Zone 5 – The Congo - Gorillas

The visitor experience reflects the change of environment from the Savannah to the Congo, a dramatic shift from the open plains to lush dense jungle. Emotive concepts of anticipation, surprise, fear, and hope are reflected in the delivery of the physical hardware, including viewpoints that reveal selectively with glimpses rather than open visual solutions, forest floor level exhibits rather than an all human height delivery, and sound and smell factored into the physical exhibits, all becoming part of the experience. The winding pathways allow multiple engagements with the Gorillas, as well as with the rich, cooling landscape.

Image 11: Special Effects, nature sounds, fog and digiglass signage around the bridge pathways and water areas describe the unique habitat of the gorillas and the fragility of the rainforest environment. Visitors have opportunities to get 'glimpse' views of Gorillas through natural themed landscape. Image Courtesy of Motherworks.

Image 12: Winding pathways and bridges traverse the site, enabling visitors to engage with the Gorillas and landscapes of the Congo. Image Courtesy of GDA.

2. **Built Form + Urban Design**

Siting and Topography

Within the project area, the Savannah area is sited to the west utilising the flattest and most open area that can easily be landscaped for an open grassland exhibit. Similarly, the Congo forest is sited to the east so that it will be able to utilise many of the existing trees to create a closed canopy on a this steep site.

Both sites hold many built and landscape heritage items that have been considered within the new layouts of the exhibits.

Image 13: The Savannah plains are wide, open expanses with long vistas views.

Image 14: The Congo jungle is dark, moody and overgrown. Visitors will feel like they have entered the Congo Rainforest.

Building Form & Materials

Giraffe House

The new Giraffe House is at the main point of arrival to the Savannah area. The building occupies the northern end of the Giraffe enclosure sited on a level with the main exhibit, a full storey below the visitor circulation at this point.

The form and location were carefully chosen to have minimal impact on iconic harbour views, whilst still providing the required shelter for the Giraffe. The building is defined by its vaulted roof, broken up into shards which provide good cross ventilation and reduce the visual bulk of the building. The architecture develops the long-standing tradition of significant garden buildings as transparent enclosures with dramatic internal volumes and good connections from the indoor to the outdoor.

The roof partially covers the altered existing Giraffe Mock Rock house to tie all new Giraffe facilities together. The 'cutting of the existing Mock Rock allows entry to the shelter by full-grown Giraffes, and also provides better views towards the harbour. It is developed to function both as a shelter for the Giraffes and as a new VIP feeding area. All back of house areas are sized to provide required accommodation to service both the Giraffes and Zebras.

Image 15: Tonkin Zulaikha Greer's impression of the New Giraffe House and the Existing Mock Rock house.

Image 16: Timber glulam structures span across the Giraffe House, providing shade and

Image 17: Timber screen walls provide natural textures and soft back drop to the Savannah

Zebras

Zebra Back of House areas are located to the west of the Giraffe House. Store Rooms and Keeper areas are shared with the Giraffe House. The four Holding areas are all interlinked and exit into an external raceway. The building is covered by a green roof edge. Internal walls are only 1800mm tall with mesh above to provide maximum natural ventilation. The southern façade is clad in timber, minimising its visibility from the south.

Lions

This Exhibit is designed so that the visitor will clearly know that they have entered an area where the animal is dominant – this is the lion's domain. The pathway, and therefore the visitors, are covered by a mesh which will separate them from the carnivore animals. The form and shape of the main viewing area replicates the existing rocky ground plain with the addition of a very light but sculpted enclosing structure.

The Back of House facility building is two stories, with the lower storey being part of the visitor circulation path and the upper storey holding the required eight lion dens with keeper working areas and circulation. Two separable Lion exhibits plus a holding yard are connected to the Back of House building. To the south, the only public viewpoint, the mass of the building is broken up by the use of a facetted corten steel screen on the lower level and a green wall and roof edge above.

Image 18: Tonkin Zulaikha Greer's Artist impression of the Lion Viewing Shelter. Mesh walls glass viewing windows provide for visitors to experience the Lions habitat up close and create an immersive exhibit.

Image 19a,b,c: Curtain chain mesh green walls, green roof, Corten steel and transparent wire mesh materials make the Lion Back of House receed as landscaped element in the bushland setting.

Image 19a: Gallery of Te Kaitaka, Fearon Hay Architects. Auckland, New Zealand.
Image 19b: Bodega Bell-Lloc Winery, RCR Architectes. Girona, Spain.
Image 19c: Fencing to Prince Alfred Park Pool, Neeson Murcutt Architects. Sydney, Australia.

