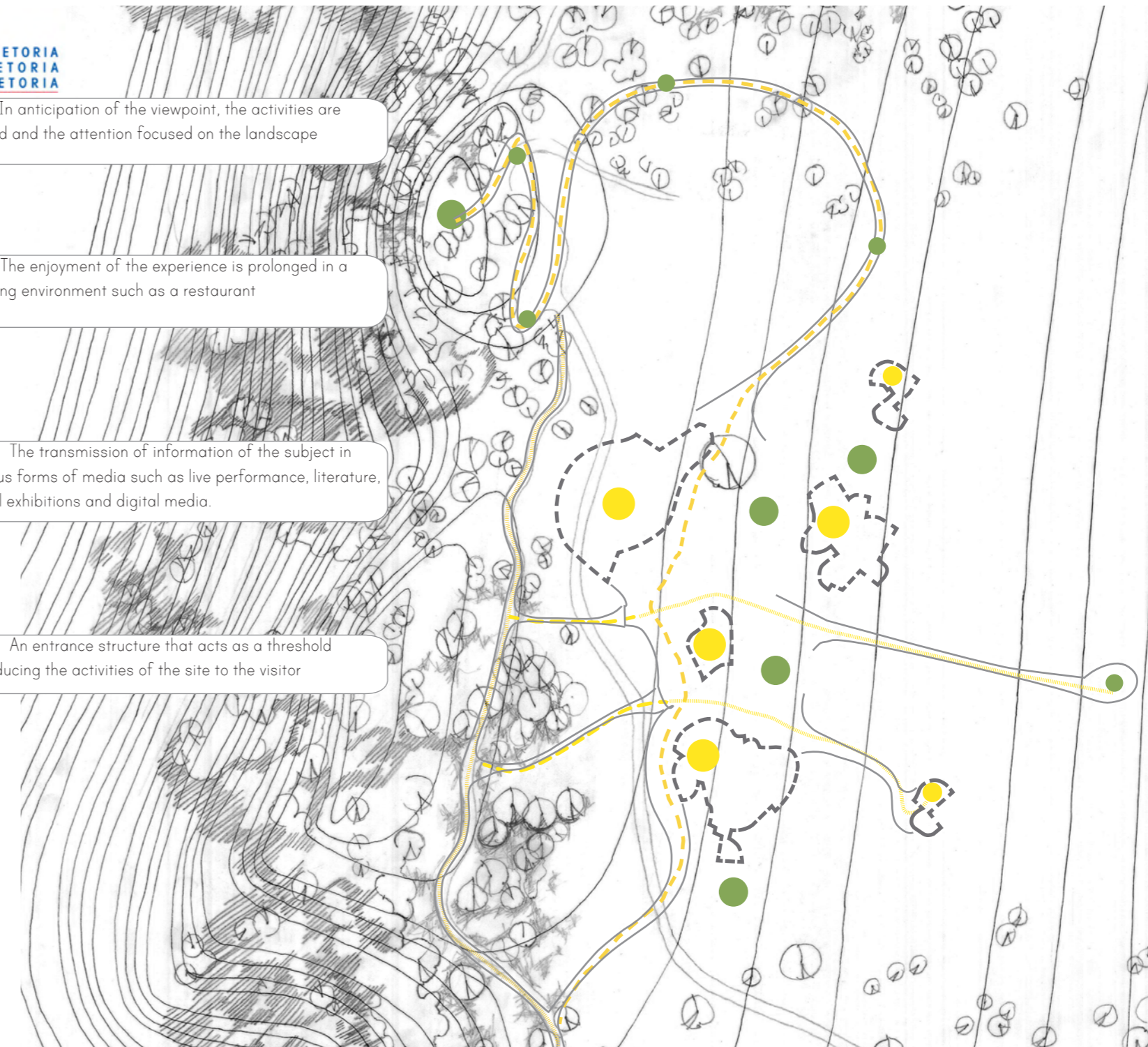
Fig. 84

In anticipation of the viewpoint, the activities are muted and the attention focused on the landscape

The enjoyment of the experience is prolonged in a relaxing environment such as a restaurant

The transmission of information of the subject in various forms of media such as live performance, literature, visual exhibitions and digital media.

An entrance structure that acts as a threshold introducing the activities of the site to the visitor



returning from the viewpoint. Views of and connections to the main path and buildings offers the visitor the opportunity to construct their own experience of the site as opposed to a rigidly regulated experience. In this another reference is made to African storytelling where crowd participation is encouraged and embraced.





-  MAIN PATH
-  ALTERNATIVE CIRCULATION
-  INDOOR EVENT
-  OUTDOOR EVENT

Fig. 85

MULTIMEDIA EXPERIENCE

Although the focus of the project is that of oral literature, live performance is not the only way to experience the art. Stories can be recorded in different forms of media. Firstly, the only historical accounts of oral literature that we have available is in the form of the written word and should be included in the complete experience. Contemporary media can also be extremely useful in order to preserve oral literature. Thanks to audiovisual recording, performances can be recorded anywhere and collected in a database. In this way the project can reach beyond the boundaries of the Tswaing site. It also presents the possibility for the visitor to leave behind their own account or story at Tswaing.

STORYTELLING PLACE

Although more opportunities for storytelling are planned, the main, or formal, storytelling space is the first built intervention found along the path. The space is envisaged to be intimate, although it would be beneficial to be able to use the space for larger gatherings.

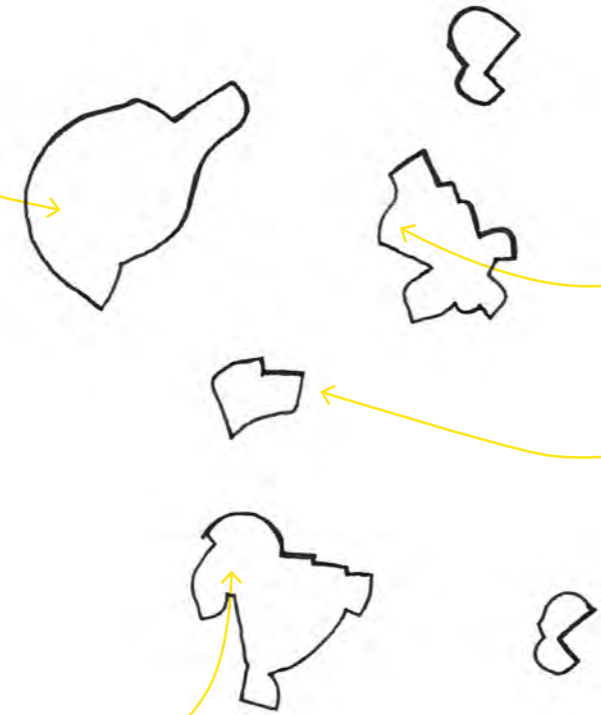


Fig. 86 Parti diagram

RESTAURANT AND AMPHITHEATRE

Situated adjacent to the multimedia experience is a restaurant and amphitheatre space. The restaurant is predominantly considered an outdoor space around the amphitheatre area, but the structure also provides a roofed deck space and indoor restaurant and bar space. The average volume of visitors at once is expected to be quite low, but adequate space should be available for larger gatherings as the space may be rented out for functions and be able to accommodate seminars and school groups entertained in the storytelling building.

EXHIBITION SPACE

As all forms of storytelling is explored on the site, a space is required where exhibitions can be held informing the visitors of the background and context of certain forms of storytelling. Thus, the exhibition space should be flexible to accommodate changing exhibitions.

Art is also a powerful expression of a unique person and their story. Therefore, the exhibition space, along with the outdoor sculpture garden may exhibit the work of local artists.



VIEWPOINT

The anticipation built along the path, culminates in the extraordinary view of the crater as a whole. As the view is a unique experience, very subtle (or weak) built interventions are required so as not to detract from the natural majesty. However, the crater viewpoint offers a great opportunity for storytelling. Specifically, the art of skylore. The unique perspective of the crater creates a powerful vertical connection that is a perfect setting within which to experience stories of the sky and universe.

OUTDOOR SPACE

The fact that the buildings are spread out along the path render the spaces in between the buildings significant. This importance is amplified by the context of the project and the emphasis that has been laid upon the connection to the landscape.

5.3 PARTI AND PROGRAMME

REST AREA AND WATERPOINT

In order to minimise the potential littering of the site by the visitors, no disposable ware will be allowed on the site. To provide a source of cool water on the hot site water bottle can be refilled at the water point located by the rest area. A cool shady area provides a good rest stop before proceeding on the path to the viewpoint.

DISCUSSION SPACE



Fig. 87

5.4 THE LANDSCAPE REVEALED

To facilitate the understanding of the site, a photographic analysis of the site fabric may give one an idea of what is present on the site that has the potential to be revealed.

