

V\_1.  
Conceptual collage  
of man and  
animal threshold  
(Author 2014).

# CHAPTER V

## EXTRUDED EXPERIENCE

*design development: enclosure intervention*





*Extruded experience*

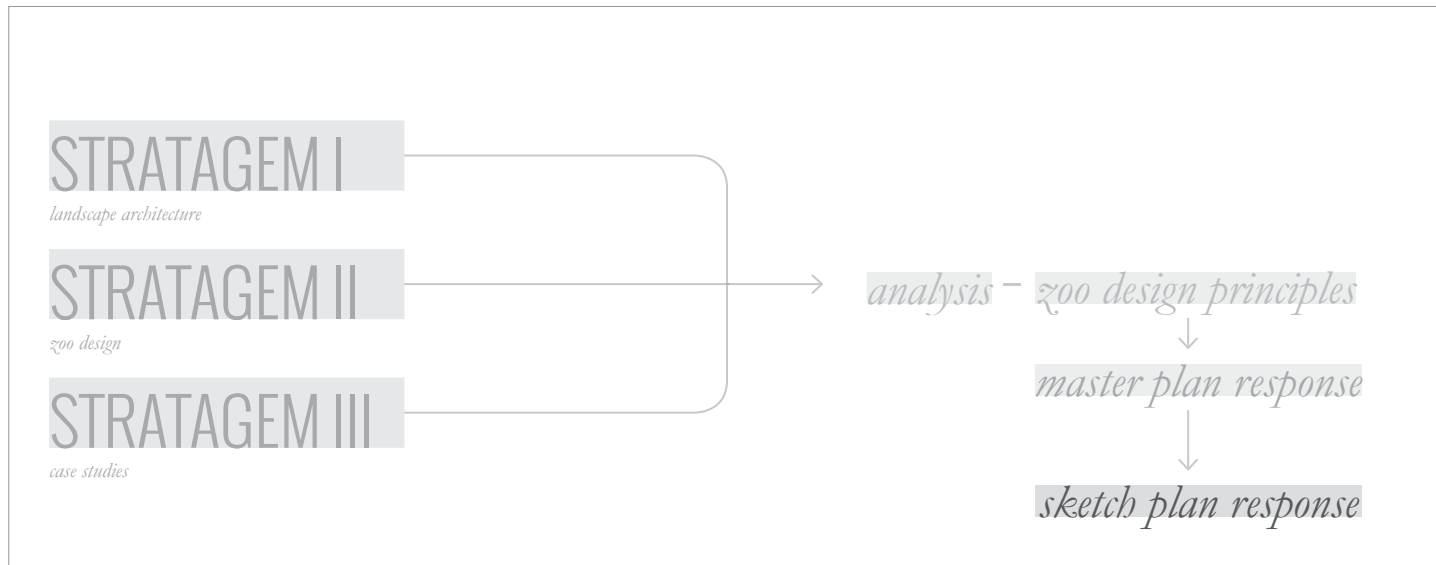
THE EXTRUDED EXPERIENCE WILL FOCUS ON THE SPATIAL IMPLICATION OF THE THRESHOLD BETWEEN MAN AND ANIMAL WITHIN A ZOOLOGICAL ENCLOSURE. CHAPTER V ADDRESSES THE ENCLOSURE DESIGN OF A SELECTED SPECIES ON A DETAIL DESIGN LEVEL AND AIMS TO PROVIDE AN EXTRUDED EXPERIENCE FOR BOTH MAN AND ANIMAL. CHAPTER V AIMS TO PROVE THE DESIGN HYPOTHESIS AND ADDRESS THE RESEARCH QUESTIONS OF THIS DISSERTATION.



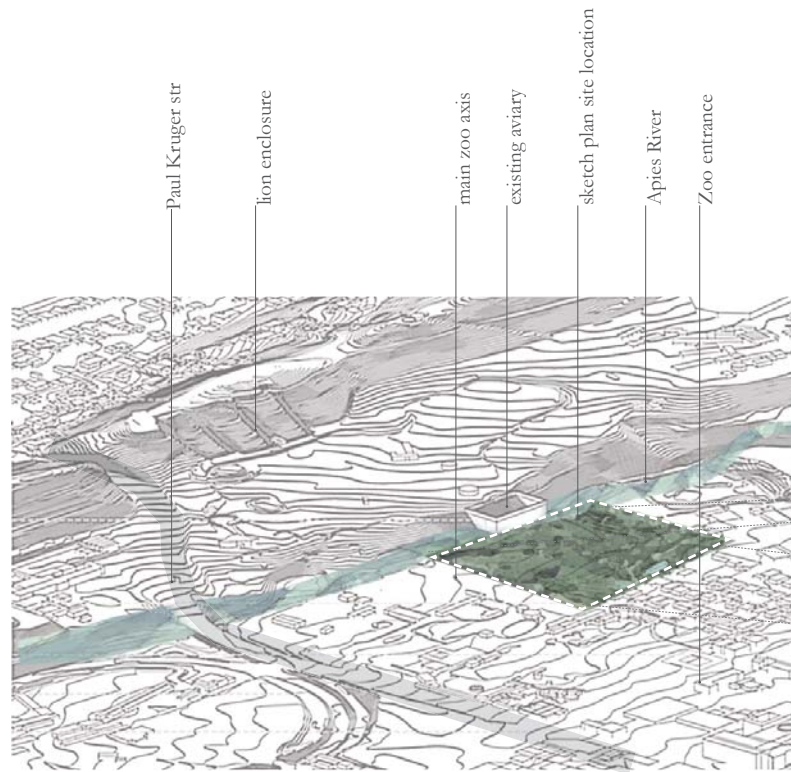
## 5.1 *Introduction*

The proposed conceptual master plan served as a collaborated experiment of different applied design principles to provide a specified platform for sketch plan development. Detail design principles will be implemented to the identified site and aim to influence the typical enclosure designs. The initial outcome of the master plan experiment gave rise to critical issues that are addressed in this chapter. Alternative options will be explored to support the final conceptual design intent. The analysis of current enclosures, topography, hydrology and historical value of the site will serve as design determinants for the identified site. This review will refer directly to the unique relationship between man and animal. The proposed enclosure design will aim to reconfigure current zoo typologies to spatially inform the new set of design principles.

Landscape design becomes a fundamental instrument that will aim to combine ecology and aesthetics to create a hybridised interactive experience with nature, animals and humans. The design will acknowledge the historical and cultural significance of the NZG and use the landscape as a medium to communicate this significance.



V\_2. Stratagem  
application for  
sketch plan response  
(Author 2014).





lion enclosure

existing aviary

existing rhino enclosure

lion enclosure

bridge

sketch plan site location

main zoo axis

existing giraffe enclosure

Zoo entrance

*V\_3. 3d and plan view of sketch plan site location (Author 2014).*





*V\_4. Carrying  
capacity feasibility  
representation  
(Author 2014)*

## 5.2 *Master plan analysis*

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The master plan analysis will serve as the first set of guidelines for sketch plan development. The identified issues of the master plan will aim to redefine the proposed zoo design principles. A single biozone will be selected and analysed to determine the outcome critique. The critique will include pragmatic aspects, such as the carrying capacity of enclosures, but also spatial and experiential implications of the proposed master plan.

### 5.2.1 *Carrying capacity*

In the master plan analysis, it has been noted in the savannah biozone that the intended biome cannot be replicated in the NZG to the full extent due to the amount of space available. The degree to which one can successfully maintain a high quality immersion exhibit is directly proportional to and dependent on the size of the exhibit and the type and number of animals contained within it.

In every case, the carrying capacities, or density of animals within the zoo exhibit, are numerous times of those found in natural ecosystems. Generally, the larger the space and the smaller the number and size of animals in it, the easier it will be to maintain the original landscape concept. Figure 4 on page 168 illustrates the carrying capacity feasibility conceptually.

Conversely, exhibits housing too many large, heavy herbivores in a minimal area have little chance of success. Where possible, the duplication of exhibit spaces to allow the rotation of animals from one space to another will allow for sound pasture management practices and will significantly improve the exhibit experience. While the emphasis is on the authenticity and natural appearance of every biozone, the reality is that satisfactory results depend on intensive management practices to overcome wear and tear generated by animals within any simulated or replicated habitat. Ultimately, the closer an exhibit habitat parallels the true ecosystem, the greater the opportunity for meaningful interpretation and education.

The purpose of an immersion exhibit is to attract attention, increase curiosity, and thereby encourage intellectual involvement, eventually creating a memorable image in the mind of the observer.

In conclusion, the carrying capacity should therefore not be applied to wild animals, as it will not be to the advantage of the animals and their habitat. Nature and the ecosystem should be the norm and the objective towards environmental integrity in terms of education and interpretation of zoo visitors.



*V\_5. View of site location showing existing Apies River, wooded area and existing primate cages (Author 2014)*

5.2.2

## *The Unzoo response*

The master plan implemented a number of Unzoo principles to support the final master plan intent. One of the principles was that animals should have superior domination and humans serve as the inferior background. Initially, the aim should reflect coercion versus cooperation. The author, however, argues that when the enclosure design replicates the Unzoo principles regarding novel and natural habitat too literally, the design will risk to lose the essence of what a zoo is really all about. The visitor can only experience a mono subjective response to an extent that will restrict the user to contribute or experience to the full potential of the enclosure and the animal.

The sketch plan design will therefore aim to use nature and the ecosystem as the norm, but acknowledge the zoo as a place-making platform for humans. The humans will not serve as observers in the background but become part of the design which aim to enhance the experiential quality of the visitor to further interaction and relationship between man and animal. This notion will be explored through the reconfiguration of the current enclosures and compare animal as the spectacle versus visitor as the spectacle.

5.2.3

## *Tarzaneque*

The enclosure design will aim to prevent the ‘Tarzaneque’ vernacular and the re-construction of unrealistic habitat replication. The proposed detail enclosure design will aim to establish a sustainable enclosure that will not result in dusty un-experiential scenes of landscapes overgrown with Kikuyu. This can be achieved by identifying a larger site for the enclosure and choosing smaller numbers and sizes of animals in it. This will result in the original landscape concept.



V\_6. Approach to site location next to existing Apies River (Author 2014).



V\_7. View towards existing aviary existing Apies River (Author 2014).



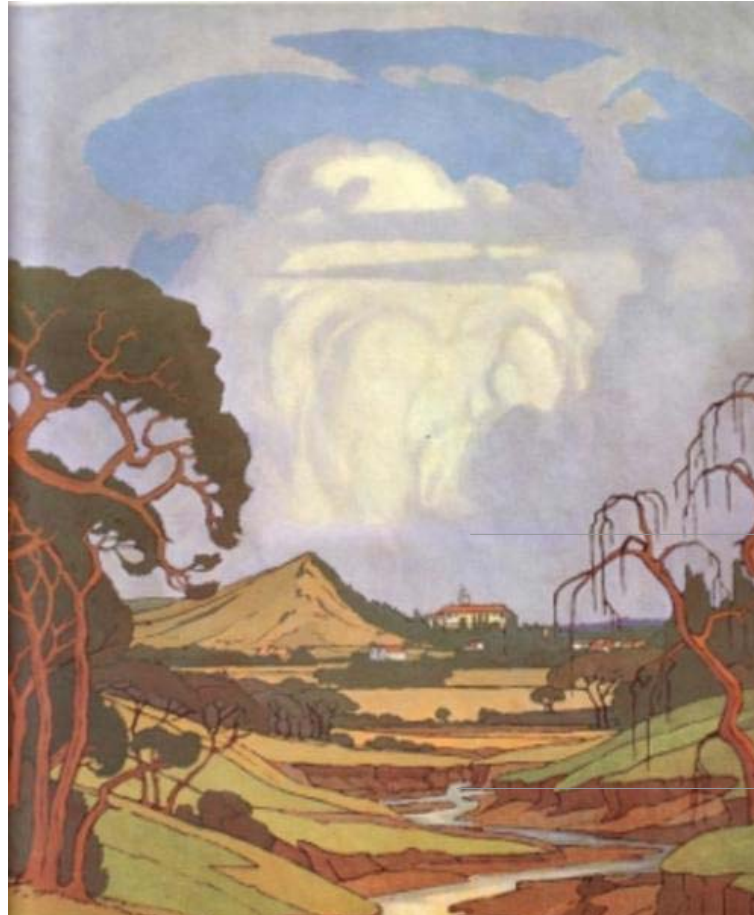
V\_8. Approach to primate cages on site (Author 2014).



*V\_9. Existing primate cages on site (Author 2014).*



*V\_10. 'Brachiation' of Gibbons in confined enclosure (Author 2014).*



union buildings location

predicted historical location of NZG today

*The Apies River with Meintjieskop*

*Jacobus Hendrik Pierneef*

V\_11. Apies  
river, Transvaal  
by J.H Pierneef  
(Bolsmann 2001).

### 5.3 *Concept development*

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Stratagem I, the sustainable beauty application, proposed that the enclosure design must acknowledge the qualities of the social and cultural aspects of the site. The proposed enclosure will therefore incorporate a broader range of factors beyond the proposed ecology as design generators. The historical image of the Apies River will serve as a design driver for sketch plan development.

As established in the master plan analysis, smaller and local species must be chosen in order for the design to establish full ecological integrity and meaningful interpretation of the ecosystem. Because of the historical image of the Apies River and the vervet monkeys, this species has been identified as one of the prominent species in the historical landscape, which will initiate a platform for habitat replication. The original Apies River landscape will therefore be replicated and regenerated within the new enclosure. This design principle will respond to the site-specific conditions in terms of ecology, history and culture. The chosen site will therefore be adjacent to the Apies River to further strengthen this metaphor.

Eugene Marais describes the historical Apies River significance in one of his short stories, *Van oudae en oumense in Pretoria*: "Daar was niks waarvoor Pretoria in die ou dae beroemder was as sy water nie. Die Apiesrivier was 'n dolomietstroom, 'n sterk riviertjie met water so helder soos kristal. In die diepste kuile was die kleinste klippie op die bodem sigbaar. As mens vandag die vuil, klein straaltjie water aanskou, kan jy nooit 'n denkbeeld vorm van die *marchenbafte* stroom van ouds nie, die walle bedek met varings en kapokvelde; varklblomme het elke vleitjie versier" (Marais 2006: 758). The Marais (2006) image will be the proposed aim for the replicated Apies River within the enclosure. The design will aim to implement an artificial stream with crystal clear water and banks filled with ferns and arum lilies (*Zantedescia spp.*).