The Cliff Village

The Cliff Village comprises a series of re-interpreted African huts - Aunt Aisha's Hut, the Poacher's Hut, a Meeting Hut and the Zebra Viewing Hut. These are a part of the main circulation route, and serve to screen the 'back' of the adjoining Tiger exhibit from above. The structures not only screen this view and but provide accommodation for education programs and interpretation. These buildings have African shapes, forms and materials. Roof materials are timber shingles, Corten steel and corrugated iron on timber and steel structures. Highly textured walls provide further identity to each structure.

Image 20: An Artist's impression of the Cliff Village. Image Courtesy of GDA.

Image 21: Modern African shapes and forms have inspired the Cliff Village architecture.

Image 22: Highly textured walls create a tactile interpretive environment for visitors. Natural textures allow the architecture to receed into the natural setting.

Image 21: Artists in Residency and Cultural Centre, Toshiko Mori Architects. Senegal, West Africa.
Image 22: Detail from a Clay Brick Education Centre, Dominikus Stark Architekten. Rwanda, Africa.

Meerkats & Fennec Fox

The Meerkat Back of House features a green roof mound and is designed to have minimal visual impact. From the viewing areas to the north it is hidden from behind trees and the green roof appears as a continuation of the Zebra landscaping. From the visitors path to the south the building sits recessively in the Meerkat exhibit as a low-lying lightweight structure with organic timber screening and landscaped roof.

The Fennec Fox viewing structure is integrated with the animal containment strategy. It is conceived as a lightweight canopy common to both visitor and Fennec Fox to enable intimate interaction between the two. The sunken Back of House area is completely out of view to emphasize Fennec Fox viewing.

Image 23: The Meerkat Back of House has a Green roof on lightweight structure. The green roof and organic wickerwork walls allow the architecture to receed into the landscape and exhibit.

Image 24: Organic wickerwork screens allows for ventilation to the Meerkat Back of House and provide privacy to the animals.

Image 25a and 25b: The Fennec Fox Back of House lightweight structure is hidden within the landscape. Covered viewing is provided near covered exhibit for close encounters with the animals.

Image 23: Cow Barn, Forschungs Architekturburo. Basel, Switzerland.
Image 25b: Les Cols Restaurant, RCR Architectes. Girona, Spain.

African Waterhole

The African Waterhole structure links the Savannah and Congo precincts with each other and to the main Taronga circulation to the north and south. A concrete plank path from east to west is combined with a neutral tree-like timber structure to provide shading and shelter to this resting space. New toilet amenities are dotted along the pathway and replicate a Burkina Faso type building typology with textured organic masonry and painted patterning.

Image 26: Concrete pavers and planks on raised footings create a textured pathway within the African Waterhole Pavillion.

Image 27: Timber glulam tree columns mimics the language of the tree canopies at the African Waterhole.

Image 28: The African Waterhole Timber shade structure acts as a neutral architectural transition between Savannah and Congo African exhibits. The architectural language is simple and universal.

Image 29: Burkina Faso building render and patterns is applied to the WC, First Aid and Store to unify both the Savanna and Congo precincts.

Image 26: Detail from the High Line, Diller Scofido + Renfro and Field Operations. New York, USA.
Image 27: Casa Pohutukawa, Herbst Architects. New Zealand.
Image 28: Paseo Maritimo del Puertito de Güimar, Correa Estevez Architects. Tenerife, Spain.

Congo

Visitors will be led through the exhibit through a winding paths with a number of viewing shelters integrated with the exhibit enclosure. Timber structure roofs and ramped earth walls provide shade and space for interpretive material for the visitor but also cave-like shelter for the animals within the exhibit.

The siting of the Gorillas' Back of House building considers animal handling, the view shielding of the overhead cable car plus level road access to the facility. The facility will provide ten family dens and four bachelor dens with Gorilla 1 and 2 exhibits linked by central more sheltered Gorilla exhibit. A green roof ensures minimal visual impact from above. External facades facing into the exhibits are green walls with mesh anti tamper protection to disguise the building's form and shape.

Image 30: Rammed earth walls to all Congo Viewing shelters.

Image 31: Cave-like shelters allow for visitors to view the Gorillas, whilst providing privacy and respite from direct viewing for the animals.

Image 32: Green walls soften the interior of the Gorilla Rainforest Room exhibit.

Image 31: Congo Gorilla Forest, Helpern Architects. Bronx Zoo. New York, USA.
Image 32: Orchid Pavillion, Manuel Cervantes Cespedes Architects. Mexico City, Mexico.

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