THE RESEARCH CENTRE FOR INDIGENOUS TRADITIONAL MEDICINES

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To God the Almighty, my parents: Brothers and Sisters, and in memory of my late grandparents, friends and my extended family, the Boukende staff and my fellow classmates [what can I say we made it!]
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Introduction

The Research Centre for Indigenous Traditional Medicines, Pretoria, Marabastad

Background

According to the World Health Organization (WHO) Traditional Medicine Strategy 2002-2005 traditional medicine is referred to as "Traditional Chinese medicine, Indian Ayurveda and Arabic unani medicine and various forms of indigenous medicine - if they involve the use of herbal medicinal animal parts and substances - and non-traditional and so-called alternative therapies - if they are carried out primarily without the use of medications." (WHO report 2002-2005)

According to the WHO, 80% of South Africans use traditional medicines for health practices. Even though there was a lot of substantial or background nature, the South African Constitution, which regulates the use of traditional medicine, states that:

"Every person shall have the right to freedom of conscience, religion, thought, belief and opinion..."

Everyone person shall have the right to freedom of conscience, religion, thought, belief and opinion. Every person shall have the right to an environment which is not detrimental to his or her health or well-being (South African Constitution).

The current urban fabric still reflects the segregation that dominated the apartheid regime by not being (South African Constitution) being able to address the negative conditions from a Western stance those correlate with disadvantage, barriers and a sense of prehistoric. This view taken because of misrepresentation combined with the scarcity that follow traditional healing. "Despite these limitations, it has remained a prominent characteristic in a lot of South African society of life and credence."

The proposal, at large, is intended to, and should not be viewed as competition to Western medical practitioners, but a complement and an attempt to provide an equitable access to all that need healing as dictated by the South African constitution but to:

• Socially and economically uplift those that practice and embrace traditional healing.
• Incorporate traditional healing into an existing urban fabric.
• Facilitate for such activities are unavailable and when built they become artifacts of "cultural skin condition".

Traditional healing is an indispensable component of heritage of most of the community in the urban areas. With growing urbanization, under the current democratic dispensation, most people are still utilizing the services of the traditional healers.

As a result, this thesis attempts to narrow the gap between indigenous health practices and the development and transformation of urban spaces to better serve its inhabitants, and to De-mythify the theories and assumptions that cause the traditional healing culture in South Africa. It addresses the negative conditions from a Western stance those correlate with disadvantage, barriers and a sense of prehistoric. This view taken because of misrepresentation combined with the scarcity that follow traditional healing. "Despite these limitations, it has remained a prominent characteristic in a lot of South African society of life and credence."

The project is located within the inner of Pretoria. A part of the city that has the highest demographic, which has been dogged with negative stigmatization. The proposal, at large, is intended to, and should not be viewed as competition to Western medical practitioners, but a complement and an attempt to provide an equitable access to all that need healing as dictated by the South African constitution but to:

• Incorporate traditional healing into an existing urban fabric.
• Create a platform on which the importance of and use of traditional healing is mainstreamed.
• Facilitate for such activities are unavailable and when built they become artifacts of "cultural skin condition".

Traditional healing is an indispensable component of heritage of most of the community in the urban areas. With growing urbanization, under the current democratic dispensation, most people are still utilizing the services of the traditional healers.

The new national constitution, adopted in 1996, has finally cleared the path to redress past injustices, with the secrecy that follows traditional healing; irrespective of this outlook, it has remained a prominent characteristic in a lot of South African society of life and credence. As a result, this thesis attempts to narrow the gap between indigenous health practices and the development and transformation of urban spaces to better serve its inhabitants, and to De-mythify the theories and assumptions that cause the traditional healing culture in South Africa. It addresses the negative conditions from a Western stance those correlate with disadvantage, barriers and a sense of prehistoric. This view taken because of misrepresentation combined with the scarcity that follow traditional healing. "Despite these limitations, it has remained a prominent characteristic in a lot of South African society of life and credence."

Terminology

...
In addition to the existing models, the centre for indigenous medicines is an important one today and dropped with negative stigmatization.

**DESIGN PROBLEMS:**

Marabastad hosts large numbers of informal traders and micro enterprises. Currently no formal facilities are in place for hawkers, and traditional healers, and suggested guidelines are not enforced to structure the complex one of the intellect. (Architecture Mysticism and Myth, 1974) Traditional healers are but the thought behind form embodied and realized for the purpose of its manifestation and transmission. As vehicles through which the modern day culture carried through and evolves the role of traditional healing is still an important one today and dropped with negative stigmatization.

**DESIGN POSITIVES:**

• The proposed traditional healing center can serve as a first to commercial activity in the area of Marabastad.
• The proposed center will allow the informal sector to recognition as a significant contributor to economic growth.
• The cultural and social understanding of the Marabastad community.
• The connection with the intellectual and religious expression.
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• Inadequate social facilities and services within Marabastad.
• HIV Aids
• The uncontrolled influx of people into Marabastad. Especially the problem of illegal immigrants.
• Employment opportunities for local, unskilled and skilled individuals

• Lack of employment opportunities
• Inadequate social facilities and services within Marabastad.
• Health and safety

The Department has set up a medical research unit to evaluate the safety and effectiveness of traditional African medicines, to develop new remedies for chronic conditions, to safeguard indigenous knowledge, and to provide consumer information and protection. The Institute for Traditional Medicines will research and evaluate African traditional medicines and explore their potential to help address the health and economic needs of the country and the continent. The Institute is a reference centre at the Council for Scientific and Industrial Research (CSIR), working partnership with the National Department of Health, in conjunction with, The Institute for African Traditional Medicines, Pretoria North and outlying areas. This site is currently zoned as a PUBLIC SPACE and/or PARK, and is positioned in such a way that its the first landmark encountered when entering and leaving Marabastad. The site is a gateway into the Tshwane CBD for the masses of people from the outlying areas.

**Economical problems:**

• Informal trade lends an African market culture to the streets of Marabastad. That adds to the creation of a unique and attractive character in the urban life, if conducted in a reasonable and applicable manner.

**Social problems:**

• Informal trade existing in Marabastad, that include exposure and applicable manner.
• The proposed traditional healing center can serve as a first to commercial activity in the area of Marabastad.
• The proposed center will allow the informal sector to recognition as a significant contributor to economic growth.
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• Health and safety

The council would conduct tests to evaluate such medicines, develops substances that could be used for chronic conditions – including immune boosters -and provide information on these medicines to the general public.

**Situation:**

In Marabastad, the most formal and informal traders face the competition and rent pressured forms that cause friction. The lack of facilities, leads to unsuitable conditions for the hawkers and traditional healers. These include lack of a proper housing for food-carts, informal trade facilities and or stores.

• Uncontrolled healing is a negative urban influence, as it brings with it overcrowding and invasion of “sensitive” urban areas.

**Situation:**

1. The traditional Healers in Marabastad
2. The City of Tshwane
3. The community of Marabastad and the surrounding areas

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2 Locality and context analysis

**site context**

The proposed site

fig.1

fig.2

fig.3
As a gathering, and trading space within Marabastad, this market becomes a focal and destination point, allowing for growth development within the centre. The location of the proposed site between two such strategic, and the existing transport interchange, the bus and the Belle Ombre Railway stations facilitates pedestrian movement on and off the proposed adjacent site.

An opportunity through which the proposed Traditional healers centre becomes a nucleus along and through which pedestrian and commercial activity can be and encouraged.

fig.4
**context analysis**

**Location and accessibility and site use**

- **Integration of site into inner city**

![Map showing site context with labels for main roads, historical tourist route, and current land ownership.]

**fig.6**

**fig.7**

*University of Pretoria, Selipe (2007)*
Marabastad has suffered a history within Pretoria that saw the suburb increasingly strangled and isolated from the city. Currently the area forms an enclave that is physically separated from the surrounding urban fabric by a number of barrier zones on all sides. (Refer to Figure 8)

To the north the successive barriers of the railway line, the sewage farm, the Ajes River and the Doornpoort Ridge.

