

# CONTEXT

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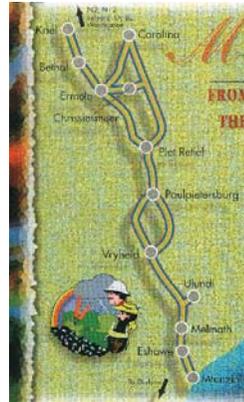


Fig.03.01



Fig. 03.02



Fig.03.03



Fig.03.04

## 03 CONTEXT

### 03.01 TOURISM IN PIET RETIEF

#### 03.01.1 Piet Retief as a tourist node

*"For the industrialist, the commercial man, and the man who wishes to make Piet Retief his home, the attractions, facilities and the advantages offered are many and varied. Its outstanding richness of natural resources is unrivalled...It has a superb climate and possesses all the amenities of a modern town."*  
(Piet Retief: 75 jaar van vooruitgang 1959, p.2)

Piet Retief lies at the meeting point of several important national roads. It lies on two major holiday routes: The Zululand Kingfisher Route and the Rainbow Route. (Figure 03.01) The Rainbow Route is an innovative tourism initiative that includes the leisure, sporting and recreational opportunities of twelve towns in Mpumalanga. The roads that converge here are also important trade routes and the town forms the gateway to the mountain Kingdom of Swaziland. The area is becoming increasingly known as a unique tourist destination with many guesthouses, game farms and hiking trails. (LABUSCHAGNE, H. 1998 p.6) Most of the tourist activities are nature-related and include the following: Moderate to strenuous hiking trails, 4x4 safari trails, fly-fishing, bird watching and game viewing on horseback or by specially adapted game viewing vehicles. Historical tourist attractions in Piet Retief include the Dutch Reformed Church, designed by Gerhard Moerdijk and the relics of the British Fort "Clerie". These buildings portray the rich and colourful history of the area.

#### 03.01.2 Farm Madola as a tourist attraction

The main tourist attractions are the farm's visual landscape character, fishing opportunities and the organic production of produce. The focus is on providing an environment that enhances the natural beauty of its setting and responds to the need for quality accommodation in the area. It does not include a vast array of tourist activities, but rather a base from where the tourist can take part in the different activities that the Piet Retief region has to offer.

### 03.02 HISTORICAL CONTEXT

In the late 1800's, Piet Retief was a true frontier district. The whole area fell to the marauding Swazi citizens. The tsetse fly plague and malaria were rife in some areas, but it, for the largest part, was open and uninhabited. The settlers who came from the highveld found it to be a region of mild climatic conditions and high rainfall with fertile soil. It was not long before they were using the Assegai Valley in the winter for grazing purposes. The old farmers soon found that the area was particularly suited for the cultivation of tobacco, timber, maize and for raising cattle and sheep. Indeed, Piet Retief used to be famous for its tobacco and to this very day, the pipe tobacco brand, 'Boxer', is still called 'Piet Retief tobacco'. (LABUSCHAGNE, H. 1998 p.1-2)

Being part of a tobacco production district, the main activity on the farm Madola used to be just that. But during the past years the tobacco industry phased out and the farm's main focus became the planting of trees, especially black wattle and eucalyptus. (See Addendum 08.01.3) Today, the farm's main income is generated through a small-scale strawberry operation and the exportation of timber logs and planks. (Figures 03.02 - 03.04)

### 03.03 SOCIAL CONTEXT

As was the case in most of South Africa, in the early days Piet Retief was divided into separate zones that housed different races. The town was mainly occupied by white people, whilst coloured, black and Indian races each occupied their own residential areas on the outskirts of Piet Retief. (see Addendum 08.01.2) The Indians called their area Kempville, coloured people stayed in Retiefville and black people called their town eThandakukhanya ("we love our town/place").

Today, the town of Piet Retief is about 121 years old, and currently has a population of approximately 40,000 inhabitants. It is fast-growing, with residential and industrial development continuously taking place. Presently, two residential extensions with 3 200 stands are being developed with land identified for a further 4 000 stands, should the need arise. An abundant water supply is available from the Assegai Valley and Heyshope dam (about 70km from Piet Retief). This is the 4<sup>th</sup> largest water source in South Africa. Much of the town's electricity is supplied by its own hydro-electric scheme in the Assegai River. The Piet Retief municipality is presently expanding both its water and sewer purification works. This is to ensure that a potable water supply for residential and industrial use will be sufficient.