1:1500
Fig. 92

existing path
proposed path



SECTION AA



Fig. 89



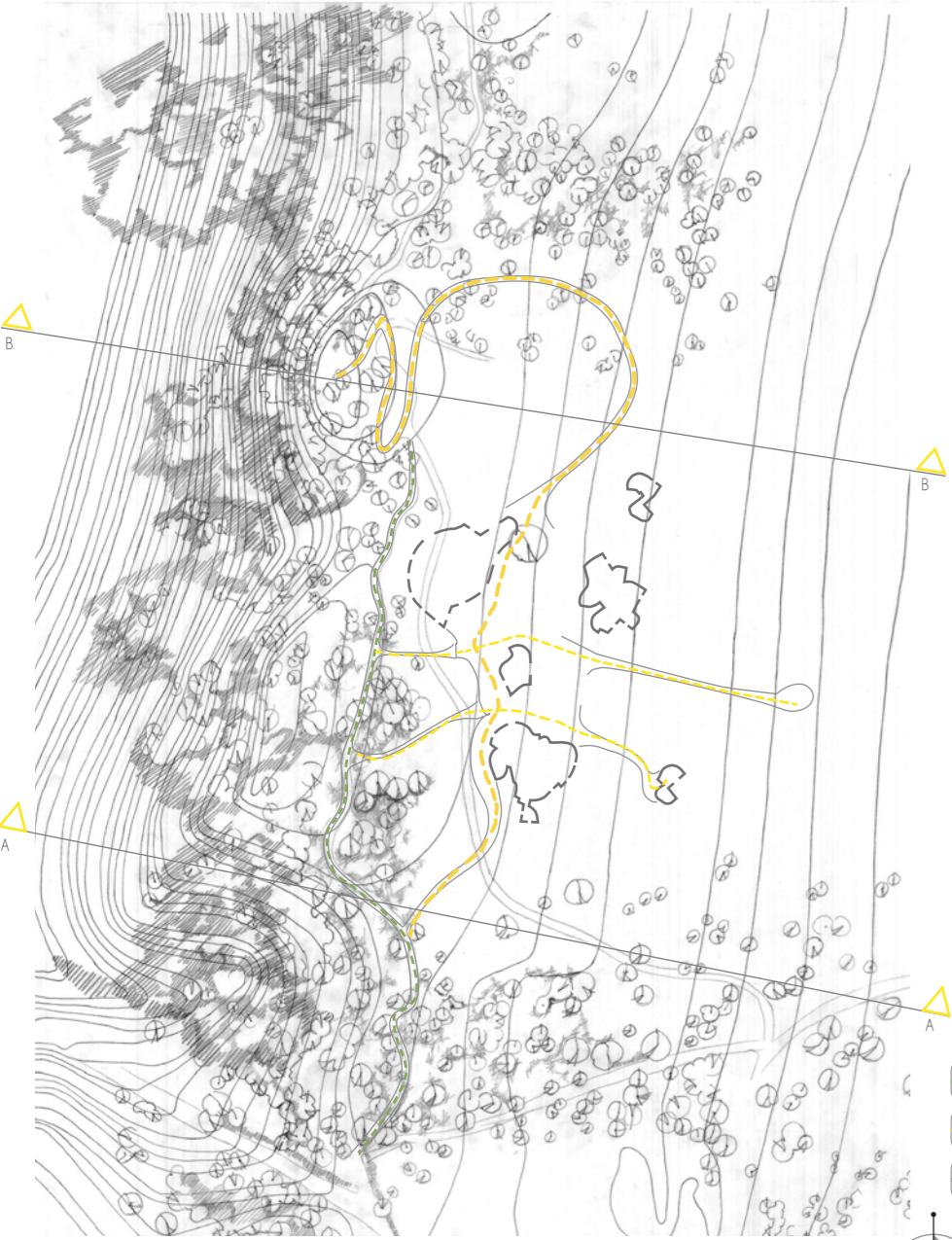
Fig. 90



Fig. 91 Existing entrance



Fig. 93 Composite view from entrance



- EXISTING PATH
- PROPOSED PATH
- PROPOSED BUILDING

1:2500
Fig. 88

PLAN OF PATHS



Fig. 96



Fig. 95



Fig. 97

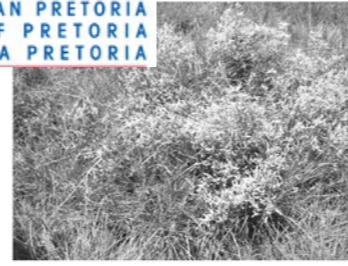


Fig. 98



Fig. 99



Fig. 100

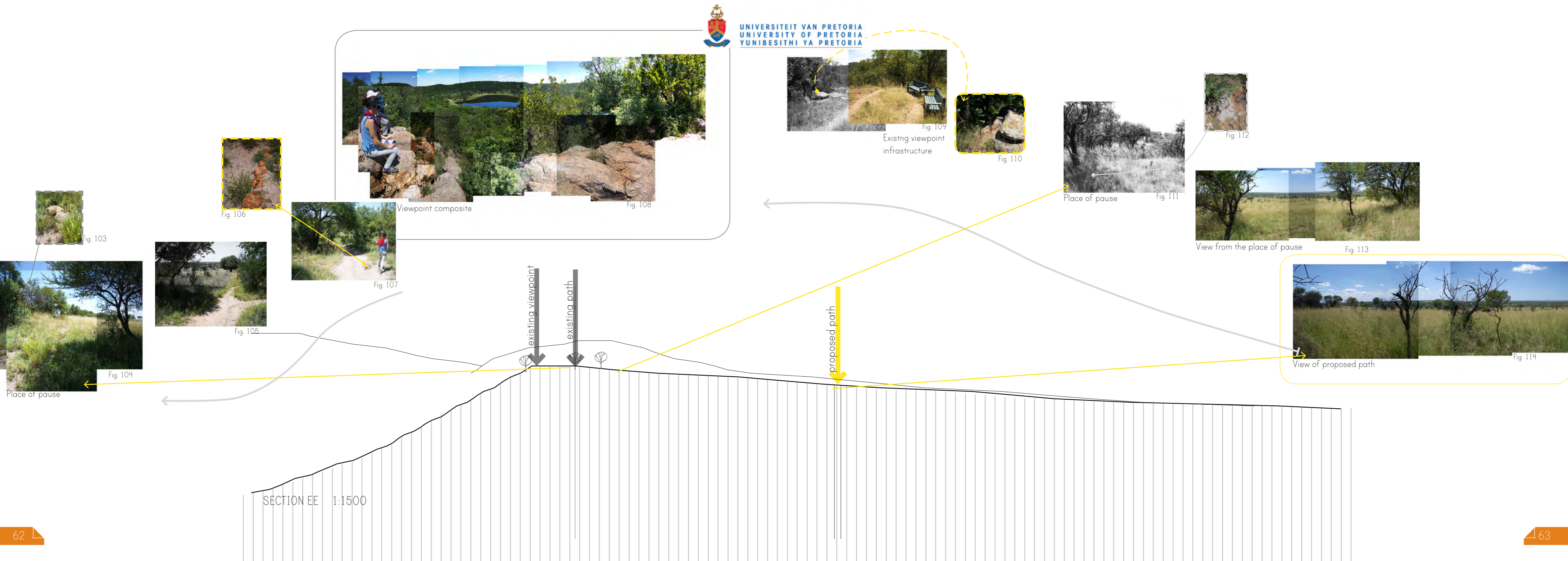


Fig. 94



Fig. 101 Composite view around tree





Viewpoint composite

Fig. 108



Existing viewpoint infrastructure

Fig. 109



Fig. 110



Place of pause

Fig. 111



Fig. 112



View from the place of pause

Fig. 113



View of proposed path

Fig. 114



Fig. 106



Fig. 107



Fig. 105



Fig. 103



Place of pause

Fig. 104

5.5 BUILT FORM

Any built form on a site such as Tswaing, where the landscape is dominant, will present a complex interplay between the man-made and natural environment. Indeed, at Tswaing this relationship becomes more complex as one considers that both the forces of the universe and man have scarred the landscape. Man and the universe have vied to exert their power and shape the landscape at Tswaing. Thus the juxtapositioning of the man-made and natural is of extreme importance to reflect the complexity of the site.

Steven Groak cites a simple diagram to illustrate the complex relationship found in the work of Alvar Aalto. (Groak 1992: 227) The diagram represents the earth in relation to the sky, or the rational in relation to the natural. This order, as Groak explains, can be found both in plan and section in the work of Alvar Aalto. This suggests the versatility of the simple, but powerful concept.

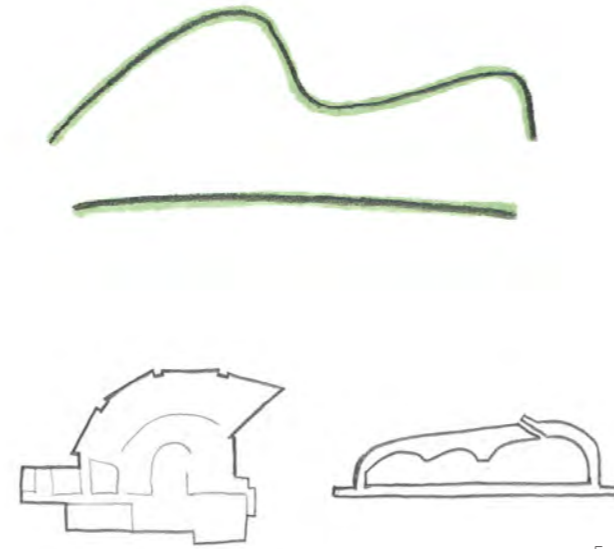


Fig. 115

Funicular shapes are essentially man-made technologies that mimic the natural. An organic shaped roof may attempt to climb into the landscape and because of this proximity, strengthens the idea of difference through juxtaposition. In this way, the architecture makes a bold statement without dominating the landscape.

Using linear geometry in addition to these organic shapes further serves to emphasise the point. The landscape may then encroach upon these structures in the form of planted roofs.



Fig. 116



Fig. 117

Relationship development on plan
Fig. 118

Fig. 122

Throughout the conceptual stages of design, the relationship between the rational and natural order has been investigated.

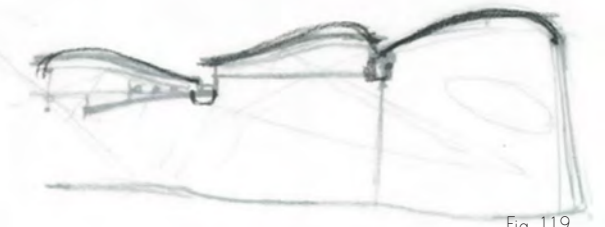


Fig. 119

Relationship development in section



Fig. 120

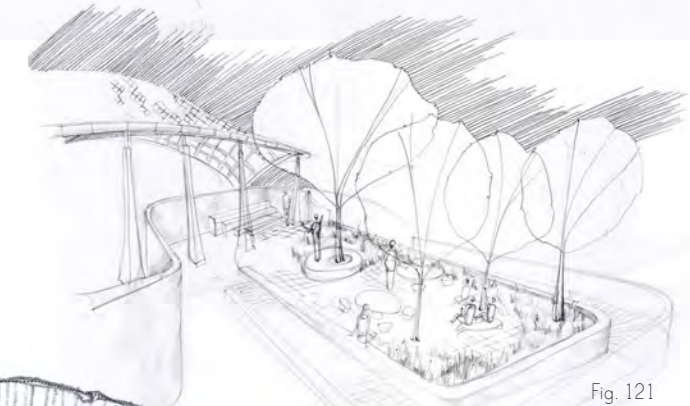


Fig. 121

Relationship development in perspective



5.6 THE WALL IN THE LANDSCAPE

As discussed, the path to the viewpoint is designed in order to lead the visitor past certain elements and accentuate aspects of the landscape. To establish the latter, the path also cut into the landscape to explore the relationship to the earth. A wall along the path begins by sitting on top of the landscape and continues to cut deeper and deeper into the natural topography. The experience physically brings the visitor closer to the earth where it is cooler en sheltered. The visitors are also reminded of their metaphysical bond to the earth that they inhabit and live on and from.

The wall offers the opportunity for expression. Walls are used to commemorate the dead, as a blank canvas for artistic expression and for a community to express building techniques. In this way the wall itself becomes an archive of stories of the people that are remembered on its surface and in its structure. The desire to leave behind a piece of oneself can be seen in something as universal as names carved in the trunk of a tree. Graffiti becomes a more artistic expression of self.



Fig. 134

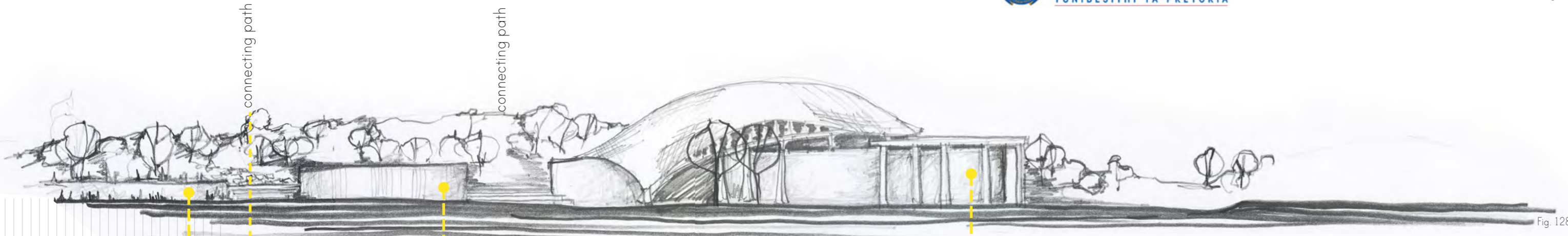


Fig. 128

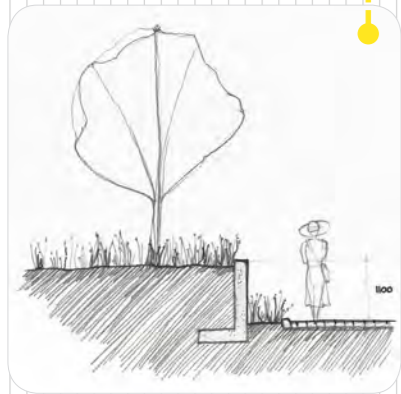


Fig. 123

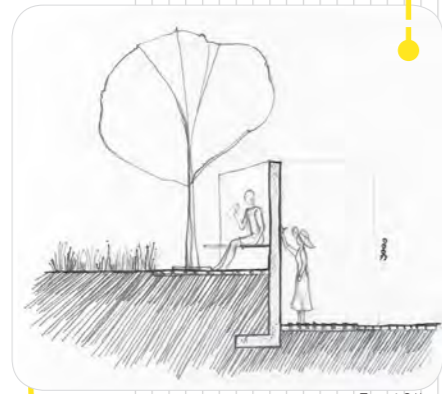


Fig. 124

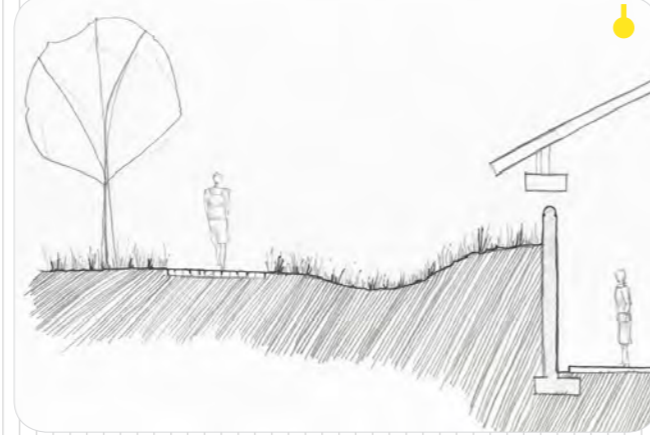


Fig. 125



Fig. 126

CONCEPT MODEL FOR THE WALL IN THE LANDSCAPE

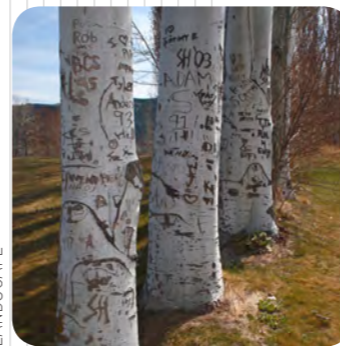


Fig. 127

NAMES CARVED ON A TREE



Fig. 129

KAI-KAI WALL OF EXPRESSION, RICHTERSVELD, COMMUNITY PROJECT, 2006



Fig. 130

LETTERS ENGRAVED ON STEEL, CONSTITUTIONAL COURT



Fig. 131

VIETNAM VETERANS MEMORIAL, WASHINGTON DC, MAYA LIN, 1981



Fig. 132

THE CHALK WALL, VIRGINIA, STEVE AINSWORTH, 2006



Fig. 133

KAI-KAI WALL OF EXPRESSION, RICHTERSVELD, COMMUNITY PROJECT, 2006

5.7 CONCEPT DIAGRAMS

Creating the spaces for the different activities relating to storytelling throughout the site, a few basic principles served as design guidelines.

Intimate space, where one would be immersed in the metaphysical world of storytelling should be focused on itself. Thus a more enclosed, cave-like space is suitable. The connection to the exterior would be a vertical axis emphasizing the relationship between the earth and the sky. For this reason, the vertical elements respond to the earth from which they seem to grow.