To the west the dual D F Malan roadway enclosing an island housing Technikon Workshops, Government Buildings, some vacant land and a filling station, as well as the Fresh Produce Market to the west of the roadway.

To the south the old cemetery, the municipal compounds, partly used by government departments, the zone of empty land between Struben and Blood Streets, part of which forms the PUTCO bus depot.

To the east the canalized Steenhoven Spruit and tracts of vacant land. At one stage Marabastad was the setting for vibrant community life. The forced eviction of the entire residential population and a large part of the traders from the area has, however, resulted in the destruction of most of the community structures. Only a small portion of traders has remained, while the rest of the former Marabastad population is scattered over the outlying former Group Areas of Laudium, Atteridgeville, Mamelodi, Eesterust and elsewhere.

With the “freeze” imposed on Marabastad over the past three decades the area has degraded into a shanty town

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following the 1913 Natives Land Act of the Transvaal. The last of the dwellings of Old Marabastad were demolished in 1918, and the site was designated for residential housing. In 1912, the site was designated for residential housing, and in 1913, Old Marabastad was resettled out of the Marabastad area, when the Pretoria Town Council started to move the residents. The historic section through the site is shown. In 1934, the site was designated for residential housing, and in 1965, it became the site of the current sports grounds.
EXISTING URBAN FABRIC

Marabastad has been always characterized by a fine-grained urban fabric, which was the direct result of the relatively small stands (249m²) grouped into city blocks of around six-to-eight stands each, strong in two rows along narrow service lanes. The small scale of developments, shaded colonnades built over public pavements and the density of the suburb contributed to a charming, pedestrian-friendly character. Of this original fabric only the zone between Mogul Street in the north and Bloed Street in the south has remained, the area closed to Bloed Street, however, badly eroded. The ban on high-rise development was the result of the 1937 building regulations. The centre for indigenous medicines acts as a catalyst of redevelopment in the area, and will likely to be the wind that complements the widening fabric.

In stark contrast to the original fine-grained texture of Marabastad stand the monolithic and insensitive developments which were later placed along the periphery and inside the area.

In summary the urban fabric of Marabastad reflects extreme contrasts, from the intimate scale of the original infrastructure to the insensitive scale of the new developments and uncertain status of Marabastad has resulted in neglect of most of the surviving buildings. The centre for indigenous medicines acts as a catalyst of redevelopment in the area, and will likely to be the wind that complements the widening fabric.

The Asiatic Bazaar lies between D F Malan Drive West in the west, Struben Street to the south, Steenhoven Street and 11th Street in the east and the railway line in the north.

This area comprises predominantly retail and wholesale outlets and vacant, undeveloped pieces of land, with limited entertainment and religious activities. The eastern part of the area formerly housed schools, but has now been realigned from the Asiatic Bazaar, essentially forming a traffic island within the city.

A pedestrian bridge with a stair from 11th Street allows commuters from Potgieter Street to gain access to the street for the full length of the Asiatic Bazaar.

The area between Bloed and Struben Street has been entirely demolished, and is a wasteland except for some structures of the PUTCO bus depot. The zone between Struben and Potgieter Street, which formerly housed the municipal compounds, has also been demolished and vacant land.

A shopping development between Steenhoven Street and Potgieter Street in the west, and a motor service facility on the corner of Struben and 7th Streets.

A typical shopping centre within the station concourse.

The area north of Boom Street is covered predominantly by the Maraba Shopping Complex. This shopping complex was established by the Community Development Board in terms of the Group Areas Act to relocate the Indian traders from the white CBD of Pretoria around 1970. It is currently privately owned by the traders as a share block scheme.

A relief shopping centre. A pedestrian ramp to the west of the station serves the bus station immediately west of the Maraba Shopping Centre.

From here the commuters change over to other modes of transport, which are mainly busses and taxis. The bus terminus is directly linked to the station concourse and is fenced off from the Asiatic Bazaar.

A pedestrian ramp leads off to the east, away from the Asiatic Bazaar and into the taxi rank and adjacent shopping centre. A pedestrian ramp to the west of the station serves the bus station immediately west of the Maraba Shopping Centre.

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iii. Indian Retail Fruit and Vegetable Market

The Indian Retail Fruit and Vegetable Market is located on the southern part of the Asiatic Bazaar. A pedestrian ramp leads off to the east, away from the Asiatic Bazaar and into the taxi rank and adjacent shopping centre.

The Belbe Omnire Station Acts as a connecting terminal for black commuters and migrant workers between the city centre and the northern townships and rural areas. It has a self-contained shopping centre within the station concourse.
natural environment

In the ISDN (1998) for Marabastad report, the natural environment consists of:

**slope:**
- Marabastad has a gentle slope from the south-west to the north-east at about 1 in 36, which poses good and bad constraints to the proposed development and should respond to the constraints.
  - i. The trading area platform will have to be levelled.
  - ii. The slope as gentle as it plays a vital role in distinguishing between different thresholds.

**climate:**
- Marabastad is characterized by generally high temperatures, relatively high local humidity, and high afternoon temperatures in summer. Rainfall is seasonal (summer rains) with an average of 741mm per year. Mostly precipitation occurs in thunderstorms, with rates around 90 to 100mm per hour. Hailstorms are fairly common and can be severe.
  - i. The buildings are used for passive ventilation generally, on generally high temperatures where passive ventilation is not efficient, air-conditioning will be used.
  - ii. Rainfall is addressed with the sloping corrugated roof to dispose of the water, and the utilization of rainwater downpipes at efficient points to dispose of the water evenly throughout the site.

**wind:**
- Prevailing winds are calm and blow from the north-east in the morning backing to north-west in the afternoon. During winter occasional cold snaps bring winds from the south, while in the summer thunderstorms are accompanied by turbulent wind patterns.
  - i. In order to resolve the wind problems, the consulting rooms act as windshields against the north easterly winds onto the site, refer to diagram.
  - ii. On the East side of the site, the trees/vegetation acts as windshields onto the site, refer to figure 12.

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**Figures:**
- Fig. 10: Slope
- Fig. 11: Shading
- Fig. 12: Wind directions

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**University of Pretoria eet, Selape M (2007)**

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context

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Pedestrian Traffic:

Given the existing concentration of public transport facilities in Marabastad, and the volumes of commuter traffic, much pedestrian traffic is generated between the termini for the various transport nodes, and between Marabastad and the workplaces in the CBD and the service industries of Pretoria West.

Belle Ombre Station

In the morning peak most people entered Marabastad via the western pedestrian ramp. These head to Boom Street or via Mandela complex to the bus rank west of the complex. About half as many pedestrians used the 11th street stair, and only a small portion headed east to the Schubart Street taxis and exit.

In the afternoon peak most people arrived from the western direction via the western pedestrian ramp, followed by arrivals from the east via Schubart Street, and the remainder from the south via the 11th street stair.

Bus rank west of Mandela complex

In the morning peak the majority of commuters headed from the bus rank to Boom Street. In the afternoon peak the majority of commuters arrived at the bus rank via Boom Street.

On the positive side the pedestrian presence in Marabastad provides a customer-base for traders in the area, and adds to the vibrant character associated with Marabastad.

Currently pavements are in a bad state of disrepair, and absent in areas that have been fully demolished. Extensive littering and filth indicate that there is a desperate shortage of public facilities and municipal services to serve the pedestrians (refuse bins, public ablutions).

The bus station forming part of the Belle Ombre concourse is functionally well integrated, with dedicated staircases leading onto the various bus platforms.

The taxi rank at the shopping centre immediately northeast of the station is not well utilized, since it pulls people away from Marabastad.

In Marabastad however provides a strong opportunity to re-activate the suburb, by careful placement of new facilities, to optimize pedestrian movement through the area, and stimulate commercial activity.

The bus station to the west of the Mandela Complex is well-used, and its location helps to pull commuters from the station through the Mandela Centre, to support trade in the centre.