### 03.04 ECONOMICAL CONTEXT

Today Piet Retief is economically strong and stable. The premier agricultural activity is silviculture and Piet Retief forms the southern boundary of what is called the largest man-made plantation in the world, stretching from Sabie to the southern region of the town. The timber industry incorporates the exportation of mainly pine, wattle and eucalyptus species (encompassing 150 000ha of plantations) and the production of a variety of timber products, such as chipboard and paper. Eucalyptus species are used for mining timber, chipboard and ever-increasing volumes are being exported in chip form to global markets. Wattle bark extract is used in the leather tanning industry and the manufacture of resins, whereas wattle timber is the preferred raw material in charcoal manufacture. Wattle pulp is now being exported to Japan and as far as Norway to supplement their shortages in hardwood pulp. Pine is mainly used as saw logs and a source of long fibre pulp, most of which is processed in South Africa.

Although a large proportion of timber grown in the area is exported, Piet Retief's economical growth can be attributed to adding value to this raw material. These captive markets include a pulp and paper mill, chipboard plants, mining timber mills, lumber mills, etc. Maize and cattle are still very important, but tobacco is no longer cultivated commercially. (see Addendum 08.01.3) In recent years, coal mining has become a major part of the economy. There is even a gold mine that has been productive since the late 1800's.

Apart from the mentioned industries, the economy of Piet Retief is starting to rely greatly on its tourist and travelers industry. Most of the guesthouses and smaller accommodation enterprises are dependent on the large timber industry, for it provides them with regular clients who work in Piet Retief on a weekly basis. Local garages and convenient stores, restaurants, coffee shops, café's and motor vehicle service centres all thrive economically during the festive. As it is seen as the perfect halfway stopover between destinations, tourists often spend time and subsequently money in Piet Retief, contributing to the overall economical well-being of the community.

#### 03.04.1 Economical & Social Implications of constructing a lodge

SATOUR estimates that one direct and indirect work opportunity is created for every 30 new international tourists who visit South Africa. (NEL, S.J., 1995 fig 1.1) As a tourism effort, Mkhonda Lodge will bring an influx of tourists to the area, which will indirectly uplift the community by creating additional work opportunities. In this way, social and economical growth takes place within the town. Furthermore, the lodge will serve its own community by providing them with a place of relaxation out of town.

The development on Madola may have a negative effect on private or smaller tourist industries within Piet Retief, but it should be kept in mind that the lodge will cater for a more diverse group of people to those staying in town. For example, large groups of people attending mushroom conferences or tourist groups that are interested in culturally rich areas with superior natural beauty will be housed at Mkhonda Lodge.

#### 03.04.2 Economic sustainability of Mkhonda

Madola is a relatively small farm that does not lend itself to agricultural activities as a main source of income, as the ground has been overused over the last few years. The topography of the farm is irregular, as a large portion of the farm is mountainous. Land value can therefore be best enhanced through incorporating another development that is not as much land dependent, but can capture the aesthetic qualities that the farm has to offer. Mkhonda Country Lodge provides the necessary facilities to be able to use the land for this purpose, having tourism as its main focus.

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## 03.05 PHYSICAL CONTEXT

### 03.05.1 Location

Both Piet Retief and Madola are on the doorstep of the N2 and strategically in the corner of Mpumalanga, with Swaziland and KwaZulu-Natal as their neighbours. The town is known to be the gateway to the game reserves of Swaziland, Northern KwaZulu-Natal, Southern Mozambique and Mpumalanga Lowveld. It can also be seen as the major route to Pongola, St Lucia, Richards Bay and other exotic spots along the KwaZulu-Natal South Coast. To the south lies the bird paradise of Wakkerstroom with its rich birding culture, followed by Volksrust, a place of major battles in the Boer War. To the north lies Amsterdam, with its strong Anglo Boer War history and Ermelo, which is seen as the major node of tourist routes throughout Mpumalanga.

### 03.05.2 Site - Madola 154 H.T., Portion 5

Lying approximately 15km east of Piet Retief, (Figures 03.05, 03.06) the farm Madola consists of 9 subdivisions of which only one, Portion 5, is the appointed site. Figure 03.08 indicates the exact position of Portion 5 and its relation to Swaziland. Portion 5 is connected to the main road by means of a 2.5km dirt road. (Figure 03.09)