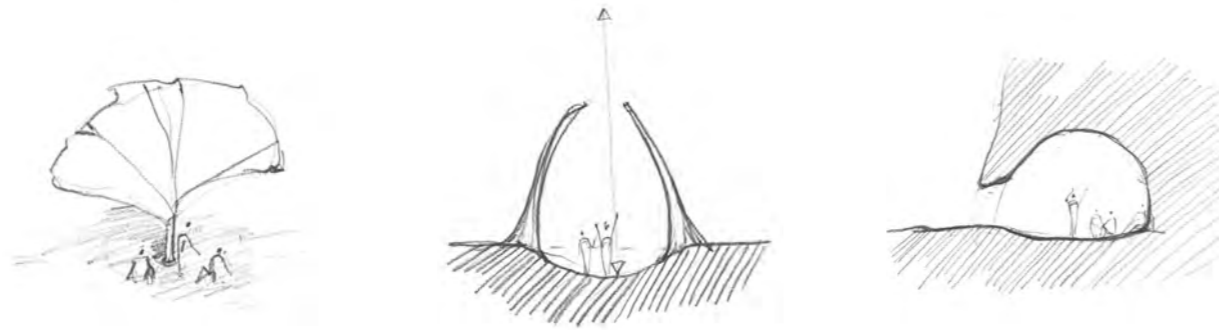


Fig. 135

The revelation of the horizon, the horizontal plane of the landscape should also be a concern of the designer hoping to reconnect the visitor to his environment. For this purpose, certain spaces reach out into the landscape with a horizontal axis. Being of a less intimate nature, these spaces are suitable for social interaction. Spaces where the view of the fellow visitors are unobstructed in addition to the visual link established with the landscape. The vertical elements would necessarily be lighter.

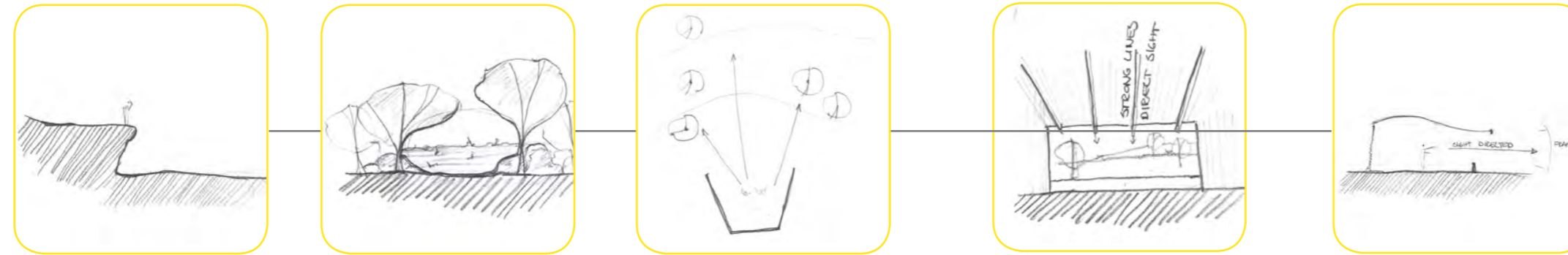


Fig. 137

Geometric roof shapes are suitable for service areas, although when combined with curved lines and framed views can also be used for visitor spaces. Vertical elements free the roof structure from the walls allowing for organic design on plan.

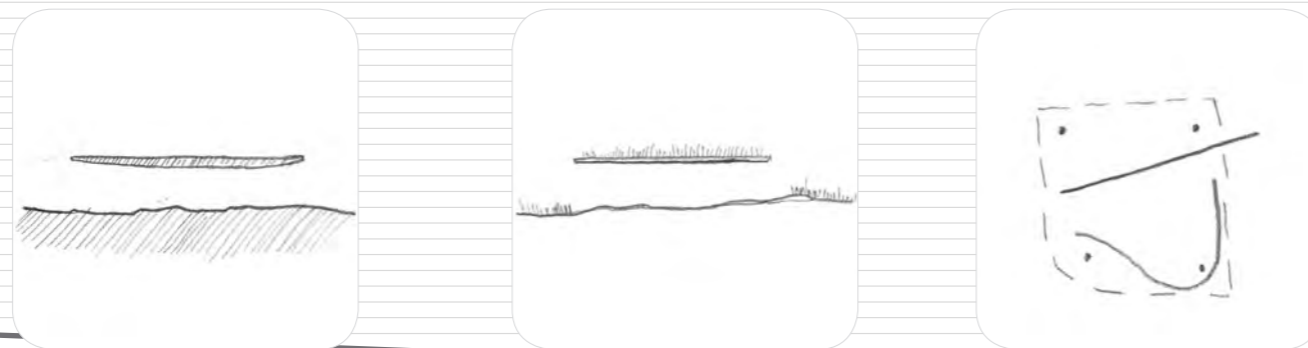


Fig. 136

5.8 STORYTELLING PLACE

5.8.1 PROGRAMME

The main storytelling space with the depression as 'stage' and seating consisting of anchored stones arranged around the slopes of the depression.

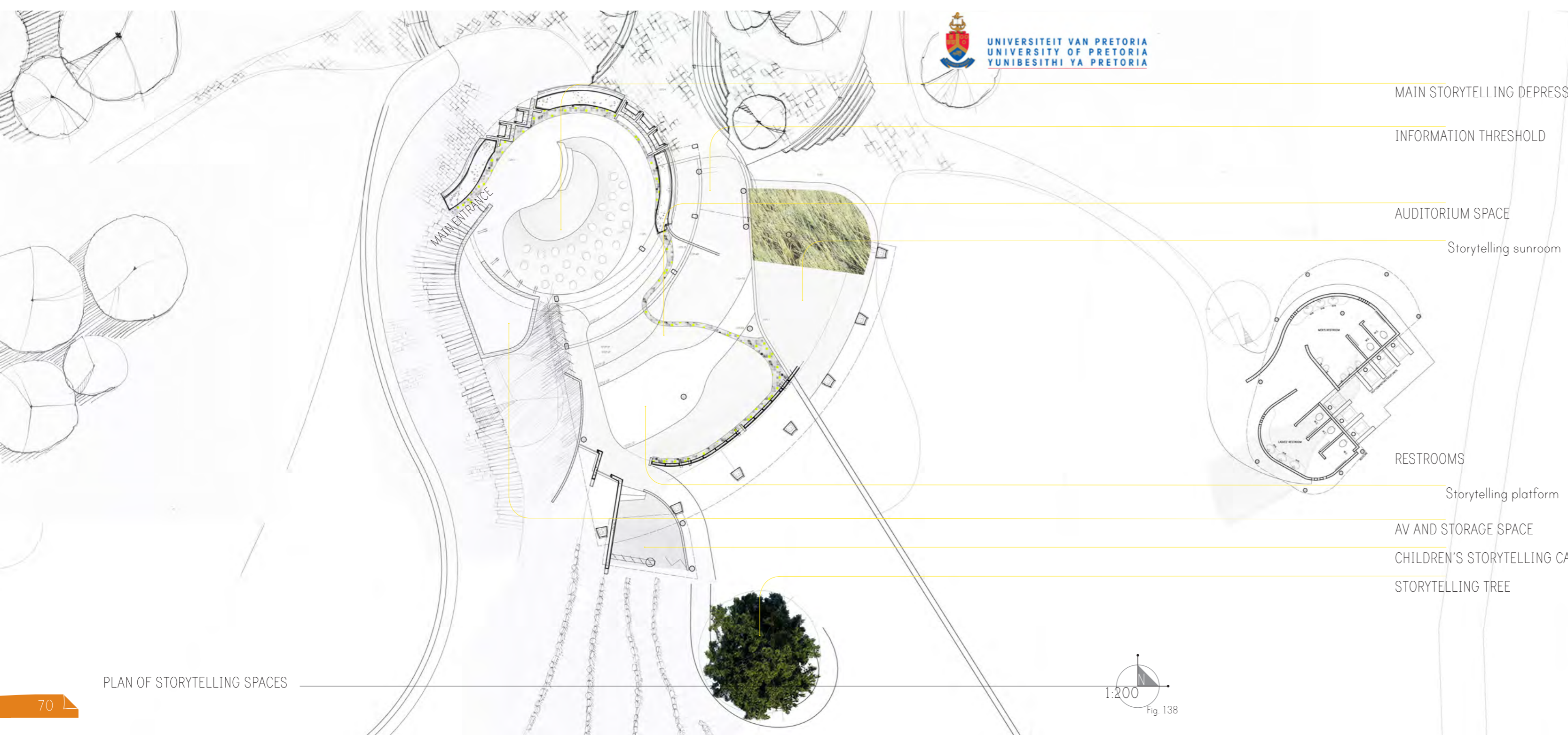
A technical room from where a sound system may be operated and may serve as dressing rooms for the performers.

The large seating space is irregularly stepped to create platforms for smaller gatherings. No fixed seating is suggested in order to sustain the flexibility of the space. Although smaller gatherings would be expected during the day to day functioning of the building, the building has the capacity to house larger performances, or even be rented out for private functions such as seminars where more auditorium-like seating would be required.

A intimate space leading of the main seating space will be used as a children's storytelling space as noise will be more contained and the space leads directly to a storytelling space around an existing tree on the site.

The semi-basement houses a service area where the air handling unit is housed as well as spaces that will serve as small workshop areas. These lead to the ramped terrace adjacent the building where outdoor discussion space is proposed. The spaces are envisioned to be used in addition to the main storytelling spaces to entertain school and other educational groups.

The landscape interventions around the building include planted areas benefitting from rainwater harvesting from the roofs. Existing aloes found on the site will be reestablished on the terraced slope on approach to the building.



MAIN STORYTELLING DEPRESSION

INFORMATION THRESHOLD

AUDITORIUM SPACE

Storytelling sunroom

RESTROOMS

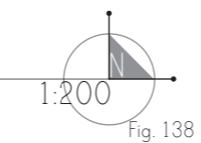
Storytelling platform

AV AND STORAGE SPACE

CHILDREN'S STORYTELLING CAVE

STORYTELLING TREE

PLAN OF STORYTELLING SPACES





SOUTH-WEST FACADE OF STORYTELLING BUILDING

Scale 1:100
Fig. 139

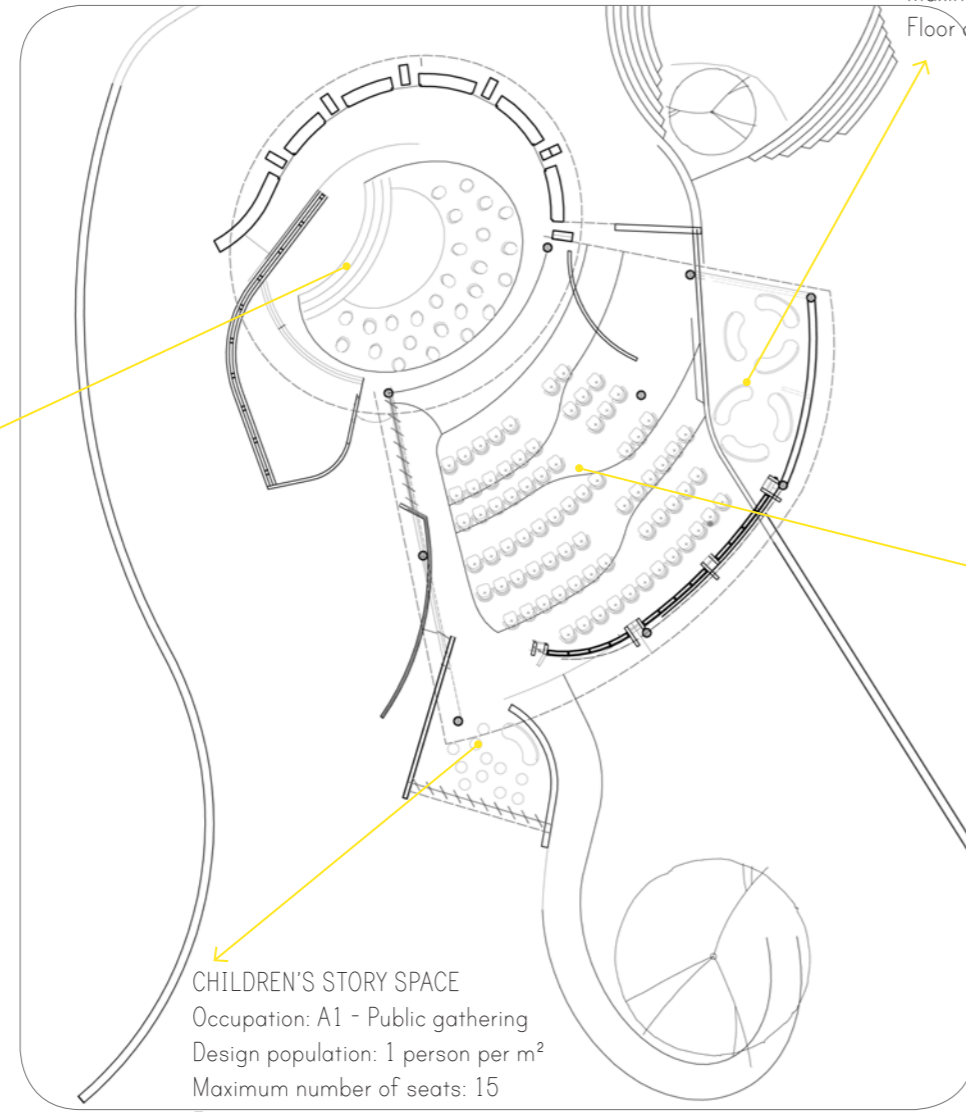


Fig. 140

Entrance to the storytelling building

5.8.2 OCCUPATION

The storytelling space is intended to be a flexible space that can be adapted to the number of visitors. The nature of the site and programme of the project will cause the volume of visitors to fluctuate greatly according to the time of day, the time of year and the events presented at the site. The day-to-day volume of individual visitors will be far less than that of special occasions, seminars or tour groups. The population, however is indicated at the full capacity of the building.



