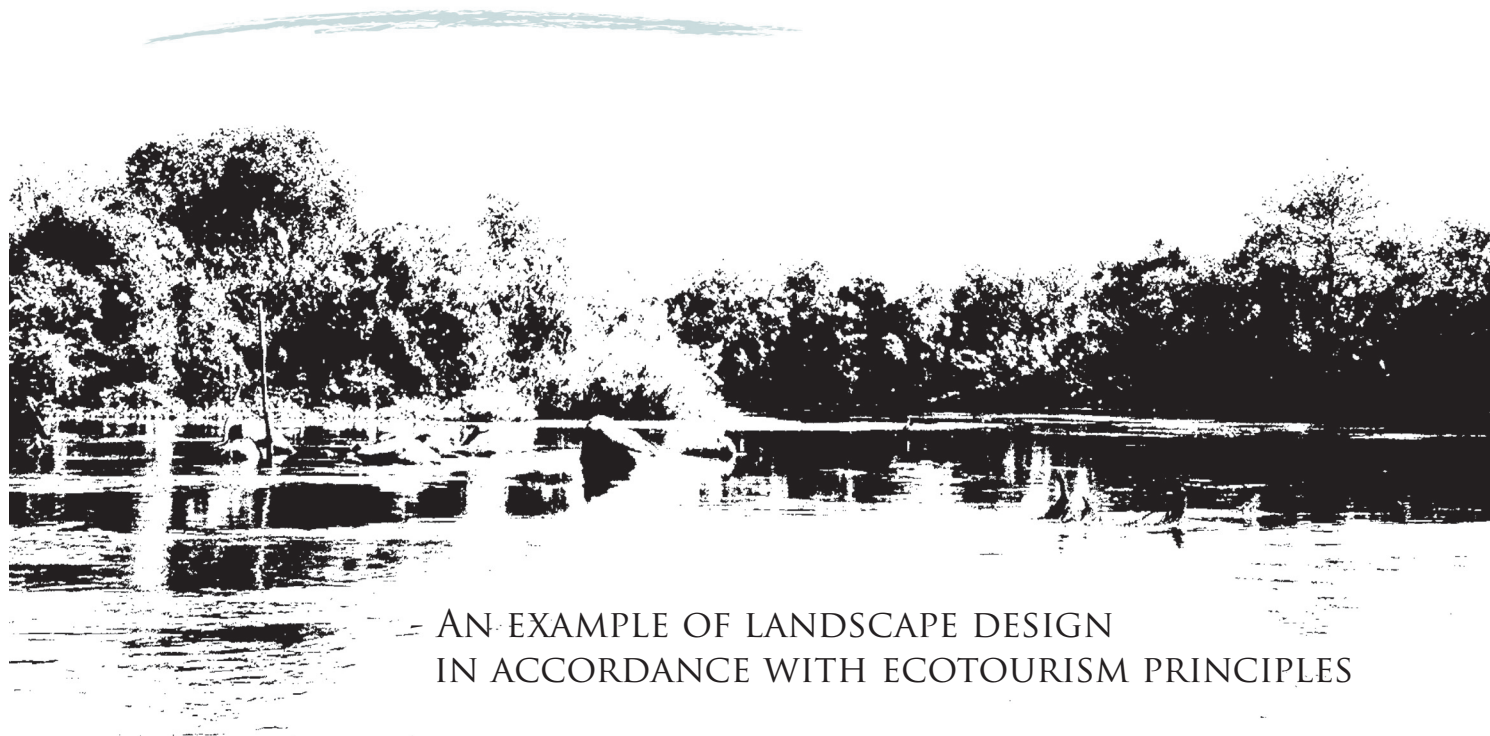


THE **ROYAL MUTANDA** RIVER LODGE, ZAMBIA



AN EXAMPLE OF LANDSCAPE DESIGN
IN ACCORDANCE WITH ECOTOURISM PRINCIPLES

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Minor Field Studies are carried out within the framework of the Minor Field Studies (MFS) Scholarship Programme, which is funded by the Swedish International Development Cooperation Agency (Sida).

The MFS Scholarship Programme offers Swedish university students an opportunity to undertake two months' field work in a developing country to be analysed, compiled and published as an in-depth study or graduation thesis work. The studies are primarily made on subjects of importance from a development perspective and in a country supported by Swedish development assistance.

The main purposes of the MFS programme are to increase interest in developing countries and to enhance Swedish university students' knowledge and understanding of these countries and their problems and opportunities. An MFS should provide the student with initial experience of conditions in such a country. A further purpose is to widen the Swedish human resource base for international development cooperation.

The SLU External Relations administers the MFS programme for the rural development and natural resources management sectors.

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ABSTRACT

Our project in Zambia has been to design a new lodge, the Royal Mutanda River Lodge (the Royal Mutanda), according to ecotourism principles for CSM SOLWEZI DEVELOPMENT CO INC. (CSM) In this essay we will present and discuss the landscape design aspects of our proposal.

The global natural resources are depleting and the growing tourism industry is partly responsible for this. An alternative is ecotourism, which seeks to give tourists the experience of nature at the same time as nature is preserved. The Royal Mutanda is located along the Mutanda river in the northwestern part of Zambia in relatively untouched nature with the Kaonde tribe as a close neighbour.

The design proposal calls for a planning and a design that is site-specific and suitable for the location. The lodge should be part of the natural environment and respectful to the local culture. A necessity for success of the project is to attract local and international tourists, this can be done through enhancing the unique qualities of the area.

Our objective with this essay is to answer these questions:

- What is ecotourism? How can landscape architects relate to the concept of ecotourism?
- What is an attractive design solution for the Royal Mutanda River lodge with the principles of ecotourism in mind?
- What are the consequences of the lodge for the local community?

KEYWORDS:

royal mutanda river lodge, ecotourism, landscape architecture, ecodesign, landscape design, kaonde, solwezi, zambia.



Picture 1. Sunset over the Mutanda river at the lodge site.

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1. BACKGROUND

1.1 INTRODUCTION

In a world where the natural resources are becoming more and more scarce, every way to preserve and nourish them is a step in the right direction. As landscape architects we can use one of our fields, landscape design, to provide beautiful and attractive tourism sites where people can stay and enjoy the wonders of the untouched nature. Ecotourism is about experiencing the nature in an environmentally and culturally sustainable way. This increases the number and size of the nature areas that are protected in the world, all with respect to the local culture. Ecotourism also contributes to the local economy and gives local people the opportunity to make a living out of preserving the nature, instead of exhausting it. An example of this is our design project, the Royal Mutanda River Lodge, which is situated along the Mutanda river in the Kaonde tribal area in the northwestern part of Zambia. The lodge is intended to be built by our hosts Chris Heurlin and Mark Tomlinson through their company CSM SOLWEZI DEVELOPMENT CO LTD (CSM). In this essay we discuss issues concerning the process of working with landscape design in an ecotourism context.

This project leads to a bachelor degree in Landscape Architecture at SLU-Alnarp, Sweden. We have spent 8 weeks in Zambia and the region working with the design proposal and the essay. This corresponds to 10 Swedish credits, 15 ect. We have been supported by the Swedish International Development Agency (SIDA) with a MFS-scholarship.

1.2 TOURISM AND ECOTOURISM

Tourism in the purpose of enjoying the beauty of nature has been popular since the days of the frenchman Alexis Tocqueville in the 19th century when he made trips into the wild american nature. At that time, most people found him strange doing this, today it is a dream of many. (Fisken, 2006)

There are different ways of experiencing the nature through tourism. Figure 2, shows a hotel close to the famous Victoria Falls in Zambia which attracts many international tourists. This adobe architectural style is not local, it rather belongs to a mexican tradition. The hotel dominates over the landscape and there is little connection with the local community. This kind of tourism would fall into the category of masstourism where the aim solely is to attract as many tourists as possible (Fennel, 1999).

The alternative is ecotourism which is characterized by smaller locally orientated lodges in harmony with the landscape (Wearing & Neil, 1999). Important to this kind of tourism is to preserve nature and support the local communities. Nkwale Camp in South Luangwa, Zambia (picture 3) has an architectural style which is locally inspired and makes it part of the landscape.



Picture 2. The Zambesi Sun, Victoria Falls, Zambia.
http://www.eyesonafrica.net/african-safari-zambia/zamsun_imgs/ZAM2b1H.htm



Picture 3. Nkwale Camp, South Luangwa National parc, Zambia.
http://www.eyesonafrica.net/african-safari-zambia/nkwali_imgs/nkwali4.htm

1.2.1 THE TOURISM INDUSTRY

The tourism industry in the world is growing, and is by many accounts said to be the world's largest industry. In 2002 there were around 700 million international travellers per year. This number is expected to rise to over 1 billion by 2010 with the earnings expected to grow from US\$621 to 1.5 trillion during the same period of time. (Fennell, 1999) Most countries today are very interested in having an increased share of the incomes of tourism. The governments around the world are acknowledging the potential of tourism to provide economic development by generating employment, foreign exchange and regional growth. One should bear in mind that the positive effects are often followed by negative, in terms of environmental and cultural effects (Wearing & Neil, 1999).

As tourism develops at attractive sites, hotels are constructed, transportation increases and air and water are polluted. Vegetation is affected by littering, camp fires and walking paths. The animals are similarly affected when previously wild areas are being exploited and their life patterns are changed due to visitors taking photographs, feeding them and buying souvenirs from illegal hunting (Aronsson, Tengling, 2003).



Picture 4. Litter on a beach in Greece.

The relation between an unchecked and expanding tourism industry and negative environmental effects has been acknowledged by the United Nations (UN) and other international organisations. The necessity for the travel industry to act responsible and to take measures to lessen its impact on holiday destinations and their indigenous cultures is encouraged by the Rio de Janeiro Earth summit in 1992, which resulted in the Agenda 21 (Faiers, 2005).

The income from tourism is generally believed to contribute to all levels of the economy. (McLaren, 1998) Local communities do not always agree. If tourists live and eat at lodges owned by

foreign tourist companies and rent their cars from international firms, a very small amount of the money spent at a destination contributes to the local economy. The reason is "leakage". It is estimated that 80-90 % of the incomes in the developing world goes abroad. If tourism is supposed to be a way out of poverty, this "leakage" is a problem (Wearing & Neil, 1999).

1.2.2 ECOTOURISM

Ecotourism is pointed out as a way forward towards a more sustainable tourism. The UN declared 2002 the "International Year of Ecotourism". (Faiers, 2005) Since then, ecotourism has been declared as the fastest growing sector of the tourism industry. It is difficult to actually see how fast it is growing, since there are many different definitions of the term ecotourism. What is certain though is the fact that the tourism industry is growing fast and the branch ecotourism is growing at least as equally fast (Wearing & Neil, 1999).

The term ecotourism was first coined by Ceballos-Lascuran in 1984 in an advertisement for a tourist operation. Since then the term has been adapted among many tourism operators involved in nature experiences (Ceballos-Lascuran, 2002). Among the numerous definitions of ecotourism, this one covers most of the important aspects.

"Ecotourism is a sustainable form of natural resource-based tourism that focuses primarily on experiencing and learning about nature, and which is ethically managed to be low-impact, non-consumptive, and locally oriented (control, benefits and scale). It typically occurs in natural areas, and should contribute to the conservation or preservation of such areas." (Fennel, 1999)

Essential to ecotourism is the very experience of unspoilt nature, which thus constitutes a natural resource in and by itself. By preserving the nature and opening it up to tourism, the local community and the government can benefit more than using it in other ways. For example, in Amboseli National Park, Kenya, it is estimated that the annual income from one lion is \$ 7 000 and from an elephant herd \$ 610 000, which means that per hectare, nature conservation results in more than 50 times the income of agricultural land use (Honey, 1999).

The protection and preservation of the environment through sustainable management is one of the most important aspects in ecotourism. In many cases in southern Africa, the natural resources has been depleted, the animals poached, the vegetation cut down and the waters fished out. In these cases ecotourism is also about rebuilding the natural resources by restrictions in hunting, fishing and forestry. Animals, which previously had their habitat in an area, are reintroduced. This process is a long-term commitment. When the quality of the nature experience is improved, more tourists can be attracted (Honey, 1999).

The scale of ecotourism enterprises is often small, locally orientated and built as part of the environment. The scale is an important aspect to consider in ecotourism projects,

which is illustrated in picture 2 and 3.

The approval of the local community is essential for any ecotourism project since most of the employees and materials are local and the land might previously have been used by the community. The best approach to this is a sincere dialogue and that the project will benefit the community, both economically and culturally. The establishment needs to be on equal terms with the local people to avoid the feeling of a "local Zoo" when the tourists are in contact with the locals. Cultural and environmental exploitation are common in the mass-tourism industry (Honey, 1999).

From where do the typical ecotourist come? It is still quite unclear (mainly because of the unclear definition of ecotourism), but some studies show that they are predominantly male, well educated, wealthy and long-staying (Fennel, 1999).

The potential in ecotourism is increasingly recognised by governments, Non Governmental Organisations (NGOs) and aid donors, and in some cases the recognition leads to planning measures. A successful example is the controlling of the height of the hotels in Bali that was implemented during the 1980s. The new hotels could not be built higher than the tallest palm trees. Hence, the hotel development would fit into the landscape rather than dominate it. The need for these kinds of regulation measures has been acknowledged in many places but there is still much to be done, especially in less developed countries (Dixey, 2005).