Fig.03.05



Fig.03.06

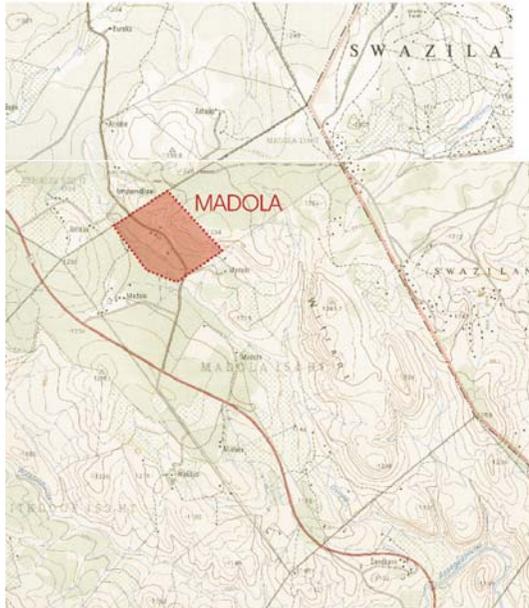


Fig.03.07

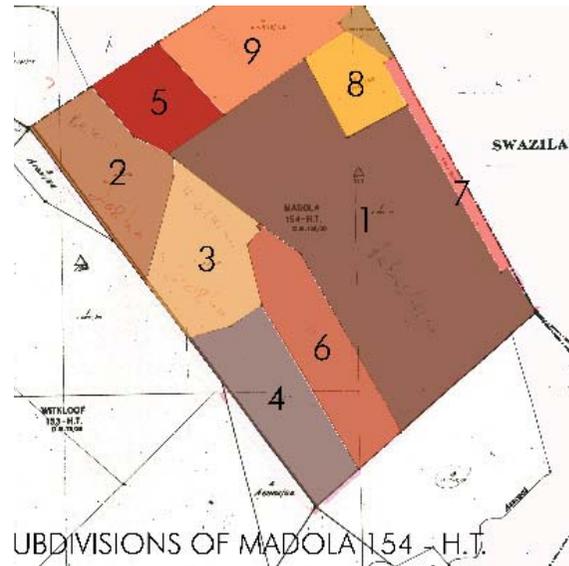


Fig.03.08



Fig.03.09

### 03.05.3 Geology

The farm Madola lies between the Lowveld and Highveld with an undulating topography. (Figures 03.10, 03.11) It is on the escarpment between 1180 and 1334 meters above sea level. (Figure 03.07) The farm therefore has a 150 metre vertical change, which includes the Osloop Spruit at the lowest part on the western boundary and a mountain range on the eastern boundary of the farm. The main development will take place at approximately 1250m above sea level and the Farm Factory at 1220m. Earth layers exist of mainly dolerite and contain misphas (soil with rocky sub-layers). No impenetrable layers occur. The largest part of the farm consists of highly weathered Hutton type soil with an average clay content of only 28%. Clay will therefore not have a considerable effect on construction methods. Other soil types include Griffin and Glenrosa.



Fig. 03.10



Fig. 03.11

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Fig. 03.12



Fig. 03.13

## 03.05.4 Climate

Madola and the rest of Piet Retief lie in the Middleveld with a unique and moderate climate. Average summer temperatures soar to 28°C and coldest winter nights dip to 3.8°C. The farm lies in a summer rainfall region with an average of 843-880mm per annum, which reaches its peak during December and an average annual winter rainfall of 148mm. The climate is mild with hardly any frost. Madola lies within a mist belt and therefore it has a relatively high humidity, which is optimal for forestry. Overall, the farm has little wind activity with only a light eastern wind during late afternoons and at night. During winter and early spring, cold fronts are usually brought about by the northwestern winds that blow during the day but calms down during the night. Piet Retief is also known as having some of the highest lightning activity in the world. During summer, thunderstorms reaching 11.7 on the ground flash index have been experienced.

## 03.05.5 Vegetation

On the site, there is a variety of vegetation including mixed grasslands, man-made plantations and a dense forest area, playing host to a large variety of indigenous tree species. (See appendix 08.01.4) Extinct species in the area include white stinkwood, yellowwood and wild olive.

In the 1800's, early German settlers in the region traded with yellowwood trees on a large scale, exporting to the Johannesburg region. (See appendix 08.01.1) As a result, only the largest yellowwood trees remained in inaccessible terrains. Another reason for their becoming extinct was the use of bark by the African community for traditional medicine, or so-called 'muti'. On Madola, yellowwood and wild olive, but not white stinkwood, have been re-established. The development will incorporate specific efforts to rehabilitate this tree species. A hiking trail will be included into the overall design in order to bring the tourist into contact with these trees.