MAIN STORYTELLING SPACE
Occupation: A2 - Theatre
Design population: 1 fixed seat per m²
Number of fixed seats: 25
Floor area: 58m²

CHILDREN'S STORY SPACE
Occupation: A1 - Public gathering
Design population: 1 person per m²
Maximum number of seats: 15
Floor area: 17m²

Fig. 141

DECK AREA
Occupation: A1 - Public gathering
Design population: 1 person per m²
Maximum number of seats: 12
Floor area: 22,5m²

AUDITORIUM SPACE
Occupation: A2 - Theatre
Design population: 1 person per m²
Maximum number of seats: 75
Floor area: 86m²

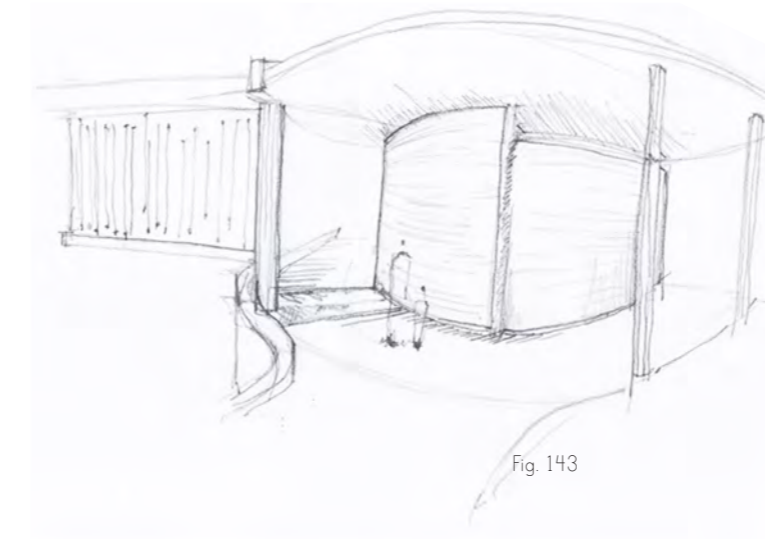


Fig. 143

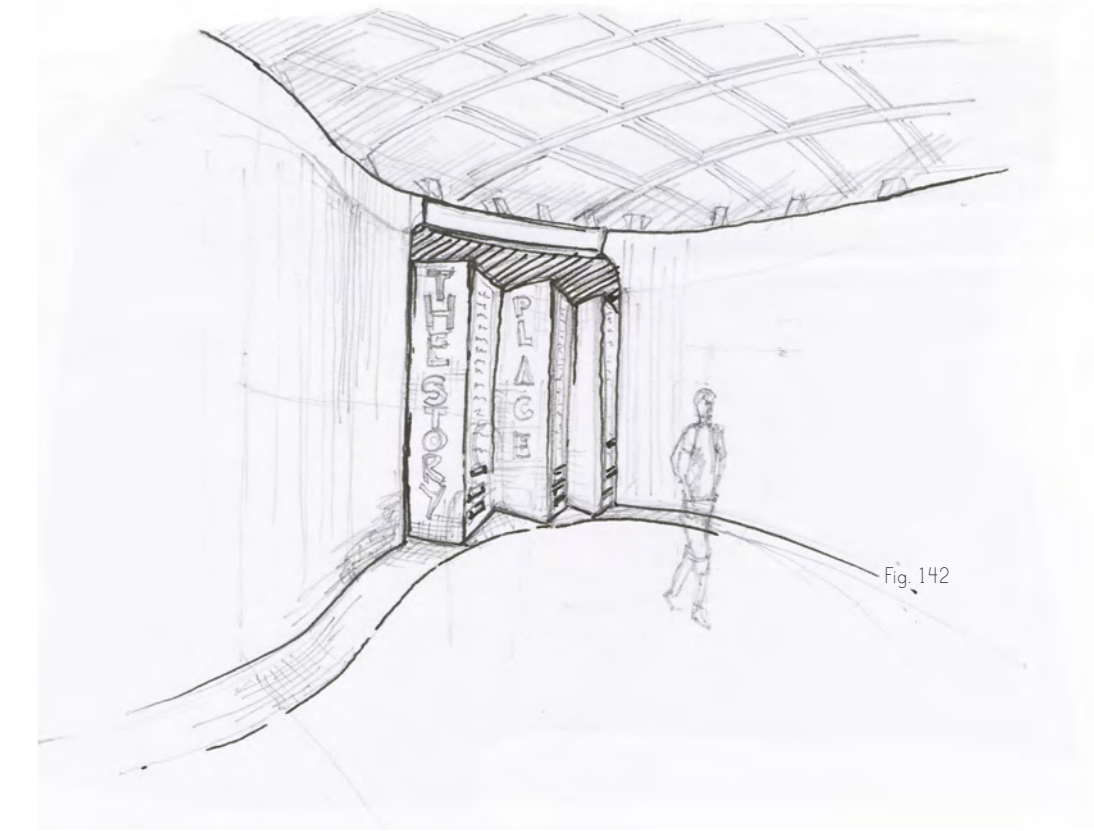


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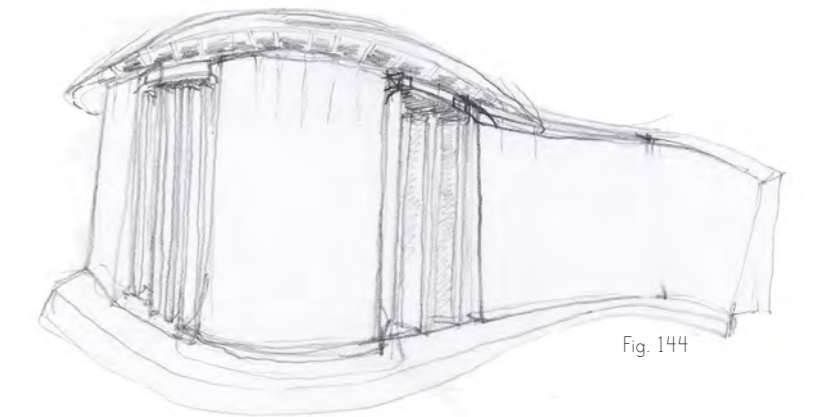


Fig. 144

5.8.3 CONCEPT DEVELOPMENT

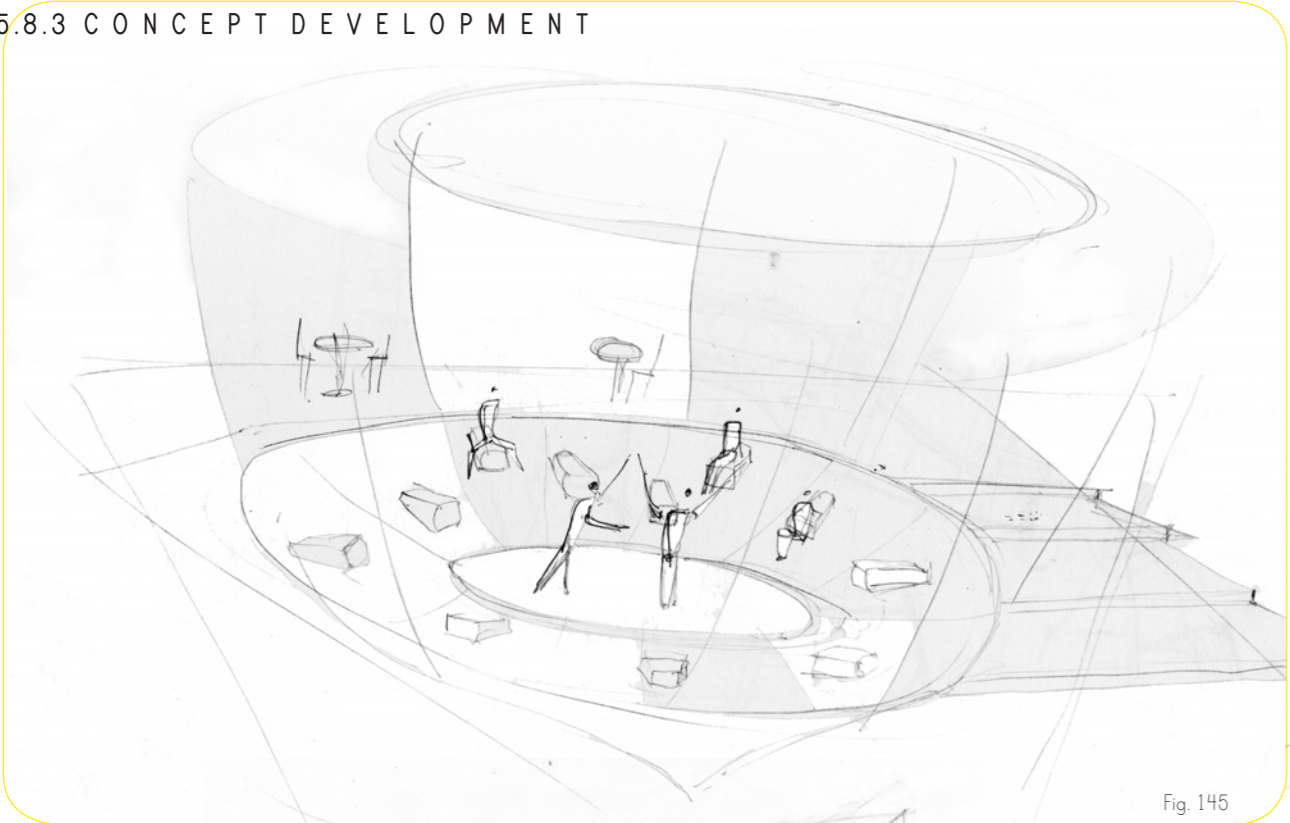


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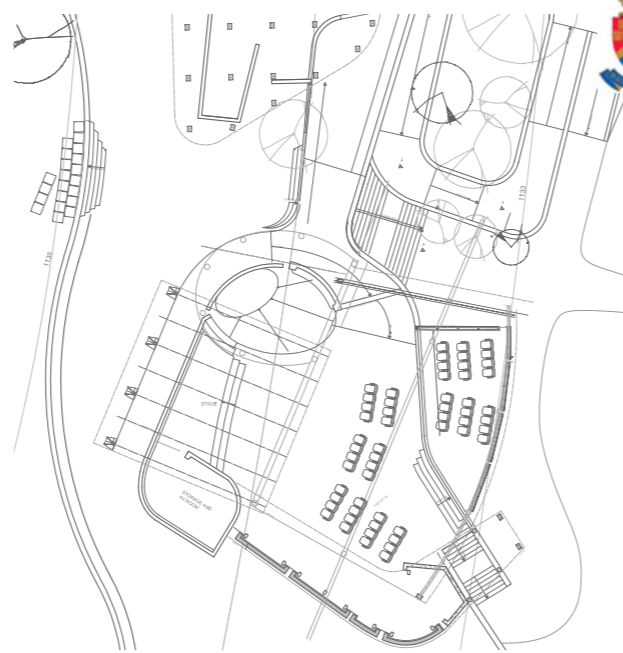