1.3 ZAMBIA

1.3.1 GEOGRAPHY

Zambia is the country with a butterfly shape in southern Africa. (see diagram 1) The area is about 750 000 km² with approximately 10 million inhabitants. The country has no coast and is bordering eight nations. It is situated on the South African high plateau. The fertility is generally low except for the land along the rivers. The largest river is the Zambezi, which has given the country its name, Zambia. The capital is Lusaka with a population of 1,3 million. The other big cities are found in the mining areas in the north, also known as the Copperbelt. (UI, 2003)

Livingstone with the Victoria Falls is an attraction in the south, other attractions are the Bangweulu swamps in the north which is one of the worlds largest swamp areas and the South Luangwa national park in the east which is ranked among the best in Africa. Other national parks include the Lower Zambezi National Park and the Kafue National Park. All of these hosts the African Big Five (Buffalo, Elephant, Leopard, Lion and Rhino). (Dooley & Plewman, 1999)

1.3.2 CLIMATE

Zambia has a tropical climate divided into three seasons. The weather is dry and cool from May to August, dry and hot, with up to 45 degrees C, from September to November and rainy with high temperatures from December to April. It rains the most in the north with an average of 1400 mm a year. The average annual daytime temperature is 24° C. (UI, 2003)

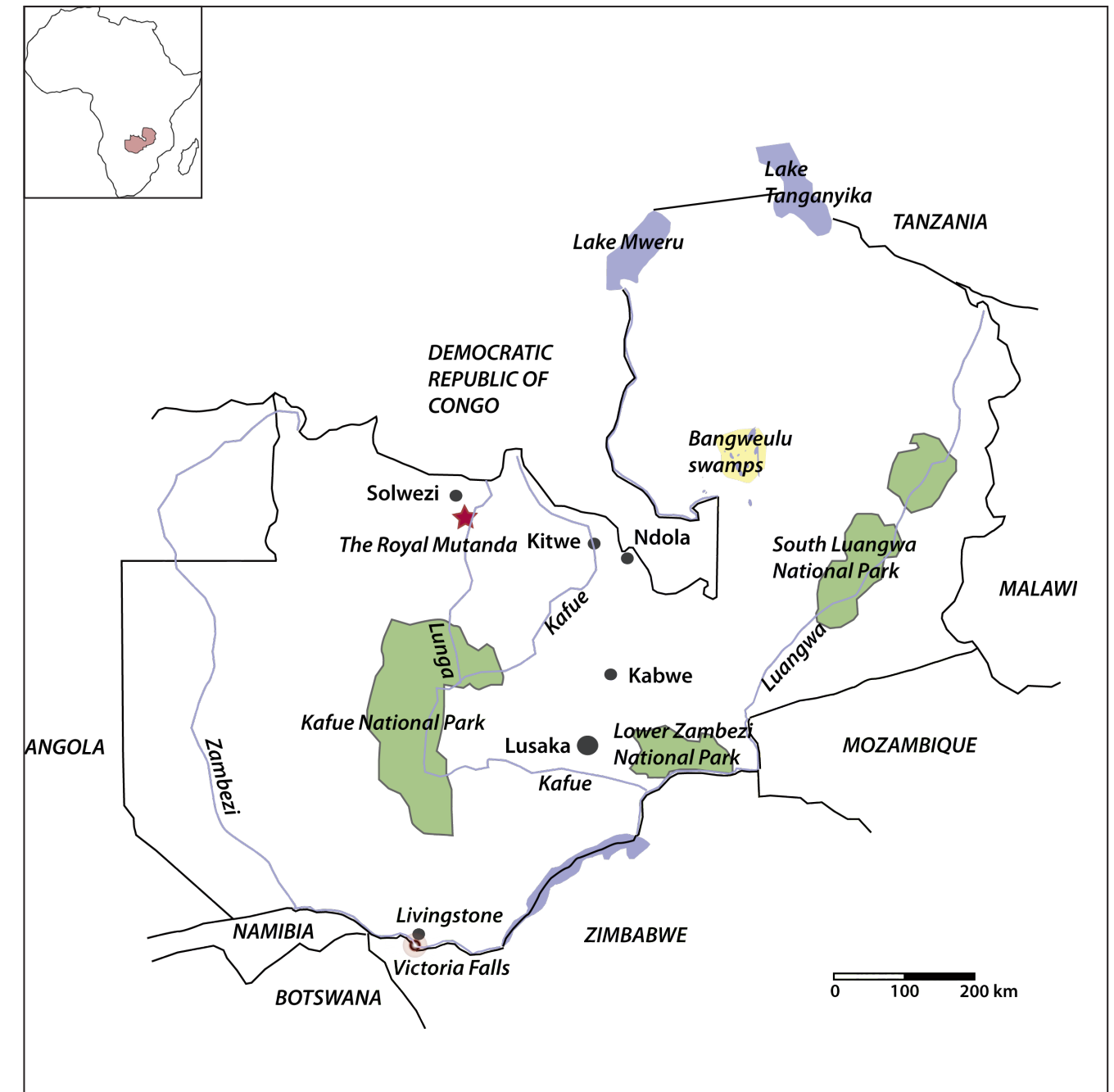


Diagram 1. Map of Zambia, its location, large cities, national parks and attractions

1.3.3 HISTORY & ECONOMY

The people living in Zambia today, as in most of the southern African countries, are of Bantu origin. In Zambia they are divided into at least 72 tribes. The country today is a democracy combined with a traditional tribal system. Each tribe has their own language and chief. (UI, 2003)

In the years between 1889 and 1964 Zambia was under different forms of British rule. At first the industrial leader Cecil Rhodes was given the right to the trading and mining in present Zambia by the British queen. In the end of the colonization Zambia, which at that time was known as North Rhodesia, was incorporated with presently known Malawi and Zimbabwe into the Central African Union. This was dispersed in 1964 by freedom leader Kenneth Kaunda, who later became president. (UI, 2003)

Zambia's main source of income is copper, and has been so since the independence from Great Britain. Because of the copper, Zambia was one of the richest countries in sub-Saharan Africa until 1975, when the prices of copper, in a short period of time, dropped to half. Since then, corruption, debts and political unrest has made Zambia one of the world's 17 poorest countries. (Burdette, 1988)

There has been a long time of peace between the tribes. According to Zambians, peacefulness is a trait shared by the modern Zambians. The surrounding countries including the Democratic Republic of Congo (D.R.C), Angola and Zimbabwe has been less peaceful in modern times. This has led to considerable numbers of people and companies establishing themselves in Zambia, for example mining companies working in the D.R.C and white farmers previously living in Zimbabwe and South Africa. The increase of, by the Zambian standard, wealthy white minority in Zambia has improved the economy, but increased the economical gap within the society. In later years, the Chinese, the Indians and the Arabs have started to invest in Zambia, besides the western companies. A higher interest in Zambia and Africa needs to be understood in relation to a higher global demand for resources, which brings investors to the mineral rich Africa (Interviews; Tomlinson, Heurlin).

1.3.4 THE ZAMBIAN LANDSCAPE & WILDLIFE



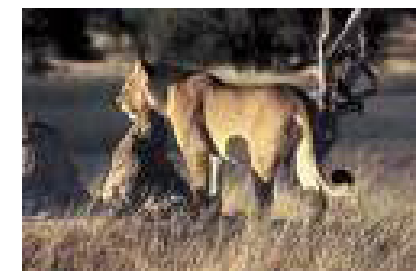
Picture 5. The Zambian landscape

The landscape in Zambia (see picture 5) consists mainly of woodlands, although the areas are shrinking because of charcoal production. The main type is the "Miombo woodland" which is covering about 70 % of Zambia with its associated "dambos" (floodplains). This type of woodland exists on Zambia's main plateau, where the acid soils are not particularly fertile and have often been leached of minerals by the water run-off. It consists of a mosaic of large wooded areas and smaller, more open spaces dotted with clumps of trees and shrubs. The woodland is broad-leaved and deciduous, and the tree canopies generally do not interlock. This kind of landscape differentiates from further north in equatorial Africa where the rainfall is higher and forests are the norm (Mcintyre, 2004).

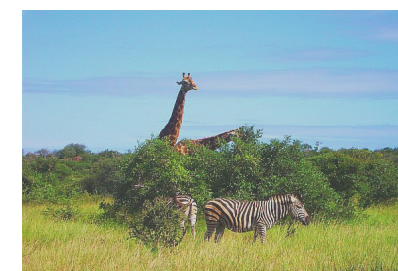
The Zambian nature and wildlife are what brings tourists to the country. A reserve with wild animals is generally called a game reserve, and the animals are referred to as game. Some of the attractive animals that are found in the large Zambian national parks are shown below:



Buffalo



Lion



Giraffe & Zebra



Leopard



Rhino



Elephant

1.3.5 TOURISM POLICY IN ZAMBIA

In 1990, the Zambian government started to regard the country's wildlife as a resource. Donor nations and conservation bodies argued that, if properly managed, the Zambian wildlife could become an infinitely renewable source of income. Since then, tourism has increased by massive numbers in Zambia, the main reason is the impressive natural resources of the Victoria Falls and South Luangwa national park. The tourists are both

found among the international clients and among national clients, for example foreign miners presently living in Zambia (Else, 2005).

Tourism is today an important source of income for Zambia and this income is planned to increase. The government together with the World Bank in Zambia has made a poverty reduction strategy, PRSP, where they point out the need to diversify the country's income. Agriculture and tourism are believed to play leading roles in Zambia's future economy. (The World Bank, 2005) The increase of tourists to Zambia is at the present rate roughly ten percent per year (Linda Simuyuni, ZNTB, 2006).

This rapid growth creates a demand for accommodation and lodges are accordingly being built. To make this expansion sustainable, the people involved in the construction and management of the lodges have to be aware of the impact this expansion might have on local ecosystems and indigenous communities.



Picture 6. The Victoria Falls, Livingstone, Zambia

The Victoria Falls (see picture 6) close to Livingstone is the most famous tourist attraction in Zambia. (Dooley & Plewman, 1999) The Zambian government is eager to expand its tourism industry beyond the Victoria Falls and they are just in the process of finalising a new set of Strategies and Tourism objectives for the country. The Zambian National Tourist Board (ZTNB) attends road shows, international fairs, conferences etc. Money is also put into marketing on big TV-stations such as CNN and BBC. The slogan is "Zambia- the real Africa" (See picture 7). The Victoria Falls is

the main attraction in Zambia. However during recent years the ZTNB is also trying to promote other attractions in Zambia such as its friendly people, its undiscovered nature "the true wilderness", its 19 national parks, South Luangwa national park, which is rated as one of the top game reserves in the world. Besides the Victoria Falls, Zambia has 52 waterfalls that are situated in the northern part of Zambia, an area that currently sees quite few tourists. With the slogan "true wilderness", ZTNB is trying to promote areas in Zambia that are yet to be discovered and that Zambia is not acquainted with the "mass tourism" which is found in other more traditional tourist destinations in Africa. The strategy aims to attract the independent traveller at the same time as the many small-scale luxurious bush lodges will attract the more financially "well-heeled". The Zambian culture, with its traditional ceremonies, handicrafts etc. is promoted and put in focus (Interview: Linda Simuyuni, ZTNB, 2006).



Picture 7. The ZTNB logo for marketing Zambia.

Community based tourism focuses on the involvement of local communities and some of the key objectives are: The increase of local supplies to the tourism industry, encouragement of communities to play a role in tourism development and management and secure a fair share of its benefits. There are a number of community based tourism projects in Zambia. The government is for example encouraging the visitors to Livingstone to explore more of Zambia including community based tourism products. The USAID report, "Inventory and analysis of Community Based Tourism in Zambia" shows that there is a good ambition, but many lodge operators in the country are unsatisfied with how the government and its different organisations are working. Our experience from talking to people also tells us that it seems to be a problem with corruption within the country (Heurlin, 2006) Examples of comments from the report are:

"Government should reduce on red tape...it's like you have a drivers license but you also need a license to sit in the drivers seat!"

"...I would like to emphasize that ZAWA (Zambian Wildlife Authority, a Government Organization) has failed totally in its mandate to protect Zambia's wildlife estate and their constant efforts to squeeze more money from any and every tourist enterprise that they are involved in makes investment in tourism a very unattractive position."

There is an ambition by the government to support ecotourism, but there is still a lot of work left as the comments from them who are involved in ecotourism shows.

2. METHODS

The study consisted of six parts: Literature studies, interviews, making of design proposal, presentation and writing of essay.

In order to prepare ourselves before the field trip we conducted a literature study to learn about ecotourism, lodge design and Zambia. It was mainly conducted in Sweden prior to the arrival in Zambia.

We carried out informal interviews and discussions to get a deeper knowledge of ecotourism in Africa, tourism in Zambia, lodges in southern Africa and the needs of tourists.

We decided to camp on the future location of the lodge to thoroughly study the future lodge site. The method was used to make the design site-specific and feel part of the landscape. For this approach a certain time is necessary to get the input and feeling of the place to be able to do the design. The finalization of the design proposal included design of the whole area, the exterior, the houses and the interior. These were all connected and part of the project. In order to do the landscape design properly we had to design the buildings and the interior aswell. The landscape design proposal is presented in the essay, while the rest is presented in Appendix.

The presentation for our clients was essential to introduce our ideas to them and receive feedback on our work.

Our main work with the completion of the essay has been conducted in Sweden.

2.1 WORKING PROCESS

In the literature study we focused on ecotourism theory, successful examples of ecotourism around the world and lodges with inspiring design. Upon arrival in Zambia the focus shifted to study traditional architecture in Zambia by visiting villages and a website dedicated to traditional architecture of Zambia. The studies of lodge design in southern Africa were also deepened by visits, websites and discussions with people who have experience of lodges.

We started off our interviews by discussing ecotourism in Africa with the owner of Thanda private game reserve in South Africa, Dan Olofsson. He is involved in community based tourism through his lodge which, according to him, both employs and educates the local community at the same time as the environment is preserved. We discussed the key to a successful business in the field of tourism and how to attract international visitors.