## 03.05.6 Water resources

There is an abundance of water available on site and during summer the water table rises to only 8 meters below natural ground level. Water resources include dams, boreholes, fountains and springs. Although the Osloop Spruit runs along the western boundary of the farm, it is an insignificant source of water for agricultural activities, as it is very small.

There are two dams that collect rainwater and runoff during summer when rainfall is high. The water content of the upper dam, Dam 1 (Figure 03.12), is dependent on the amount of rainfall the farm receives, as it is filled with runoff within the mountain catchment's area. Because of the large topographic difference on

site, strong underground water current exists, which fills up the lower dam, Dam 2. (Figure 03.13) This dam is therefore full for the largest part of the year and becomes very important in winter for household and agricultural purposes. In future, if the agricultural activities and therefore the need for water increases, an additional dam can be built on the western boundary of the farm which will be filled with water from the Osloop Spruit and the strong underground water current. Additional rainwater tanks are included at various points on site that can collect water for irrigation purposes.

### 03.05.7 Existing buildings

Existing buildings in the area of the homestead will be left as is, with only minor alterations to facades in order to keep in line with the overall theme of the development.

### 03.05.8 Site selection

The design requires two separate sites that could host the main development and production area and another site for the placing of private cottages. To be able to determine the best solution for each situation, site requirements were determined and the different options were analyzed. The site requirements are:

#### SITE 1 – MAIN DEVELOPMENT & PRODUCTION AREA

1. Should be highly accessible
2. Should be relatively close to existing homestead and services
3. Preferably a site which is already disturbed and needs rehabilitation, since the overall building footprint will be significant
4. Should capture most important views
5. North-south orientation is preferred

#### SITE 2 – PRIVATE COTTAGES

1. Privacy should enjoy highest priority
2. Accessibility relatively important
3. Should be unique in vegetation and experience
4. Availability of services not as important as with main development

It is important that the design should respect and build upon the landscape's distinctiveness. The following questions were asked before decisions were made about the location of the new development:

1. Can the development help restore or reconstruct the local landscape character and its distinctiveness?
2. Can it assist in meeting the local authority objectives for the area?
3. Can it help solve specific issues such as derelict land reclamation?



Fig. 03.14



Fig. 03.15



Fig. 03.16

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Fig. 03.17



Fig. 03.19b



Fig. 03.19a



Fig. 03.18

Proposed Farm Factory site



Fig. 03.19c

Most important view

It was agreed upon that the development of Mkhonda Lodge will contribute positively to the landscape of the site and the local area through adding diversity in terms of vegetation and infrastructure. Through carefully analyzing different possible areas for the development, the following two sites (Figure 03.14 & figure 03.15) were chosen for the following reasons:

## SITE 1 – MAIN DEVELOPMENT & PRODUCTION AREA (Figure 03.16 & 03.17)

1. Is an already disturbed landscape.
  - a. southern side - very rocky area and not suitable for intensive agriculture. Best for plantations, which can lessen visual impact.
  - b. western side – good agricultural land suitable for permacultural activities
2. Has a 14m x 50m flat piece of land behind the dam that is ideal for the placing of the Farm Factory (Figure 03.18)
3. Enjoys great views (Figure 03.19a,b,c)
4. Sloping site, thus opening up design possibilities
5. Water resources in close proximity
6. Situated next to dirt road, therefore highly accessible (Figure 03.20)
7. Close to existing power lines and services.
8. Next to farm house to alleviate management
9. Screened off from road by wattle trees (Figure 03.21)

## SITE 2 – PRIVATE COTTAGES (Figure 03.22)

1. Very private and sheltered area
2. Unique in that it hosts 31 indigenous species
3. Existing informal road, thus relatively accessible (Figure 03.15)
4. Relatively close to power lines
5. Site fairly even slope of 1:13, minimal cut & fill required (Figure 03.23a,b)
6. Visually stimulating area (Figure 03.24)

03.06 VISUAL IMPACT ASSESSMENT

Since the site is enclosed by surrounding plantations all year round, the visual impact of the proposed development on Mkhonda will be insignificant. However, a visual analysis was done to determine the best layout and arrangement of buildings to further enhance natural elements and add to the overall visual quality of the site.

The three separate entrances of Mkhonda Lodge will be situated within the first two kilometers of the dirt road (Figure 03.25), while the existing farmstead and sawmill are found a further 500 meters down the road. Therefore tourists will never travel far enough to pass the existing private sector of the farm. (Figure 03.26) A visual analysis therefore needs only be done for the exposed parts within the first two kilometers of the dirt road.