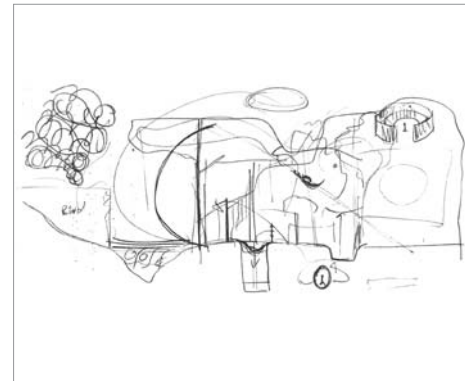
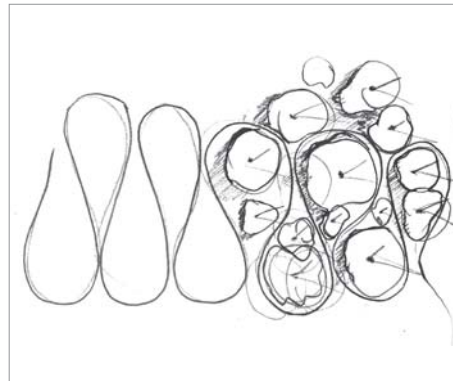
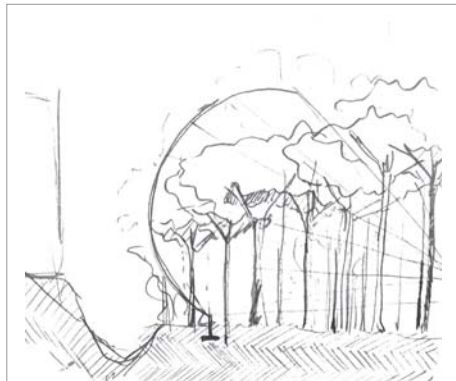
*“Daar was niks waarvoor Pretoria in die ou dae beroemder was as sy water nie. Die Apiesrivier was ‘n dolomietstroom, ‘n sterk riviertjie met water so helder soos kristal. In die diepste kuile was die kleinste klippie op die bodem sigbaar. As mens vandag die vuil, klein straaltjie water aanskou, kan jy nooit ‘n denkkeeld vorm van die magiese stroom van ouds nie, die walle bedek met varings en kapokvelde; varkelblomme het elke vleitjie versier.”*

*-Eugene Marais*



According to Bolsman (2001:170), the name of the Apies River was adapted from the prolific vervet monkeys that inhabited the white stinkwood (*Celtis africana*) forest along the banks of the river when the first settlers arrived in the Fountains Valley. One of the earliest settlers wrote: "Trees along the Apies River made a beautiful pleasance, remarkable for its scenery, and the place was blessed with a fine climate and an abundance of the purest water". The historical imagery of this specific area paints a different picture from what the Apies River currently provides within the context of Pretoria and in the NZG. The historical context dispenses a character in terms of the appropriate planting that historically occurred and hints at the state of the river that is lost. The design will therefore acknowledge the qualities of the social and cultural aspects of the site. The exposure of the ecological, historical and cultural memory of the site can be celebrated through the introduction of an abstracted memory by means of determining where the course of the river used to run from historical maps.

Introducing endemic vegetation types that diminished over time (as noted in the description from historical records and books) will reinstate the habitat where the vervet monkeys used to reside. Water will also form a critical building block for the proposed constructed systems and support the ecology and pragmatic requirements of the proposed enclosure design. The design will therefore aim to replicate natural process through the abstraction of the natural form. These natural processes will generate and replicate the above-mentioned elements and will take precedence over the actual form appearance of these elements in nature.



V\_12. Conceptual development and barrier exploration (Author 2014).



*V\_13. Zoo poster by  
Arnid Banniza for  
Regent's Park Zoo  
1920 (Christies).*

## *The Inverted Zoo*

*Arnid Banniza*

## 5.4 *Stratagem application*

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### 5.4.1 *Stratagem I: Sustaining beauty*

As described in Chapter IV, the spatial manifestation of creative ecology, grounding the theoretical discourse within the context, will lead to the implementation of design practices from Stratagem I. These practices include the mimicry of natural process vs natural form. The hyper-nature, ecology and human life intertwined and the experience of the aesthetics will become the design generators within designed enclosure.

#### 5.3.0.14 *Beyond ecological performance.*

The proposed enclosure will perform as an ecological system by means of the implementation of the regenerated vervet monkey habitat. In order to design beyond ecological performance, the natural systems, such as the stream and the wetland moat, will intersect with the spatial experience of the visitor. The visitor will therefore not observe the design intent from the perimeter, but will be immersed within the enclosure through proposed design elements. The elements include an underground entrance, a circulation tunnel, historical enclosures, a skywalk and a tower. The experience of spatial platforms and the ecological performance of the enclosure will celebrate the vervet monkey and manifest a diverse interactive experience between man and animal.

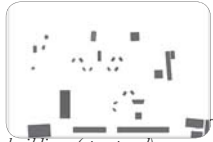
The enclosures will therefore perform beyond the display of animals. The enclosure will aim to satisfy the aesthetical, educational, intellectual, ecological, social and emotional needs of zoo visitors through a sequence of preceding experiences at different strata. Refer to figure V\_49 on page 196.

#### 5.3.0.15 *Natural process vs. natural form*

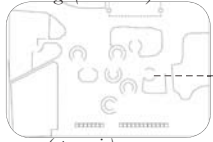
In order for the design to replicate a specific habitat, the enclosure will have to contain specific natural elements, such as the meandering stream, the wetland and the woodland habitat.

In order for the enclosure to obtain natural processes over natural form, the processes ought to generate and replicate elements that will take precedence over the actual form appearance of the identified elements. Proposing a design that will replicate the animals' natural habitat to a qualitative standard similar to a 'first nature', the natural processes will have to dominate form and initiate a foundation of the design enclosure.

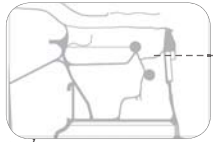
# 1. existing site conditions



buildings (structural)



cages (open air)



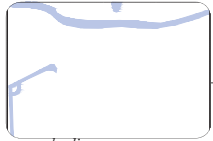
pathways



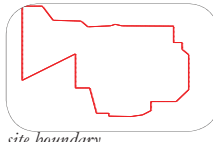
vegetation (lawn)



vegetation (trees)

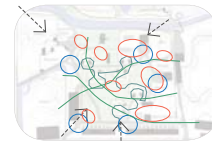


water bodies

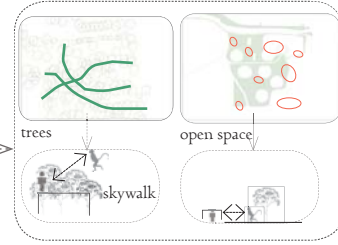
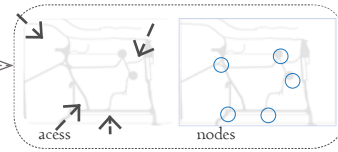
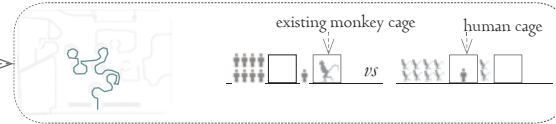


site boundary

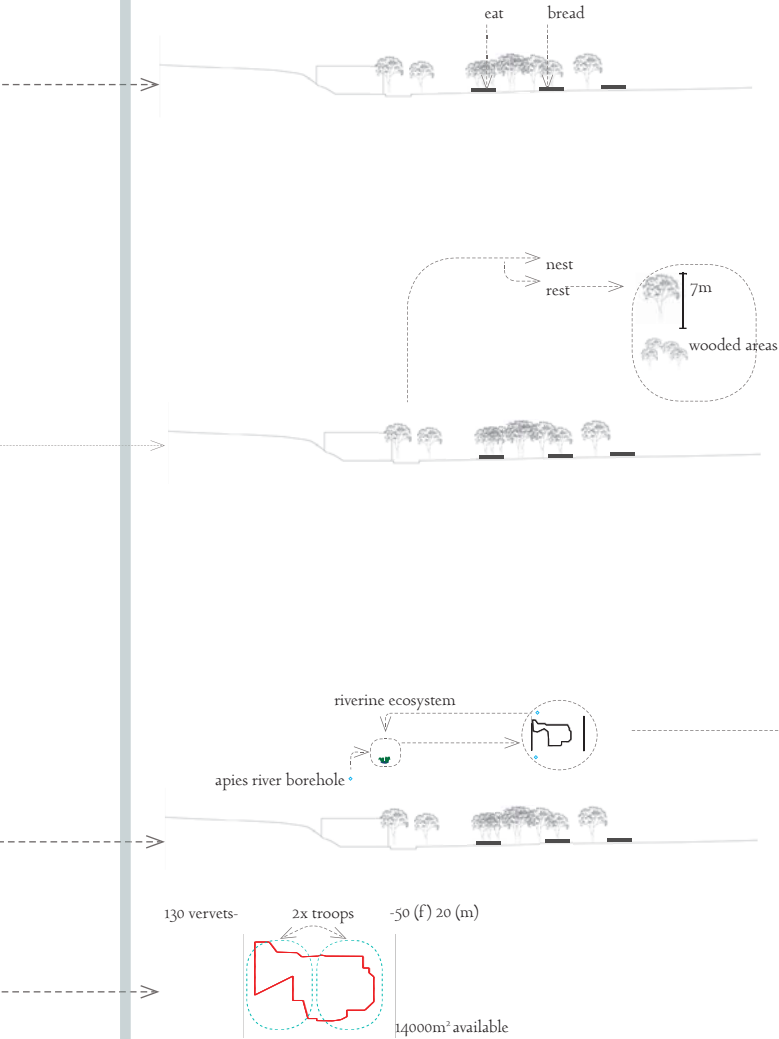
# 2. users



- access
- top circulation
- nodes
- bottom circulation
- open space

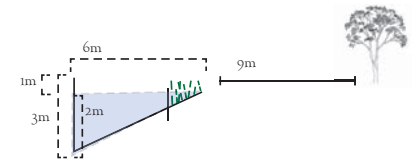
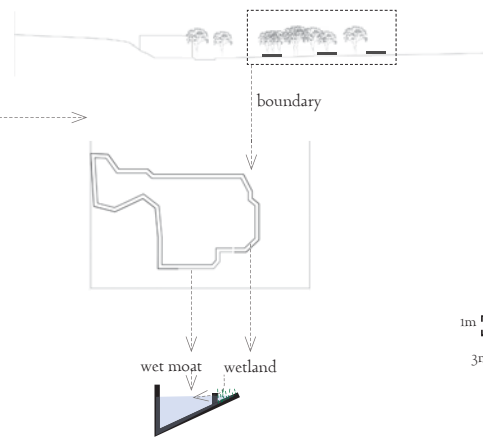