We discussed Zambia's ambition in becoming a tourist country and the role of ecotourism with Public Relations Officer Linda Simuyuni at ZNTB. Many discussions were held with our clients in this project, mainly with Mark Tomlinson. We discussed issues on tourism in Zambia, the Kaonde tribe and the specific needs that CSM had for this lodge. Potential tourists were interviewed, George and Eileen Bender who are farmers living in Zambia and enjoy vacations once in a while to different lodges, Keith Offord who is south African and working with mining in the area and

Susan Scott, a tourist from England.

We were not able to interview people from the local community on their views of the planned lodge and impacts on their community. CSM emphasized that we should keep a low profile and not nourish rumours and raise expectations. Due to this we choose to not explicitly discuss the project with local community. Looking back, these interviews would have been an important source of information. Instead, our conclusion of the local community's opinion is based on discussions with our guides, where one is part of the Kaonde community.

During the on-site design phase we camped out in the bush at the future lodge location for 10 days. The design process started with a search for the most suitable place for the lodge in accordance with the needs of CSM and our ideas of good landscape architecture. After the location was chosen we made maps in different scales of the area using GPS and measuring distances by walking. The area is mostly covered with tall grass and in order to increase the visibility the area was cleared in strategic positions. Intensive sketching and discussions followed. All locations and functions of the lodge area have been decided on the site. Views, functionality, and the characteristics of the river are some of the considerations taken. After the location of the lodge and some basic ideas of the design were clear, we travelled back to Nsobe Game Lodge, where we stayed, and worked with the details of the chalets, the interior and the landscape. The sketch-work resulted in drawings, 3-d models etc.

We presented our proposal at Nsobe Game Camp to Chris Heurlin and Mark Tomlinson (CSM) using PowerPoint and a projector. The clients were satisfied with the proposal and after discussing some details of the design and the functionality, they wanted the Royal Mutanda to be built after our design.

After returning home to Sweden, we started working with the essay. This work has involved analyzing field data, constructing diagrams and first and foremost a lot of reflecting and writing.

3. INFLUENCING FACTORS

3.1 THE COPPERBELT

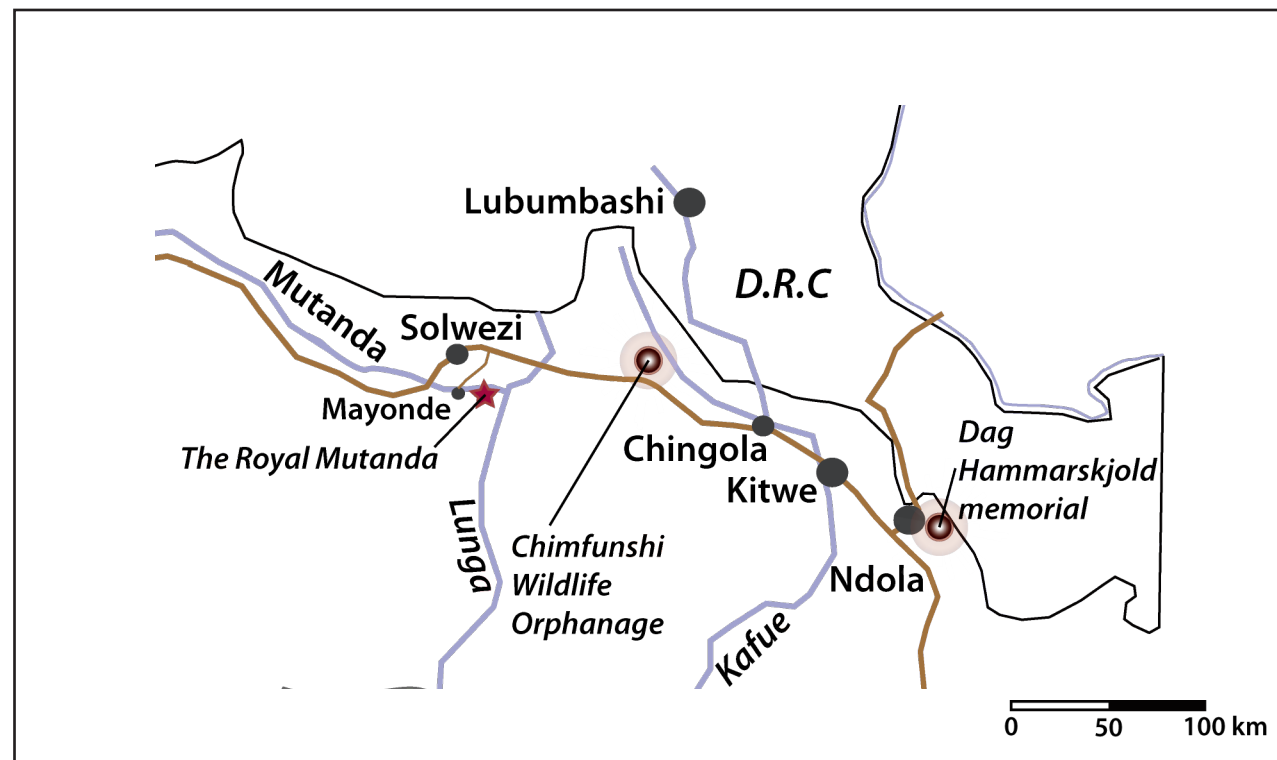


Diagram 2. Map of the Copperbelt region, Zambia

The Royal Mutanda is situated, north of Lusaka in the Copperbelt region as shown in diagram 2. The Copperbelt is Zambia's industrious centre with the two large cities, Ndola and Kitwe. The first copper mine, Broken Hill, opened in 1906 and since then the Zambian economy has been dependent on the copper. The copper deposits in Zambia stretch from Ndola in the east to Solwezi in the west. One of the world's largest copper mines is situated in Chingola. The majority of the companies that operates the mines are foreign, as well as most of the qualified workers. Besides the foreigners working in Zambian mines, many that work in the mines in the D.R.C close to the borders chooses to stay in Zambia for reasons of comfort. The foreign miners are one target group for the Royal Mutanda.

Compared to other parts of Zambia, the attractions in the Copperbelt for international visitors are quite few. One attraction is the Chimfunshi Wildlife Orphanage outside Chingola, which takes care of chimpanzees from the D.R.C that have been injured and needs aid. The former general secretary of the U.N, Dag Hammarskjold was shot down in D.R.C and the plane crashed outside Ndola, where there is a memorial to honour him. The route to Solwezi is also used to reach the very north-western part of Zambia where the source of the Zambezi river is. This area is rather untouched and primitive by western measures, which might evoke some interest from international tourists eager to explore areas priorly "untouched" by tourists.

The location of the Royal Mutanda means that a large tourist group of foreign miners are close

by and that the lodge could be part of a potential tourist route to the "untouched" areas of the Zambian north-west.

3.2 THE TOURIST IMAGE

We conducted informal interviews with potential tourists to the Royal Mutanda to understand what tourists are looking for in a tourist destination in Zambia. The kind of tourists that the lodge is looking to attract is mainly consisting of two groups, as discussed with Mark Tomlinson. There are the foreign miners working in Zambia and there are the international safari tourists. Besides these two target groups, other wealthy people living in the area will be of interest, for example expatriates such as missionaries, peace corps-workers etc. Keith Offord and Susan Scott were representative for the two main groups. We also present the views of George and Eileen Bender and an Zambian English artist, George.

Keith Offord is a white south African working with mining in D.R.C and currently living in Zambia. A few things seem clear when talking to Keith who has large experience of different lodges in southern Africa. An important aspect according to him is the "bush-feeling", which is discussed later. The presence of the powerful African nature is crucial, and that is what attracts him. He prefers a luxurious environment, combined with a very present nature. The lodge needs to be part of the nature in order to be interesting. Main activities are watching animals on game drives and general relaxation, including a good bar and a restaurant. The culture is of little interest, instead the experience of nature and the comfort of the lodge are important. The design of the lodge area needs to provide the bush-feeling and make it feel like a special lodge.

Susan Scott, a white English tourist, fits into the group of nature admiring international tourists. The reason she enjoys coming to Africa is the attraction of the wild and mighty nature. The African culture is also interesting and she finds interest in some of the handicrafts and cultural traditions. It is a good way to get away from the modern world and all the stress. In Zambia people are very friendly, and because it is not very touristy, it feels quite genuine and a bit exclusive, she says.

George and Eileen Bender are white farmers in Zambia and enjoy going on vacation to different lodges. The important qualities of a lodge are the accessibility and the peace and quietness. Because of their relatively old age, it is important to be able to park the car close by. A good view from the chalet and comfort is also essential to them.

The Zambian English artist George frequently meets with international tourists. He has some theories on what tourists want. He is sure that tourists want the romantic, wild and bushy Africa that they dream about and not the real Africa, ..."in that case they would sit around fires eating little tasting food and sleeping on mud floors..." He believes there is a fine line between a lodge who gives the Africa feeling with finesse and one which becomes too much and tacky. Comfort and as much of "Africa feeling" as possible is what they want. The "Africa feeling", according to George consists of traditional architecture combined with nature and organic forms in the lodge. George says

that a good lodge in southern Africa, makes you feel part of the magic of Africa.

Our main conclusion based on our interviews is that tourists want comfort and the “Africa feeling” or “bush- feeling” as we define it. The bush-feeling consists of the images people have of Africa, the powerful, beautiful and untamed nature is in the centre. There are also some elements of exotism and traditions of natives incorporated in the term. It is not certain that every tourist is searching for the bush-feeling as we describe it, but after visits to other lodges and talking with people in the industry, the bush-feeling is something that seems to attract. The term bush-feeling is controversial. Among some users of the term, there are traces of values from a colonial past and a view of Africa and its people that implies that the white man still is the master, this complexity is further discussed in 5.1.

3.3 CASE STUDIES IN ECOTOURISM

3.3.1 CASE STUDY 1. THANDA PRIVATE GAME RESERVE, SOUTH AFRICA



Picture 8. Thanda Lodge in the landscape

Thanda Private Game Reserve (Thanda), South Africa, is owned by Dan and Christine Olofsson, resident in Malmö, Sweden. It was bought in 2002 as a cattle farm and turned into a lodge and game reserve. At that time, only antelopes were present of the traditional game species and many needed to be introduced. The plan was to re-establish the ecological balance that once prevailed in the area.

Thanda is part of the JAC initiative: Jobs, Aids and Conservation. This is important, according to

Dan Olofsson, since the social investments in the community is crucial for success in a lodge project. In this area of South Africa, the problem of unemployment and aids are the largest threat to the well-being of the community. It can be added, that many of the projects run by Dan and Christine Olofsson are not economically profitable, and is made possible through donations.

Thanda is marketed as a safari lodge with romance and Zulu culture in the centre. There is for example a theatre with regular performances by Zulu dancers. It’s all a show, but a good one according to Dan Olofsson. The lodge is strictly upmarket and the only lodge on the prestigious list of “the leading hotels of the world” (<http://www.lhw.com/>).

The lodge is designed by architectural firm Riddler, Shephard and Law from Johannesburg. There is a luxury area, common to upmarket lodges, and a “tented camp” without electricity. The tented camp is intended to provide a sanctuary from the modern world. The most important consideration for the positioning of the lodge was silence and a beautiful view. Therefore it is placed on the side of a ridge, which screens out the noise from the traffic nearby. The mountains provide a feeling of safety. Wind is used for cooling through air circulation. In accordance with ecotourism principles local materials was used in the construction.

It is a luxury way of experiencing nature and the Zulu culture, besides this the positive effects for the local nature and the community are vast. (Interview: Dan Olofsson, 2006)

The conclusions from Case Study 1 is that it is important to have good relations with the local community and that Thanda is a successful example of attracting tourists by designing for a romantic and magic feeling of Africa throughout the lodge. This is something we relate to in our design in chapter four, using the term bush-feeling.

3.3.2 CASE STUDY 2. KAYA MAWA, LIKOMA ISLAND, MALAWI



Picture 9. Kaya Mawa, Lake Malawi

Kaya Mawa is an interesting example of how a lodge can blend into the landscape. The lodge is situated on the remote Likoma Island and the first to develop land here for tourism purposes were the Englishmen Andrew Carne and Will Sutton. They were invited by the village headman to build the island's only hotel. The objective from the beginning was that the project should benefit the local community as much as possible.

Kaya Mawa Lodge sits on a tiny island just off the coast. The resort has minimal visual impact on its environment, with the cottages tucked discreetly into their surroundings. The lodge is designed around the natural elements of lake and rock. Each of the seven stone cottages are built around natural pools of water accessed by a private jetty. Huge white boulders jut out from the water providing a natural boundary between one cottage and the next. Since the cottages are built of stone, they blend well into this rocky landscape.

It is a lodge that has been built and designed step by step with help from architects and the local community. The construction took about ten years with the help of village craftsmen using only local materials. Since the lodge is so remote, it has to be completely self-sufficient and it is equipped with solar energy.

Some of the areas around the lodge are shared by the locals and the guests. The beach is one example, which is both used by guests for swimming and locals for washing and fishing (Faiers, 2005).

There are a few interesting aspects for us to relate to in Case Study 2. How a lodge can be designed to blend in with nature, as in this example using small stone houses to match the large stone boulders, how the relations with the local community can be developed when building the lodge and how some areas still can be shared between local people and tourists with the lodge in place.

3.4 ZAMBIAN ARCHITECTURE

The Zambian vernacular architecture, the style of the standard houses for living, is relatively consistent throughout the country, despite the 72 different tribes. It follows the same architectural patterns.

A Zambian homestead often consists of one or a number of main buildings where you sleep, this depends on the size of the family. The outdoor spaces are important because of the hot climate and they are usually divided into a functional and a social/public area (see diagram 3). In the functional area there are common structures such as a latrine, pigeon coops, a groundnut container and a granary. Maize is one of the major crops in Zambia and Nshima, made of maize, is the main staple food. A cooking insaka is also common in the functional area. Besides the cooking insaka, it is common with a social insaka in the homestead. The social insaka is an important gathering point which provides shelter from the heat. Another important gathering point is the mango trees often found centrally located in the typical homestead.