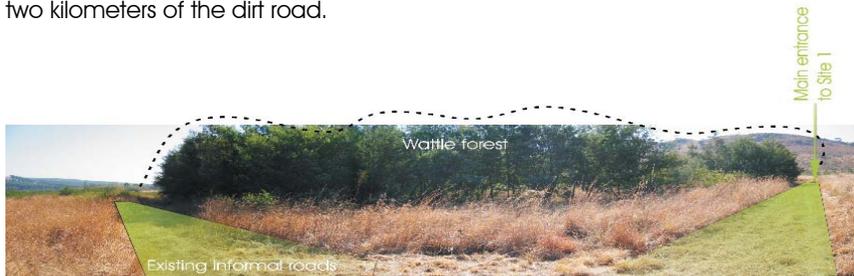


Fig. 03.20



Fig. 03.21

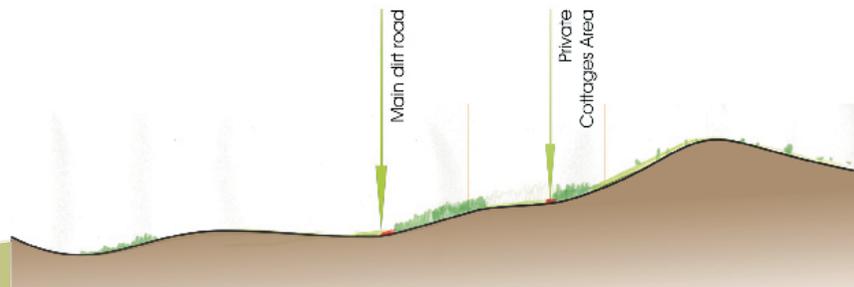


Fig. 03.22



Fig. 03.23a



Fig. 03.23b



Fig. 03.24

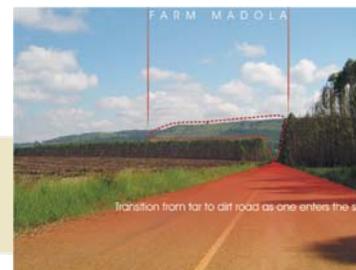


Fig. 03.25



Fig. 03.26

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## 03.06.1 SITE1 – Main Development