### 3. vervet monkey

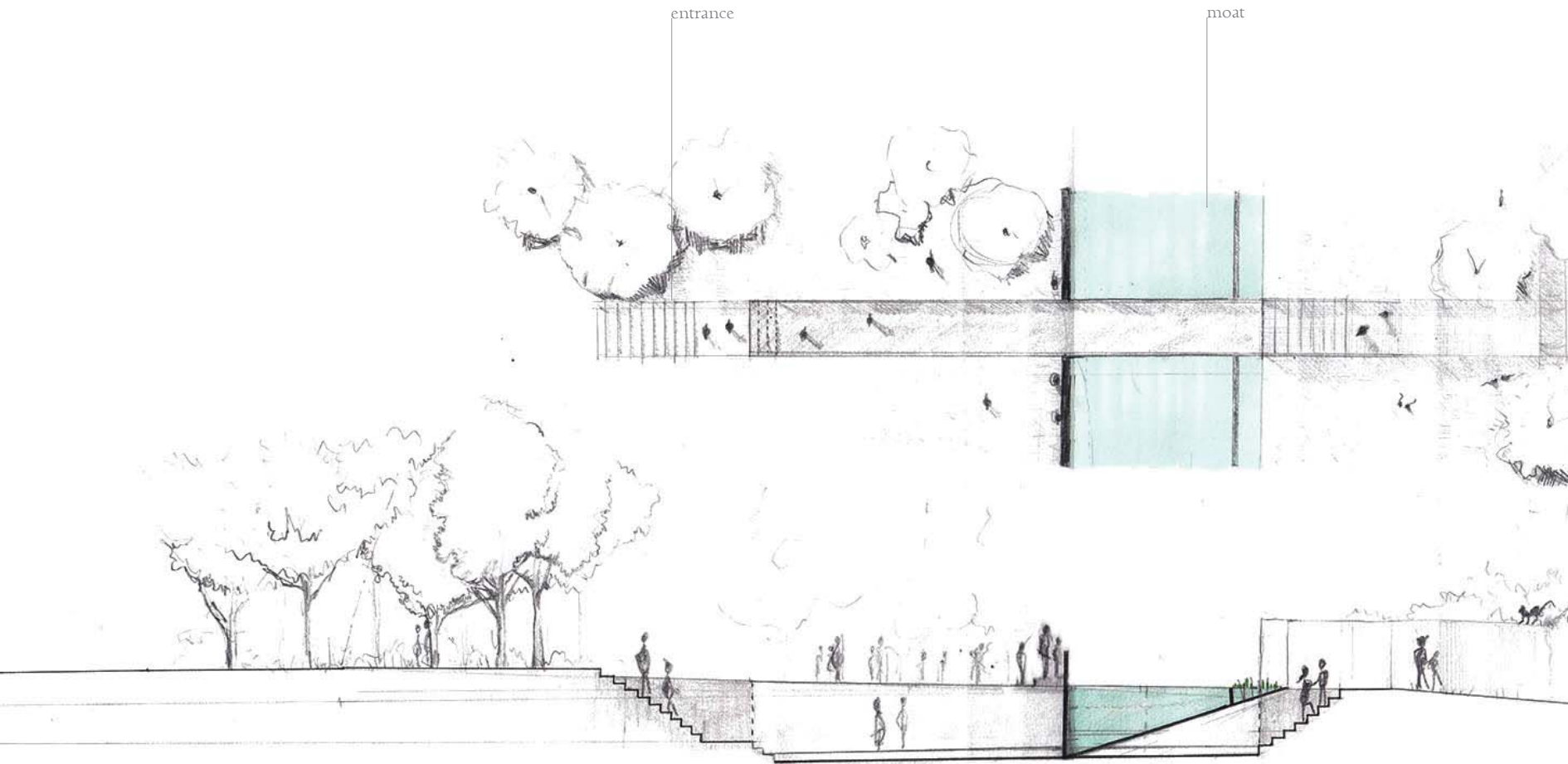


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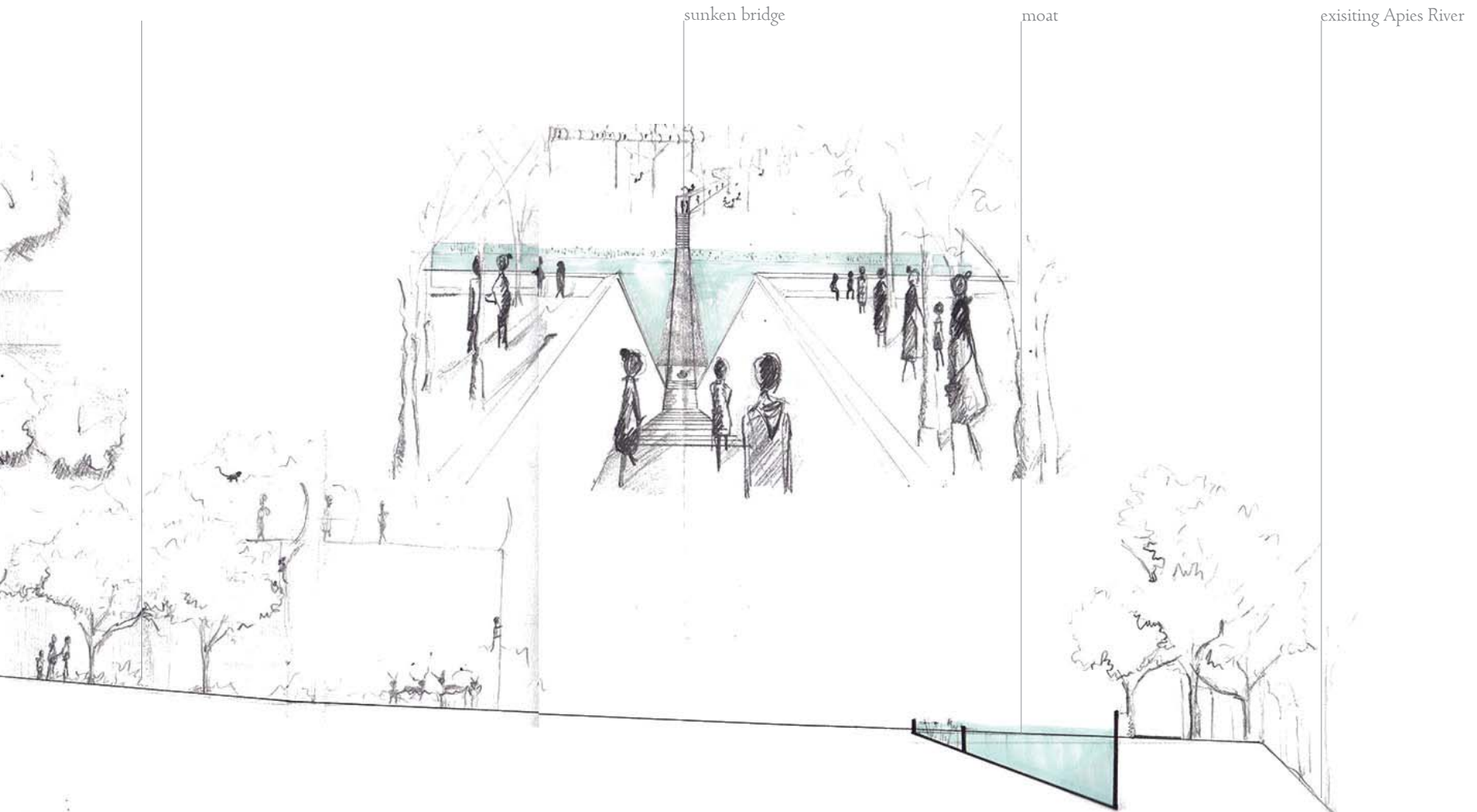
### 4. functional



V\_14.  
Pragmatic analysis  
of chosen site for  
enclosure: user vs.  
monkey vs functional  
(Author 2014).



*V\_15. Conceptual development of entrance and moat design. Critique: sunken bridge becomes obstacle for monkeys to escape (Author 2014).*





5.1.1.1.1 *Hyper-nature: the recognition of art*

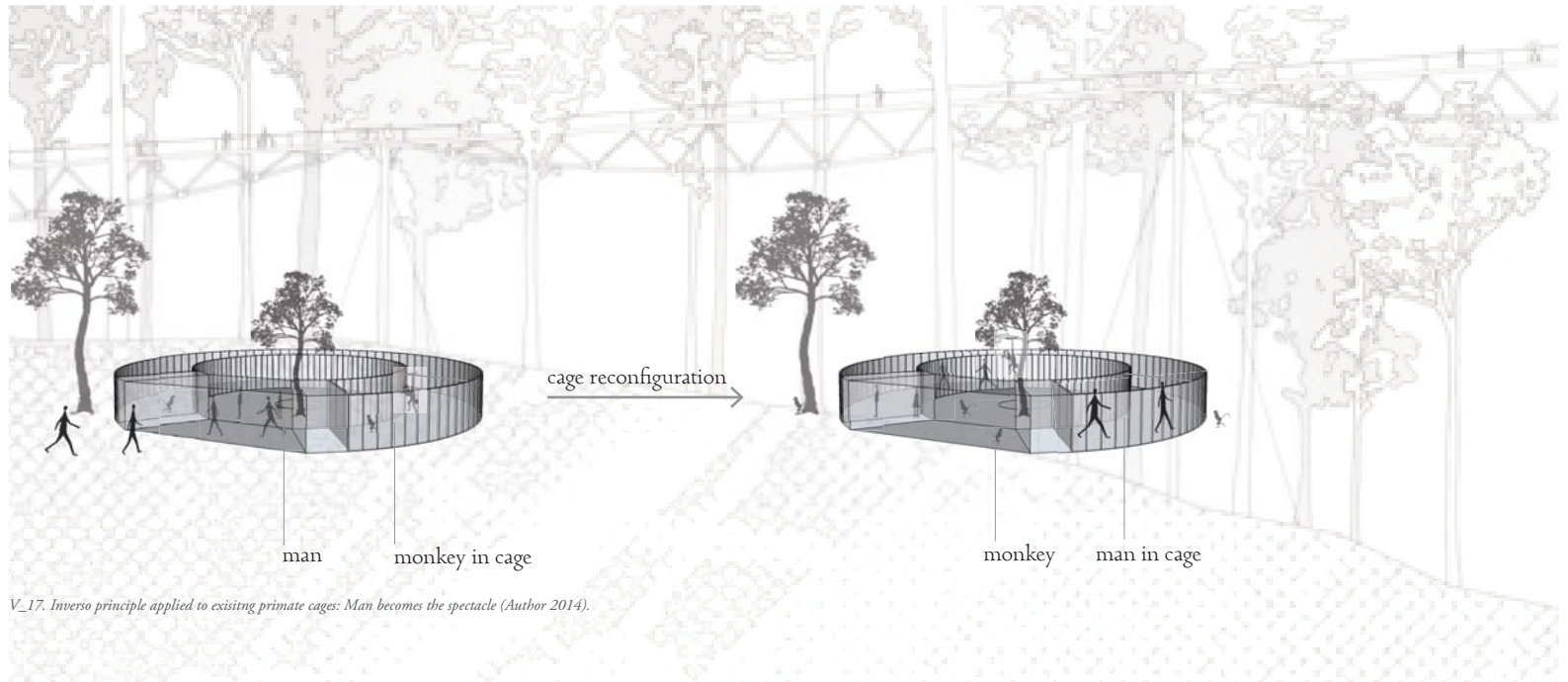
The design will further aim to analyse and understand the landscape enclosure as a design medium – a medium that will provide opportunity for the manipulation and sculpture of spaces. The manipulation and sculpting application will be achieved through exaggeration, amplification, purification, abstraction, juxtaposition and palimpsest. The sculptured landscape will, in turn, create a more experiential environment for the visitors and the animal. This landscape will amplify a translucent threshold between man and animal.

5.1.1.1.2 *The performance of beauty*

Beauty in the landscape, as defined by Meyer (2008), can influence the psyche of the zoo visitor. The design experience intent will therefore aim to stimulate a sensory and haptic quality to enable a reconnection of the zoo visitor with the animal and its habitat. The beauty will be discovered in the design enclosure through a process of stimulating different senses. Materiality will therefore serve as an important factor to physically construct the landscape experience in subtle and diverse stratum. This experience will be enhanced through spatial manipulation of the constructed elements.



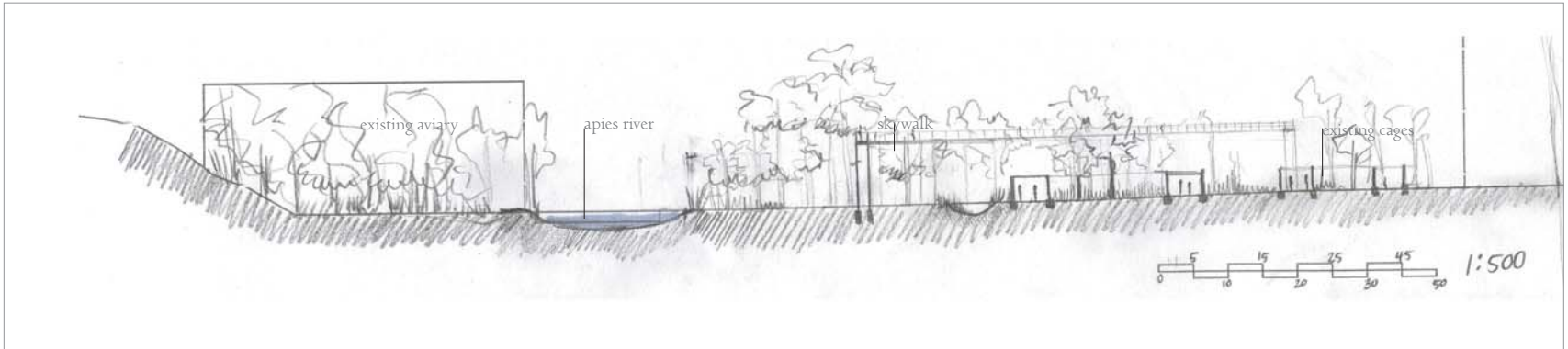
V\_16. Photographic study of existing primate cages on selected site (Author 2014).



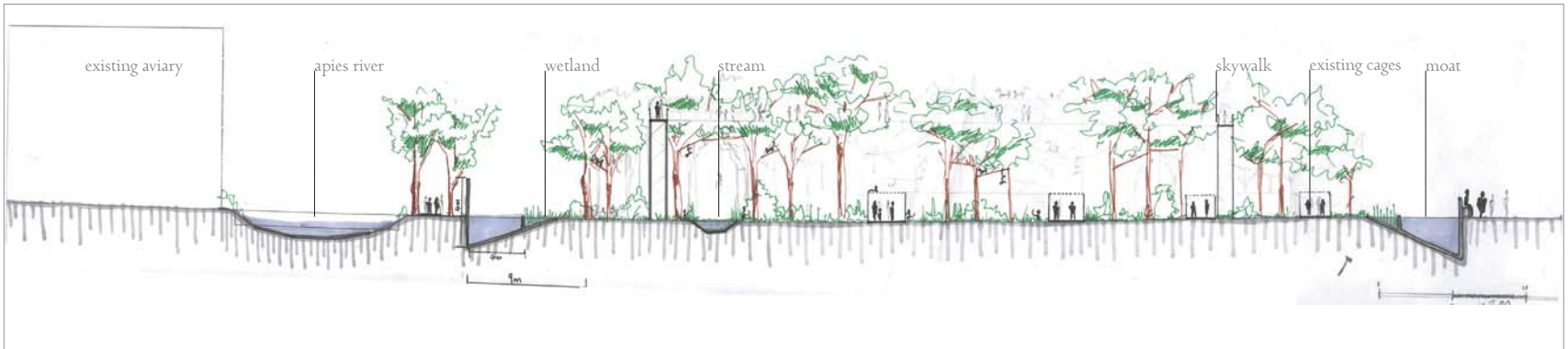
V\_17. Inverso principle applied to existing primate cages: Man becomes the spectacle (Author 2014).



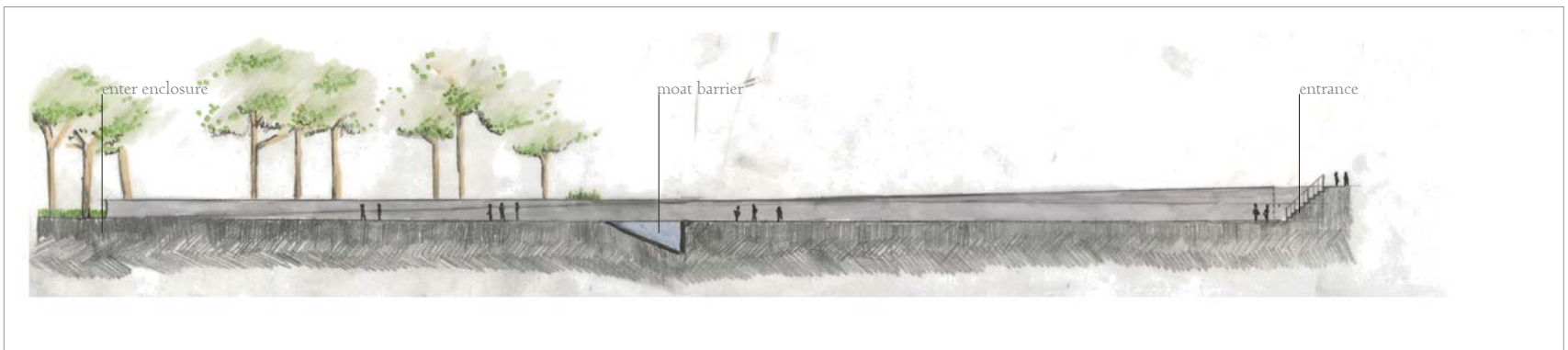
V\_18. Photographic study of existing primate cages on selected site (Author 2014).



V\_19. Design exploration: apies river, skywalk and existing cages (Author 2014).