With the bulk of pedestrian movement heading to or from Boom Street, a preference of Boom and possibly in future Bloed Streets is indicated for taxi connections.
**PLEASING RELAXING IN MARABASTAD**

Family relationships, social networks and neighborhood recreation were important defence strategies for the urban poor. For some, economic survival was dependent on informal activities and were often related to leisure time activities such as beer drinking, dance parties and tea meetings (”timiti”). Rugby, football, cricket and tennis were played during daytime.

In the late 19th century the tea meeting was a church organized communal meeting often sponsored by members of the church’ women’s group. By the end of the 19th century it had expanded into more social recreational forms centered around drinking and “wild dancing”. A café owner Galom Hassain was rewarded for hosting tea meetings or dances every night of the week. According to some scholars the so-called “mendi” culture associated with the suburb of Johannesburg, originated in Marabastad.

Beer drinking and beer brewing became visible symbols of the struggle between the dominating classes and the ruling classes. Mazotho dwellers where liquor was sold and dancing occurred. According to some scholars the so-called “mendi” culture associated with the suburb of Johannesburg, originated in Marabastad.

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**LIFE IN THE CAPE LOCATION**

If you did not live in the Cape Location (for that matter Marabastad), you would not have been able to reconstruct the spirit and ambiance of its community. Life was not superficial, but lively - a feeling not experienced anywhere else.

The colored people lived in harsh social conditions. Some parts were practically slums with no proper housing. It consisted of houses constructed of inferior materials. The outbuildings, constructed of rusted corrugated iron, were used for storage, and often served as apartments for several families. The overcrowding put their health at risk.

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**WORKING IN MARABASTAD**

Marabastad used to be a cosmopolitan in character and consisted of an urban mixture of shops and dwellings. Home and workplace were walking distance from one another.

There were general dealers, cafés, butchers, tailors, bicycle shops, barbers, shoe-repairs, furniture dealers, dry-cleaners, tailors, jewelers and other businesses, who were owned by Marabastad residents and provided employment to other residents.

With the promulgation of the Group Areas Act 36 of 1950 the blacks were moved to Axelgaardale, Colonists to Kemens and Indians to Laudium. Marabastad became a commercial node for Indian people.

The area had been transformed for a residential suburb to a business district. Many former residents still owned and managed their shops and other businesses in the area.

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History

During 1887, the city of Pretoria was extended to the west of the river, and in 1890, the town of Marabastad was set up between the river and the Transvaal railway line. Marabastad was given town status on 15 June 1900 by the Union Government, following the conclusion of the South African War. The name Marabastad was derived from the Zulu word for "a new location", in recognition of the need for additional land to accommodate the growing population of the region.

In 1888, the Marabastad municipality was established, and in 1891, the town hall was completed. The town became a major center for commerce and industry, and a large settlement developed around it. In the early 1900s, the town continued to grow, with the development of new areas such as New Location and Marabastad East.

In the 1930s, the Group Areas Act was introduced, which resulted in the forced relocation of many black communities to new areas, such as Atteridgeville. Marabastad was one of these areas, and in 1945, it was proclaimed a residential area for white people only. This led to a decrease in the population of Marabastad, and the area became a ghost town.

In the 1960s, Marabastad was returned to the black population, and some black squatters moved into the area. However, the conditions were very poor, with no proper infrastructure or services. The area became known as a slum, and the residents were subjected to constant harassment and violence by the police.

In the 1990s, the area began to change, with the reintroduction of jobs and services. The area became known as "New Marabastad" and "Old Marabastad", and a new area called "Belle Ombre" was established.

Today, Marabastad is a vibrant community, with a strong sense of identity and culture. The area is known for its music and arts scene, with local musicians and artists regularly performing in the area. The area is also home to a number of community organizations and initiatives, which work to improve the lives of its residents.
The history of traditional healing

History of Traditional Healing

In attempting to understand, apply health and illness in a society, individual's behaviors, interactions and social structures must be placed within a cultural context (Loustaunau 1997:10). Culture affects our perceptions and experiences of health and illness in many ways. In addition, these perceptions and experience change with the dynamic culture (Loosa et al 1997:11). Sangomas are the traditional healers in the Zulu, Swazi, Xhosa, and Sotho, Tswana, Venda and Tsonga (Schuster & Campbell 1988:7). The history of traditional healing is covered by many different social and political roles in the community: divination, healing, directing rituals, protecting warriors, counteracting negative spells, and narrating the history, cosmology, and myths of their tradition.

Sangomas are the traditional healers in the Zulu, Swazi, Xhosa, and Sotho, Tswana, Venda and Tsonga (Schuster & Campbell 1988:7). The history of traditional healing is covered by many different social and political roles in the community: divination, healing, directing rituals, protecting warriors, counteracting negative spells, and narrating the history, cosmology, and myths of their tradition.

There are two types of healers in South Africa, the first being the “ukhawenena” an initiation by spirit and ancestral purification into the many rites of passage to become a Sangoma. In the instance the person receives a powerful spiritual calling from the ancestors, that is not easy to resist and can have physical symptoms if they do not resist (Schuster & Campbell, 1988:9). The second category, trains for and studies Traditional Healing and includes people interested in alternative healing practices.

Some Sangomas may speak in tongues, or foreign languages according to the specific ancestor they have connected and interpreted. The Sangoma may possesses a collection of boxes and other small objects like seeds, sea shells, each with a specific significance in their lives. Amathambas, which they use for divination. The Sangoma or the patient throws the bones and interprets them in relation to the patient’s life. They are the traditional healers and they interpret the metaphors in either their dreams or their visions. Where a patient's illness is not easily diagnosed, the Sangoma will ask them to perform certain actions to test the patient. The Sangomas use divination to perform rituals and treatments addressing the healing of the body and soul and can be a catalyst for subtle yet profound changes within a society. These are used by Traditional Healers and/or Sangomas variety greatly and depends on the healers own knowledge and skills as well as the patient’s illness. The treatment of a patient involves:

- **Reading the Psyche or Energy**
- **Muti or traditional medicine plays an important role in the lives of many South Africans. They rely on its medicinal effects, as well as its spiritual and cultural significance, often with powerful symbolism.** - There are medicines for everything from physical and mental illness, social alienation and spiritual difficulties to problems for love and luck. Medicines can be fall and form patterns which in the eyes of a skilled practitioner can tell accurate history or story of the patient.

Bio Scan

Using the same faculty as above, the Sangoma reads the biosphere and body of the patient looking for areas where the ancestors (DNA) patterns are blocked causing illness in the physical body. Patterns that a Sangoma sees in the body give an impression of where Imimoya (Energy) may be blocked or where Idlozi (Life force) is ill. The treatment of a patient involves:

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history

Traditional Healing: Focus is on the individual client and their whole family includes the immediate family, the extended family and the community. The main tools are the psychological/integrative/alternative therapies, rituals, herbs, and dance.

Western Medicine: Focus is usually on the individual client with specific therapeutic and counseling strategies, interview, assessment and specific therapeutic interventions. The main tools are the psychotherapeutic interventions, minimally invasive interventions, and minimally invasive interventions.

http://www.sangoma.ca/sangoma/?PHPSESSID=ff036bc6184b38b9694f1327c09dd7a3

provide the healing needed.

economic and political influence of traditional healers and their practices were, shunned demonized and in some instances prohibited (Adler 1995:45). Sangomas far outnumber western-style doctors in Southern Africa, and are consulted first (or exclusively) by approximately 80% of the indigenous population. Whilst for many they provide the healing needed.

The centre for indigenous medicines. ikhaya lemithi yesintu. lehae lame

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Traditional healers have been practicing in Africa for about 4500 years. Prior to European colonization in South Africa, traditional healers exerted great political influence in private and public affairs. Under missionary influence as well as imperial trends traditional healers and their practices were, shunned demonized and in some instances prohibited (Adler 1995:45). Sangomas far outnumber western-style doctors in Southern Africa, and are consulted first (or exclusively) by approximately 80% of the indigenous population. Whilst for many they provide the healing needed.