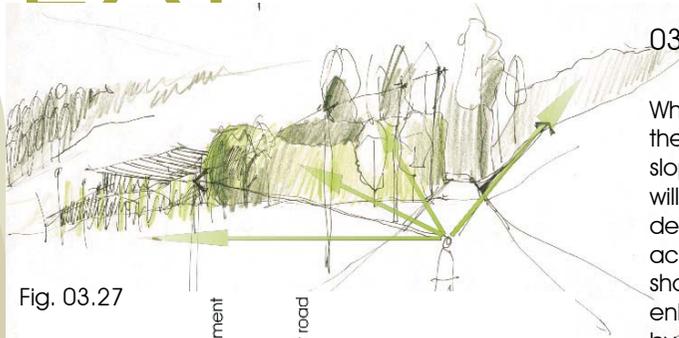


Fig. 03.27

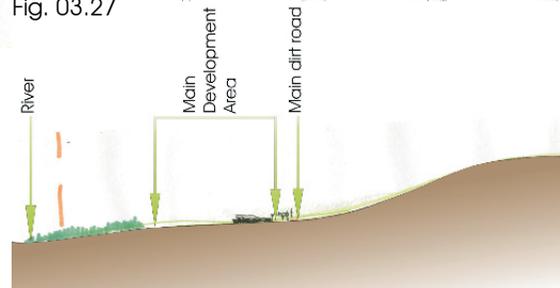


Fig. 03.28b

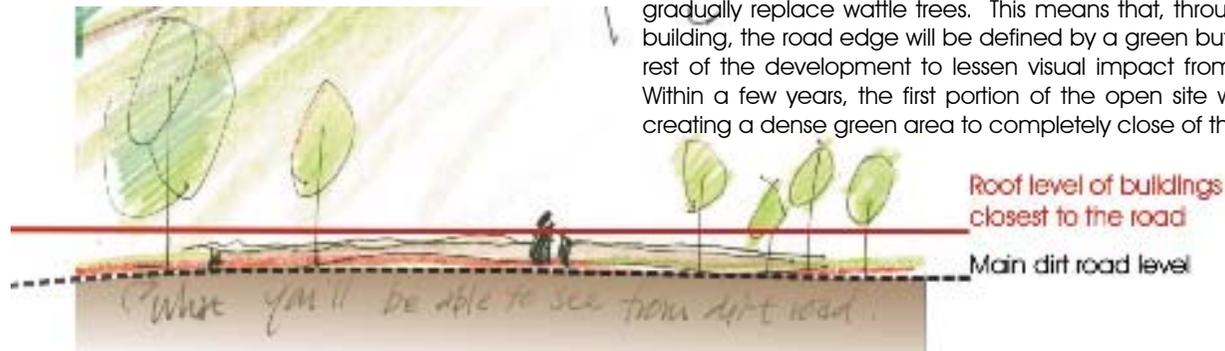


Fig. 03.29

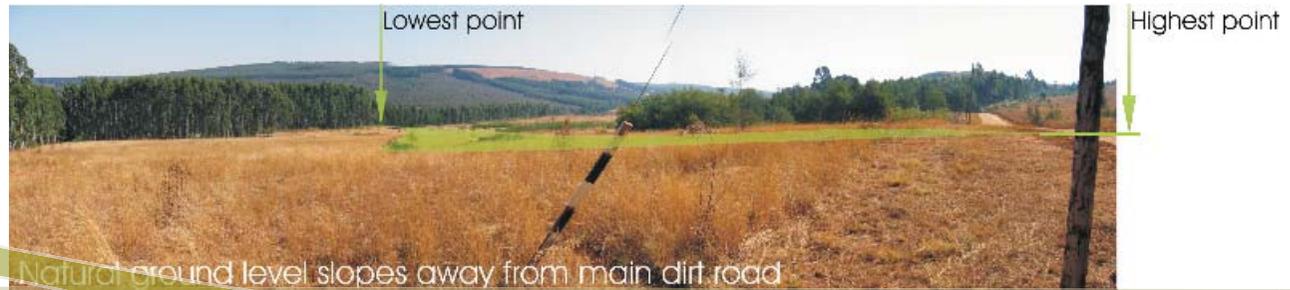


Fig. 03.28a

When driving along the main dirt road for approximately 2km, the open area to the left of the road is not clearly visible (Figure 03.27), as the natural ground level slopes downwards and away from the road. (Figure 03.28a,b) Since this area will mostly be seen from this point of view, it is of low visual importance. The design stage hence needs to take the required visual quality from road level into account when designing the façades of buildings closest to the road. Buildings should blend into the natural landscape. Stone walls will contribute greatly to enhancing visual quality. (Figure 03.29) By recessing buildings from the dirt road by 50 meters and stepping buildings down according to the natural slope of the site, the visual impact can further be reduced. (Figure 03.30a,b) The stepping down of buildings also allows for the opening up on the opposite side of the road to be able to capture the most valued views on site. (Figure 03.30c,d)

Another contributing factor to the low visual quality of this particular area is the forest next to the road, which screens off the largest part of the site. (Figure 03.21) It would therefore be best to place the largest part of the development behind this dense forest area. Although this forest consists of mainly wattle trees that need to be removed, at first many of these trees will be preserved, providing sufficient shading for the proposed parking area. (Figure 03.31) An indigenous canopy will gradually replace wattle trees. This means that, throughout the lifespan of the building, the road edge will be defined by a green buffer that will screen off the rest of the development to lessen visual impact from the main access road. Within a few years, the first portion of the open site will be planted with trees, creating a dense green area to completely close off the development.

Very seldom, plantations between Madola and the main tar road are cut down, causing Madola and thus Mkhonda Lodge to be visible from the road. (Figure 03.32) However, the distance between the traveler and Mkhonda Lodge is large enough to ensure an insignificant visual impact. Travel time can also be reduced when considering that most of the road users are traveling at an average of 110km per hour, calculating the total time of exposure to the site at less than three seconds. Only one farmhouse, currently unoccupied, has a fixed view onto the farm. However, the house in itself is surrounded by large evergreen trees, which further reduce a clear view onto Mkhonda Lodge. (Figure 03.33)

The entire farm is visible from the opposite farm, which forms the highest point above sea level in the area. Visual impact from this point is therefore very high, but since there is no fixed infrastructure that overlooks Madola on that point and having only the occasional passerby, the development need not take minimal visual impact into account in this particular instance. (Figure 03.14)