Fig. 148

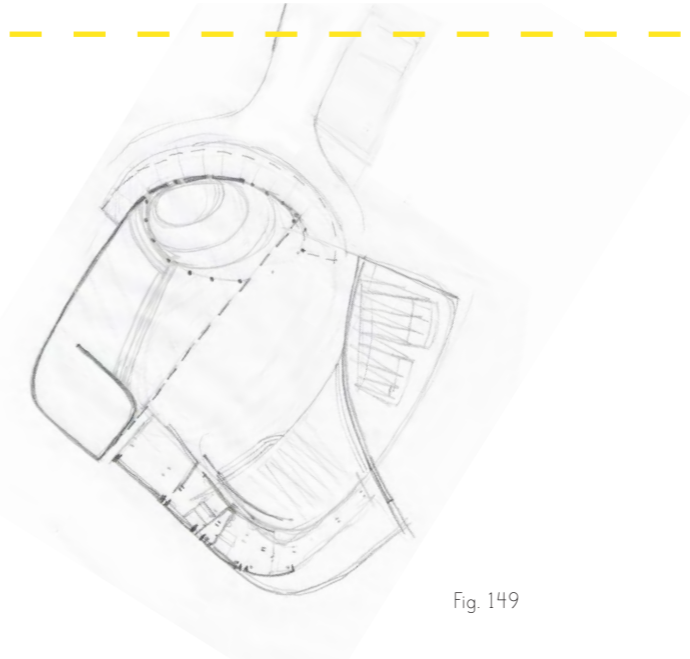


Fig. 149



Fig. 150



Fig. 153

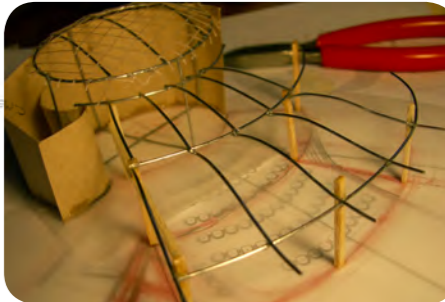


Fig. 154



Fig. 155

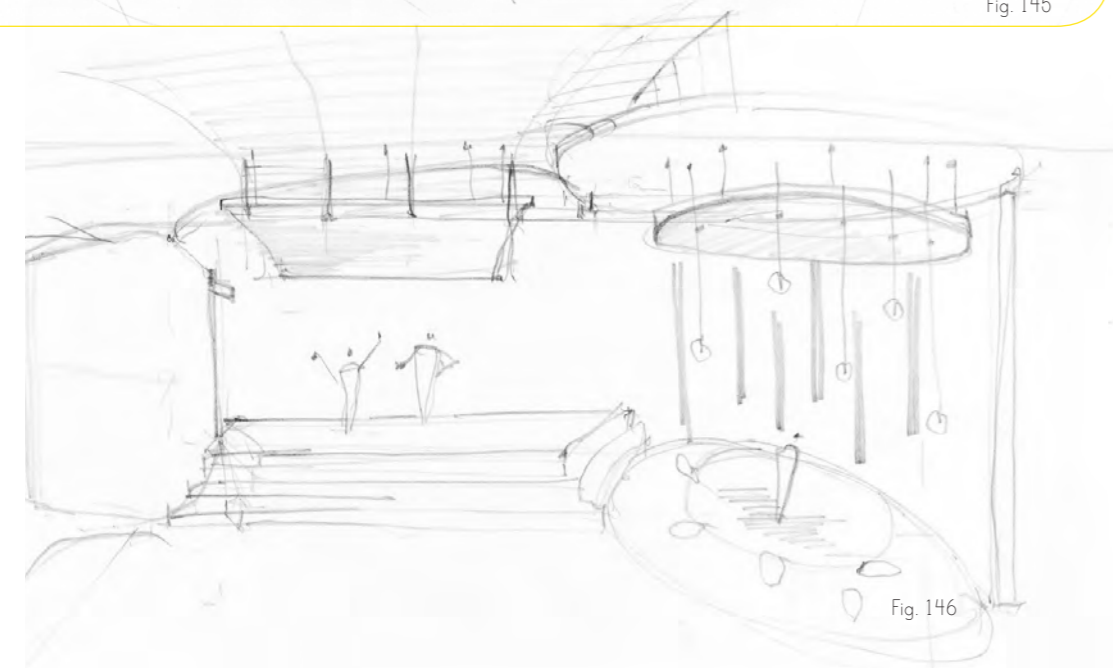


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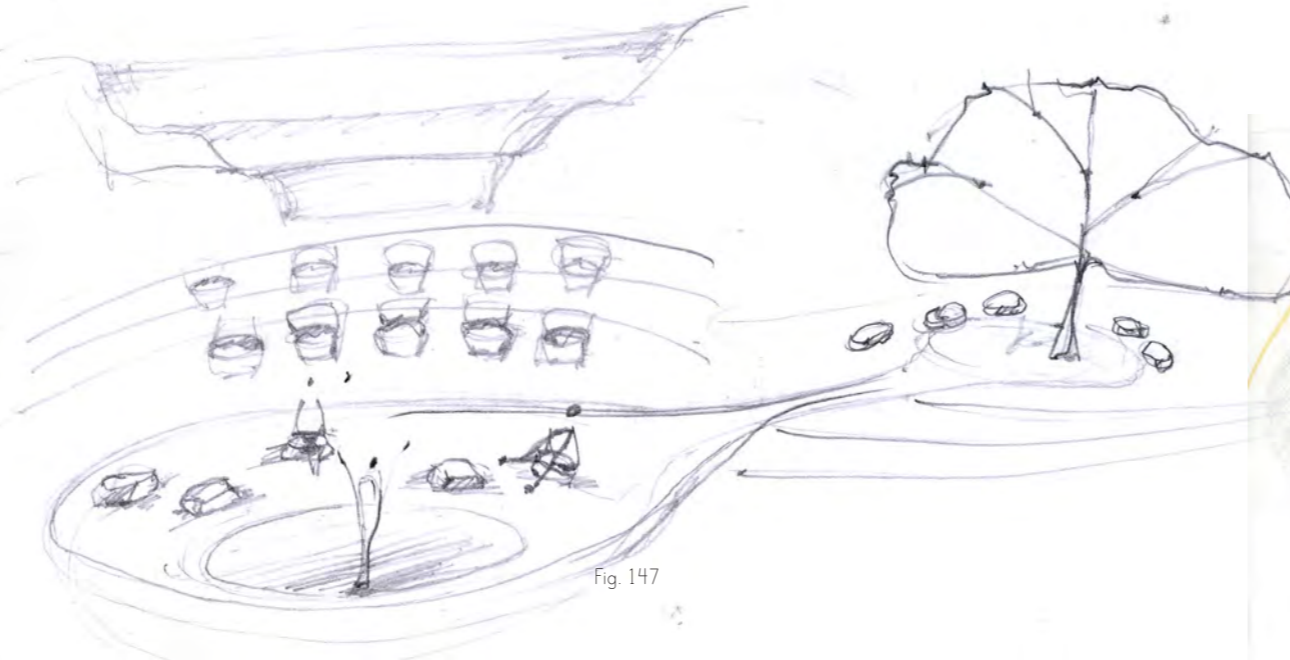


Fig. 147



Fig. 152

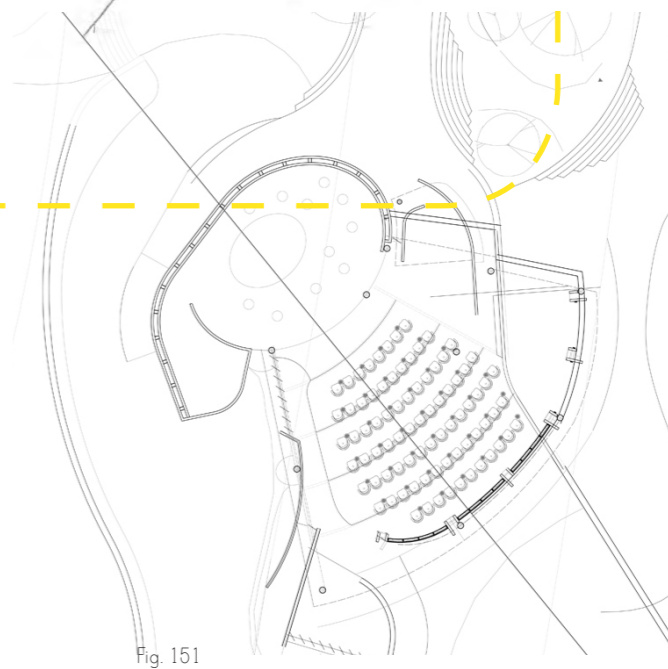


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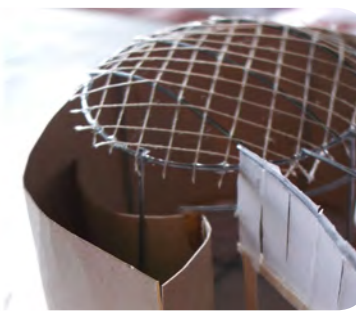


Fig. 156



1:200 Fig. 157

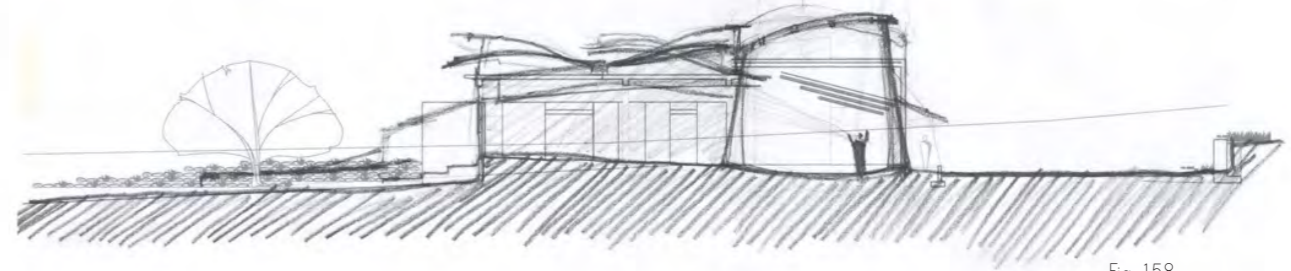


Fig. 158

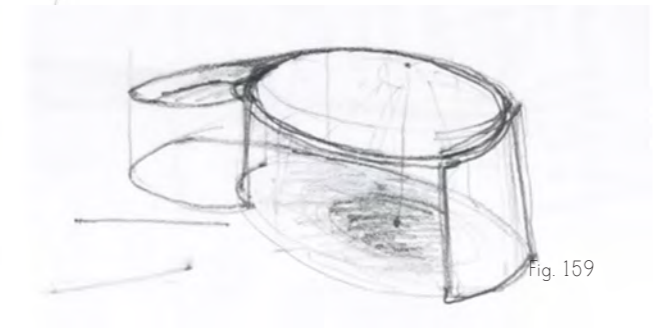
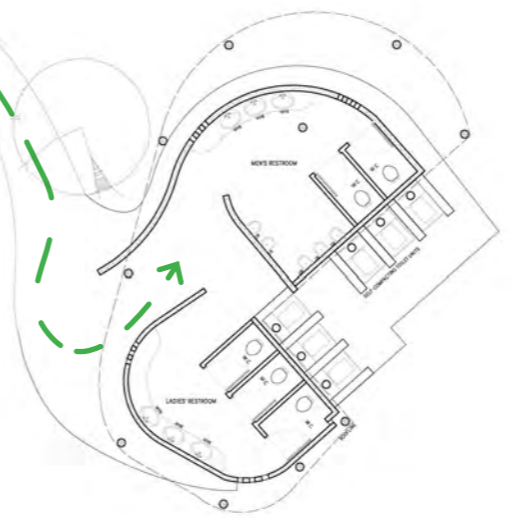


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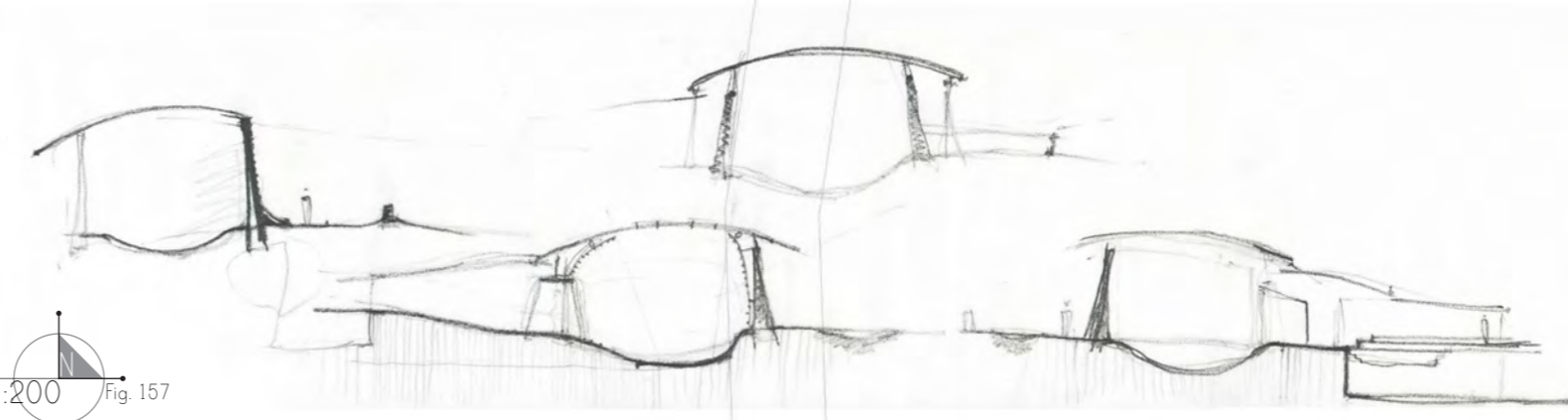


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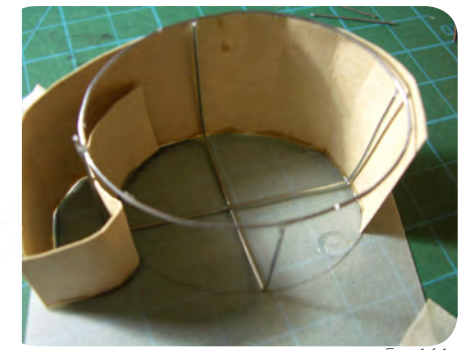


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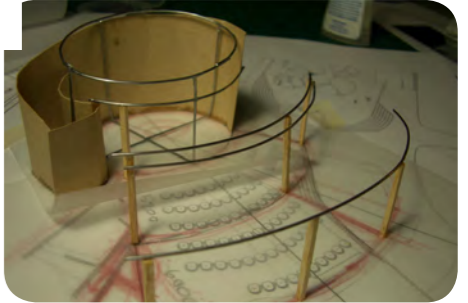


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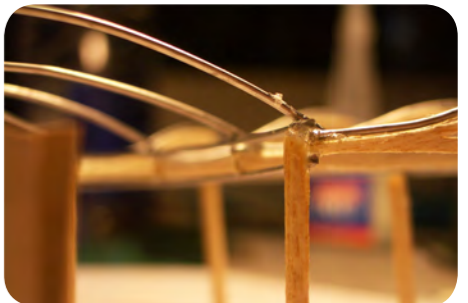