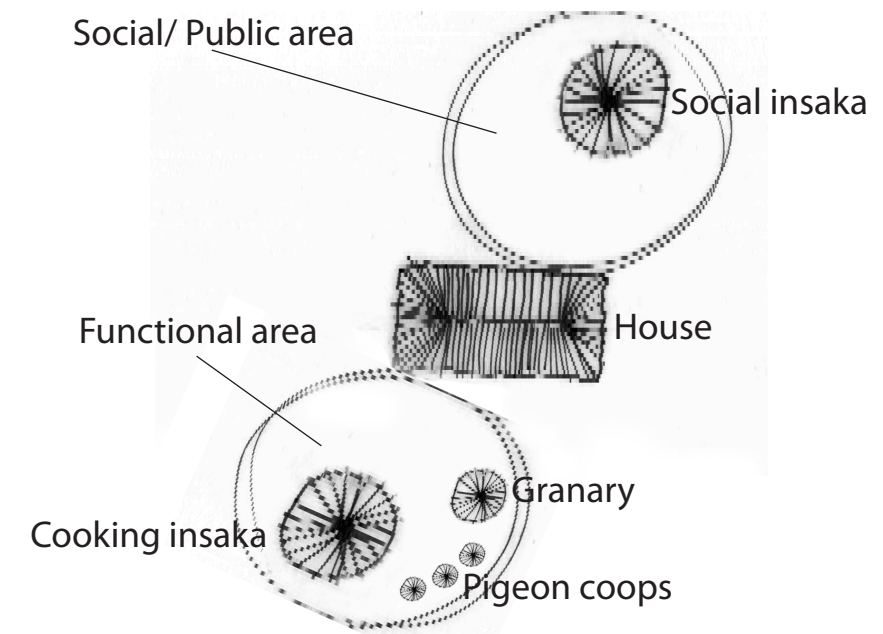


Diagram 3. Plan of typical Zambian homestead.
(<http://www.zambiaarchitecture.com/>)

The word insaka means "place to gather" in Bemba, a language in Zambia. The appearance resembles a gazebo. The insaka plays a significant role in the village life and in the preparation of food. Because of its open structure, and therefore good ventilation, it is suitable for cooking and as shelter from the heat. The insaka encloses a space and provides protection against the elements (see picture 10).



Picture 10. Insaka in Kaonde village. (to the right)

There are differences to the overall layout of the village depending on the location of the village in the country. A common layout is where the homesteads are close to each other divided only by plants. These plants may not block views or actual passages but they do create a boundary. Sometimes shrubs are used as a kind of fence and sometimes these shrub-fences create a "street like effect". Another layout which is common is the scattered one. In this layout some homesteads are closer to each other and some further apart. The scattered layout is found in the areas surrounding the future "Royal Mutanda River Lodge". Trees, grass and fields are often separating the homesteads and functioning as buffers (see diagram 4).

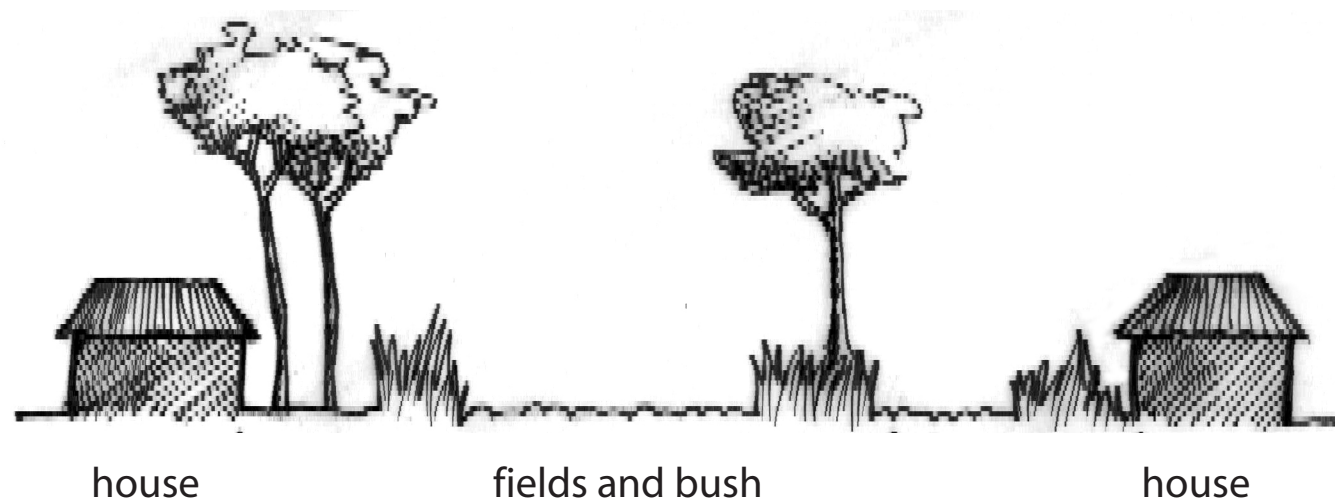


Diagram 4. Illustration of traditional relationship between houses
(<http://www.zambiaarchitecture.com/>)

There is a variation in the architecture of the houses. Houses with a square plan are often found in the northern part of the country. It is a result of missionaries who brought the technique of brickwork and mainly arrived to this part of the country. Brickwork enabled construction of square buildings. Something that was not possible with the technique of using bamboo with plaster on top. With bamboo, circular buildings were built because of the difficulty of bending bamboo in to 90 degree angles. This technique is still used, although it is more common in the southern parts of Zambia.

The houses are often decorated with different kinds of paintwork. The paintwork often depicts motives such as fishes, animals or the name of the family living in the house. It is also common to colour parts of the building. The paint is made of natural colours from the soil. Other decorations are brick patterns, different shapes of the windows and decoratively thatched roofs (see picture 11).



Picture 11. Decorations on Zambian house, Mayonde

There are interesting elements in the local architecture traditions that we wanted to use in our design solution. First and foremost we have been inspired by the the traditional use of materials

and techniques. An example is the thatched roofs, which have many different and interesting appearances. The way that buildings are separated with trees and grass has also affected the design. Finally, the insaka's round shape is reflected, in a larger scale, in the shape of the restaurant. (see chapter 4, appendix) As illustrated in appendix 1, we have chosen not to decorate the houses the traditional way. This technique bring a potential for a truly unique design. In cooperation with a skilled local artist, this technique could enhance the qualities of the lodge, but when lacking the artist, it should be avoided.

3.5 ECOLODGE DESIGN IN SOUTHERN AFRICA

The design of different lodges have inspired us to think about how a strong experience of nature can be achieved, what kind of materials to use and how to make the lodges interact with the landscape. Ecolodge design in the world is generally focused on enhancing the nature experience and providing something "special". The design often includes the use of natural materials, like local wood, stone and grass.

The buildings of a lodge are often gathered together. When placing a lodge in the landscape, the view from the lodge seems to be one of the most important concerns, and a pleasant sunset. Lodges are constructed of local materials and are relatively small in size, these features allows the lodge to blend into the landscape and gives an organic and natural feeling (see picture 12).



Picture 12. Shompole lodge, Kenya (Faiers, 2005)

Many lodges have incorporated local characteristics like a large rock or an interesting

tree in the design. This strengthens the connection with the local environment the unique qualities of the site (see picture 13).



Picture 13. Mowani mountain camp, Namibia (Faiers, 2005)

The general feeling in many lodges is the bush-feeling, a commonly used term. The feeling of the powerful African nature and the local traditions in a comfortable way (see picture 14).



Picture 14. Mchenja Bush Camp, Zambia (http://www.africaaway.com/zambia/camp_lodge/norman_carr/mchenja_bush_camp.htm)

3.6 THE KAONDE AND THE AREA

The Kaonde tribe lives in the area around the lodge (diagram 6) and up north to Solwezi. (See diagram 2). The tribal leader is chief Kapijimpanga and the lodge area is situated entirely within his territory. It is governed by the tribal chief but the central Zambian government retains control over constitutional issues, law and order. Mayonde is one of the largest villages in the Kaonde region and is a neighbour to the Royal Mutanda. The village of Kanyakaula is also close, and the population that are active in farming and fishing within the planned lodge area, are mainly from Kanyakaula. The lodge is situated in a river landscape, where the Mutanda runs in to the Lunga. The Lunga continues down to the Kafue National Park in the south of Zambia. (see diagram 1) The area is in the malarial zone but due to relatively low surrounding population it is not as badly affected as many other areas. All visitors will be encouraged to take appropriate precautions against malaria. East of the Lunga, is the Kaubo reserve, which is a large untouched forest area, this is one of the main attractions in the area and the aim of Chief Kapijimpanga is to preserve and open the Kaubo reserve to tourism. This is in accordance with the plans of our client, CSM, who wants to reintroduce interesting and native species to this area again. The attractivity in the area is then believed to increase and bring more visitors to the Royal Mutanda. The terms of the economic deal between the Chief and CSM is not finally decided, clear is however that the land the lodge will occupy is to be put on a 99 year lease and that a certain percentage of the incomes (now discussed is 20 %, which in the context is regarded as generous) will be distributed to the local community.

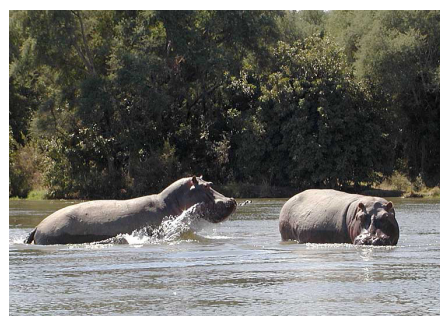
3.6.1 VEGETATION AND LANDSCAPE

The landscape in the area consists of trees and grassland, fertile flood plains (dambo) in connection to the rivers and forests (diagram 6). The location of the lodge is in a tree and grass landscape next to the Mutanda river. The area next to the river has very lush vegetation consisting of medium-high trees, river reeds and grass. The vegetation and landscape is suitable for tourism because of several reasons; first of all the landscape itself is beautiful and has a feeling of "a powerful African nature", secondly the vegetation has a potential to suit many and rare game species which will increase the tourism attractivity of the area. On the eastern side of the Lunga river is the Kaubo reserve which is a large unspoilt forest landscape with old hardwood trees. This area is remote and exciting and could in the future hold many species if preserved.

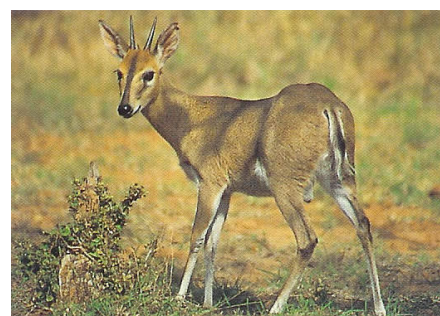
3.6.2 WILDLIFE



Picture 15. Sitatunga



Picture 16. Hippos



Picture 17. Common Duiker

The number of wildlife in the area is currently low, but if protected, this number has a great potential to increase. Traces of Lichtenstein's Hartebeest, Sitatunga, Bushbuck, Common Duiker and Hippo have been found. (see pictures 15,16,17) Crocodiles are common in the rivers, but seems to have temporarily moved because of the occurrence of fishing with dynamite. This kind of fishing has also negatively affected the fish population. On the positive side, the bird life in the area is still rich with numerous species present both in the wetland and in the forest regions. The population and variety of game can be improved by fencing, poaching protection and introduction of species.

3.6.3 THE LOCAL CONDITION

The Kaonde is a tribe where poverty and unemployment are widely spread. The U.N are active in the area and provides food to hinder starvation when the harvests fail. The Royal Mutanda project would change the way of life for the local community. As we travelled in the area we noticed a very high interest for employment by the locals. Among the local community it is already high expectations that the project will provide them a way out of poverty and starvation. We were instructed by our clients not to raise these expectations, since the project is only in the planning stages and the actual establishment of the lodge is not by any means certain.