Western-style scientists continue to study the ingredients of traditional medicines in use by Sangomas. Public health specialists are now entering Sangomas in the fight against the spread of HIV/AIDS. In the past decade, the role of all types of traditional healers have become important in the fighting the impact of the virus and treating people infected with the virus before they advance to a point where they require (or can obtain) antiretroviral drugs.

Sangomas function as the social workers and psychologists in their community. The formal health sector has shown continued interest in the role of Sangomas and the efficacy of their herbal remedies. Western-style scientists continue to study the ingredients of traditional medicines in use by Sangomas. Public health specialists are now entering Sangomas in the fight against the spread of HIV/AIDS. In the past decade, the role of all types of traditional healers have become important in the fighting the impact of the virus and treating people infected with the virus before they advance to a point where they require (or can obtain) antiretroviral drugs.

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"There are ceremonies that determine space, and spaces that determine ceremonies" (Tschumi, 2000: 19). The notion of public gathering is apparent in African cultures and cannot be overlooked. South African cities, Pretoria included lack sufficient adequate public spaces and facilities that function properly, they either non-existent, inadequate or merely in a state of deterioration. These activities have patterns and tend to develop unofficially and spontaneously and bear a sense of formality and are generally more successful than most enforced interventions.

Natural gatherings of people be it city markets, transport interchanges or where there is some kind of function are inevitable and have to be emphasized in the south African context and most South African cities bear the mark of apartheid planning with large sector of society being geographically isolated from job opportunities. “…many new projects built with post-apartheid public funding work around points of mobility such as transport interchanges” (le Roux, 2003:17) in the case of herb traders the pattern is observed people tend to situate themselves where there is some kind of function, be it transport interchanges or where there is high pedestrian movement. These take place where there are transport interchanges, market places.

Attention is drawn into existing scenarios, the “herb traders market, Warwick Junction Durban, OMM Designworkshop Architects” the trade focused itself under the bridge where there is public circulation. The architects in partnership with the Ethekwini municipality in attempt to resolve the situation, provided the traders with a place where they felt comfortable to trade in, with a basic sheltered roof over the space they traded on, with a provision of communal toilets, and private consulting rooms for the ‘inyanga’s’ and ‘sangoma’s.’

Herb Traders’ Stalls:

Location:   Durban
Architect:   OMM Design Workshop Architects

over the railway lines remained high and dry, the vestiges of the Queen Street vehicular on ramp and the Victoria Street off-ramps to a freeway never completed, yet the need for further overhead pedestrian paths connecting the Victoria Street bus terminus and the various taxi ranks to the city became pressing. Besides, herb-traders began plying their trades by lining the pavements, there being no other spaces available.

KZN-NIA Journal 3/2001 p7
KZN-NIA Journal 3/2001 p9
KZN-NIA Journal 3/2001 cover page

3 Precedent studies

3.1 Precedent [1]

It acts link between the freeways and the Railways lines.

• The project allows for diversity in the functions allowed for within the spaces created. A character created within the Proposed Traditional Healers centre

• Formalization of informal and alternative trading, to create and encourage a distinctive architectural idiom and approach that leads to interest and debate within the urban fabric

fig.13

fig.14

fig.15

Lessons

• The project allows for diversity in the functions allowed for within the spaces created. A character created within the Proposed Traditional Healers centre

• Formalization of informal and alternative trading, to create and encourage a distinctive architectural idiom and approach that leads to interest and debate within the urban fabric

Somkhele

Designed by East Coast Architects for the African Centre for Health and Population Studies, this centre is set on a South facing slope, four research pods cluster around a cruciform space containing social functions. A 15-meter tower acts as a thermal stack that allows the area to ventilate naturally. A strong reference point, around which communal activities are arranged, makes a bold statement to the surrounding landscapes. Within each pod, open plan offices offer maximum exposure to natural light and ventilation. Concrete frame construction filled with steel, block work, aluminum, glass and timber display a vibrant honesty. (Atlas Phaidon Contemporary World Architecture 2005:638)

Eucalyptus, ubiquitous in the area, used to support the main tower and roof, with saplings used for shading and balustrades. Storm water collected in tanks or channeled into the adjacent wetland systems, and the gardens on site.

Lessons learnt
- The use of locally available and sustainable materials. Used to reflect the indigenous environment in which the project stands. This has been used in the proposed Traditional Healers Centre which the incorporation of timber lattes shading, and the structure
- The use of a centrally located stack and or space, as a ventilation tool within the building
- The sensitivity to the context within which the building is located
- The use of transparent roofing materials to allow for natural lighting and create a unique ambience within the building
The Farraday Market:

The Farraday precinct situated along the Eloff Street extension, in the South – eastern sector of the Johannesburg CBD. (Digest of South African Architecture 2004:32) The area, characterized by former industrial buildings, which predominantly serve the motor industry. Apart from the motor taxi related industry and attendant street trading, a traditional “muti” market exists in the area under the prominent M2 roadway. Started 10 to 15 years ago this traditional market provides divination and herbal services to the numerous commuters and job seekers that move through this area. Historically the Railway Station operated as gateway into the city for the masses of black migrant laborers entering these working areas. The area was home to the Miros Employment Bureau, the native “pace” office and a single sex hostel. It became a foothold for Black people in the city, and later came to house various famous cultural and media institutions including Dorkay House, and the Bantu Men’s Social Centre and the offices of Drum Magazine and other black print media. (Digest of South African Architecture 2004:32) The area, characterized by low-rise industrial buildings, which predominantly serve the motor industry. Apart from the motor taxi related industry and attendant street trading, a traditional “muti” market exists in the area under the prominent M2 roadway. Started 10 to 15 years ago this traditional market provides divination and herbal services to the numerous commuters and job seekers that move through this area.

The Farraday precinct was identified as one of the city’s major multi-model transport and informal trading hubs. In addition, the precinct plan, developed around the new taxi rank, cited in an adjoining depot near the Farraday Railway Station and bus rank. (Digest of South African Architecture 2004:32) Located to facilitate traffic flow on and off the adjacent M2 highway, there is a maximization of the opportunities for both formal and informal trading. The old industrial buildings and sheds, refurnished to accommodate trading and consulting for both formal and informal trading. The old industrial buildings and sheds, refurnished to accommodate trading and consulting for both formal and informal trading. The old industrial buildings and sheds, refurnished to accommodate trading and consulting for both formal and informal trading.

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Though not recognized as vehicles through which the modern day culture is carried through and evolves, these were matured, evolved and sometimes born because of traditional healers. An alignment to what was a medium through which people could allow themselves a release, expression of their spiritual, mental health, and provide context hope and a sense of protection. Arguably, also used for evil, but a place of knowing nonetheless.

The thesis attempts to translate the traditional role of traditional healers in an modern urban context that allows for an interpretation into the mysticism and sacredness of a way of life from which the culture that is referred to as South African was derived. In this instance the architecture then, interprets building not for the simple satisfaction of the simple needs of body, but the complex ones of intellect. (W.R. Lethaby: 1).
The base:
The base itself divided into two parts: the rubble foundations (krepis, usually invisible), and the stepped platform wrapped around it on which the column shaft stands (Rykwert: 171).

The column shaft:
This is symbolic of a tree trunk standing on a base and held in place by the weight that it carries. A part of the column that allows one to deconstruct the shape feel and meaning of the column.

The capital:
The very word capital reintroduces the terminology of the body image: capitulum as a diminutive of caput, “the head” (Rykwert: 176).

The enlargement of the capital depicts the emphasis of this thesis to try and intellectualize the experience and perception that the symbolism carried into the proposed project carries. Directly interpreting into the nature of symbolism.

The transparent roof:
A connection with the divine and the super-natural. The skies traditionally considered the gateway to the after life. By bringing this element into the design this thesis attempts to draw the spiritual role that traditional healers sometimes play into the design of the building.