Fig. 163

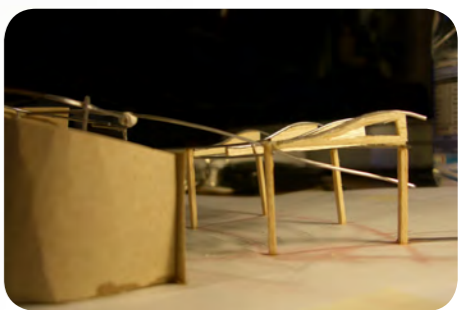


Fig. 164



Fig. 165

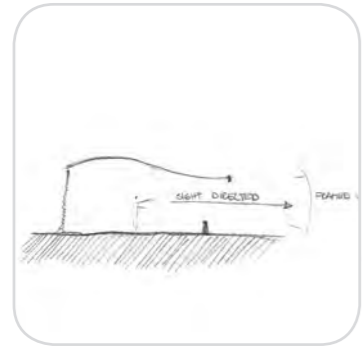


Fig. 166

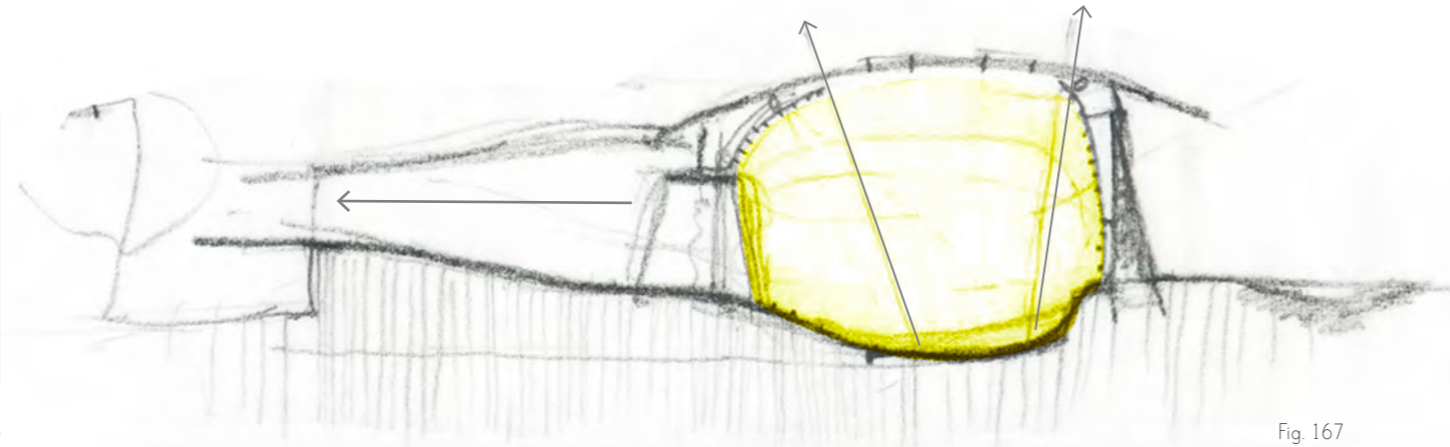


Fig. 167

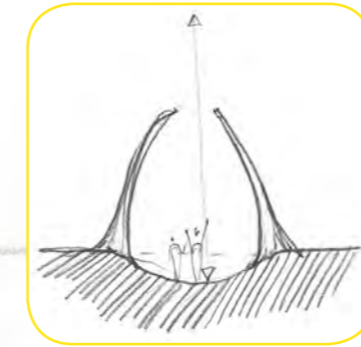


Fig. 169

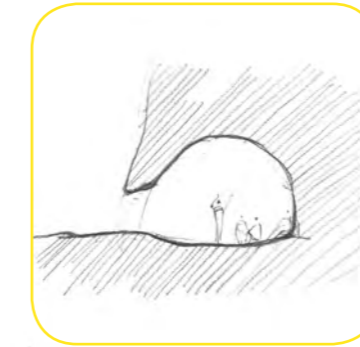


Fig. 170



Fig. 171

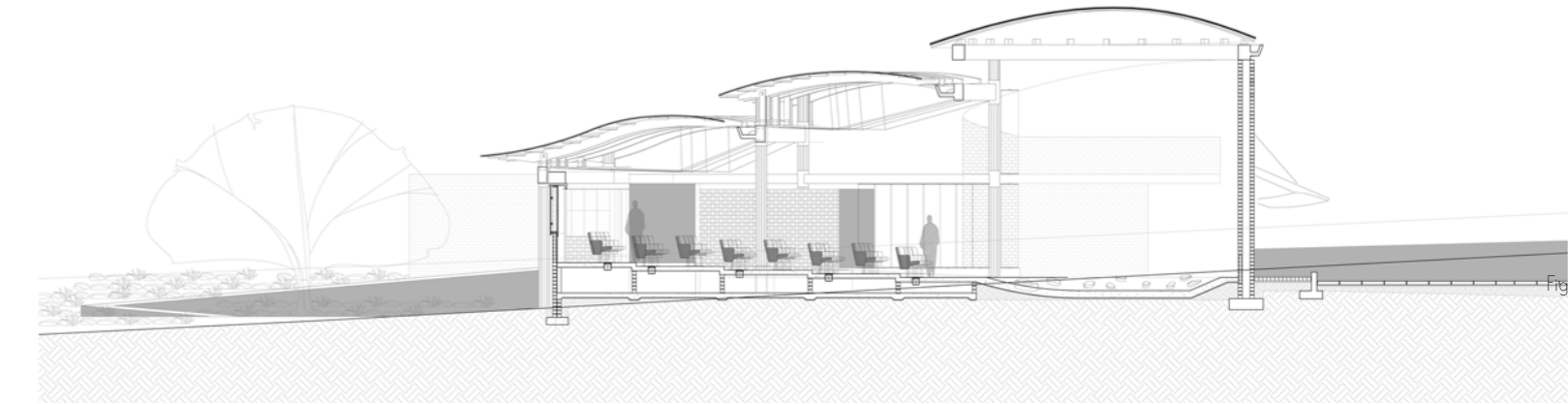


Fig. 168

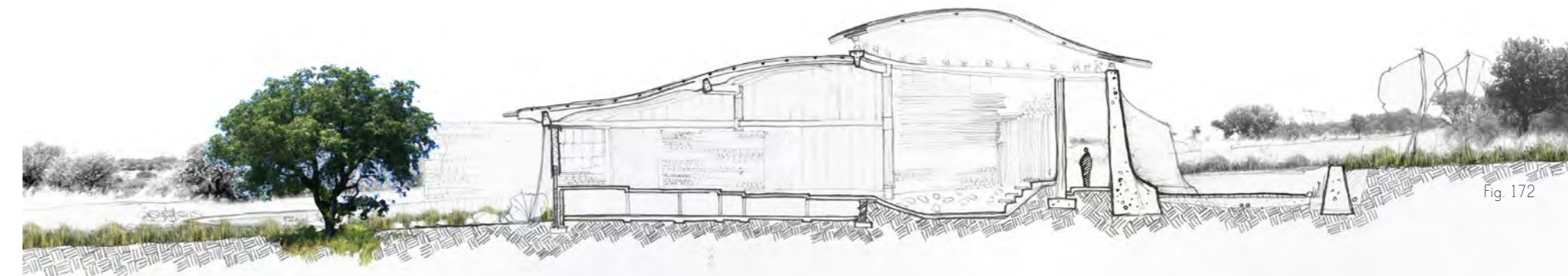
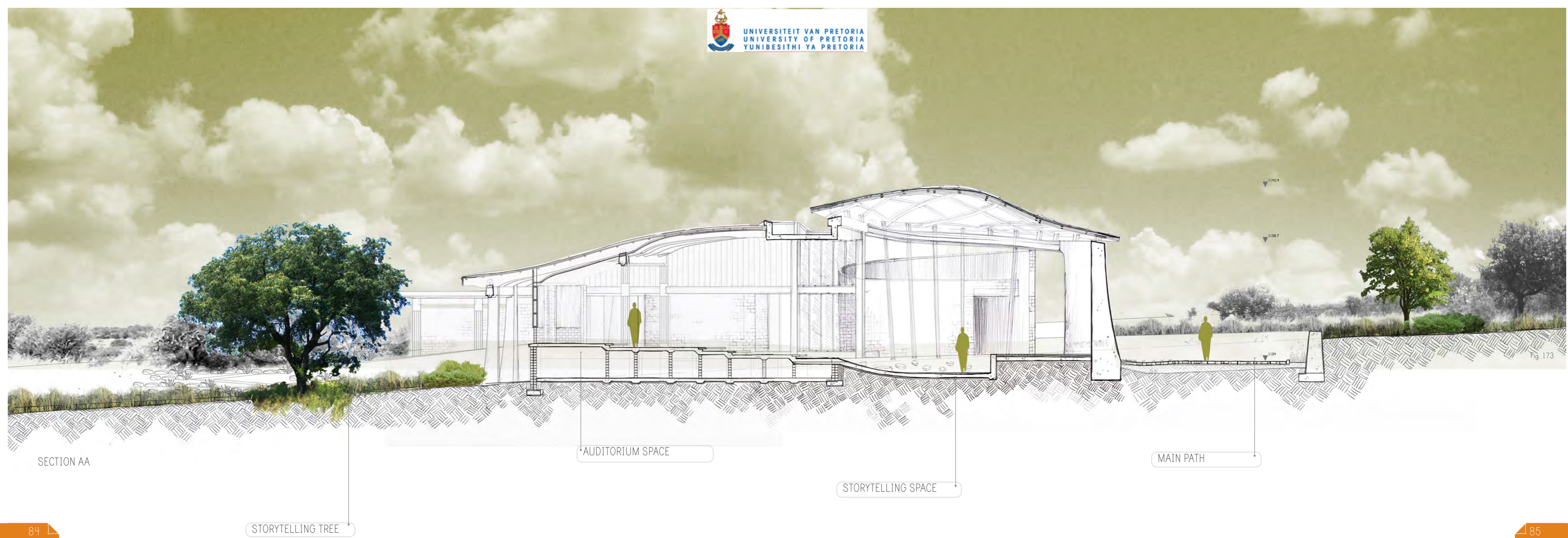
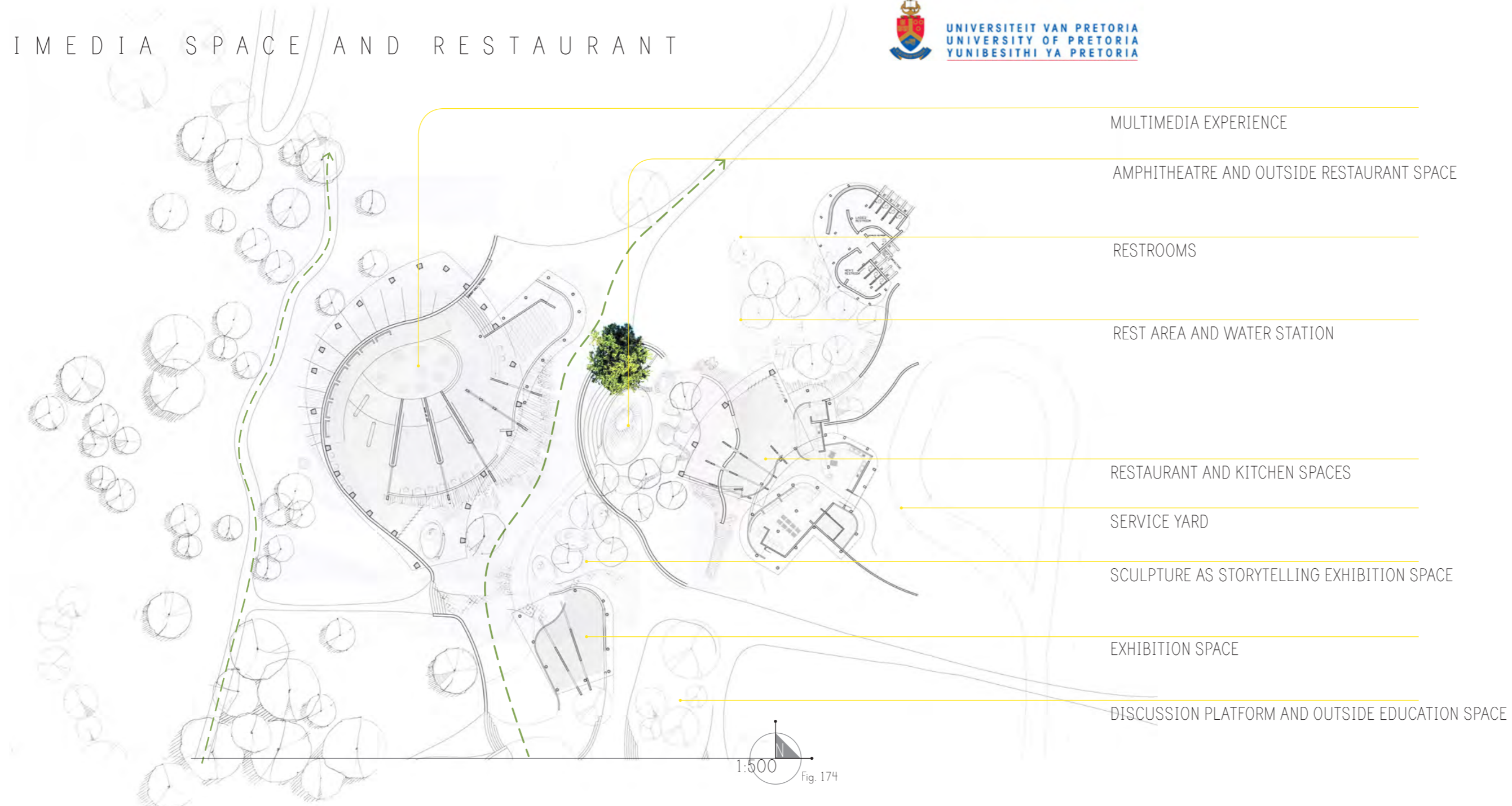