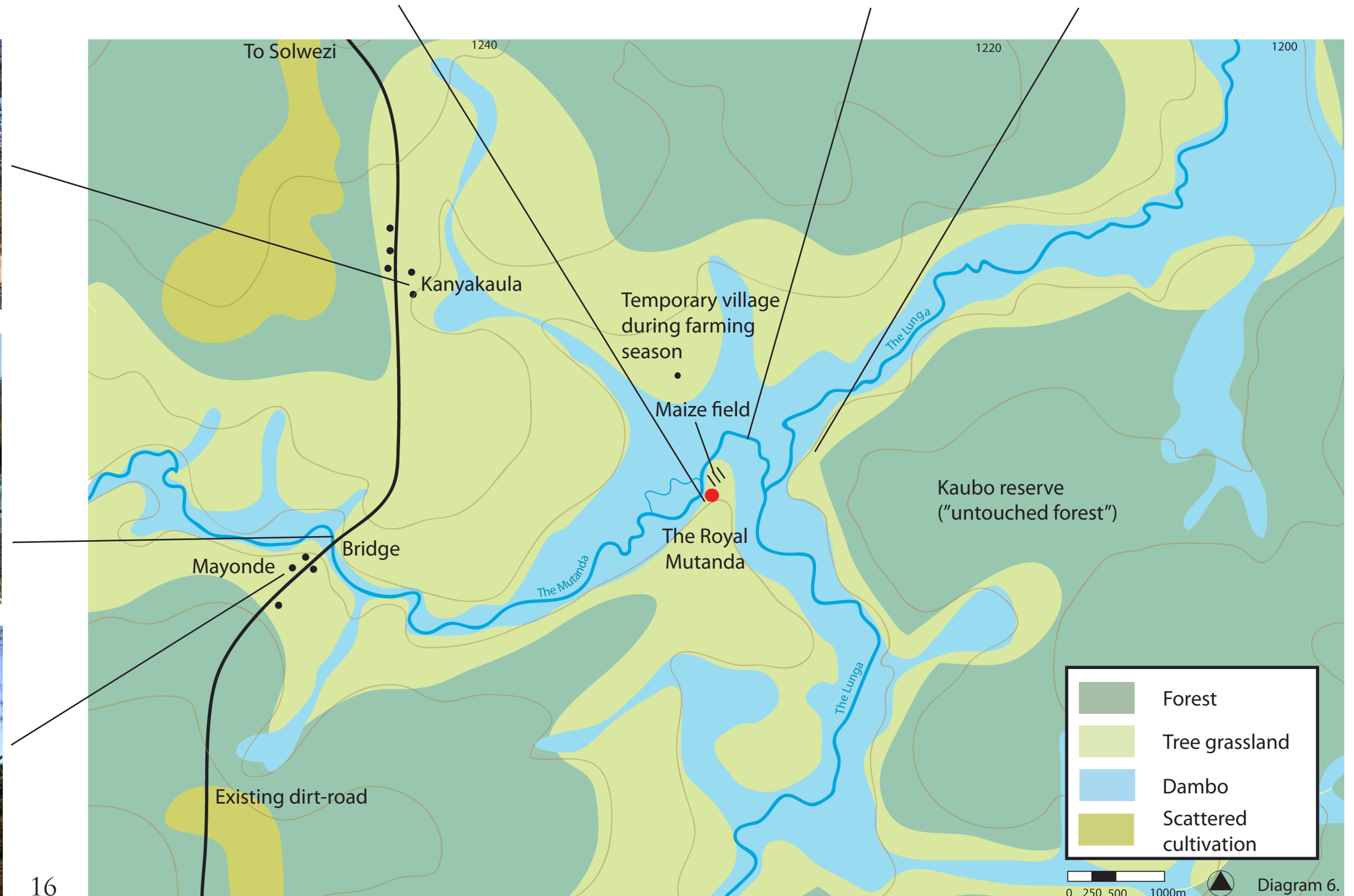
Besides not raising the expectations and the importance of the understanding of the consequences for the local community there are other issues concerning this that is discussed by ecotourism literature. For example, Honey (1999), is discussing the importance of a certain ratio between natives and tourists. If the amount of tourists is high, and the visits to the villages are too frequent, there is a risk that local culture gets disturbed. It is a delicate matter for any ecotourism operator to figure out how many tourists the area can receive, and especially how many visits to the villages can be made. This is further discussed in 5.3. When reflecting on the definition of ecotourism in 1.2.2 and this project, there are some differences. The definition states that the local community should have certain amount of control over the project. This is not the case of the Royal Mutanda, where CSM will be in control but the incomes will be shared. The affairs of the lodge will be regulated between CSM and the chief. The definition also states that a project should be environmentally non-consuming, the lodge will of course consume resources like wood and water, but hopefully it can be done in a sustainable way.

3.6.4 LAND USE

The land use in the area is an important issue. The area where the lodge will be situated is unpopulated, but used for farming and fishing. The village members of Kanyakaula are presently farming maize within the actual lodge area as shown in diagram 6. Local people are fishing in the Mutanda and Lunga river in a traditional way with nets and rods. Lately the environmentally devastating method of dynamite fishing has been introduced and practiced. Firewood and wood for construction of buildings are being taken from the area but in small scale and in a sustainable way.

MAP OF THE AREA

The map shows the Royal Mutanda's location, the landscape and the populated areas. The pictures to the right illustrates the landscape where the lodge will be situated. The pictures below illustrates the village landscape and the people living close to the new lodge area..



3.7 ECOTOURISM DESIGN PRINCIPLES

We have presented a number of factors that in our judgement have been important to consider upon in the current project. We now turn to an attempt of describing these factors in relation to ecotourism and our field of landscape architecture. We also provide a synthesis of guidelines for landscape architects which can be used in a practical application. Our design proposal, which is described in detail in part 4, is based in the framework presented in diagram 7.

Ecotourism and landscape architecture have things in common, for example the notion of nature as a resource to be used by man in a respectful manner. The intersection between the two fields provided us with a starting point from where we defined and limited the scope of our project. We have chosen to emphasise factors that we believe are central to consider in order to meet the requirements of ecotourism, the requirements of our hosts and our knowledge as landscape architects.

The ecotourism principles that we have chosen to adapt to this project are:

- Design with nature and blend into the landscape by using as much of local materials as possible and provide a site-specific design.
- Respect the local community’s use of land, its culture and values.
- Create an attractive lodge design that can attract tourists and earn money, this benefits both the local community and the tourism operator

The principles used in the design proposal are in line with general ecotourism theory and we as landscape architects emphasize the importance of some parts of ecotourism more in this project, for example “design with nature”. The principle has also been used in practice by other landscape architects such as Mr Harding when designing the Chan Chich lodge in Belize and John Reynolds in his work for the US National Park Service. (Jukofsky, 1992)

The three parts that have influenced us in our design proposal are local architectural tradition, modern lodge design and the local landscape character (see diagram 7). The design proposal is in every part a mixture of different influences but mainly: the local architectural tradition has inspired the material use and some details, the modern lodge design has inspired the architectural expression and the function of the lodge and the landscape character has inspired the placement of the different buildings.

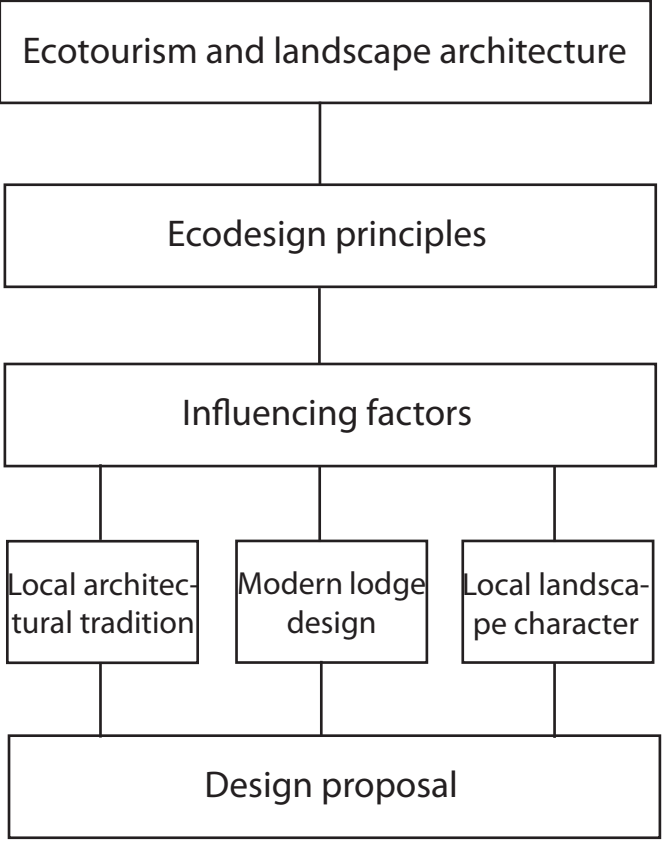


Diagram 7. The process towards the design proposal

4. THE DESIGN CONCEPT

With the principles as our guidelines the design objectives for the Royal Mutanda has been to create a "bush-feeling in that sense that there should be a strong presence of the African nature throughout the lodge. This is achieved by preserving the landscape character and making the nature superior to the lodge. The lodge should therefore blend into the local landscape and not stand out. We want it to be luxurious at the same time as it is basic, our aim is not to provide a "Hilton in the bush", but instead make it attractive to tourists by providing a good nature experience. The lodge should be ecologically sustainable and respect the local community in its expression and use of land.

The design proposal that follows is focused on the larger scale of the landscape design. In this scale the landscape itself has largely influenced the proposal. The influences that the local architectural tradition and modern lodge design has made on our design is more clearly illustrated in our detailed design proposal as presented for CSM in Zambia. (Appendix.)

4.1 ARRIVING TO THE LODGE

The nearest town to the lodge is Solwezi, which is about 60 kilometres away. When driving from Solwezi towards the Royal Mutanda, the first kilometres is tarred road and the rest is dirt road with variations in quality. When designing the lodge area we have been working with the notion of a total experience. This long dirt road enhances the feeling of being away from civilization and as the road gets worse the stronger this feeling of being remote gets. Driving to the lodge includes driving through beautiful Kaonde villages and passing the river Mutanda. These experiences are important in building up the expectation and the notion of that the tourists are heading towards something exciting. After passing the river Mutanda there is a 4 km drive to the lodge. We can influence this final part of the journey by designing the route of the road so that the positive expectations will culminate upon arrival to the lodge. On this road you will partly drive alongside the beautiful dambo (as shown in diagram 8) and partly in the forest. This will create a more varied experience with "surprise-effects" when the forest opens up to the floodplains. With luck, antelopes can be seen on the way to the lodge. In the last part of the road experience, the tourist will pass through the forest and when she finally comes out into the open, the lodge will naturally sit in the landscape.

4.2 THE POSITION OF THE LODGE IN THE LANDSCAPE

The lodge is positioned where the Mutanda takes a turn (see diagram 8), this makes it possible to get more distant views along the river in both directions. This place is also one of few where the land is very steep towards the river, and therefore does not flood. This makes the spot suitable since one of the main attractions of the lodge is the river, and it is important to build the lodge close to it. This position also offers views towards the west and the sunset over the river (see picture 1).

There are other positive attributes that this location brings forward. From a functional point of view it is quite close to Mayonde and the road, which means less environmental impact and

infrastructural costs than if for example, the lodge were to be placed east of the Lunga. With this location the visitor becomes part of a larger landscape with plenty of lookout points within walking distance. For example, the beautiful sun and moonrise can be seen over kilometres of dambo. It is close to the conjunction of the Mutanda and Lunga river, which is an attraction itself. The distance to Mayonde village is about 4 kilometres, which makes it a pleasant half-day trip. By using the canoe it is possible to go upstream the Mutanda or Lunga or downstream the Lunga. There are plenty of small streams to discover during the trip. There is a rest place and a view tower at the conjunction where the canoes can be moored and brought snacks can be enjoyed. The current of the Mutanda is quite strong during some periods of the year, therefore it is an option for the guests to leave their canoes at the restplace and walk back, while the staff later picks up the canoe. Trips into the unspoilt nature of the Kaobo reserve with rare species are another exciting option for the guests.

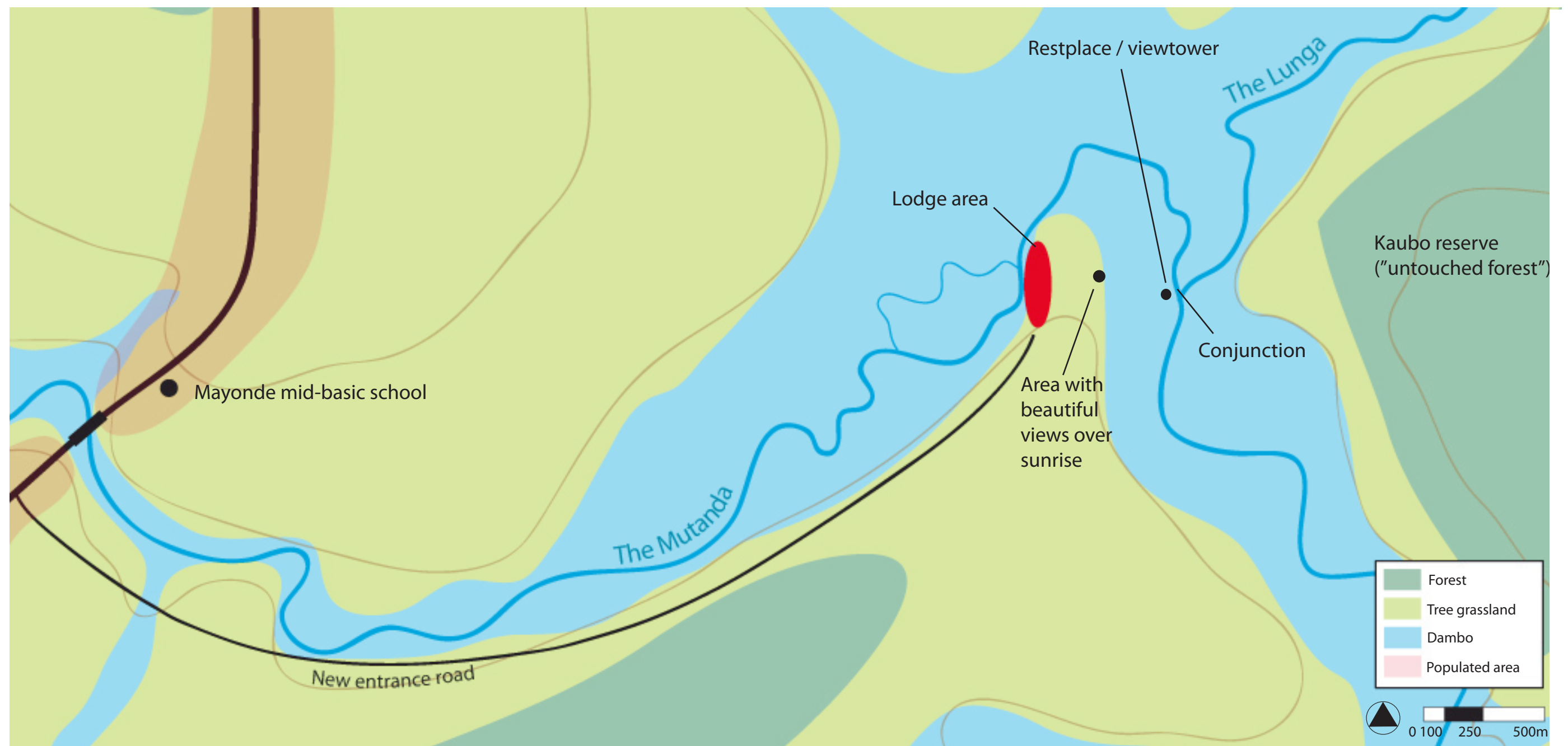


Diagram 8. The Royal Mutanda and the surrounding area.