The idea of a spiritual and physical ascension further symbolized in the raising of the “entrance” building so to speak this allows for an elevation of the site in terms of perception. The raising of the building also allows an interaction of peoples with the site and the surrounding elements. The medium through which the site communicates with its context and vice versa. Making the building symbolic of the role that traditional healers played and are still playing in today’s society.
The design philosophy centered on the concept of urbanism as an essential attitude in urban design, forming the quality-oriented public environment through the unique creation of objects to the environment. The development of the urban environment philosophy is as follows:

A holistic view of the urban environment that considers ecological, social, cultural and environmental issues. Were the urban environment is seen as one system comprised of the people, the place, the infrastructure, and the governance. The integration across all these components is central to the integrity of the urban system as a whole. Integration between various scales, as well as integration amongst different elements of the urban system, becomes essential. (Swanson, Campbell, Moffat: 8)

As a form of catalyst, the design of multi-use space with flexibility in its structures increases the capacity of all pieces of the proposed development to be adaptable to multiple uses, simultaneously and in the short and long-terms.

A sense of connectedness to its surroundings and between the various functions and activities accommodates so that all its pieces are firmly linked into an integrated network that is well defined.

Designing within the urban landscape

A cohesive approach to urban development has been taken and this is derived from the sequence which underpins any design decision:

• Internal circulation pattern, with emphasis on human and non-vehicular traffic. Also addressing the need for a separation between this and vehicular traffic.
• Provision for commercial, social and industrial enterprises, which would then provide work and employment opportunities.
• Allocation of a form of educational facilities.
• Allowing for recreational opportunities.
• Street design and planning, to minimize costs and energy demands for construction of roads and sewers. Use of local energy sources.

In developing countries where urban growth is rapid, the need to generate opportunities for SMME's this compaction allows for their growth and success, as the costs of distribution and pressure on them. In compacting the urban environment there is an allowance made for the city to be able to regenerate them-selves without borrowing too much in terms of densities, human traffic or the like from its surrounding areas, creating strain and pressure on them.

Compaction of the city allows for parts of the urban fabric to be able to regenerate themselves without borrowing too much in terms of densities, human traffic or the like from surrounding areas, creating strain and pressure on them.

In the design of the urban environment there is an abundance made for the city to be able to bring together to "centralize" various diverse activities within the same range allowing for the pedestrian to take precedence.

In terms of the SMME's this compaction allows for their growth and success, as the costs of distribution are minimized. This allows for growth and creates a sustainable environment for them to operate.

The proposed Traditional Healers complex draws on this urban generation philosophy, as situated in a culturally sensitive respect to the beliefs and practices of the indigenous people. The urban generation must allow people sufficient freedom to manoeuvre, to find opportunities to express their ingenuity and creativity. This thesis attempts to introduce this with a traditional healer's complex that combines the cultures and beliefs of South Africa's majority into the everyday life of the city of Tshwane.

Urban generation

People come to cities to experience economical, social, cultural and recreational opportunities and facilities.

• Urban development demands increasing levels of specialization and diversity.
• The ability of an urban system to generate these opportunities is not related solely to its demographic size, but also to its structural flexibility.
• In developing countries where urban growth is rapid, the need to generate opportunities for self-sufficiency and economic activity is of particular importance. Therefore taking a facet of cities, traditional medicine and beliefs as one of these opportunities allows for generation.

Urban generation must allow people sufficient freedom to manoeuvre, to find opportunities to express their ingenuity and creativity. This thesis attempts to introduce this with a traditional healer's complex that combines the cultures and beliefs of South Africa's majority into the everyday life of the city of Tshwane.

Structural relationships pursued within the urban landscape

Compaction of the city and increased densities:

Central pre-condition for the achievement of high-performance urban environments is to compact the form of the city: to ensure that it develops over a period of time, into a system which works well at a pedestrian scale. (Dewar and Uytenbogaardt: 43).

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Creating a continuity in the urban landscape

1. Arguably the concept of balance is in the relationship between people, as in urban activities; this relates to urban performances – the way in which urban structures (places, spaces and channels of movements) accommodate, promote and enhance the activities and events which define urban life.
2. Certain structural configurations generate greater opportunities for people and enhance living to greater degrees than others.
3. Part of this balance relates to access – ensuring relatively equitable access to urban opportunities and facilities for all urban dwellers.
4. This thesis also attempts to promote the urban environment through the maximum positive freedom for individuals to act.
5. The Traditional Healers complex can be seen to release the energies and talents of many people in the making of environments.
6. Public space

   A larger part of the site dedicated to the accommodation of public space. This allows for a high pedestrian movement on the site. Making the complex on that is feasible in terms of movement. Several factors considered in the design of the public space. These include:

   • Appropriateness, where the public space fits within the urban context and is usable in a manner that is both convenient and effective. Notability that this while addressing the need for a public space the need for a relationship to the human scale considered. Clearly shown in the scale of the buildings on site and in their relationship to the interimizing spaces.
   • The public space suggested is one that has several layers of form and function to it. A combination of covered and uncovered spaces allows various activities to happen on the site. Commercial social and cultural activities given a platform from which they can play out. The introduction of high changes and southerly coverings to demarcate these differences still allows for the space to function singular or as a series of smaller spaces.
   • The allowance for various activities gives the site a dynamic and multi-functional quality that lends itself to enhancing the urban fabric within which it is.
Possible thoroughfare routes on the site.

Boom street is mostly pedestrian with taxi's turning left into Boom from D.F. Malan. A proposal is to convert a portion of Boom street between DF Malan West and DF Malan East to a pedestrian only street, allowing only people on foot to access the site.

People will have an option to bypass crossing through the busy highways and access the site via dedicated entrances or exits. Dotted lines show proposed pedestrian routes.

Traffic calming, working together with the traffic department, traffic calming mechanisms will be implemented to slow down the traffic entering or leaving the city.

i. Point A car tend to speed as they approach this point; the solution is to install a set of traffic lights to control and curb the speed of the cars.

ii. Point C speed humps/ rumble strips to be implemented to alert drivers that there might be possible people crossing the road.

iii. Point B a set of lights already exists.

iv. Point D a set of traffic lights controlling vehicles speeding into town.

People have freedom of movement and can filter through the site with no restrictions, only to the office building where there is access control as not to disturb the working staff.

The site is owned by the city of Tshwane, situated in Marabastad between the busy highways, DF Malan west going out town, and DF Malan East coming into town. Vehicles are not permitted onto the site, parking will be provided on the adjacent site, the site can only be accessed by foot with the only exception will be made to delivery vehicles on restricted times only.

People have freedom of movement and can filter through the site with no restrictions, only to the office building where there is access control as not to disturb the working staff.

Pedestrian access to the site is via Boom street dedicated to pedestrian movement. Boom is on the Northern side of the site meandering and filtering under the main office building in between the slanted mosaic decorated columns, creating an entry point to different experiences or spaces, each space or experience intertwining with the other in a hierarchical orderly manner. The site is open and accessible to all regardless of the person’s disability, gender, age.

Along Bazaar Street, under the vehicular bridge,

Possible thoroughfare routes on the site.

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site use and circulation

fig. 29

fig. 30
**design development concept**

To develop a building that enhances the quality of life, and to develop a language that is derived by and from the physical and historic terrain of the Marabastad location and to integrate Marabastad’s best qualities into the chosen site. Heritage, natural environment, climate, scale, diversity, public space.

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**THE GATHERING SPACE**

The distinct functions and spaces, a collective of individual buildings to formulate a whole. The consulting rooms have different uses individually, but formulate a cluster reading as one, with individual courtyards tying them together and creating a unified divide amongst them.

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**THE RECREATIONAL SPACE**

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**fig.31**

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**fig.33**

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**fig.35**

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**fig.32**

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**fig.34**

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**fig.36**
The Centre for Indigenous Medicines: Ikhaya le Mithi Yesintu - Lehae Lameriane Yasethu

Design Investigation
Building Shape and Form
Integrate Marabastas’ Best Qualities.

The consultation rooms

Walls are moulded into thickness of earth wall, recalling the mud construction of traditional African building technology with polished screeded textured floors remind of dung floors African vernacular Architecture.