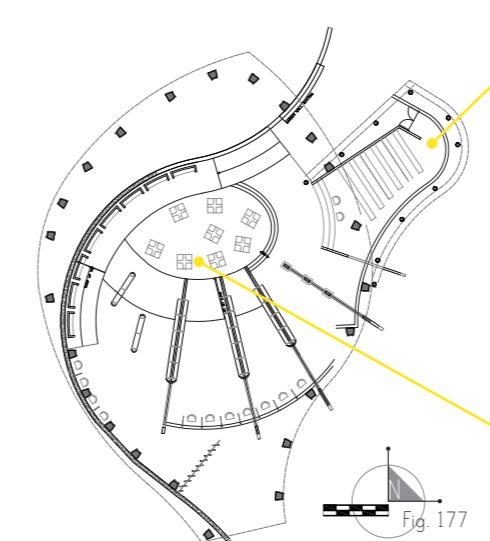
Fig. 172



5.9 MULTIMEDIA SPACE AND RESTAURANT

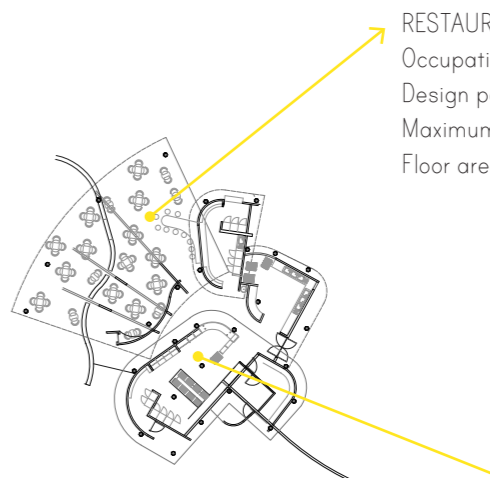






OFFICE AND ARCHIVE
Occupation: G1 - Office
Design population: 1 person seat per 15m²
Floor area: 58m²
Population: 3 people

MULTIMEDIA EXPERIENCE
Occupation: C2 - Library
Design population: 1 person seat per 20m²
Floor area: 382,8m²
Population: 19 people



RESTAURANT SPACE
Occupation: A1 - Restaurant
Design population: 1 person per m²
Maximum number of seats: 72
Floor area: 125m²

KITCHEN AND SERVICE SPACE
Occupation: D1 - Industry, moderate risk
Design population: 1 person per 15m²
Floor area: 127,22m²
Population: 8 people