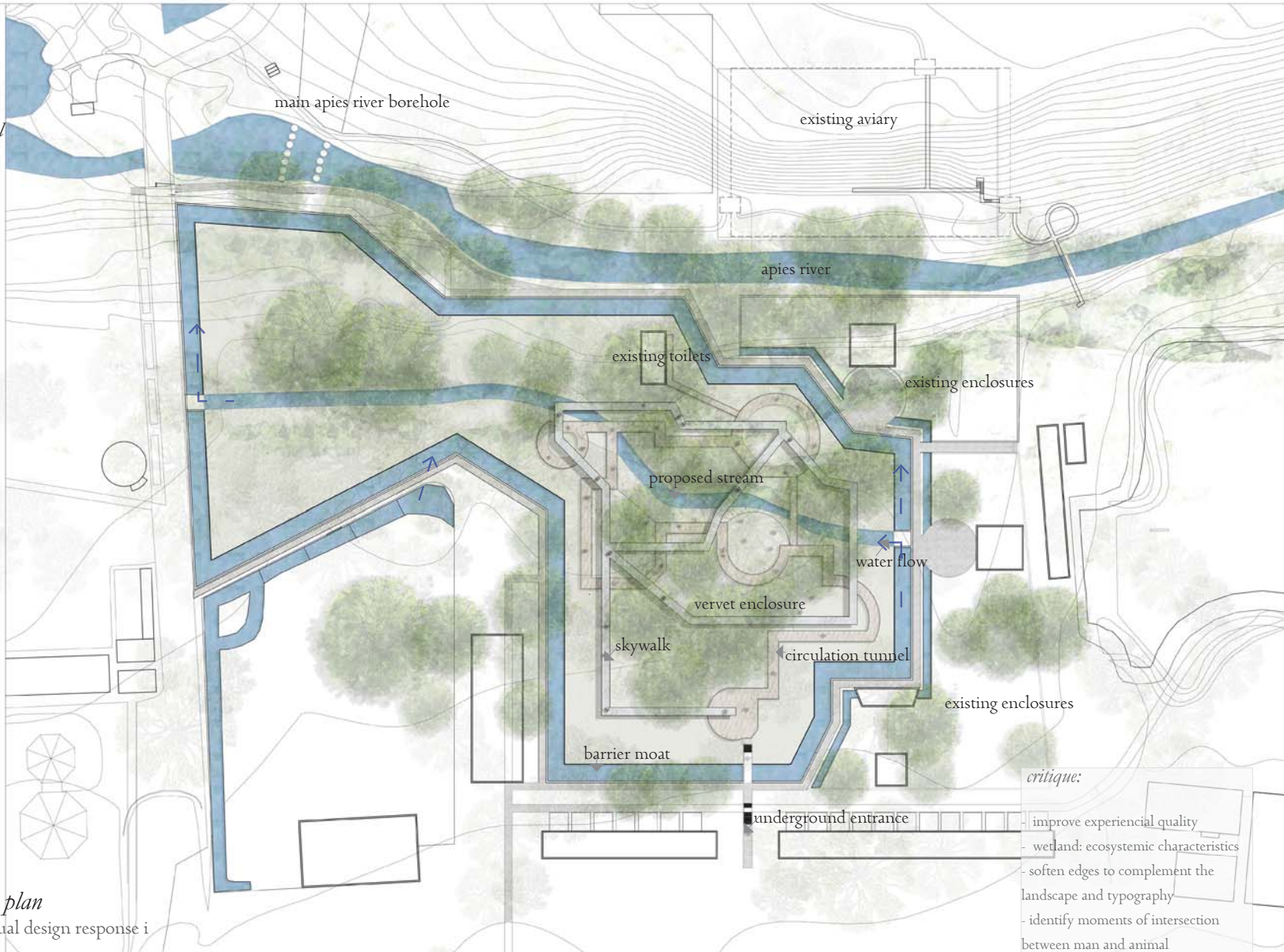


V\_20. Design exploration: moat, skywalk and stream introduction (Author 2014).



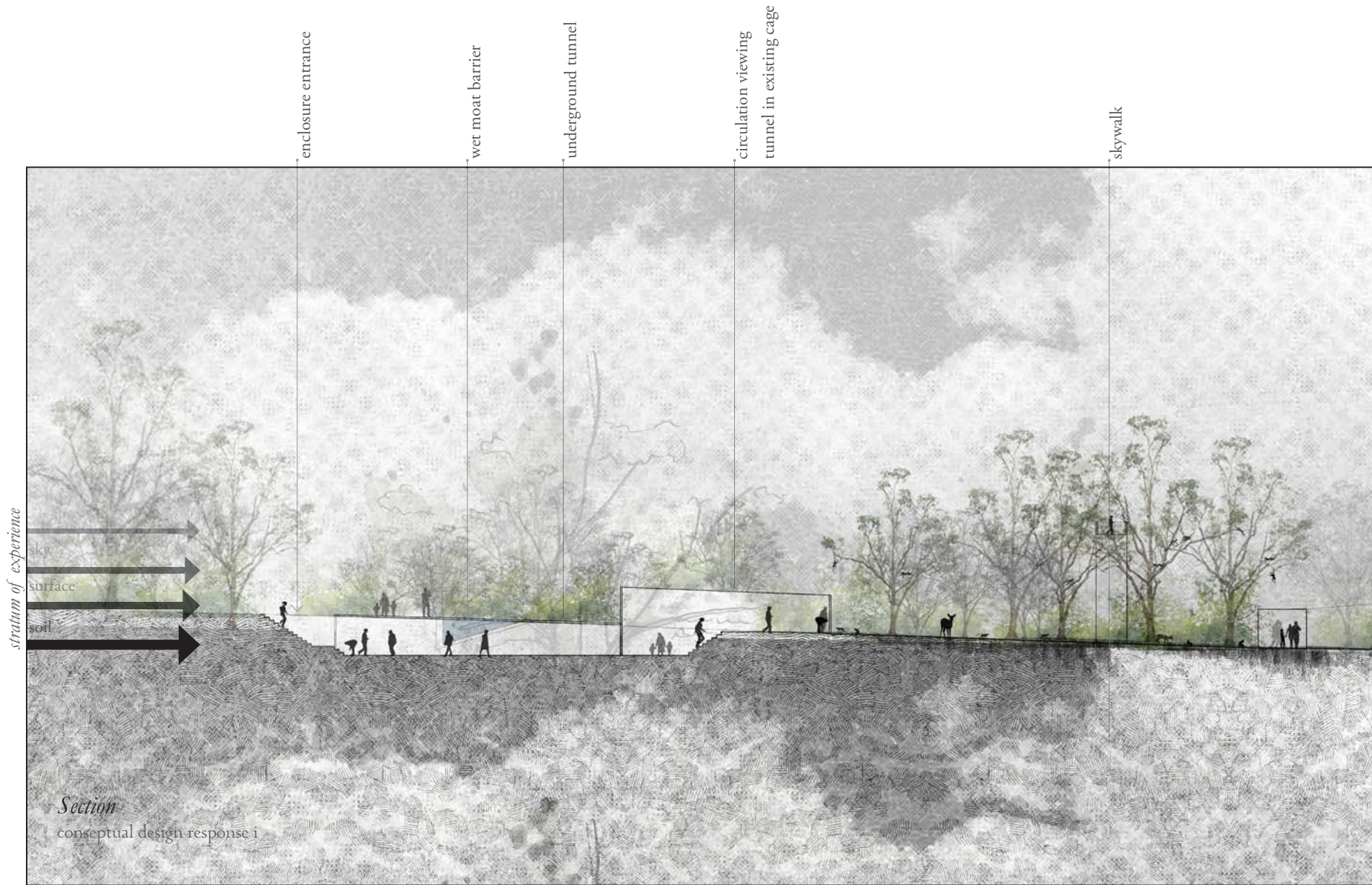
V\_21. Design exploration: moat, entrance (Author 2014).

- water bodies
- vegetation
- skywalk
- circulation tunnel



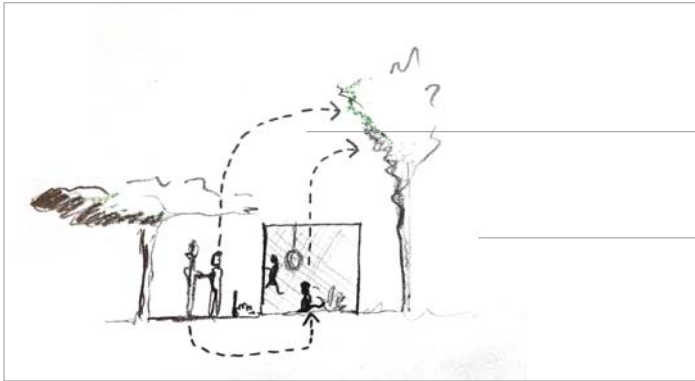
*Sketch plan*  
conceptual design response i

- critique:*
- improve experiential quality
  - wetland: ecosystemic characteristics
  - soften edges to complement the landscape and typography
  - identify moments of intersection between man and animal
  - manipulate threshold further
  - monotonous and rigid



V\_23. Section: First draft design response of primate enclosure (Author 2014).

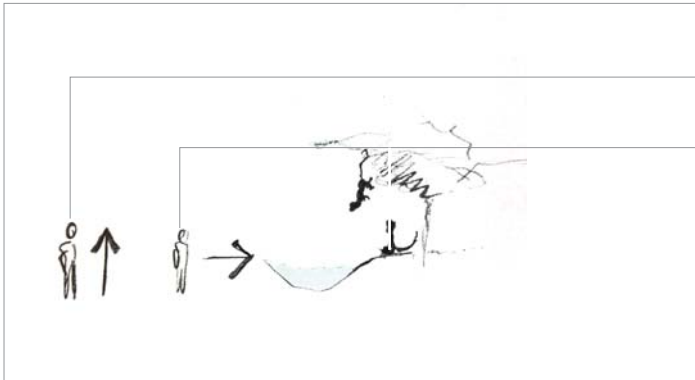




elevate user and primate

existing primate cage

V\_24. Exploration of 'extruded' experience in enclosure (Author 2014).



elevate visitor

immerse user and primate in natural habitat

V\_25. Illustration of principle application: visitor and primate elevation and immersion (Author 2014).



primate interaction with landscape element

skywalk

circulation tunnel

habitat replication

V\_26. Illustration of principle application: animal interaction with landscape elements implemented (Author 2014).

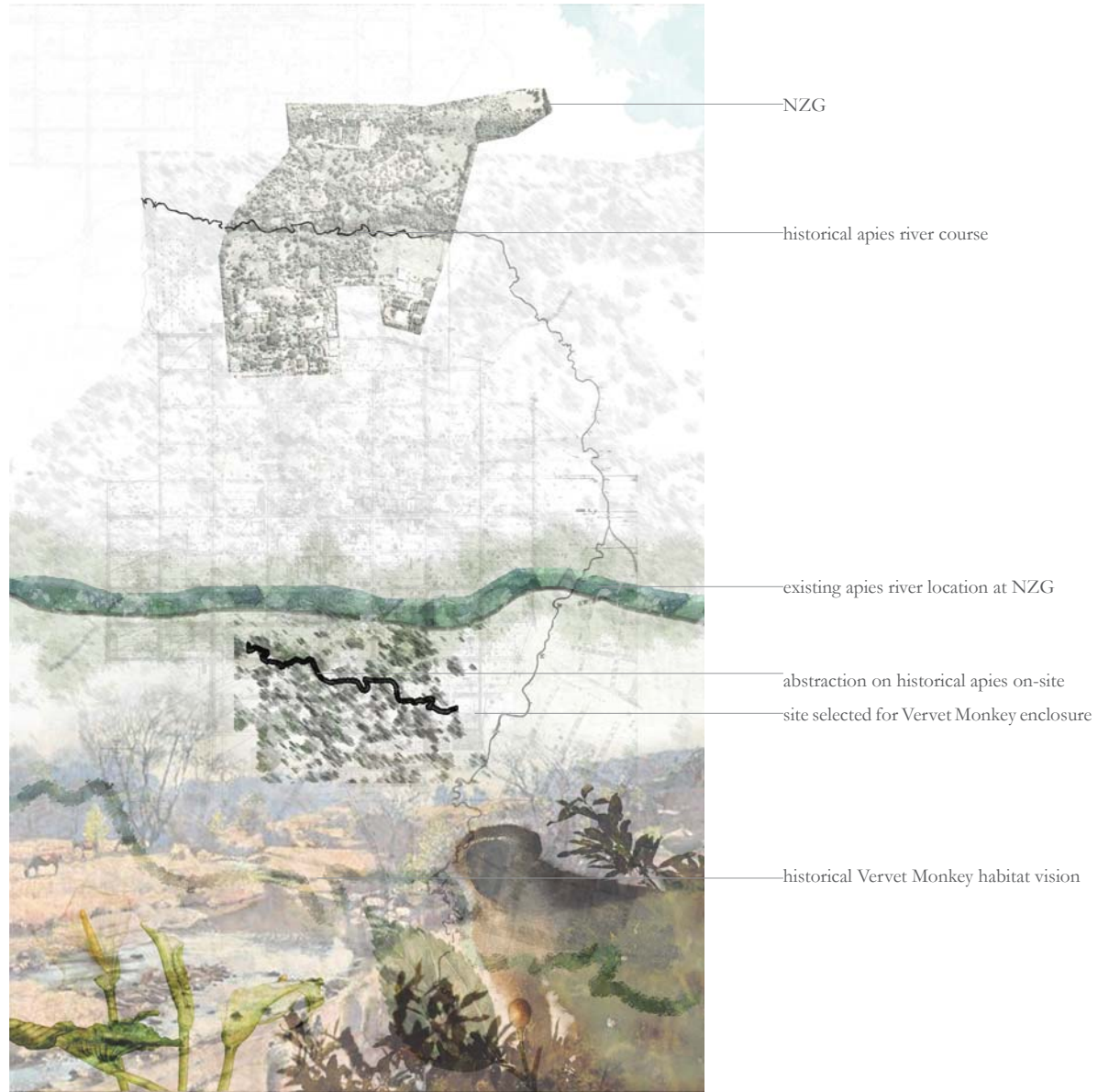
5.3.0.17 *Dynamic beauty*

The aim of the dynamic beauty is to provide a diverse experience as far as possible. Users will circulate through the enclosure, while the landscape that surrounds them transcends, morphs, ascends, descends and transforms as a regenerative ecosystem. The enclosure experience will multiply, overlap and operate on different strata, scales and rhythms. The landscape enclosure is based on incremental moments where human activity overlaps with the animals' activity. The visitor will operate on different strata within the enclosure – namely, soil, surface and sky. This concept integrates with the pragmatic requirements of the vervet monkey relative to the demanding patterns of eating, sleeping, resting and nesting. The monkey's patterns will complement the design experiences through the selected planting pallet, spatial organisation and proposed natural systems of the enclosure. The designed animal enclosure will reveal, enable and regenerate ecological processes in order to become temporal and dynamic. The dynamic landscape will be due to the changes that occur naturally in the landscape and spatial practice of the *life history universe* of the vervet monkey.