Walls:
The structure,
"ecobond" mixture of 4% "ecobond" to 80% soil almost all types of soils work with the mixture. Blocks can be cast of this mixture, curing takes up to a day and sets as hard as concrete.

the finish,
Polished featured walls, work to be done by the people, according to approval of the design.
University of Pretoria, Sakep M (2007)

concept

design development

University of Pretoria, Sakep M (2007)
design investigation

structure
material
internal
external

fig.41
fig.42
fig.43
design investigation

THE BUILDING ENVELOPE

fig.44

fig.45
building use / accommodation schedule

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**Office Block**

- **Ground Floor**
  - Reception
  - Offices for different organizations
  - Secretaries office
- **First Floor**
  - Rest rooms
  - Open plan office
  - Kitchenette
  - Staff changing room
  - Male ablutions
  - Female ablutions
  - Consultation rooms
  - Laboratory
  - Secretary’s office
  - Deputy directors office
  - Directors office

**Open Plan Trade Area**

- **Ground Floor**
  - Reception
  - Waiting area
  - Medicine display area
  - Courtyard

**Consulting Rooms**

- **Ground Floor**
  - Male ablutions
  - Female ablutions
  - Storage area

---

All major public functions should be easily identifiable and freely accessible by all, regardless of the persons abilities and disabilities.

---

*Note:* The administration, office block.

---

*Fig. 46* - Administration Block

*Fig. 47* - Office Block

*Fig. 48* - Open Plan Trade Area
THE GROUND FLOOR PLAN
final design
3d images
model images
final design

3d images
model images
final design

3d images

model images

fig. 54
Technical investigation

All materials are selected to consume the least energy and cause little or no environmental damage in their production or manufacture. The buildings are designed to require the least energy consumption and to use components that are of a standard construction technique.

The building should be robust, and designed to weather gracefully. The columns require a high technical precision and will be brought in to the site in order to create employment to the unskilled labour so that local people who live in the city can participate in the building of the project to satisfy the aspirations for technological refinement.

The design is a reflection of the cultural aspirations of the people who live in the city.

A robust building reflecting our times

fig.55

UUnniivveerrssiittyy  ooff  PPrreettoorriiaa  eettdd,,  SSeelleeppee  MM  ((22000077))
The building is legible, this is achieved by placing the easily recognisable parts of each of which looks like the function it serves. It is elevated on a cluster of columns so people can filter through under the building, creating the gateway to the site and as a security control measures on site.

There are 2 major entrances that serve the building each dedicated to the staff members and students entering the building. The entrance is set in coloured and engraved signage to the visitors which entrance to utilize. Access stairs at the entrance to access the office and auditorium floor above. Circulation along the first floor is linear via tilter covered corridor.

The ablutions are naturally positioned at each floor for easy access to all staff and visitors on the first floor with dedicated ablution facilities for the security / receptionist at the ground level.

A special sound insulated auditorium on the first floor is placed close to the entrance lobby and away from the office. Externally clad with corrugated sheeting on a timber frame. This space can and will be used for meetings, exhibition space.

The research centre is positioned on the western side of the building, consisting of one floor and a mezzanine for offices and storage. Its accessed via the same entrance to the building to minimise security risks in the building.

The building is designed to acoustically be lifted off the ground to allow movement through to the site below. A gateway to the development. Its support structure are colonnade in a rhythmic manner and designed to...
The building is divided into 3 climatic zones namely:

i. Mechanical ventilation, air-conditioning to primary use spaces and offices.

ii. Passive climatic control to central/circulation space and collective zones.

iii. Ambient air temperature.

Offices internal climate modification is through cross ventilation, by allowing the air to flow through one opening to another creating a draft or suction effect. Ideally by placing the openings opposite each other and the height is from floor to the highest point in the room, cross ventilation will occur. If the humidity is high in the room, mechanical ventilation will be applied.

Use of split air-conditioning system to cool down the spaces if the passive ventilation is not sufficient.

Under calm conditions warmer air will rise to ceiling and cooler air will sink. The use of the central courtyard helps in creating a cooling stack effect drawing hot air from the building, in turn cooling the spaces within the courtyard.
Carry out the following methods for the drawings:

- Reinforced concrete roof slab, waterproofed to detail.
- Clear corrugated roof sheeting, fixed on 50mm dia purlins with nylon washered self tapping screws.
- ‘Izintungo’ latte shading screens fixed on tubular trusses with brass self tapping screws.
the centre for indigenous medicines,

University of Pretoria ekt, Gallopol M (2007)

SECTION E-E

timber floor

DETAIL 18, det 4

refer AR/DE/001

timber floor

mezzanine

DETAIL 15, det 1

refer AR/DE/001

DETAIL 16, det 2

refer AR/DE/001

DETAIL 17, det 3

refer AR/DE/001

6.700 US BEAM

7.350 TOP OF BEAM

280x650 reinforced concrete ring beam, size to be confirmed by Engineer.

1m high balustrade to detail

200 reinforced concrete slab to engineers detail.

300dia reinforced concrete columns to engineers detail.

1:100

100 dia. galvanised mild steel tube, bent and continuous welded at joints as per assembly drawing. painted with 1 coat primer, and 1 coat final paint to Architects specification.

350dia galvanised ‘windmaster’ type whirlybird with waterproofing around mechanism, fixed to roof sheeting as per manufacturers specifications.

Corrugated roof sheeting screwed on 50dia steel tube rafters with stainless steel self tapping screws with nylon washers to manufacturers specifications.
The Centre for Indigenous Medicines - Ikhaya leMithi yesintu - lehae lame riane yasethu.

The Centre for Indigenous Medicines - Ikhaya leMithi yesintu - lehae lame riane yasethu.

The Centre for Indigenous Medicines - Ikhaya leMithi yesintu - lehae lame riane yasethu.

The drawings

CONSULTING ROOM PLAN

Ground floor plan

1:20

Consulting rm 2

Section 'A'

Consulting rm 1

Section 'A'

Consulting rm 1
ccl 0.050
ffl 0.000
polished plaster

12dia stainless steel brace.

Corrugated roof sheeting screwed on 50dia steel tube rafters with stainless steel self drilling screws with nylon washers to manufacturers specifications.

50dia purlins at 1200 centres.

100dia mild steel tube roof support.

Hawker's table to detail.

100mm reinforced concrete slab on dpm on compacted earth.

DETAIL 8, base support

refer AR/DE/001

DETAIL 9, fixing 1

refer AR/DE/001

DETAIL 12, brace

refer AR/DE/001

Corrugated roof sheeting screwed on 50dia steel tube rafters with stainless steel self drilling screws with nylon washers to manufacturers specifications.

50dia purlins at 1200 centres.

100dia mild steel tube roof support.

Hawker's table to detail.

100mm reinforced concrete slab on dpm on compacted earth.

CONSULTING ROOM PLAN

Ground floor plan

1:20

Consulting rm 2

Section 'A'

Consulting rm 1

Section 'A'

Consulting rm 1
ccl 0.050
ffl 0.000
polished plaster

12dia stainless steel brace.

Corrugated roof sheeting screwed on 50dia steel tube rafters with stainless steel self drilling screws with nylon washers to manufacturers specifications.

50dia purlins at 1200 centres.

100dia mild steel tube roof support.

Hawker's table to detail.

100mm reinforced concrete slab on dpm on compacted earth.

DETAIL 8, base support

refer AR/DE/001

DETAIL 9, fixing 1

refer AR/DE/001

DETAIL 12, brace

refer AR/DE/001

Corrugated roof sheeting screwed on 50dia steel tube rafters with stainless steel self drilling screws with nylon washers to manufacturers specifications.

50dia purlins at 1200 centres.

100dia mild steel tube roof support.

Hawker's table to detail.

100mm reinforced concrete slab on dpm on compacted earth.

CONSULTING ROOM PLAN

Ground floor plan

1:20

Consulting rm 2

Section 'A'

Consulting rm 1

Section 'A'

Consulting rm 1
ccl 0.050
ffl 0.000
polished plaster

12dia stainless steel brace.