4.3 THE ROYAL MUTANDA RIVER LODGE

4.3.1 EXPERIENCING THE LODGE. THE DESIGNERS AIM

Upon arrival to the lodge area, the car parking will be in the first section of the lodge. (see diagram 9) Since the expectations and excitement needs to be increased after the drive, the parking plays an important role in the Mutanda experience. This is the first time you stop and look around. The parking offers you a beautiful view of the flood plains to the left and a glimpse of the river and the vast flood plains on the other side of the river. The reception greets you and on your way to the restaurant you pass a small bridge, when looking upwards there is a flowery exotic creek and downwards you can see the canoe harbour. Arriving to the restaurant, which is the heart of the lodge area, the design is a pleasant surprise, it speaks to you of something modern but yet African that blends into the landscape. The presence of the river is emphasized in the restaurant area by the view of the river, the vanishing edge pool and the river bath. It offers a nice place to enjoy a cool atmosphere, with some nice beats in the background, a large flood plain ahead, where you might see antelopes while the sun sets across the river. You move from the restaurant to your chalet on a small and winding path. The chalets are gently tucked into the vegetation and offers a peaceful location and a quiet moment. The river and the flood plains on the other side is your neighbour. Every chalet offers different settings with the honeymoon suite the furthest away from the restaurant, separate from the rest of the lodge and with the total Mutanda and nature experience. The general idea about the lodge is that you park in the beginning and the further away you go from the parking and the restaurant, the more wild it gets.

4.3.2 THE POSITIONING OF THE BUILDINGS, PATHS ETC.

The buildings of the lodge will consist of a restaurant building with a connecting kitchen building in the back, seven chalets with one of them being a "honeymoon suite", a workers compound and an office building. The office building is the first building seen when arriving to the area, followed by the restaurant. The restaurant forms an entrance to the area. The chalets are then positioned alongside the river north of the restaurant. The chalets and the path connecting the chalets with the restaurant will only be accessible for those living in the chalets. This will create a secluded setting for the chalets where the guest can relax without getting disturbed by others. The chalets are also on the side of the restaurant, facing "the wild". This makes the restaurant form an entrance and, when staying in the chalets, it enhances the 'bush feeling'. Through the area there is a winding path which takes the guest to the chalets or further on to the River Walk or Sunrise Walk. The River Walk follows the river Mutanda downstream through a lush river landscape, mixed with beautiful views of the dambo across the river, to the restplace/ viewpoint as shown in diagram 8. The Sunrise Walk takes you to a beautiful spot where you can sit and overlook the eastern dambo, as the nature awakes at sunset.

4.3.3 THE RESTAURANT

The restaurant is positioned where the river takes a turn with a view both upstream and downstream and where there is a dramatic elevation difference towards the river. The restaurant will be approximately 5 meters above river level (dry season), which is suitable since the water level in the river rises 1 to 2 metres during rainy season. From the restaurant there is a beautiful

view over the low-lying floodplains on the other side. You will be able to see game while eating in the restaurant!

The restaurant building will be in two levels, with a small lounge area and a terrace on the second floor. There are tables for eating, a bar, a fireplace and a reception downstairs. In front of the restaurant, facing the river, will be a pool area. In this area it is possible to eat, take a swim in the pool, relax in the jacuzzi or sit by the fireplace. All of this while admiring the beautiful lit-up vanishing edge pool and the views over the surrounding landscape. Another option would be swimming in the Mutanda, day or night, protected by crocodile proof nets. For more information on the detailed restaurant proposal see appendix.

4.3.4 THE CHALETS

The chalets will consist of a bigger building with a bedroom and an indoor lounge and a smaller building with toilet facilities. Outside of these buildings there is a private terrace facing the river with an outdoor tub and an eating area. (Appendix 1) They are placed individually in order to blend in with the local landscape. Some of the chalets are placed low and close to the river in order to interact with the riverscape, while others are placed further up on higher ground in order to enhance the view and the interaction with the dambo landscape across the river. The views and placement are different for all chalets, but the design of the chalets are basically the same. It is important when building the chalets that local characteristics are taken into consideration, for example if there is a tree where the veranda could be, let the tree be built into the veranda to increase the presence of the nature.

4.3.5 THE LANDSCAPING

When dealing with the local landscape we have responded to our aim of enhancing the nature experience or bush-feeling. The landscape at the location as shown in the photos in diagram 6, are consisting of very lush vegetation alongside the river, and a tree and grass landscape further up where the buildings of the lodge will be. In order to enhance the experience of nature, we need to open up the view towards the dambo on the other side of the river, at the same time as the characteristics of the river, with the framing lush vegetation, still is present. There are natural openings in the vegetation, so this theme can be used to provide views at the same time as the general impression of the lush river is kept. The lower vegetation alongside the river can be kept, since the view from the lodge area is obstructed by the higher level of vegetation. The aim when landscaping and building the lodge should be to keep the characteristics of the natural landscape while at the same time carefully opening up beautiful views onto the other side, bringing the African nature to the doorstep.

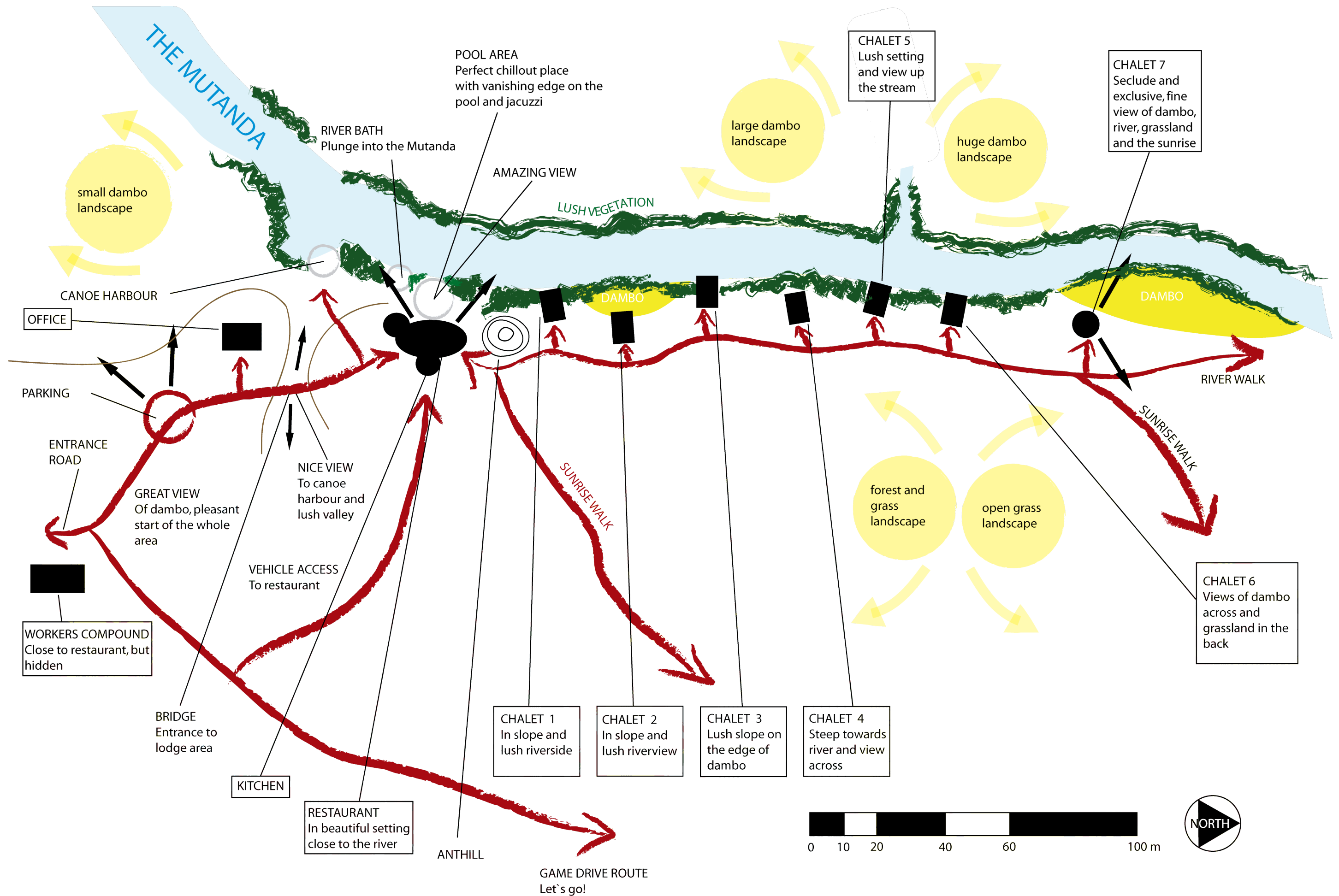


Diagram 9. The Royal Mutanda River Lodge site plan

5. DISCUSSION

Ecotourism is an alternative to mass-tourism with focus on delivering a nature experience to the tourist, preserving the nature and economically benefit the local community. As landscape architects we can take some interesting principles from ecotourism and bear them in mind when we design tourism projects. This is particularly important when we work in some parts of the developing world where the laws are not enough and the responsibility for the environment and local community is up to the tourism developer. This is the case in Zambia and the project of designing the Royal Mutanda River Lodge in Zambia has been a journey into designing with responsibility. To create a design solution that in a responsible manner suits the specific landscape setting, respects the local culture, is environmentally sound and attracts tourists.

5.1 THE BUSH FEELING

In order to make an attractive design solution for the Royal Mutanda it has been necessary to deal with the idea of the bush-feeling (as discussed in 3.3). We have regarded the bush-feeling as something tourists want when they come to Africa. Apparently, the concept of bush-feeling sells in southern Africa, and we, as practicing landscape architects will have to relate to this tradition. However, we see a problem in this tradition which conceptualizes southern Africa in a certain way and reduces it to a certain feeling. It is a romantic image that salutes primitive life and presents the tourists with what they believe to be a taste of Africa, whilst it is no more than a show which they can leave whenever they wish to. This is clearly illustrated in the Thanda private game reserve, run by Dan Olofsson, where the local Zulu put on masks they no longer wear and perform dances and songs for the tourists.

One could of course ask if this is necessarily something negative, since the tourists enjoy it and it economically benefits the local community. And would it be any different if Scandinavians would perform a Viking show for Japanese tourists? The answer is probably 'yes, there is a difference,' and this is because of the history of colonization, which created a controversial hierarchy, where western people by default were made superior to local people. Even though tourism could be a way to make different cultures understand each other, the problem here is that the misconception of Africa is ever more cemented. The exotic and primitive feeling that many Westerners have of the Africans might in this way constitute a direct hindrance to the recognition of the modern globalized African as a potential business partner, worthy of respect rather than pity and donations.

There are however different approaches to the concept of bush-feeling and we believe that the extreme of Thanda is not necessary. Instead, in our project it has been important to develop a positive understanding of the bush feeling. Ecotourism is about seeing the local culture as they are and we believe that you can create this feeling without culturally exploiting the local community. By focusing on the nature and interpreting it through the design, we believe that a bush-feeling in the positive sense is created. The architectural language of the Royal Mutanda is meant to fit in (see appendix 1.) For example the thatched roofs on our houses are also used by the Kaonde. We believe that using local materials, like thatched roofs, and placing the lodge in a natural way in to the landscape makes the architecture appropriate. It is not appropriate to

create luxurious replicas of a Kaonde village, the lodge is still a lodge and not a village, and therefore the circumstances are different. The bush-feeling in our design is about enhancing the nature, thus making it easier both to access and to respect. The feeling of the lodge is that it "belongs" here. It could possibly have been here forever, that is our aim.

Besides the certain feeling a lodge should evoke, we need to understand who the clients are, their budget and preferences. When designing this lodge there has been two main groups which would pose as the future clients and they have slightly different needs and demands on the lodge. The clients to attract at the first stage when establishing the Royal Mutanda is the foreign people working with the mines in the Copperbelt and especially the mine in Solwezi. Later on, international tourists will become a target group. The difference is speculative of course, but after our interviews some things have become clear. First of all the desire of the quiet, fascinating nature with all its animals seems to be similar. The same animals and nature generally arouses the same positive feelings. A difference is on the cultural level, where the clients who presently are living in Zambia have little interest in the local culture, whilst this is very important for the international clients. The miners usually have their own car and it is more important for them to have access to the car than for the international tourists who often lack a car or has rented one. This is an issue we have addressed in the design solution and the possibility of parking the car next to the chalet has been excluded because of the negative effects it has on the feeling of untouched nature in and around the lodge.

5.2 THE ROYAL MUTANDA SITE-PLAN

There are numerous reasons for the placement and functions of the lodge within in the lodge area. All these are explained in chapter 4. There are however some issues concerning the design proposal that needs to be addressed.

There were different alternatives to the overall shape of the lodge. We choose to make the lodge area narrow and stretched alongside the river. In many other lodges the lodge area is more compact and the buildings are closer together, which creates a strong visual impact of the lodge in the landscape. We chose to enhance the nature experience through placing the chalets in an order so that nature becomes superior. When designing and placing the chalets in the landscape our idea is that privacy and to feel somewhat isolated are important issues in order to achieve that peaceful moment together with the powerful nature that the tourists are looking for. The social interaction will be an option in the restaurant area. The distance from the honeymoon suite to the restaurant is quite far. This is both positive and negative, positive in the way that you have the nature experience to yourself, negative in the way that it takes time to reach the restaurant and that there is a possibility of feeling "off". Since our objective was to enhance the natural elements as the river and the flood plains before the lodge itself, it was a clear choice to let the lodge spread out in the landscape.