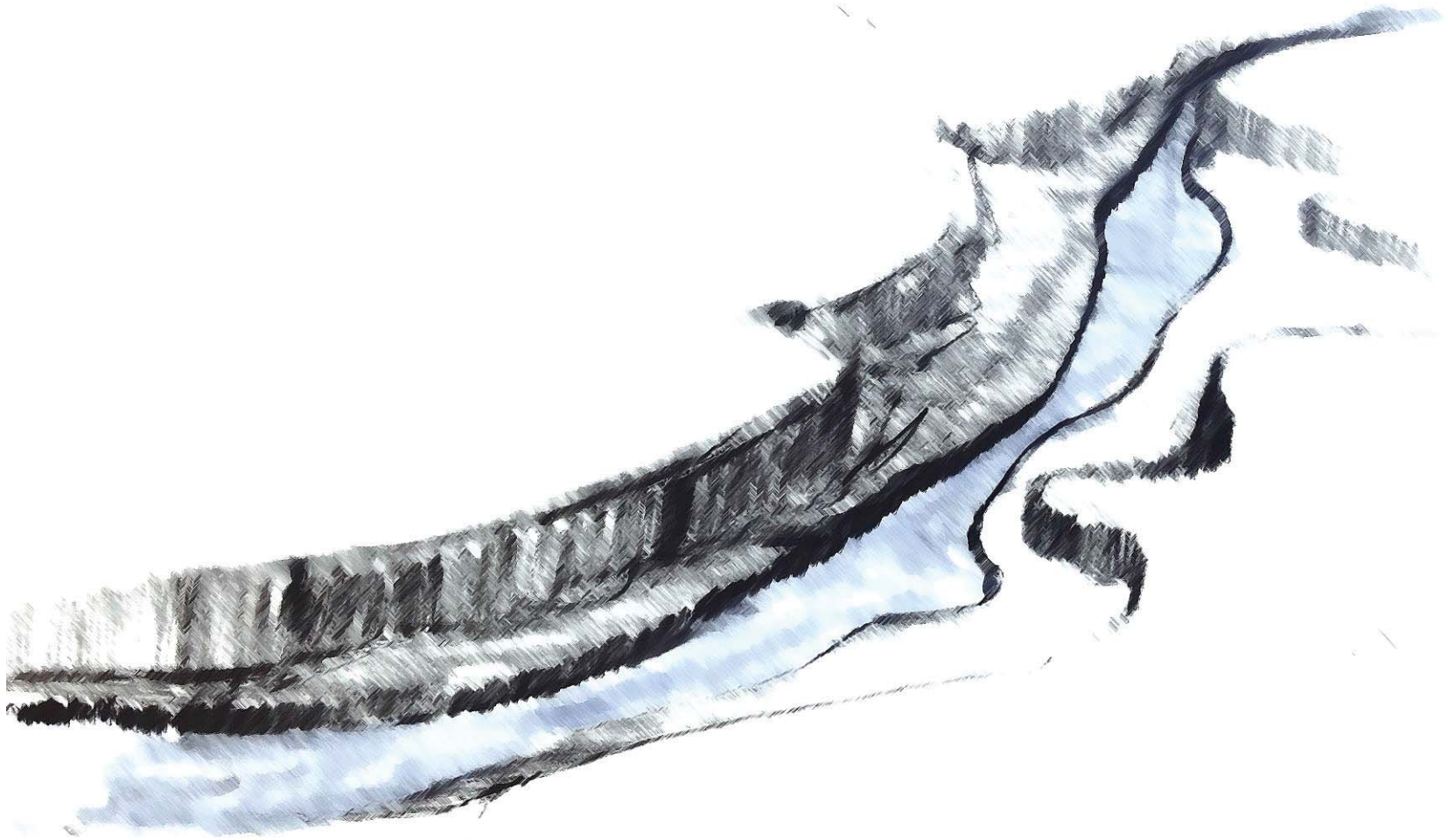
In summary, the enclosure will revive the historical image of the site-specific vervet monkey habitat, as described above. The monkeys will roam free within the enclosure and the visitors will be immersed in the landscape. This 'inverse' concept will place the visitors in the role of spectacles for the animals by means of positioning the visitors in the historic cages on-site and allowing the monkeys to observe them. The enclosure will be surrounded by a wetland moat, established as an integral part of the ecology and ecosystem regeneration (Refer to figure V\_57 on page 204 for design response) . The historical cages will be connected with circulation tunnels to create an experience through the landscape. The incremental moments, strata and interactions of the design intent, combined with the *life history universe* of the vervet monkey will manifest as a route within the enclosure. See Figure (x).

The route will intentionally become a horizontal and vertical exploration of the proposed habitat. The route will simultaneously be a habitable and interactive structure for the animals. The established route will offer interaction between the user and animals to enhance the experience for both. The landscape design response will redefine the typical threshold of a fence as boundary condition through the reconfiguration and spatial manipulation of the existing cages. The sketch plan will focus on creating different experiences and moments in the design enclosure of the vervet monkey habitat.





*V\_27. Palimpsest  
collage of vision  
for enclosure  
(Author 2014).*



*V\_28. Abstraction  
of old Apies River,  
adapted from Pierneef  
(Author 2014).*



V\_29. Footbridge Crossing  
L'Areuse (Architizer 2014).



V\_30. Pedestrian bridge, Mirp Rivero  
Architectes (Archdaily 2012).



V\_31. Re-bar footpath, RCR  
Architectes (Landezine 2014).



V\_32. Puffadder walkway, Babylonstoren,  
Patrice Taravella (Dezeen 2014).



V\_33. Re-bar walkway, Tussols basil sport-  
park, RCR Architects (Landezine 2014).



V\_34. Bell-lloc winery, RCR  
Arquitectes (Archdaily 2014)



V\_35. Bell-lloc winery, RCR  
Arquitectes (Archdaily 2014)



V\_36. Bell-lloc winery, RCR  
Arquitectes (Archdaily 2014)



V\_37. Yad Vashem Holocaust museum  
Safdie Architects (Archdaily 2011)



V\_38. Eggum Lofoten, Snohetta  
Architects (Archdaily 2007)



V\_39. Eggum Lofoten, Snobetta Architects (Archdaily 2007)



V\_40. Kirstenbosch "boomslang" canopy walkway Mark Thomas Architects (Archdaily 2007)



V\_41. Kirstenbosch "boomslang" canopy walkway Mark Thomas Architects (Archdaily 2007)



V\_42. Xtrata Treetop Walkway(Archdaily 2007)



V\_43. The Saxon Boutique Hotel walkway (Classicafrica 2010)



V\_44. Observation Tower / ARHIS (Archdaily 2010)



V\_45. Observation Tower / ARHIS (Archdaily 2010)



V\_46. Viewingtower at Vecht Riverbank / Ateliereen Architecten (Archdaily 2012)



V\_47. Viewingtower at Vecht Riverbank / Ateliereen Architecten (Archdaily 2012)

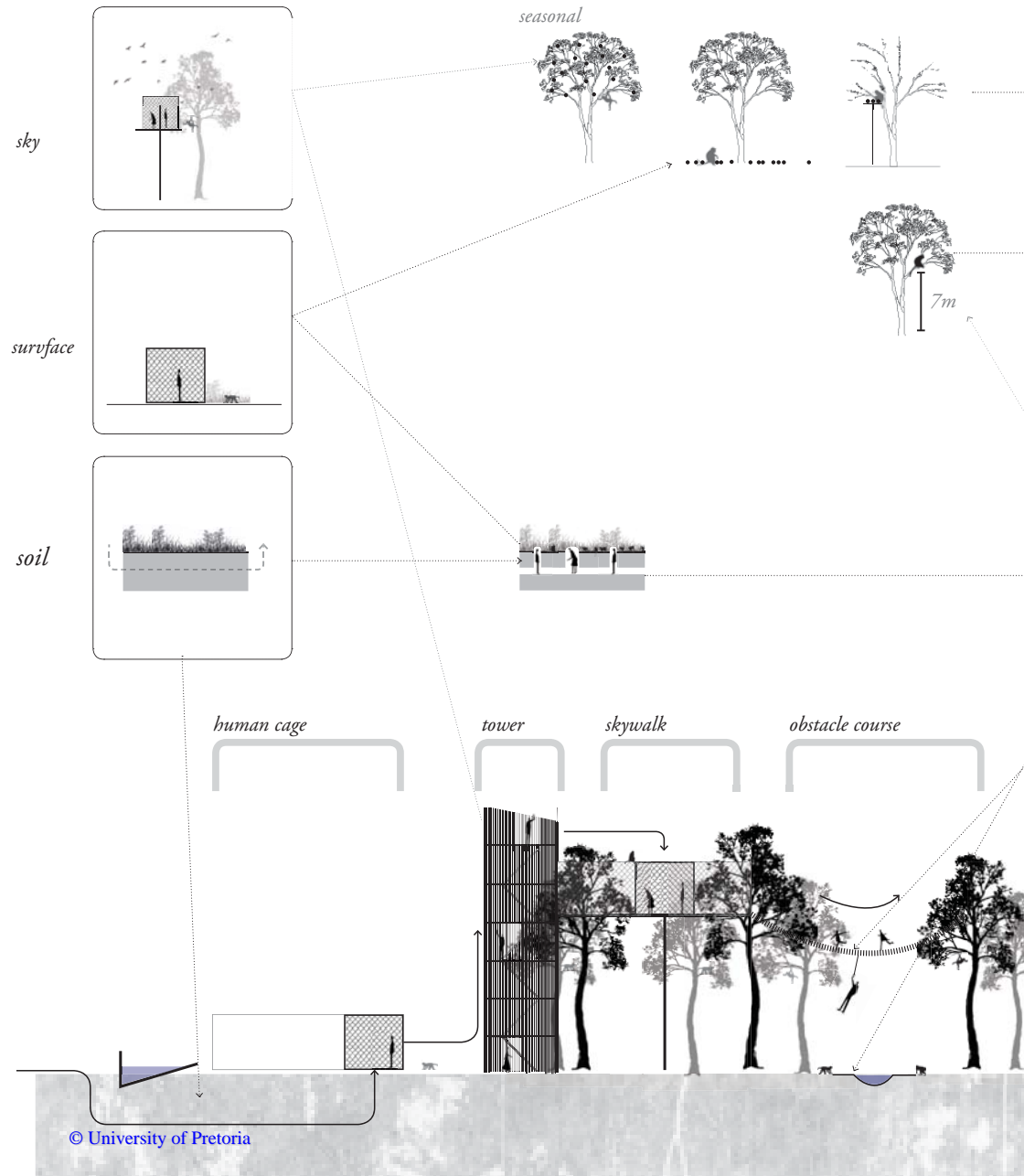


V\_48. Hedge Building Germany : Rostock Architecture (e-architect 2003)

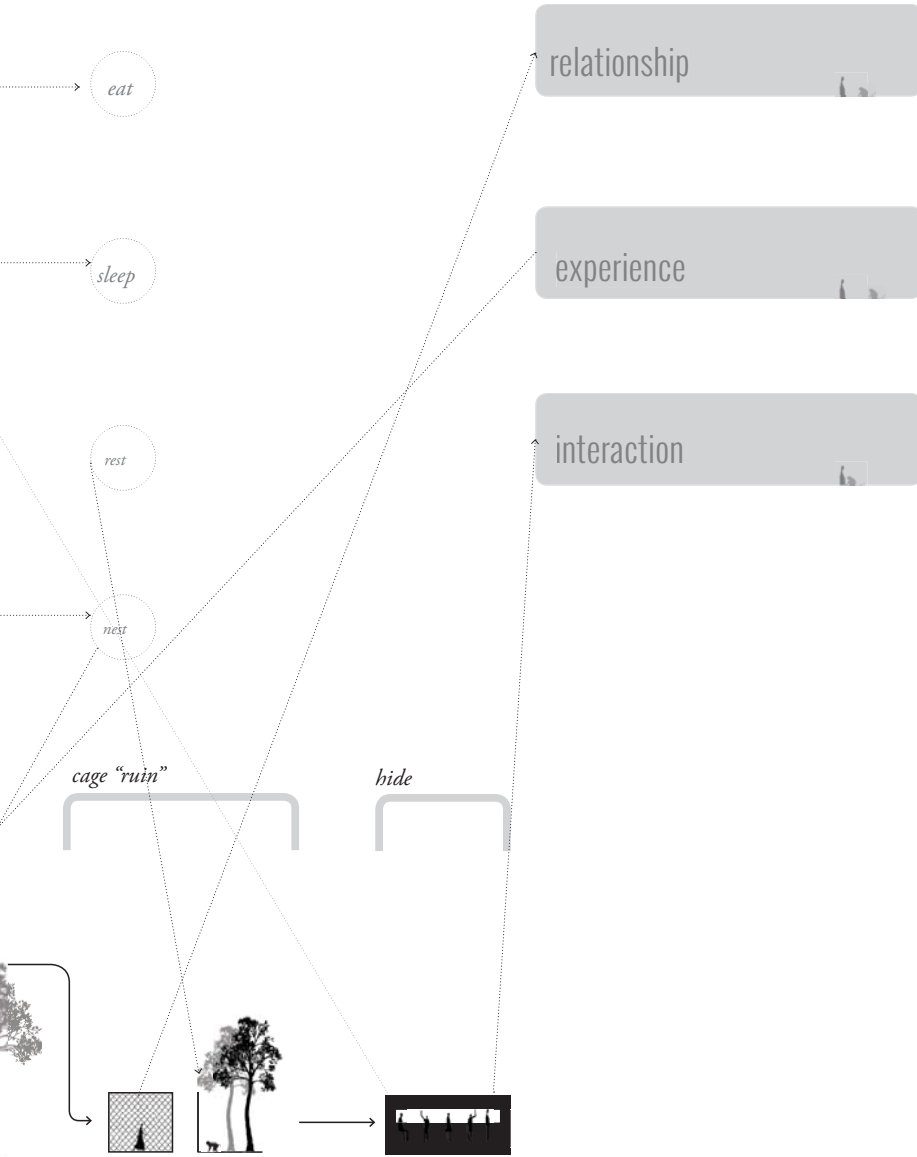
user



stratum of interaction

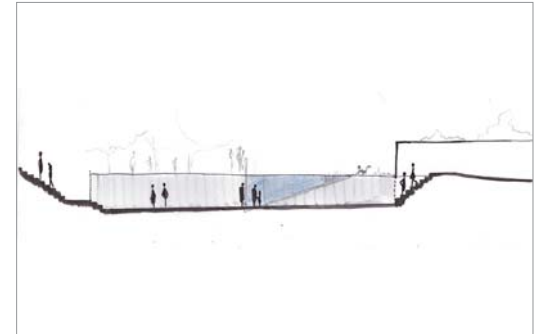


V\_49. Stratum of interaction infographic (Author 2014).