Corrugated roof sheeting screwed on 50dia steel tube rafters with stainless steel self drilling screws with nylon washers to manufacturers specifications.

50dia purlins at 1200 centres.

100dia mild steel tube roof support.

Hawker's table to detail.

100mm reinforced concrete slab on dpm on compacted earth.

DETAIL 8, base support

refer AR/DE/001

DETAIL 9, fixing 1

refer AR/DE/001

DETAIL 12, brace

refer AR/DE/001

Corrugated roof sheeting screwed on 50dia steel tube rafters with stainless steel self drilling screws with nylon washers to manufacturers specifications.

50dia purlins at 1200 centres.

100dia mild steel tube roof support.

Hawker's table to detail.

100mm reinforced concrete slab on dpm on compacted earth.
the drawings

CONSULTING ROOM ROOF PLAN

150x200x5 galvanised mild steel gutter.

DETAIL 10,
gargoyle
refer AR/DE/001

DETAIL 11,
window
refer AR/DE/001

Detail 12,
brace
refer AR/DE/001

Corrugated roof sheeting screwed on 50dia steel tube rafters with stainless steel self tapping screws with nylon washers to manufacturers specifications.

12dia stainless steel brace.

5mm 100dia mild steel tube roof support.

CONSULTING ROOM ROOF PLAN

section through main building
1:100

CONSULTING ROOM ROOF PLAN

SECTION B-B

model scale: 1:100

outside dimensions: 280x840

ground floor plan
1:20

CONSULTING ROOM ROOF PLAN

0.000 FFL
0.575 TOP OF BEAM
2.550 TOP OF DOOR

CONSULTING ROOM ROOF PLAN

UUnniivverrsiittyy  Ooff  PPrreettoorriiaa  eettdd,,  SSeelleeppee  MM  ((22000077))
In the centre for indigenous medicines, ikhaya lemithi yesintu lehae lamereiane yasethu.

2.5mm mild steel bracket to gms gutter.

150x200x2.5 galvanised mild steel gutter.

150x200x2.5mm galvanised mild steel gutter.

3mm mild steel bracket welded to steel gutter.

2 off 150x50 soft wood timber bearers fixed to the side of gutter with g.m.s. brackets at 1200 centres.

280mm NFP brick cavity wall plastered with smooth polished finish.

115mm acrylic waterproofed parapet wall.

3mm mild steel bracket M8 rawl bolted to slab + M12 bolted to soft wood bearer.

0.9mm mill finish aluminium flashing and drip fixed to brickwork.

2 off 150x50 soft wood timber bearers fixed to the side of gutter with g.m.s. brackets at 1200 centres.

150x200x2.5 mm galvanised mild steel gargoyle.

0.9mm mill finish aluminium flashing and drip epoxied to brickwork.

2.5mm mild steel bracket to gms gutter.

150x200x2.5 galvanised mild steel gutter.

150x200x2.5mm galvanised mild steel gargoyle.

3mm mild steel bracket M8 rawl bolted to slab + M12 bolted to soft wood bearer.

0.9mm mill finish aluminium flashing and drip fixed to brickwork.

2 off 150x50 soft wood timber bearers fixed to the side of gutter with g.m.s. brackets at 1200 centres.

150x200x2.5 mm galvanised mild steel gargoyle.

0.9mm mill finish aluminium flashing and drip fixed to brickwork.

2.5mm mild steel bracket to gms gutter.

150x200x2.5 galvanised mild steel gutter.

150x200x2.5mm galvanised mild steel gargoyle.

3mm mild steel bracket M8 rawl bolted to slab + M12 bolted to soft wood bearer.

0.9mm mill finish aluminium flashing and drip fixed to brickwork.

2 off 150x50 soft wood timber bearers fixed to the side of gutter with g.m.s. brackets at 1200 centres.

150x200x2.5 mm galvanised mild steel gargoyle.
6.700 US BEAM
7.350 TOP OF BEAM
acrylic waterproofing to upstand.
detail '2'
soffit, off shutter concrete.
200x200x10 mild steel plate support, fixed to upstand with M12 m.s. bolts.
280x650 reinforced concrete ring beam, as per Engineer's detail.
200x100x2.5mm galvanised mild steel gutter, on 100dia m.s. tube with water outlets at every junction.
50x50x2.5mm galvanised mild steel angle to form frame for mentis grating.
2.5mm 50dia roof support, welded on mild steel plate.
2.5mm g.m.s mentis grid ventilators to detail.

100 dia. galvanising in ventilated slits on m.s. roof plate, and 1 on specification.
2.5mm 100 dia. galvanised mild steel tube, bent and continuous welded at joints as per assembly drawing. painted with 1 coat primer, and 1 coat final paint to Architects specification.
200x100x2.5mm galvanised mild steel gutter, on 100dia m.s. tube with water outlets at every junction.

all welding to be done off site prior to galvanising to prevent welding on site, which should be kept to a minimum.
200x200x10 mild steel plate support, fixed to upstand with M12 m.s. bolts.
50x50x2.5mm galvanised mild steel angle to form frame for mentis grating.
2.5mm 50dia roof support, welded on mild steel plate.
2.5mm g.m.s mentis grid ventilators to detail.
280x650 reinforced concrete ring beam, size to be confirmed by Engineer.
2.5mm 50dia roof support, welded on mild steel plate.
2.5mm 100 dia. galvanised mild steel tube, bent and continuous welded at joints as per assembly drawing. painted with 1 coat primer, and 1 coat final paint to Architects specification.
200x100x2.5mm galvanised mild steel gutter, on 100dia m.s. tube with water outlets at every junction.

2.5mm 100 dia. galvanising in ventilated slits on m.s. roof plate, and 1 on specification.
2.5mm 100 dia. galvanised mild steel tube, bent and continuous welded at joints as per assembly drawing. painted with 1 coat primer, and 1 coat final paint to Architects specification.
200x100x2.5mm galvanised mild steel gutter, on 100dia m.s. tube with water outlets at every junction.

all welding to be done off site prior to galvanising to prevent welding on site, which should be kept to a minimum.
200x200x10 mild steel plate support, fixed to upstand with M12 m.s. bolts.
50x50x2.5mm galvanised mild steel angle to form frame for mentis grating.
2.5mm 50dia roof support, welded on mild steel plate.
2.5mm g.m.s mentis grid ventilators to detail.
280x650 reinforced concrete ring beam, size to be confirmed by Engineer.
2.5mm 50dia roof support, welded on mild steel plate.
2.5mm 100 dia. galvanised mild steel tube, bent and continuous welded at joints as per assembly drawing. painted with 1 coat primer, and 1 coat final paint to Architects specification.
200x100x2.5mm galvanised mild steel gutter, on 100dia m.s. tube with water outlets at every junction.

22mm timber flooring fixed to 150x50 bearers with brass self tapping screws.

250mm reinforced concrete beam supporting the slab above, supported on 200dia reinforced concrete columns at maximum 4m intervals.

6mm mild steel bracket M8 rawl bolted to slab + M12 bolted to soft wood bearer.

200mm reinforced concrete slab supported on 200 dia columns at 4000cc to engineers detail.

300dia reinforced concrete columns to engineers detail.

IPE 200 continuous fillet welded to 12mm base plate.

50x15mm galvanised mild steel flat for vertical balustrade epoxied onto reinforced concrete slab edge, with 10dia studs.

10dia gms round, welded onto gms angle.

20dia galvanised mild steel round, welded onto 10dia round.

50x50x2 gms angle bolted to gms vertical flat.

50x50x2 gms flat to engineers detail.
- The centre for indigenous medicines. Ikhaya lemithi yesintu. Lehae lameriane yasethu.

6.700 US BEAM
7.350 TOP OF BEAM
detail '1'
framed clear corrugated sheeting.
refer to section A-A drawing ar/se/001

280x650 reinforced concrete ring beam, as per Engineer's detail.
250 cavity wall, outer face of the inner wall to be painted with bitumen paint.