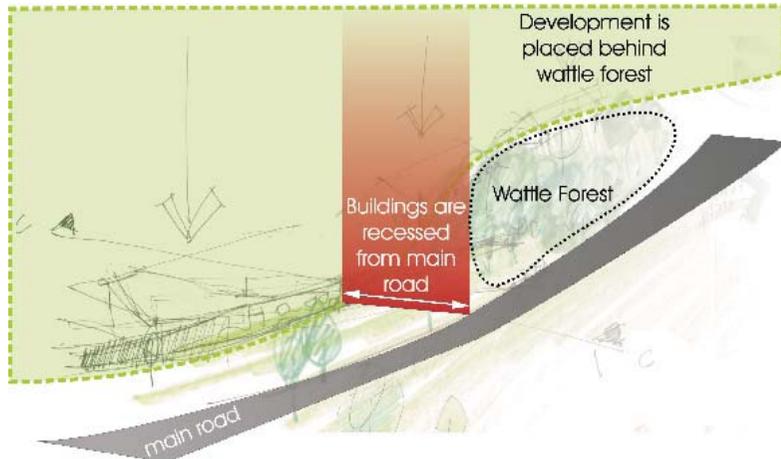


Fig. 03.30b

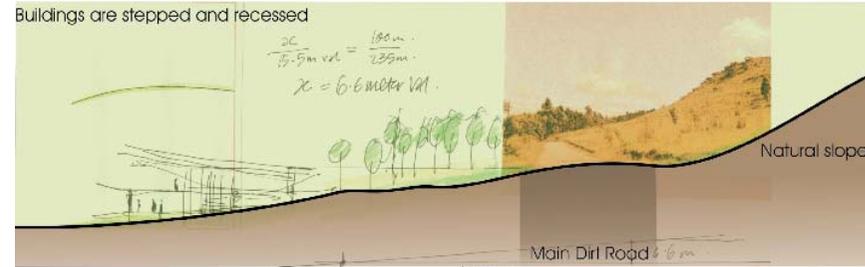


Fig. 03.30a

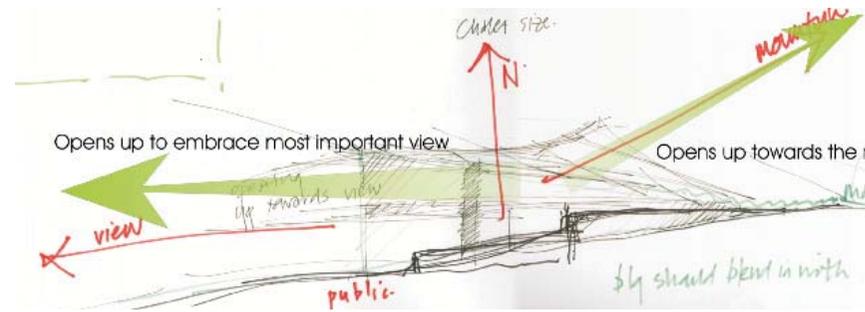


Fig. 03.30c

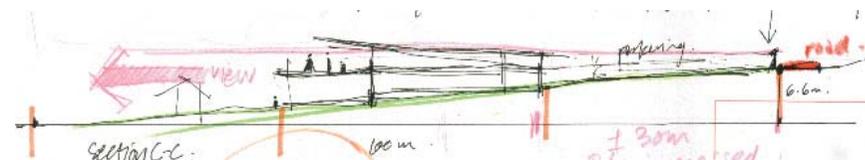


Fig. 03.30d



Fig. 03.31

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## 03.06.2 SITE 2 – Private cottages in Kloof

Site 2 is completely closed off from its surroundings and, by placing cottages within the existing forest, will entirely remove visual impact. (Figure 03.34) The existing roads can be used and therefore there is no need for additional landscaping alterations that could increase visual impact. Cottages will be spaced at a proper distance so as to ensure the required privacy between units and to maintain the visual quality that currently exists in the forest. Each cottage will be placed strategically so as to eliminate damage to the natural environment during construction. (Figure 03.35) Materials and finishes used should consider the current aesthetic quality of the forest and strive to maintain it. Specific indigenous trees should be tracked down and protected during construction. (Figure 03.36)