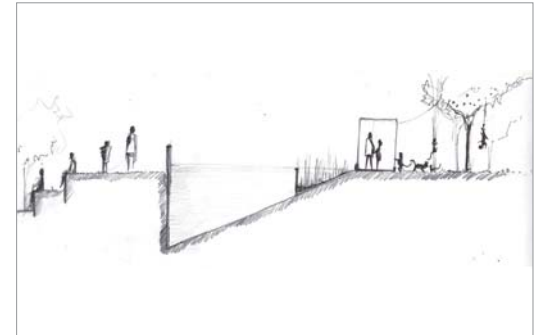




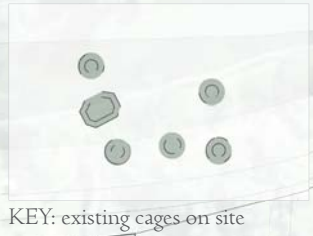
V\_50. Conceptual collage of skywalk (Author 2014).



V\_51. Conceptual development of moat (Author 2014).



V\_52. Conceptual development of moat (Author 2014).



KEY: existing cages on site

- critique:*
- accentuate moments established
  - strengthen apies river metaphor
  - moat: opportunity to feed into adjacent cages, soften edges
  - make barrier invisible
  - weir system create obstacle for primate to escape
  - investigate stratum further
  - focus on detail design of primate vs human spaces

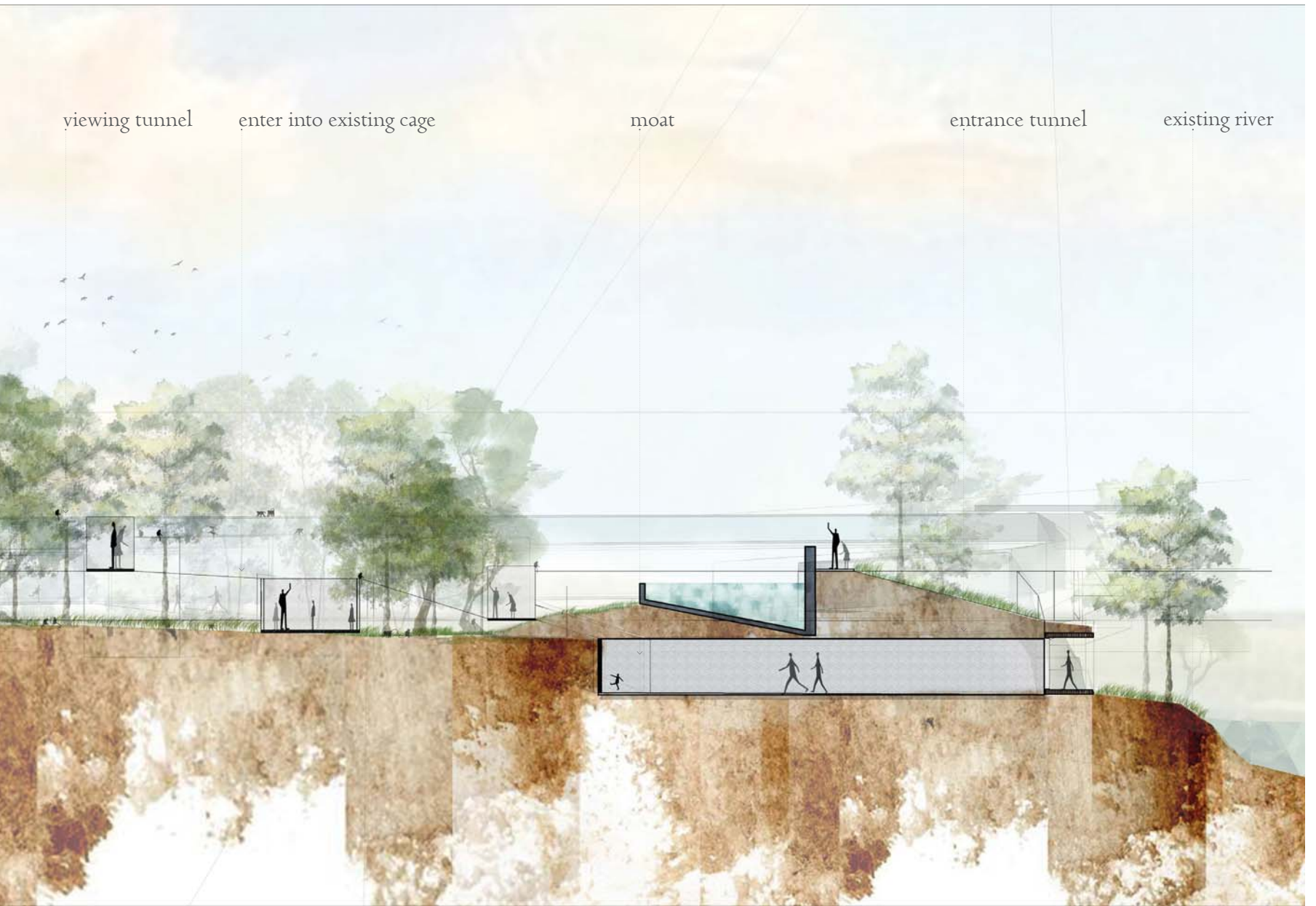
*Sketch plan*  
conceptual design response ii





*Section a-a*  
conceptual design response ii and stratum application

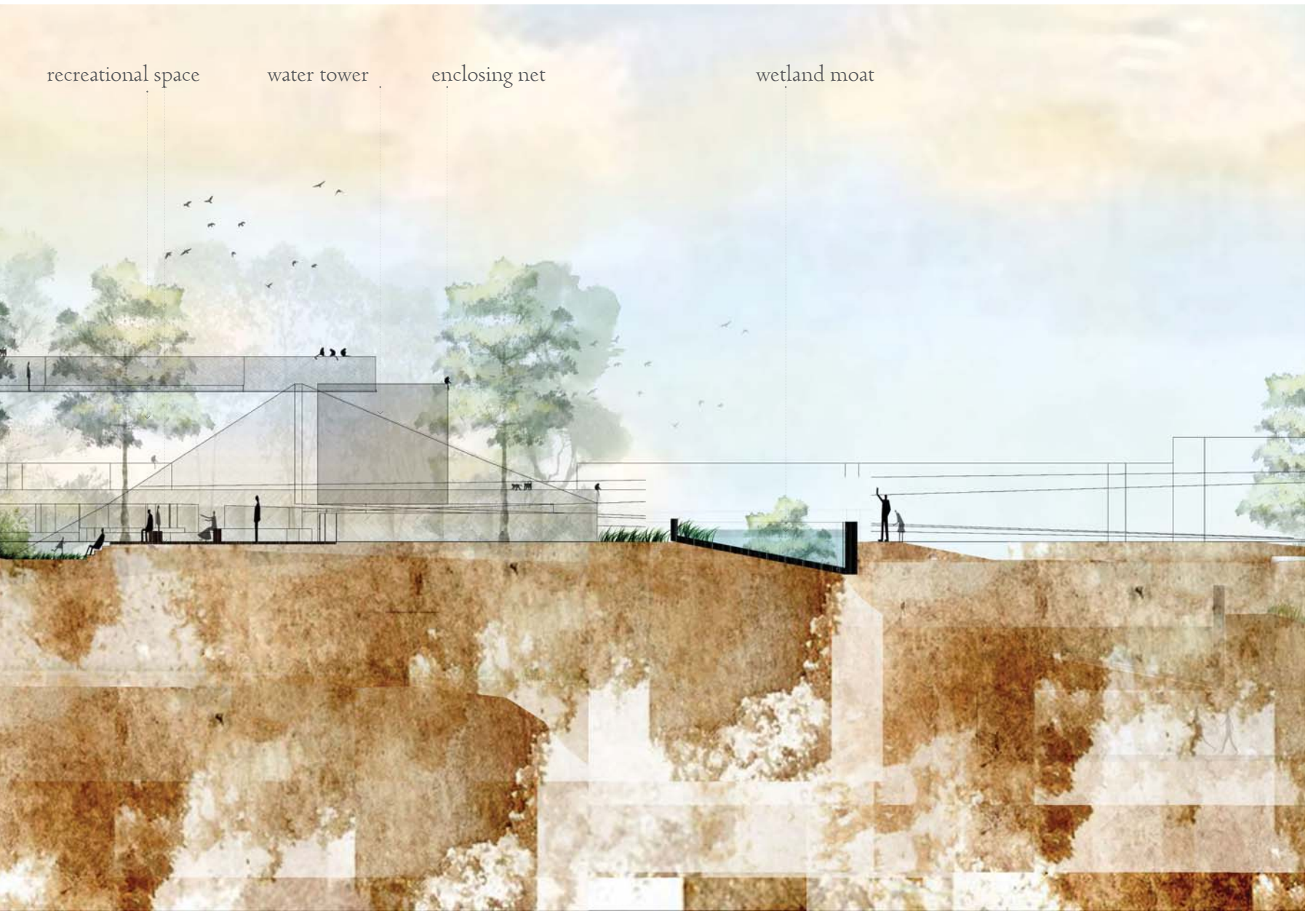
V\_54. Sectional elevation a-a: Draft design response to stratum concept application showing moat barrier, tower and underground tunnel (Author 2014).



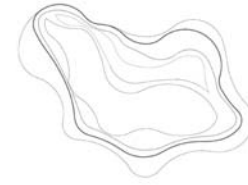
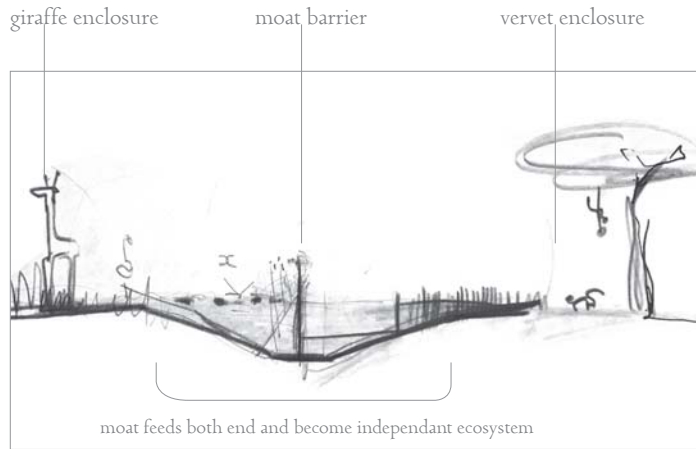


*Section b-b*  
conceptual design response ii and stratum application

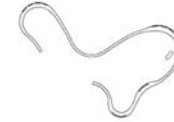
V\_55. Sectional elevation b-b: Draft design response to stratum concept application showing moat barrier, and skywalk (Author 2014).



V\_57. Response to moat critique: rethink moat ecology and influence on other enclosures (Author 2014).



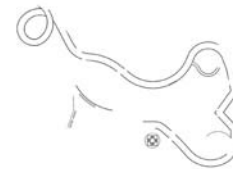
moat



skywalk



old cage ruins

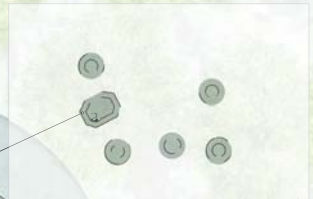


connection tunnel



entrance

V\_56. Sketch plan: components (Author 2014).



KEY: existing cages on site

*critique:*

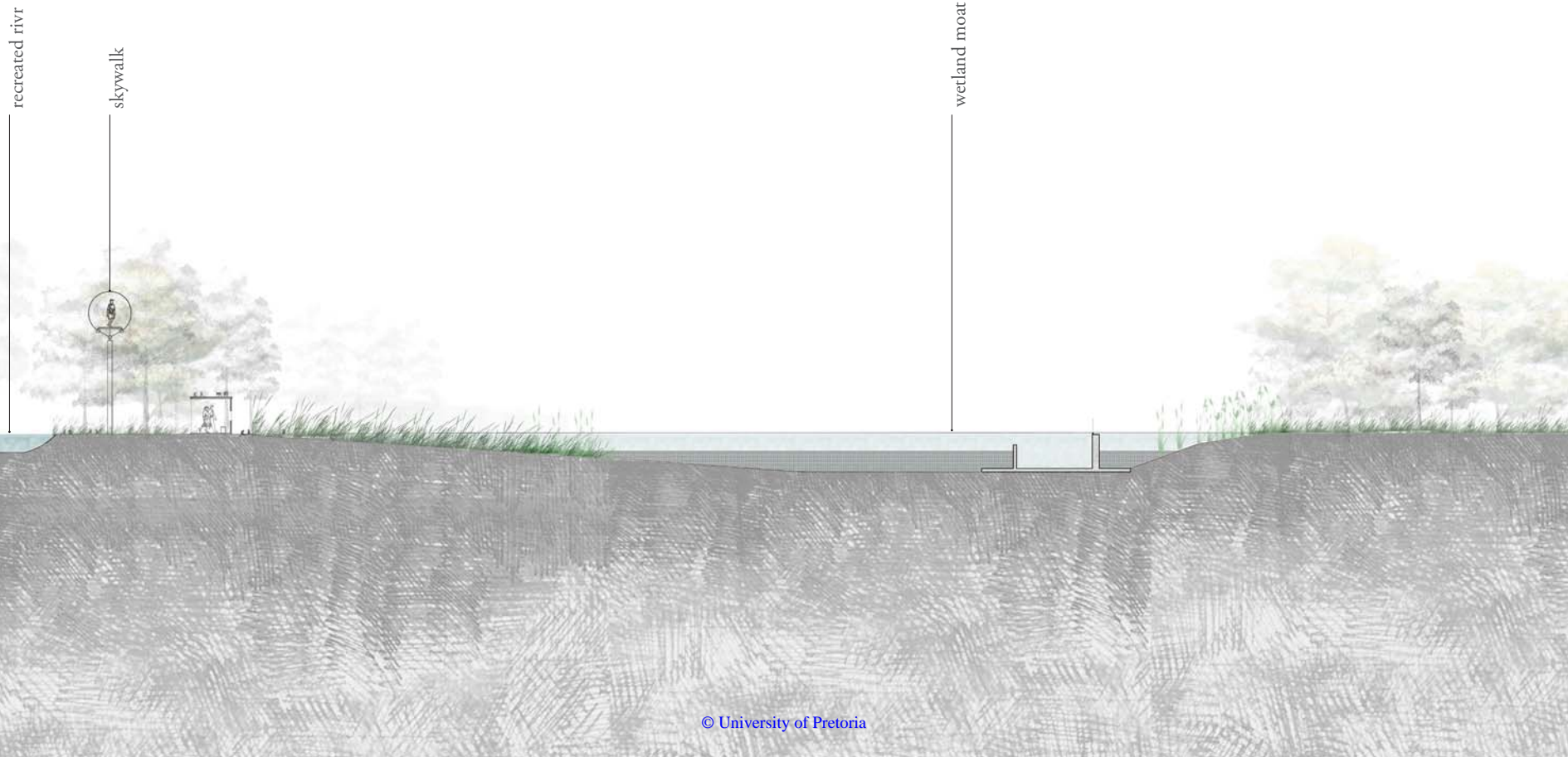
- accentuate moments established
- implement abstracted form of old apies
- investigate stratum and narrative of elements
- focus on detail design of primate vs human spaces
- dual spaces

*Sketch plan*  
conceptual design response iii



*Section a-a*  
conceptual design response iii and stratum application

V\_59. Sectional elevation b-b: Draft design response iii to stratum concept application showing moat barrier, and skywalk (Author 2014).