Besides the experience of being in the restaurant area or in the chalet there is also the important experience of moving around in the lodge. The theme has been that the

further north you walk (away from the parking) the feeling of the nature becomes stronger and it will feel more wild. The main path that connects the chalets to each other is placed with a distance to the entrance of the chalets, this is to secure the privacy of the guests. There are different walks in the area. The river walk runs alongside the river through lush vegetation to the conjunction of the Mutanda and the Lunga river. The sunrise walk goes from the lodge to the other side of the forest where you can catch a beautiful view of the sun and moonrise over the Lunga river and its flood plains. It has been important to think about how the guests would like to move inside and outside of the lodge. We have designed two walks with a specific destination, there might eventually need to be more walks in the area. A popular activity will be to explore the river by canoe, upstream and downstream. Since the current sometimes is quite strong, there is an option to leave the canoe at the conjunction. An advice to the lodge operators will be to invest in proper paddles and canoes with high manoeuvrability to maximize the enjoyment and allow the guests to try the traditional dug-out canoe that the Kaonde use. A game drive with safari vehicles to the Kaobo reserve would need the construction of a bridge over the Lunga. The bridge would increase the amount of options of things to do for the visitors and therefore make the lodge more attractive. A good idea is to build a canopy walk among the old trees to provide an opportunity of seeing the nature from a new perspective. These activities could also be open to the local community and the school.

The inspiration for the lodge design has, as shown in diagram 7, come from local architectural traditions, modern lodge design and the landscape itself. The local architecture has in this way influenced us to make a lodge that would fit in to the local context. We would like to use some of the details the Kaonde have on their houses in order to create a Kaonde atmosphere, even though a lot of the design comes from a lodge design tradition common all over southern Africa. The lodge design tradition has affected the way we think about the function of the lodge and how we can design with the concept of bush-feeling and create a feeling of luxury. In order for a lodge to be attractive, in the highly competitive business of game lodges in southern Africa, we believe that it is necessary to make it unique. Our method has been to interpret and enhance the local landscape into the design. This has led us to work with the placement of buildings into the landscape in a small scale and in a sensitive way.

Perhaps the most important issue in achieving a nature experience at the Royal Mutanda is to let the nature be part of the lodge and the idea is to tuck the chalets into lush vegetation where the guests will have great views of the dambo landscape. The view from the restaurant is very important, and this is the reason why it is placed where the river takes a turn in order to get a long distance view up and down the river. It is a dilemma when discussing the aim to maximize the view. We cannot have a total view, which would mean that all vegetation on the other side of the river would be chopped down, that very vegetation is part of the lush river feeling which also enhances the "untouched nature" feeling. The solution has been to create openings on the other side in the higher vegetation. There is no need to open up the lower parts of the vegetation since the observer, meaning the guest, is higher than this level anyway. When in the canoe, the only experience is the lush river, but when in the lodge area, some parts of the dambo landscape is visible. So, with some openings among the trees on the other side we can enjoy the vastness of the dambo, hopefully full of antelopes at the same time as the cosiness of the lush river still is there. How much and which vegetation that needs to be cleared is to be determined in connection to the construction of the lodge. This is an action where the presence of the landscape

architect would be recommended, to see that it is done in accordance to the ambition. If done properly, the lodge can really become something special, but if done poorly, the very experience of the nature throughout the lodge is at risk

5.3 CULTURAL AND ENVIRONMENTAL IMPACTS

The consequences a lodge like the Royal Mutanda will have for the local community is both cultural and environmental. Building a lodge in areas previously untouched by tourism certainly awakes some questions on the amount of impact it will have. The nature is not truly untouched in this area. In the visual sense it seems to be, but there used to be much more animals present. A higher human population in the area has led to a higher pressure for food leading to massive hunting and fishing. There is now little left of game and fish. The fish population has recently suffered severely because of the dynamiting of the rivers. With the Royal Mutanda project, native animals would be reintroduced, and the dynamiting would have to end. This means that the environmental degradation would be reversed and that the ecological situation would get better with the lodge in place. The local population would instead of putting a high pressure on the natural resources, be employed and buying the food from others. The daily lives of the Kaonde would radically be changed, from working a few hours a day collecting the food to working all day with other duties related to tourism. The impact the change of the daily life will have to the local people is hard to predict. Today there is starvation in the area and the U.N regularly delivers food. Since most of the employed in Zambia supports about 10 people there is reason to believe that the starvation will end in this area for these people. They will be able to put their children in school longer and buy some medication against diseases. It will certainly be more work, and they will be working for someone else instead of for themselves, although, a certain percent of the incomes will go to the community. So economically and environmentally there is little doubt this project is of benefit to the Kaonde and the local ecosystem.

The cultural impact is more difficult to discuss. The globalisation will come to their doorstep with people from all over the world showing them what they do not have. The question is, are they better off or not? The cultural impact is dependent on how many tourists that comes to the area. This lodge would at the maximum hold about 30 people at the same time. Of these, a few perhaps would go on visits to the village. We think that the daily life would not be affected too much by this. There is definitely a difference between the numbers of visitors a small lodge in this Kaonde area would attract and for example the lodges in connection with the Masai people in Serengeti, Tanzania where the cultural impact probably is higher. A change of the daily life that this project would have for the Kaonde is concerning the matter of land use and the possibility to use the land as they please. The land will be rented by CSM for 99 years (as customary in Zambia) and fenced off. As a payment for this the local community will receive a certain percentage of the incomes of the lodge. This is a matter we as landscape designers have very limited influence on. There are however some areas in the case of the Royal Mutanda that we can have influence on. The river Mutanda that runs

alongside the lodge area and which have buildings only a few meters from it is an area where we need to make a decision. Shall it be open for everyone or shall it in reality become another part of a secluded lodge? Today the river is mostly used by local fishermen in their dugout canoes. We want these fishermen to feel that they have the right to use the waters as much as they do now with the lodge in place. The river landscape is consisting of the narrow river (about 20 meters wide) with lush vegetation on the sides. When constructing the lodge there is very important to keep this lush vegetation and that the buildings not are too visible from the river. By doing this the buildings with their natural materials and organic feeling can blend into the river landscape and become a natural part of it. Natural high grass is for example to be preferred over well-cut turfs. By respecting the fishermen's traditional use of these waters we believe that we not only can satisfy the fishermen, we can also increase the genuine qualities and therefore the attractiveness of the lodge. The view from a chalet veranda with the river, flood plains with antelopes and a fisherman paddling on the river in a dugout will be highly appreciated. It also would not be a surprise if the fisherman found interest and amusement in the tourists and their different paddling techniques. An example of shared use is Kaya Mawa, Malawi (Case study 1.) where the beach next to the lodge is used both by the locals for washing laundry and by the tourists for swimming. In this way it can also work as a meeting point (on equal terms) between cultures.

There are some other possible conflicts that this project may arise. Some farmers who today are farming inside the future lodge area will have to cultivate on other places. This is of course a matter of conflict, as is the dynamiting of the rivers (which is illegal by the way). The people engaging in this will have to find a different living and might be upset. The way forward here is to offer them something better than what they have today. The farmers can be compensated and even get some more work out of changing the location of where they farm, the people dynamiting can be offered a job right away. These tactics are planned to be used by CSM.

In this kind of project it is crucial that the local community is supporting the project. This is not necessarily the case, even though the project in this case is endorsed by the chief. The matter of rumours is also an important aspect. People will talk when they hear that something is going on and we as students just doing a design proposal, were not separated from CSM by the local community. For them, we were part of CSM and they wanted to know what we were planning. It was hard for them to understand that we only were students and actually did not know that much about the project. People also kept asking us for jobs. We were representatives of the whole project to them, and very responsible of what feelings we might arouse within the local community. If we were to make a mistake concerning this, the whole project and the confidence of the local community might suffer severely. As representatives in that way, it is important not to give too high expectations, since it's only in the planning stages, it is not certain that it will happen.

Finally when discussing ecotourism it is important to know that few ecotourism projects have been declared a success. This is due to the fact that many so called "ecotourism projects" are actually nothing but large scale projects using ecotourism as a marketing strategy. The Royal Mutanda, if built, can hopefully be a better example.

6. CONCLUSION -

ARE ECO TOURISM PROJECTS WORTH IT?

As we see it, ecotourism in many ways presents an alternative to mass-tourism. Although sometimes a superficial market strategy, ecotourism also has to live up to a reputation of being perfect; perfect for the local culture in terms of cultural respect and as a source of income, perfect for the environment and perfect for the tourist looking for an unforgettable experience. This is of course also a myth, nothing is perfect. But we feel that ecotourism is a way forward that needs to be further developed through trial and error. The decrease of our common natural resources is truly a threat and the poverty is devastating in many parts of the world. This project could therefore be seen as a small step forward for landscape architects working with ecotourism.

Are ecotourism projects worth it?

To cite Martha Honey :

“ It is worth the struggle, local communities are being empowered and their members lives improved; national parks and other fragile ecosystems are receiving more support; and there is a growing awareness that we cannot continue to play in other people's lands as we have in the past.”

7. REFERENCES

Aronsson, L. and Tengling, M. 2003. "Turism – världens största näring," Liber, Malmö.

Burdette, M. 1988. Zambia, between two worlds, Westview press inc, Boulder.

Ceballos-Lascuran, H. 2002. "Preface, Current issues in tourism." Vol 5, Nos 3 &4. Webpage:
<http://www.commerce.otago.ac.nz/tourism/current-issues/homepage.htm>

Dixey, L. 2005. "Inventory and Analysis of Community Based Tourism in Zambia" USAID, Zambia.

Dooley, B. And Plewman, N. 1999. African adventurer's guide to Zambia, Southern Book Publishers, Cape Town.

Else, D. 2002. Zambia, Lonely Planet Publications Pty Ltd, China.

Faiers, J. 2005 "Exotic retreats : eco resort design from barefoot sophistication to luxury pad." RotoVision. Mies, Switzerland

Fennel, A. D. 1999. "Ecotourism, an introduction." Routledge, UK.

Fisken, T. 2006. "Affects of Landscape in Tocqueville's American Psychogeography." UC Berkeley, USA.

Gunn, A.C. 1988. "Vacationscape, designing tourist regions". Van Nostrand Reinhold Company, New York, USA.

Honey, M. 1999. "Ecotourism and sustainable development, who owns paradise?" Island press, USA.

Jukofsky, 1992. Magazine: "Landscape architecture", 1992:8. Vol. 82. Editor, James G. Trulove. Washington D.C. USA.

Mcintyre, C. 2004. "Zambia, the Bradt travel guide, 3rd edition." Bradt travel guides ltd. UK.

Mclaren, D. 1998. "Rethinking tourism and ecotravel." Kumarian Press, Inc, Canada.

The World Bank in Zambia, Country brief 2005-2006. http://siteresources.worldbank.org/INT-ZAMBIA/Resources/Zambia_2005_7.pdf

UI (Utrikespolitiska Institutet), 2003. "Länder i fickformat nr 206 Zambia".

Wearing, S. and Neil, Y. 1999. "Ecotourism, Impacts, Potentials and Possibilities." Butterworth-Heinemann, UK.

8. ACKNOWLEDGEMENTS

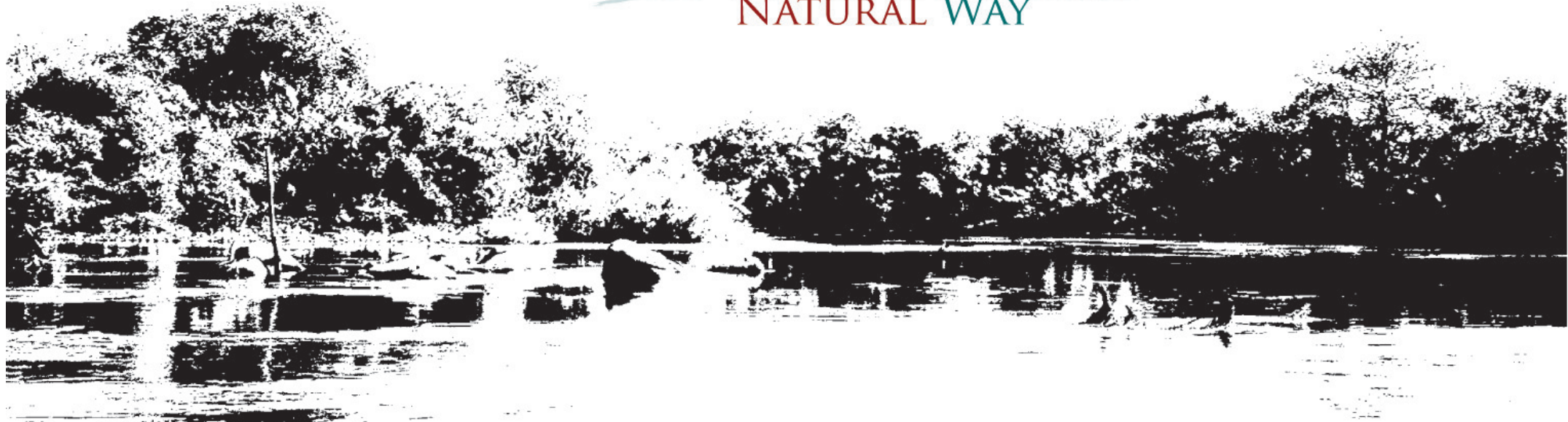
We would like to thank Mark, Chris, Fiona and the staff at Nsobe Game Camp for everything. Kapembwe and Lettish for your help in the bush. Chief Kapijimpanga and the Kaonde tribe for letting us into your land and showing us your hospitality. Steve for the trip and Dan Olofsson for the interview. Also many thanks to our Swedish supervisor Maria Hellström for your intelligent thoughts and guiding.