Fig. 176

Fig. 177

Fig. 178

5.9.4 CONCEPT DEVELOPMENT
MULTIMEDIA EXPERIENCE

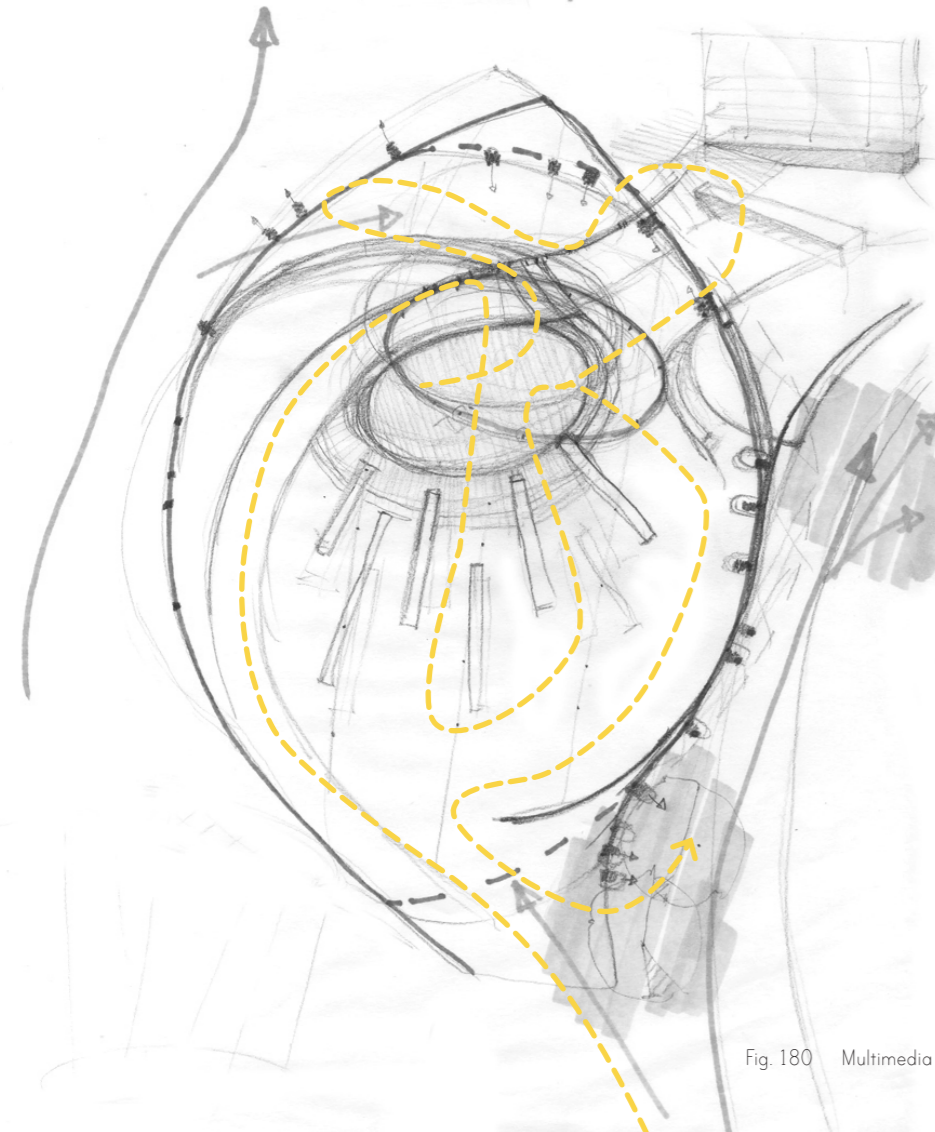


Fig. 180 Multimedia concept plan

Fig. 179 Multimedia elevation



Fig. 181

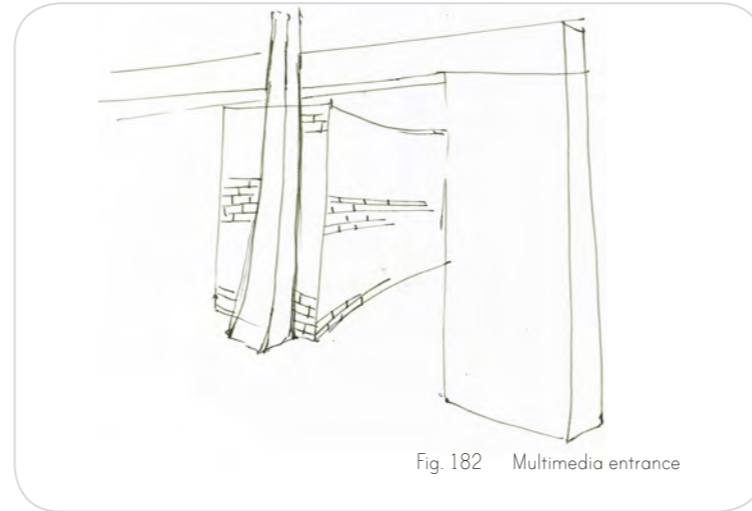


Fig. 182 Multimedia entrance

Fig. 183 Outside space concept

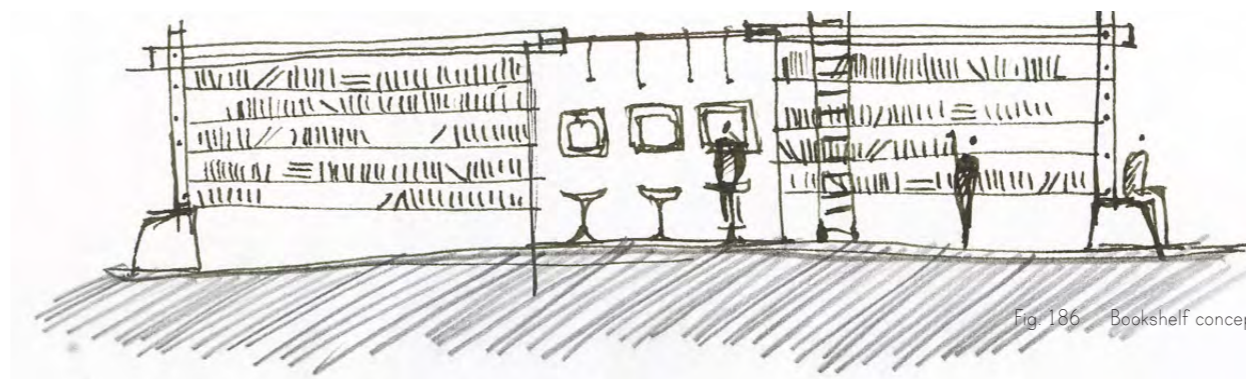


Fig. 186 Bookshelf concept

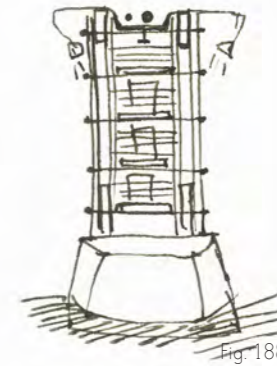


Fig. 188

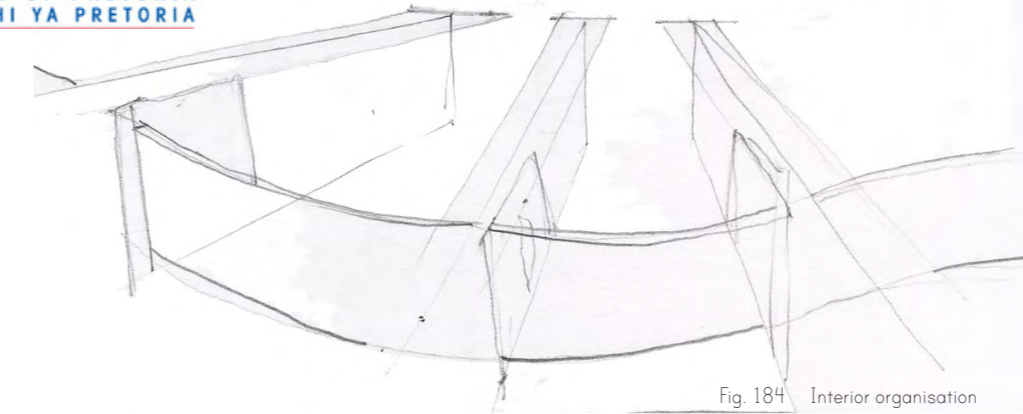


Fig. 184 Interior organisation

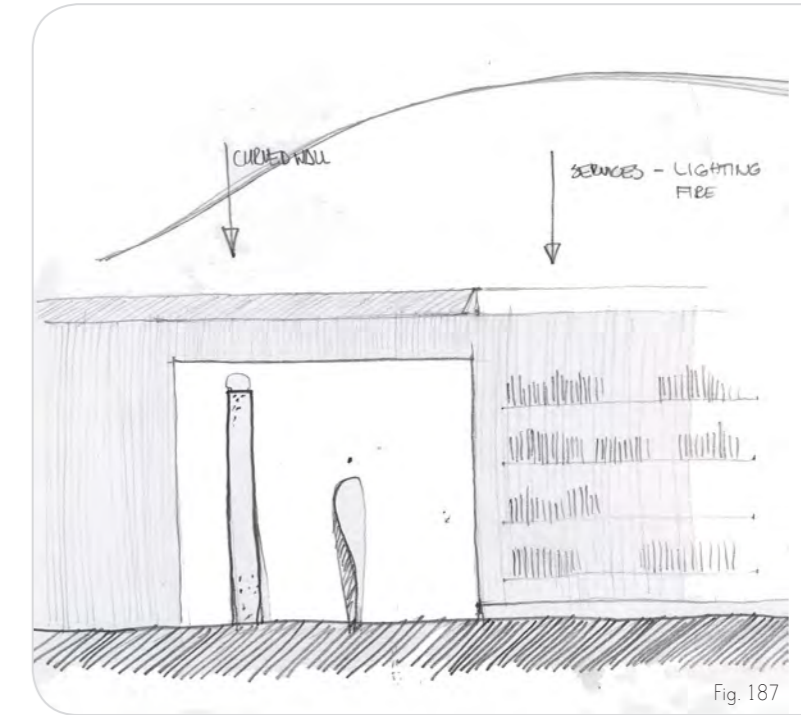


Fig. 185

Fig. 187

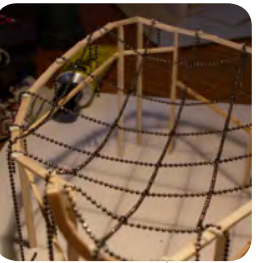


Fig. 189

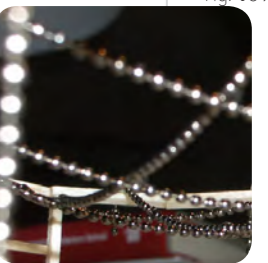


Fig. 190



Fig. 191



Fig. 192



Fig. 193

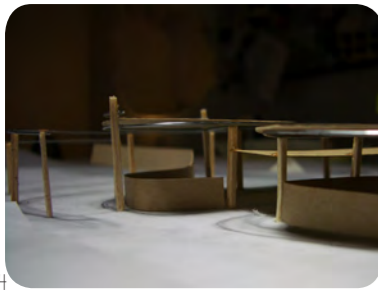


Fig. 194

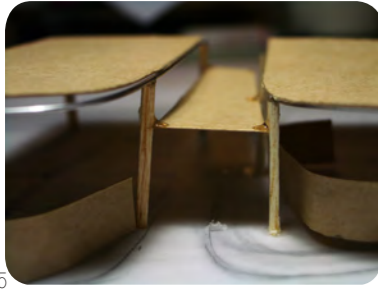


Fig. 195

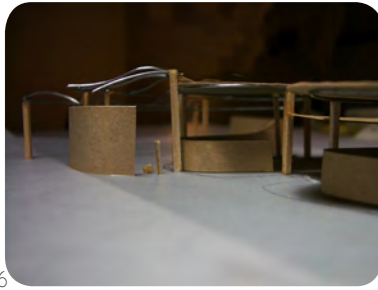


Fig. 196

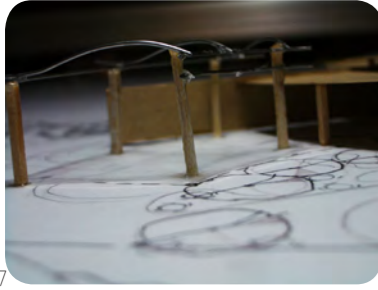


Fig. 197



Fig. 198

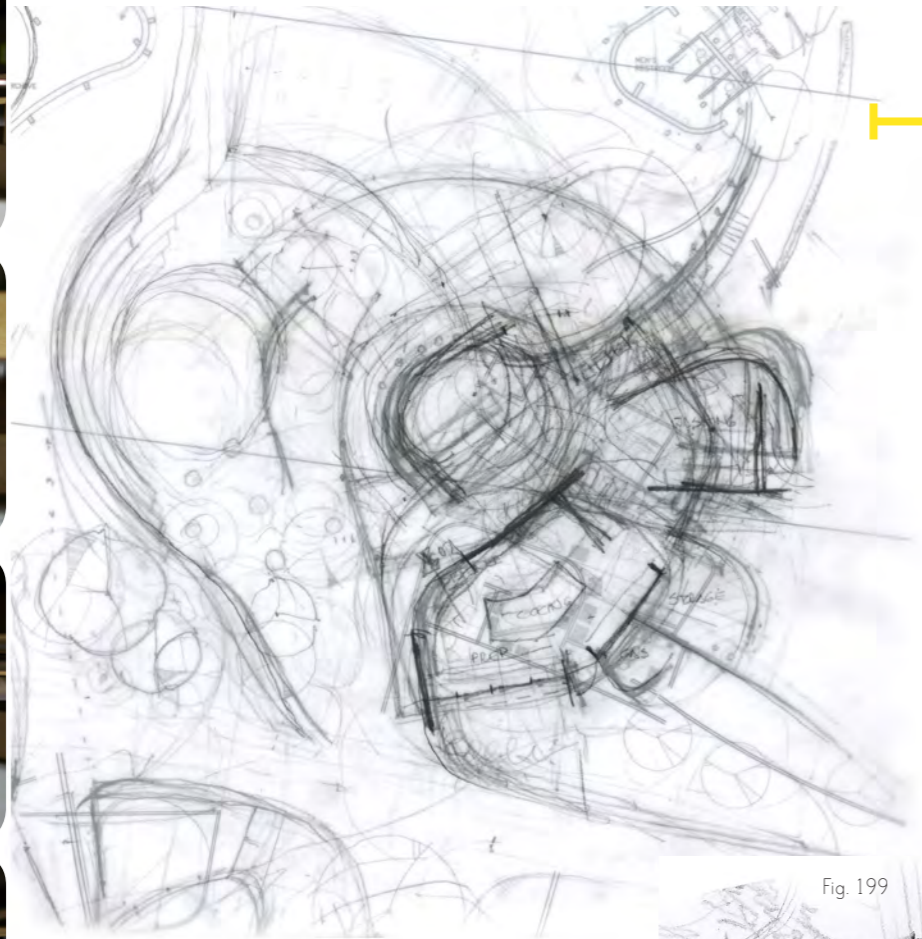


Fig. 200



Fig. 203

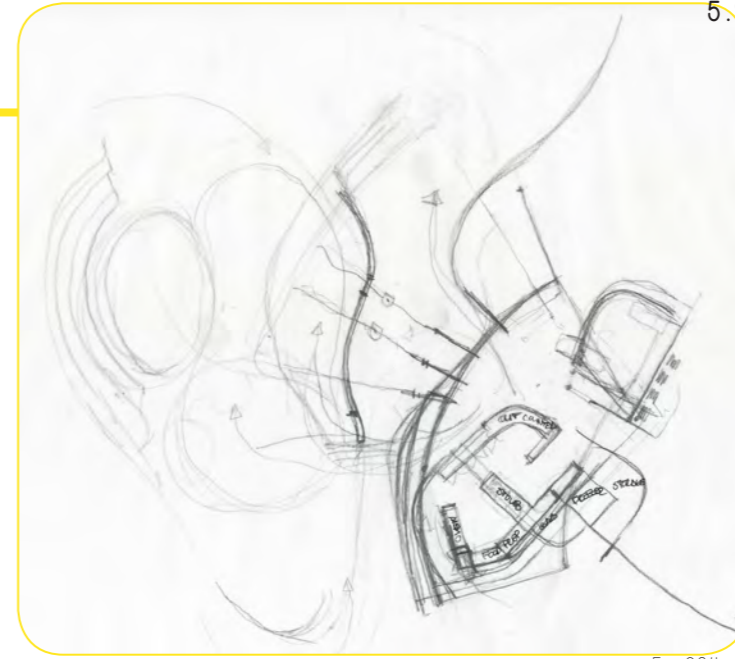


Fig. 204



Fig. 205

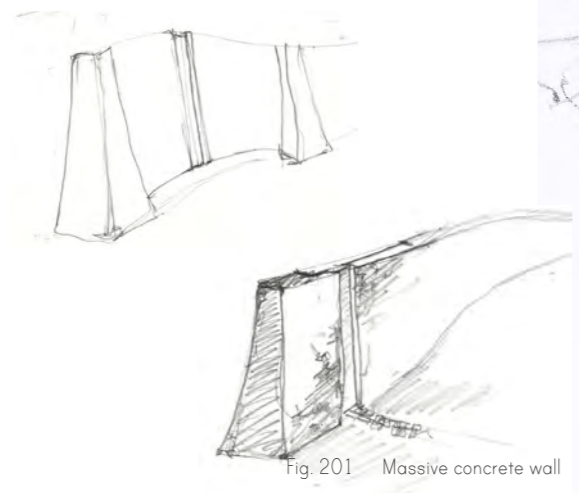


Fig. 201 Massive concrete wall

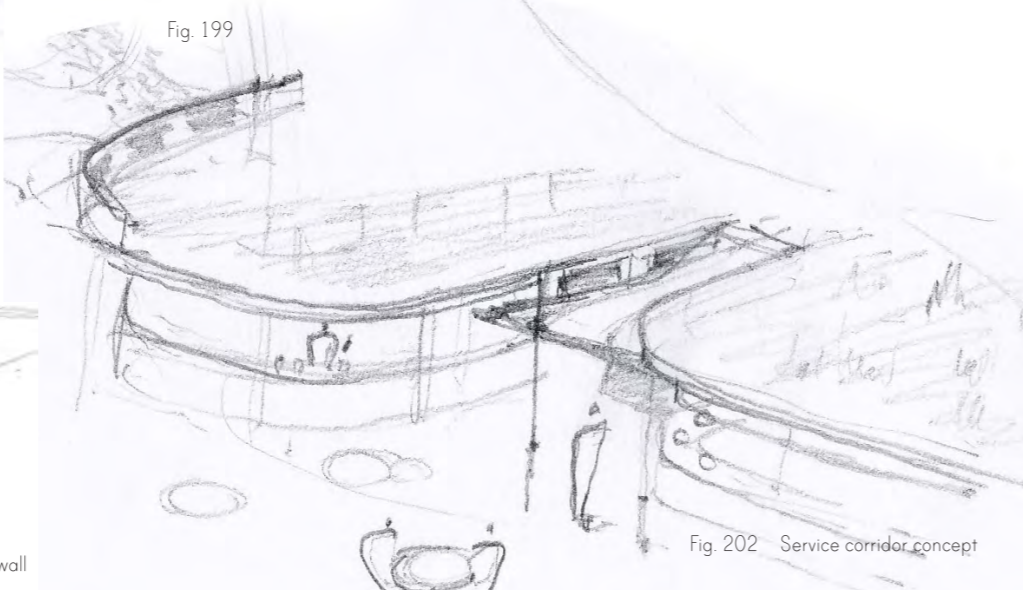


Fig. 202 Service corridor concept

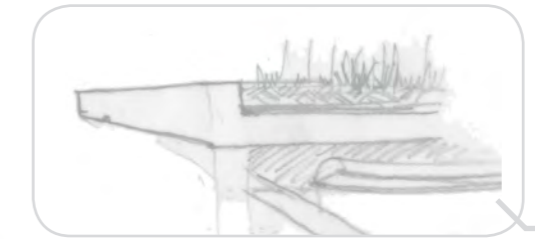


Fig. 207 Roof edge

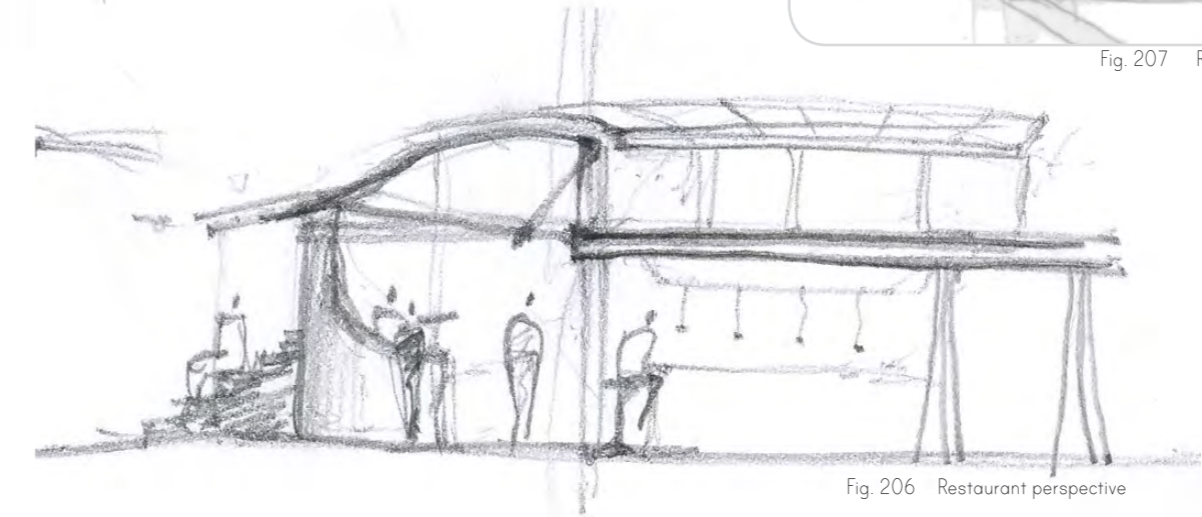


Fig. 206 Restaurant perspective

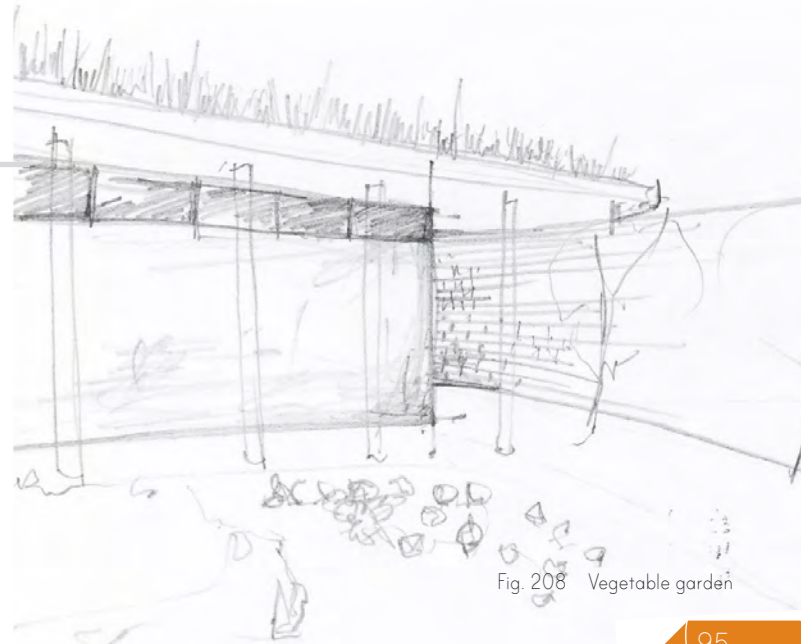


Fig. 208 Vegetable garden

5.9.6 DEVELOPMENT OF THE SECTION

MULTIMEDIA AND RESTAURANT SPACE