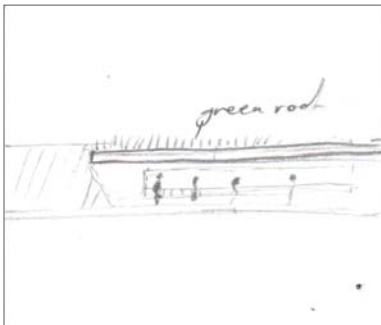




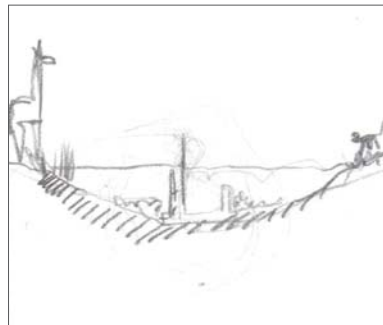
V\_60. Conceptual intention: skywalk (Author 2014).



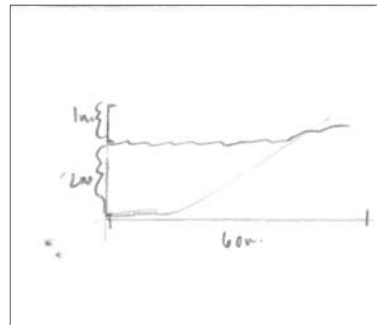
V\_61. Conceptual intention: skywalk (Author 2014).



V\_62. Conceptual intention: entrance (Author 2014).



V\_63. Conceptual intention: moat (Author 2014).



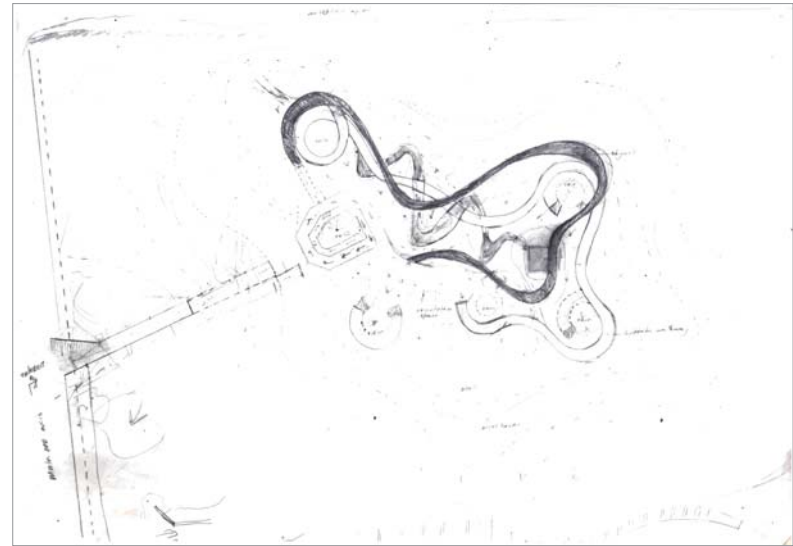
V\_64. Conceptual intention: moat (Author 2014).



V\_65. Seamless water body: moat (Author 2014).

5.1 *Conclusion*

The landscape design intervention will act as a mediator of different experiences for the visitor within the proposed enclosure. The new set of principles will aim to enhance the experience and simultaneously become the threshold between man and his perceptive attitude towards nature. The established threshold will provide experience for both the user and the animal. Finally, the new set of principles will culturally, ecologically and experientially inform the enclosure design and establish a plausible model for the rest of the zoo enclosures. The detail design and technicality of the proposed elements will be investigated in Chapter VI to indicate the characteristics and concepts of the threshold, which promotes experience as an important detail design principle.



V\_70. Conceptual sketch plan development (Author 2014).



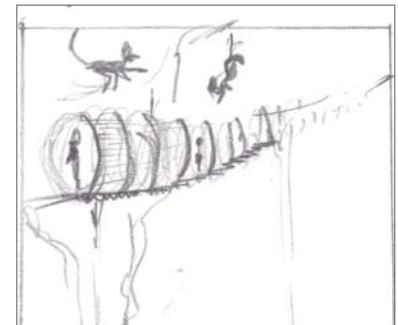
V\_66. Pierneef abstraction: stream (Author 2014).



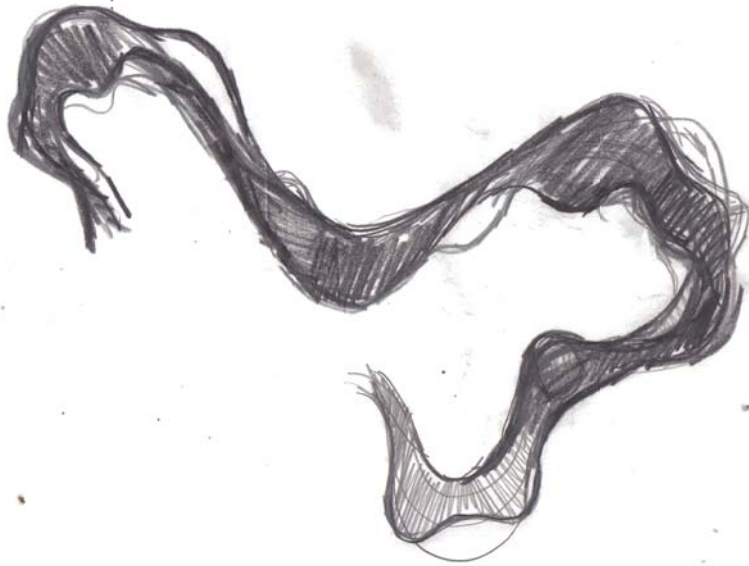
V\_67. Reconfiguration of old cages (Author 2014).



V\_68. Conceptual intention: Skywalk (Author 2014).



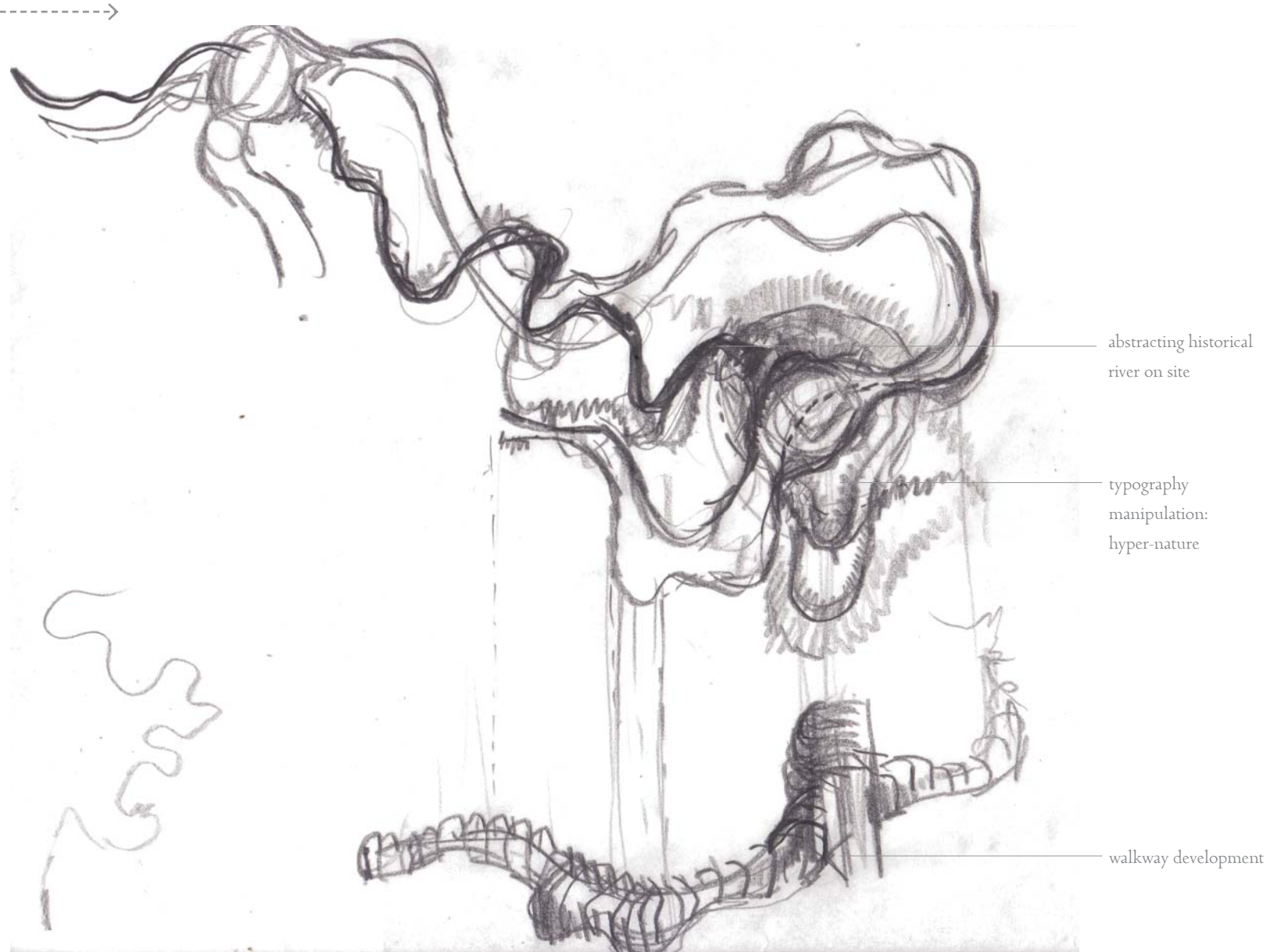
V\_69. Conceptual intention: Skywalk (Author 2014).



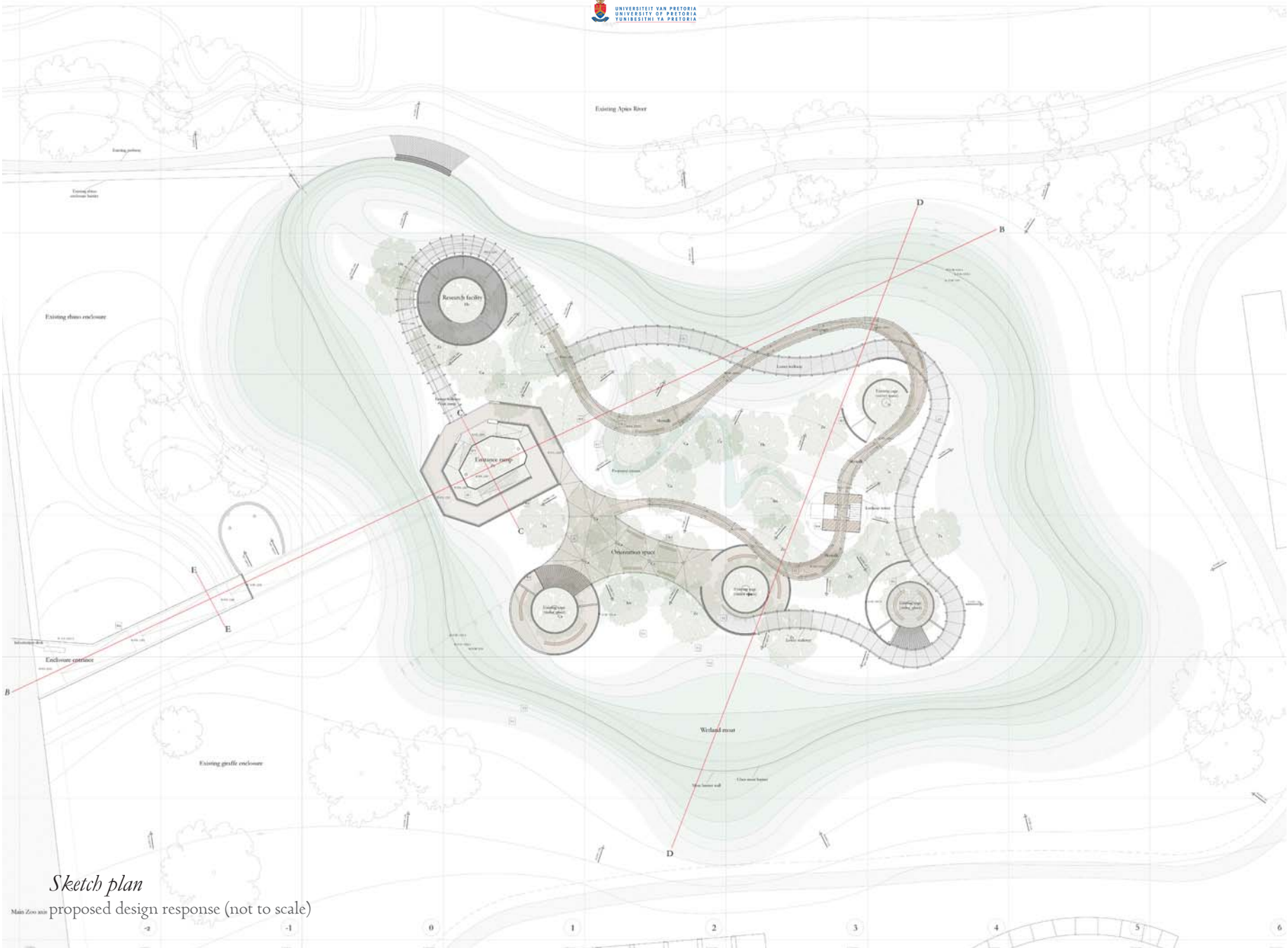
V\_71. *Conceptual development: moat edge (Author 2014).*



V\_72. *Conceptual development: connection (Author 2014).*



V\_73. Conceptual development: Apies river palimpsest (Author 2014).