THE DESIGN PROPOSAL

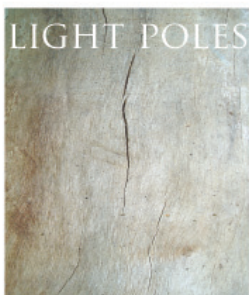
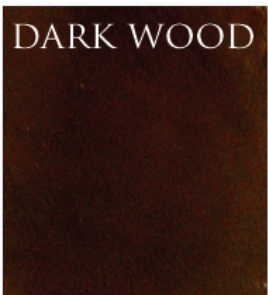
The following pages briefly presents the design material we presented at the Nsobe game camp. It consists of a material concept for the lodge, reference pictures, a proposal for the restaurant area, an illustration of the character of the landscape within the lodge and a proposal for one of the chalets.

The design concept. (right) Illustrates our design concept as well as the material concept. It shows the main materials of the lodge which are all found in the area around Solwezi.

CONCEPT: **NATURAL ELEMENTS** IN A **NATURAL WAY**



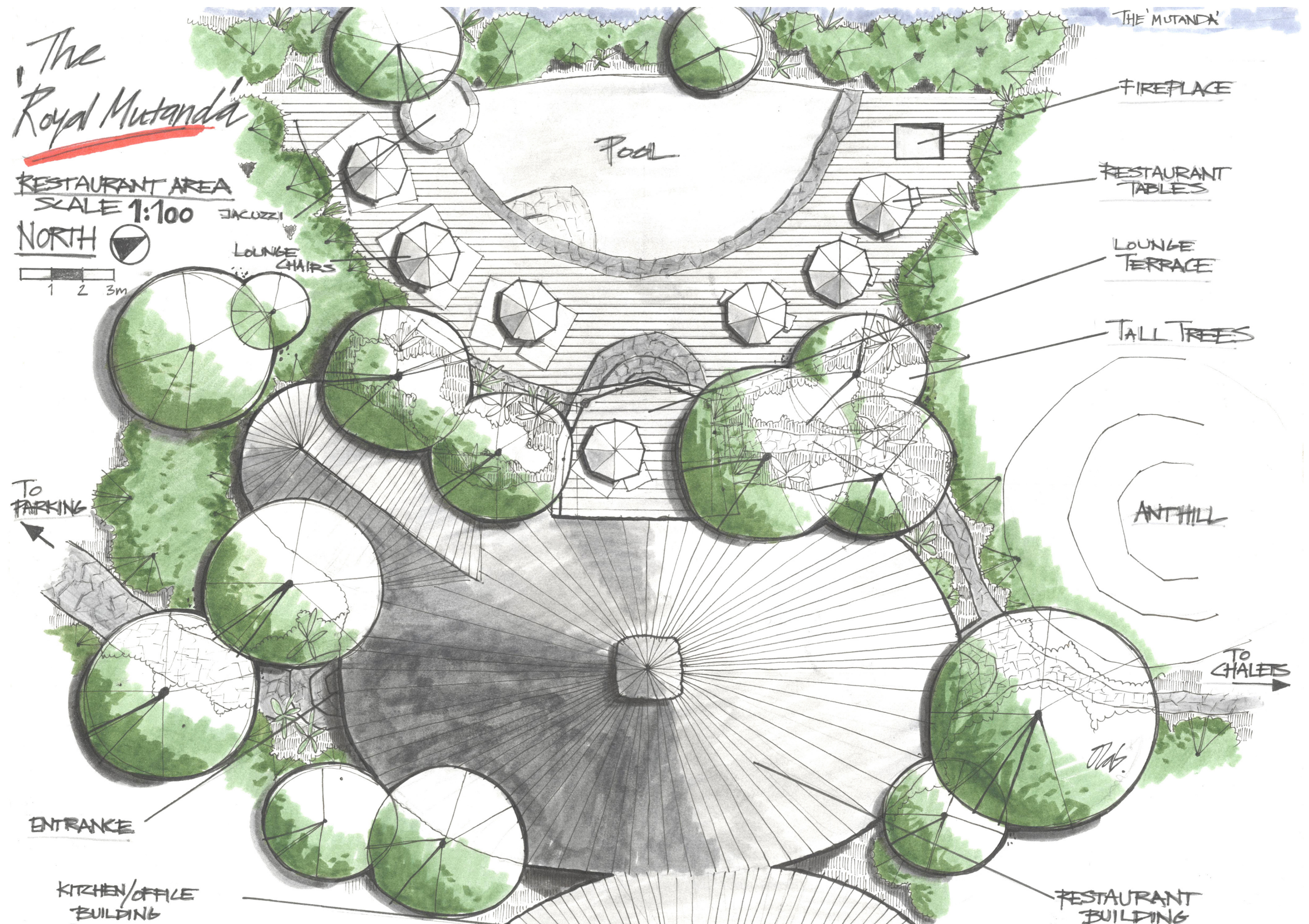
MAIN MATERIALS



Reference pictures. The reference pictures were used for inspiration and as a way of explaining our ideas. They also provide visual guidelines for the interior design of the buildings.

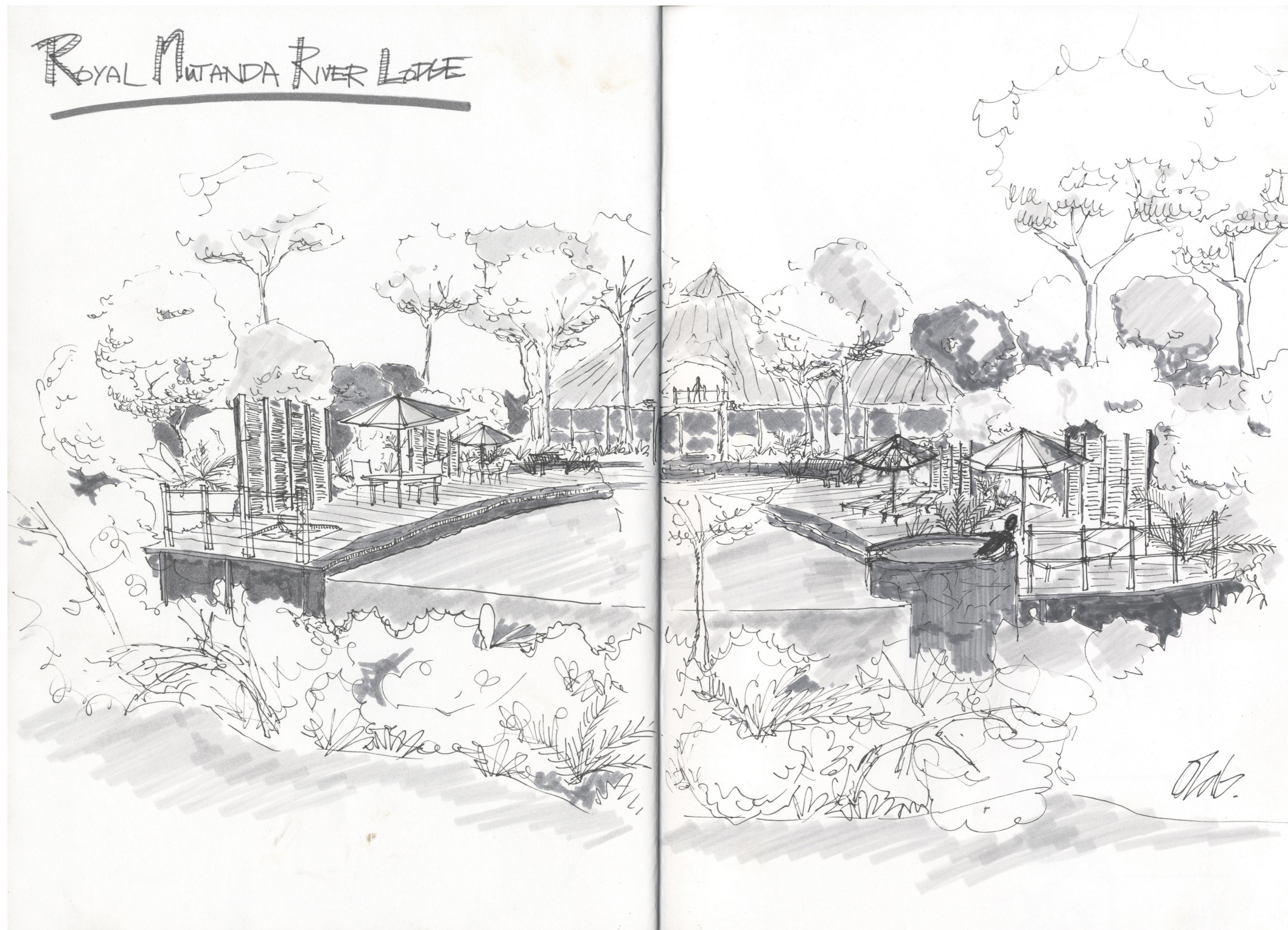


Illustrated plan of the restaurant. Consists for example of a vanishing edge pool, a fireplace in the wooden deck, a jacuzzi and a lounge terrace on the second floor overlooking the pool area and the floodplains on the other side of the river. The pool area is elevated about five metres above the river level, surrounded by lush vegetation, facing the sunset and the vast floodplains. The wooden deck will be made out of thick, massive pieces of hardwood making the pool area stylish and elegant.

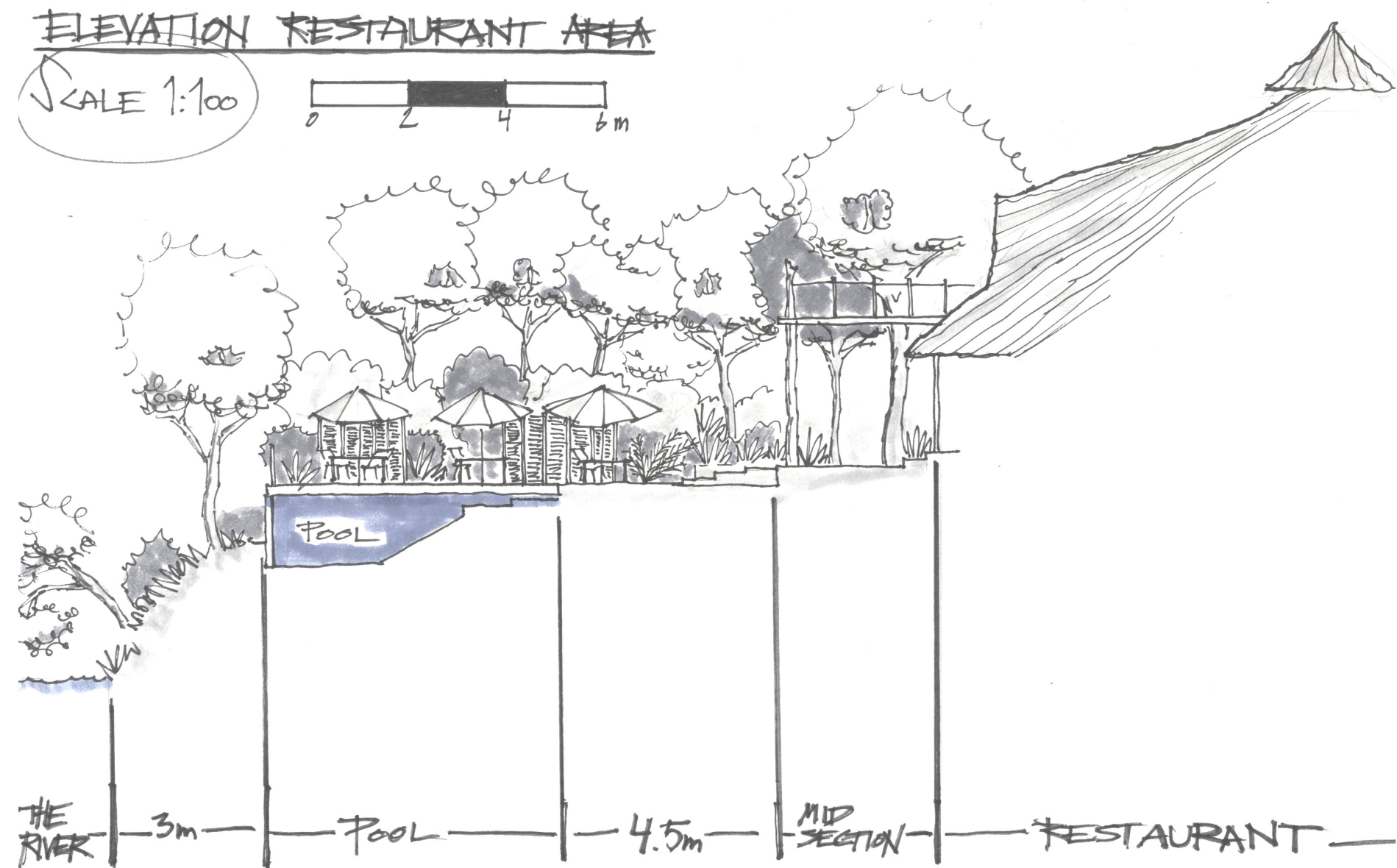


ROYAL MUTANDA RIVER LODGE

View over the pool area.



Elevation.



The character of the landscape.



Illustrated plan, detail and 3-d model. One of the reasons for having two buildings instead of one is that this more resembles the traditional zambian architecture in terms of size, height and position of the buildings. The private outdoor area is divided into two levels. The lower wooden section is put on stilts, which allows you to get closer to the river. Out here you can eat or take a bath in the hot tub while looking at the stars. The intention is to keep some of the trees by building the wooden deck around them.