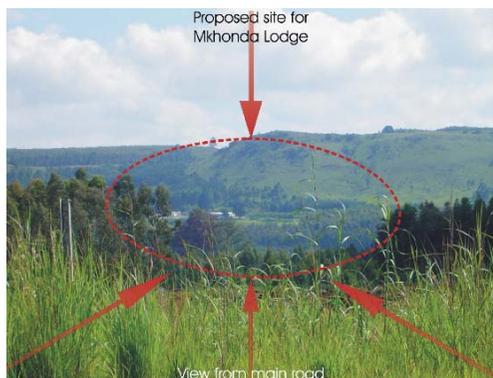


Fig. 03.32

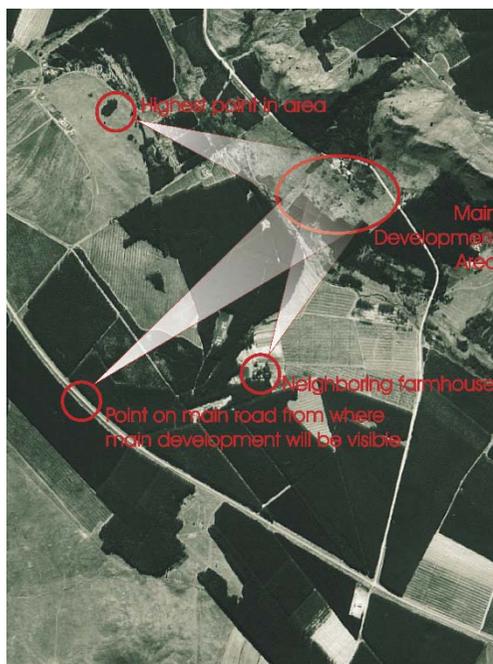


Fig. 03.33



Fig. 03.34



Fig. 03.36

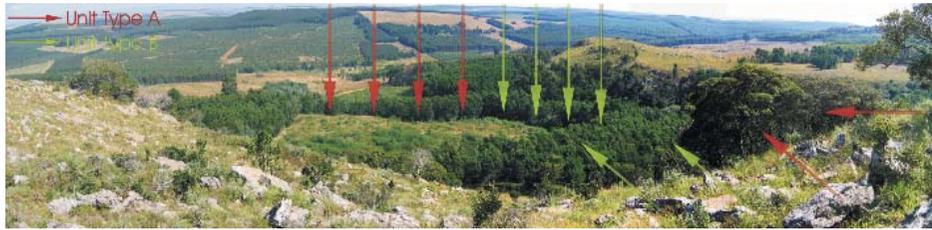


Fig. 03.35

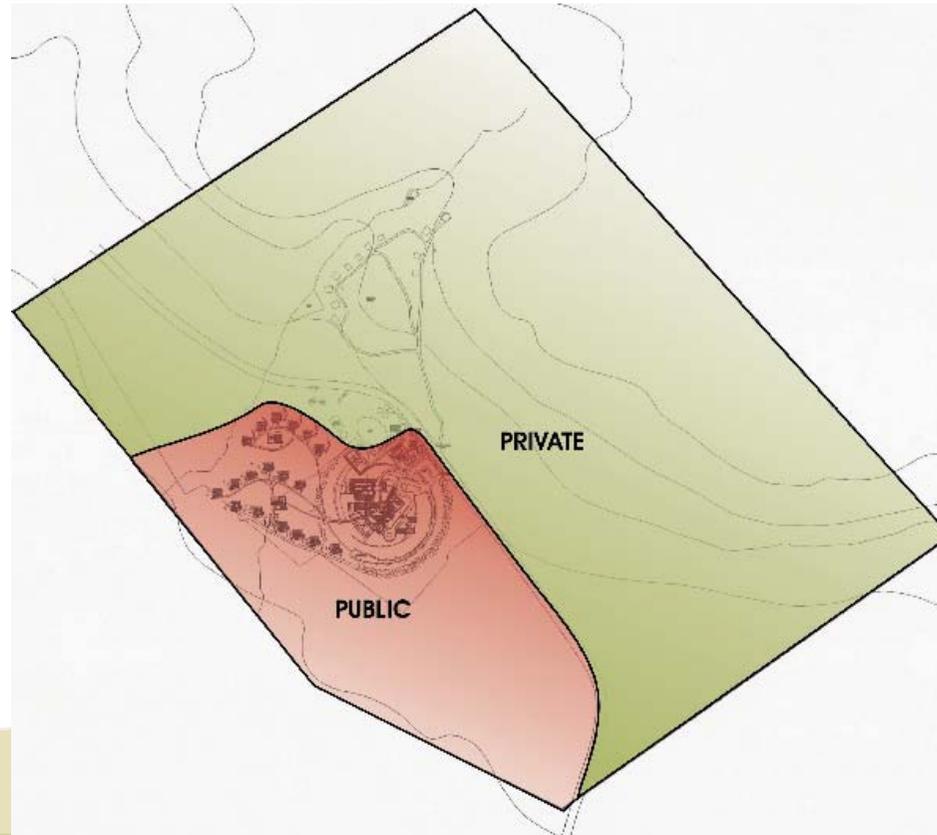


Fig. 03.37