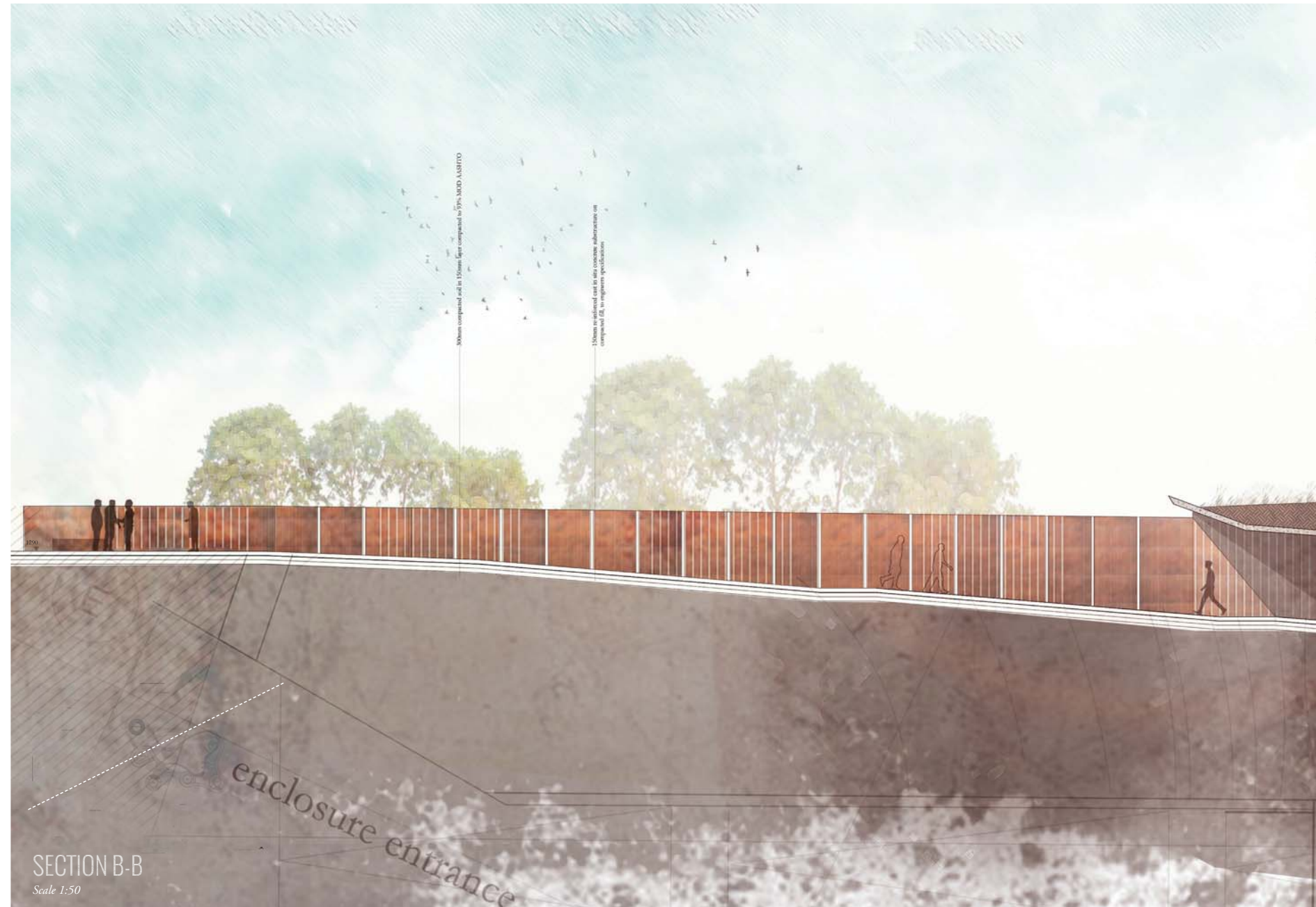
*Sketch plan*

Main Zone with proposed design response (not to scale)

V\_74. Sketch plan: Technical drawing of design response of primate enclosure (Author 2014).



*Sketch plan*  
Main Zoo area  
proposed design response (not to scale)



V\_76. Section bb: final proposed design response of primate enclosure (Author 2014).

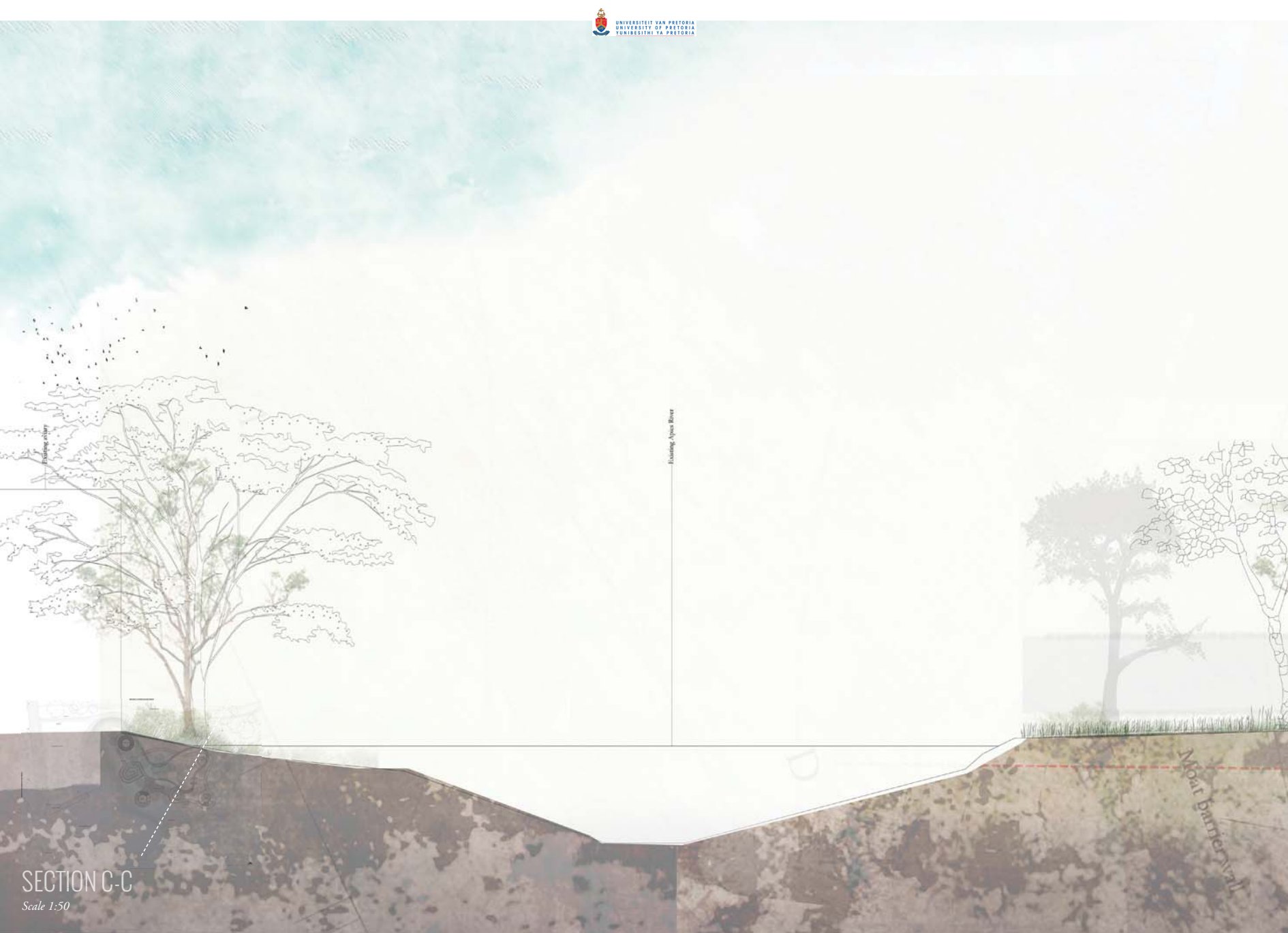
200mm reinforced concrete stock walls









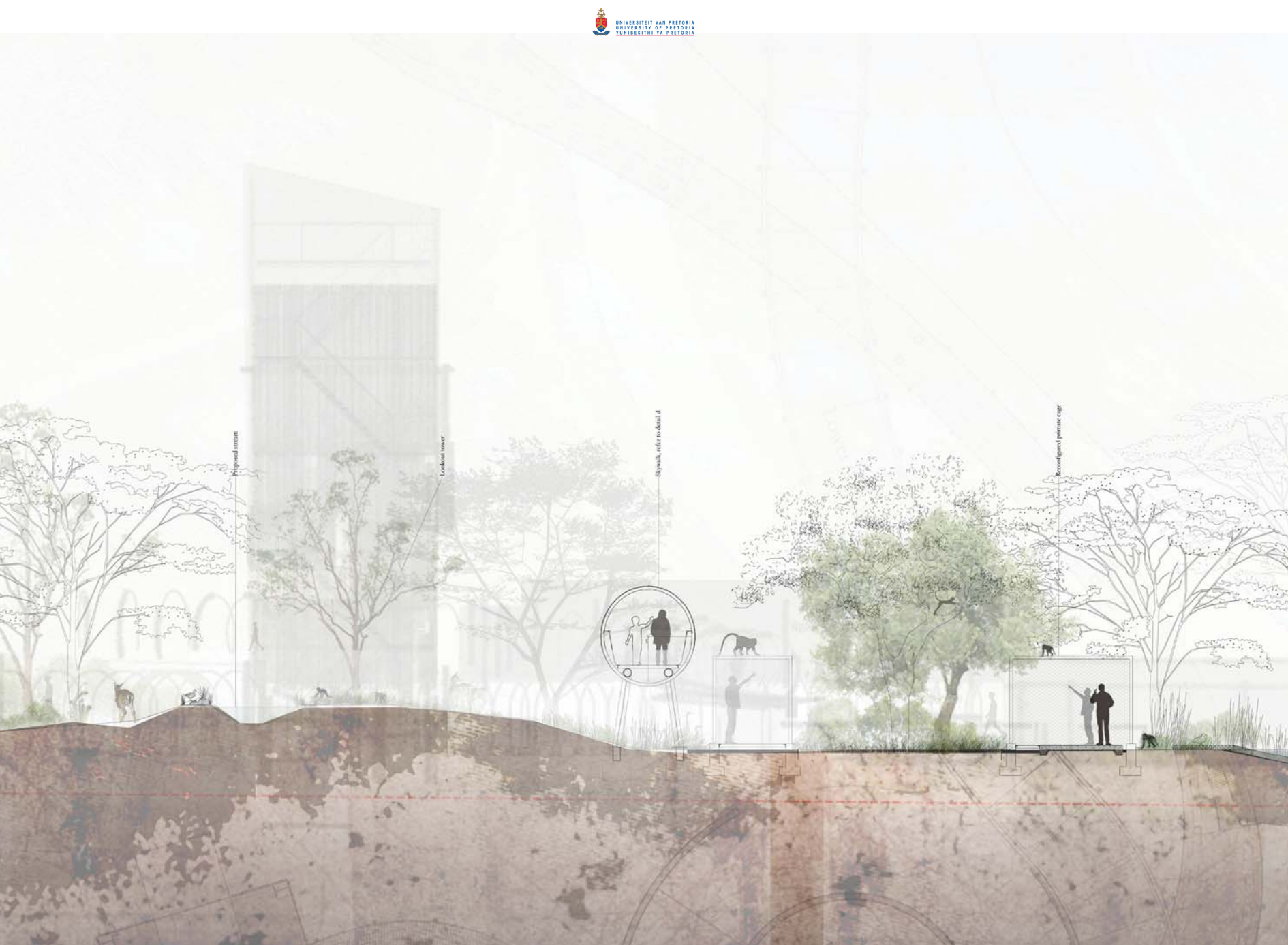


SECTION C-C

Scale 1:50

V\_77. Section cc: proposed response of enclosure (Author 2014).





Proposed terrace

Lookout tower

Skywalk, refer to detail d

Reconfigurable perimeter cage



steel plate screen

view into rhino enclosure

green roof

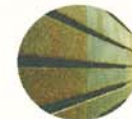
concrete retaining wall



## ENTRANCE



1. 2500mm x 1500mm x 10mm mild steel plate @ 1500mm interval untreated
2. Reinforced concrete green roof, butimin torch on waterproof
3. 150mm re-inforced cast in situ concrete substructure on compacted fill, to engineers specifications
4. Reinforced concrete retaining wall



ramp towards orientation space

excavated monkey space

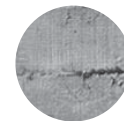
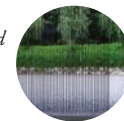
steel rod barrier



# SPIRAL RAMP



1. Mild steel Y10 pre-fabricated reinforcement bar surface fixed to angle frame structure
2. 10 dia. steel rod @ 50mm intervals threaded at ends and connected and fixed with coupling nuts to angle ,untreated
3. 100mm x 55mm IPE100 I section untreated





skywalk

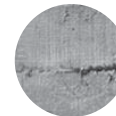
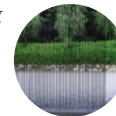
reinforcement bar barrier

proposed stream



## LOWER WALKWAY

1. Mild steel flat bar curved to 1400 radius @ 2000mm intervals welded to plasma cut section fixed to concrete footing
2. Y15 mild steel reinforcement bar with 50mm spacing @ 2000mm intervals welded to mild steel flat bar, untreated
3. 150mm re-inforced cast in situ concrete substructure on compacted fill, to engineers specifications
4. 30mm dia gravel fill



V\_80. Perspective: lower walkway (Author 2014).

Vervet monkey

lower walkway

webmesh barrier

reinforcement bar walkway

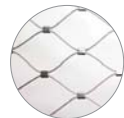
steel tube skywalk structure



# SKYWALK



1. Mild steel Y10 pre-fabricated reinforcement bar surface fixed to angle frame structure
2. 101 Ø mild steel circular hollow section frame @ 2000mm intervals
3. 20mm x 38mm Aperture x 1mm Ø cable stainless steel (Jakob® INOX LINE Webnet) fixed to circular tube
4. 273mm x 12mm mild steel circular hollow section column
5. 60 Ø Rhino Modified Wood handrail with oil based finish radii of skywalk curvature



skywalk entrance

lookout tower

existing reconfigured cage

lower walkway entrance

webnet "human enclosure"



## ORIENTATION SPACE

1. Mild steel Y10 pre-fabricated reinforcement bar surface fixed to angle frame structure
2. 101 Ø mild steel circular hollow section frame @ 2000mm intervals
3. 20mm x 38mm Aperture x 1mm Ø cable stainless steel (Jakob® INOX LINE Webnet)
4. Existing cage with chain-linked fence
5. 38mm x 38mm Rhino Modified Wood cladding fix to steel square tube with oil based finish