300dia reinforced concrete columns to engineer's detail.
reinforced concrete footing to engineer's detail.
reinforced concrete pile foundation to engineer's detail.

60

steel doors to as specified elsewhere
detail '2'
refer to section A-A drawing ar/se/001
balcony 1:10
floor finish, power floated screed.

4.000 US SLAB
4.200 TOP OF SLAB
detail '3'
pile foundation 1:10
300dia reinforced concrete column, as per Engineer's detail.

ecobond pavers on compacted earth.
polymer bonded soil, ratios, 3 in 100.

2.5mm 50dia mild steel half round, welded to 50dia roof support.
2.5mm 100 dia. galvanised mild steel tube, bent and continuous welded at joints as per assembly drawing. Painted with 1 coat primer, and 1 coat final paint to Architect's specification.

All welding to be done off site prior to galvanising to prevent welding on site. If a need be to weld on site, prepare the surfaces well, finish off the welded area with 'coldgalv'.

Steel glazed doors to as specified elsewhere
detail '1'
refer to section A-A drawing ar/se/001

University of Pretoria ekt, Suikerbos NJ (2007)
University of Pretoria eet, Salopek M (2007)
In conclusion, the proposed Traditional Healers Centre incorporates the culture of traditional healing into an existing urban fabric, Mbombela.

The proposed Traditional Healers Centre allows for the de-mystification of traditional healing, as it becomes a part of daily urban life. Located on a site that acts as a movement link between different areas, the Centre gives prominence and a platform on which traditional healing occurs.

The provision of ancillary services such as a Creche and market on the site for the proposed Traditional Healers Centre, allows for a push towards the socio-economic upliftment of the area. As it acts as a catalyst for future development and helps to create a development within the area of Mbombela.

The proposed Traditional Healing Centre is a start to the re-development and the re-instatement of an urban environment truly owned by the community it serves, and integrated into greater Pretoria.

The architectural typology proposed in the Traditional Healing Centre highlights the diversity with which regeneration in the area of Mbombela can be approached. In the unique use of material, spatial considerations and the movement patterns proposed on site. A reflection and celebration of the diversity in culture and of the peoples within South Africa.

The Traditional Healing Centre as a destination point allows it to become a tourist attraction. For those interested in the alternative approach to Health Care and as a cultural precinct within Mbombela.
The Sustainable Building Assessment Tool (SBAT) has been designed to help evaluate the sustainability of buildings. This is done by assessing the performance of a building in relation to a number of economic, social and environmental criteria. The tool has been designed to be particularly appropriate for use in developing countries and therefore includes aspects such as the impact of the building on the local economy, as economic issues are often a priority.

In conclusion the building according to the outcomes and benchmarks of the SBAT in figure 1 is implemented and integrated into the construction environment.

In this thesis, the SBAT tool is used as: A way of ensuring that policies on sustainability are implemented and integrated into the construction environment.

In conclusion the building according to the outcomes and benchmarks of the SBAT in figure 1 is sustainable, it fulfills all the required standards set by the tool to assess the building.

The SBAT tool is used in design stages of a new building. It is designed to encourage the development of more sustainable buildings by enabling different options to be evaluated rapidly and compared. The tool also enables a building to be ranked in terms of its sustainability. This enables buildings to be compared to each other and to benchmarks.

The SBAT tool is used as a way of ensuring that policies on sustainability are implemented and integrated into the construction environment.

In conclusion the building according to the outcomes and benchmarks of the SBAT in figure 1 is sustainable, it fulfills all the required standards set by the tool to assess the building.

This is done through careful planning in which design decisions, material specifications and so on are carefully evaluated in terms of their long term impact on the economic, social and environmental sustainability of a society and the natural environment.
### Building Performance - Social

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Indicative performance measure</th>
<th>Measured Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO1</td>
<td>Occupied Comfort</td>
<td>6.0</td>
</tr>
<tr>
<td>SO1.1</td>
<td>Daylighting % of occupied spaces that are within 2H from window, where H is the height of the window or where there is good daylight from skylights</td>
<td>0.8</td>
</tr>
<tr>
<td>SO1.2</td>
<td>Ventilation % of occupied spaces have equivalent opening window area equivalent to 10% of floor area or adequate mechanical system, with upploded air source</td>
<td>0.8</td>
</tr>
<tr>
<td>SO1.3</td>
<td>Noise % of occupied spaces where ventilation/airerebservation/noise does not impinge on normal conversation</td>
<td>30/50A</td>
</tr>
<tr>
<td>SO1.5</td>
<td>Thermal comfort Termperature of occupied space does not exceed 28 or go below 16C for less than 5 days per year (100%)</td>
<td>0.8</td>
</tr>
<tr>
<td>SO1.5</td>
<td>Views % of occupied space that is from an external window (not a skylight) with a view</td>
<td>0.8</td>
</tr>
</tbody>
</table>

### Site Environment

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
<th>Examples of quantified performance indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO2.1</td>
<td>Public Transport % of building (a) within 400m of disabled accessible (20%) and affordable (30%) public transport</td>
<td>0.9</td>
</tr>
<tr>
<td>SO2.2</td>
<td>Information Comprehensive signage provided (50%), Signage high contrast, clear, print increase in appropriate locations and language (a) use of undestandable symbols / marked reception at entrance (all inclusive)</td>
<td>0.8</td>
</tr>
<tr>
<td>SO2.3</td>
<td>Space % of occupied spaces that are adequate for the space intended (all inclusive)</td>
<td>0.8</td>
</tr>
<tr>
<td>SO2.4</td>
<td>Toilets % of occupied spaces with fully accessible toilets within 50m along easily accessible route</td>
<td>0.8</td>
</tr>
<tr>
<td>SO2.5</td>
<td>Furniture % of occupied spaces that have a properly designed furniture / reception desk, which can comfortably accommodate wheelchair users (all inclusive)</td>
<td>0.8</td>
</tr>
</tbody>
</table>

### Access to Facilities

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
<th>Examples of quantified performance indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO3</td>
<td>All users can walk (100%) / use public transport (50%) to get to their children’s schools and churches</td>
<td>0.9</td>
</tr>
<tr>
<td>SO3.2</td>
<td>Banking All users can walk (100%) / use public transport (50%) to get to their banks and cashiers</td>
<td>0.9</td>
</tr>
<tr>
<td>SO3.3</td>
<td>Communication All users can walk (100%) / use public transport (50%) to get to their communication facilities (post/telephone/internet)</td>
<td>0.9</td>
</tr>
<tr>
<td>SO3.4</td>
<td>Accommodation All users can walk (100%) / use public transport (50%) to get to their accommodation facilities (postal/phoneline/internet)</td>
<td>0.9</td>
</tr>
<tr>
<td>SO3.5</td>
<td>All users can walk (100%) / use public transport (50%) to get to their medical facilities</td>
<td>0.9</td>
</tr>
</tbody>
</table>

### Participation & Control

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
<th>Examples of quantified performance indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO4</td>
<td>Control of occupied space able to control their thermal environment (adjacent to openable windows/thermal control)</td>
<td>0.9</td>
</tr>
<tr>
<td>SO4.2</td>
<td>Lighting control % of occupied spaces able to control their light (adjacent to controlable blinds etc/local lighting control)</td>
<td>0.9</td>
</tr>
<tr>
<td>SO4.3</td>
<td>Social informal meeting spaces (parks / staff centres / public facilities) % of occupied spaces within 400m (100%)</td>
<td>0.9</td>
</tr>
<tr>
<td>SO4.4</td>
<td>Sharing facilities % of occupied spaces within 400m that share facilities with other users (organisations on a weekly basis (100%)</td>
<td>0.9</td>
</tr>
<tr>
<td>SO4.5</td>
<td>Disaster response Plan for all types of emergencies (all inclusive)</td>
<td>0.9</td>
</tr>
</tbody>
</table>

### Health and Safety

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
<th>Examples of quantified performance indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO5.1</td>
<td>Education Two percent or more spaces/facilities available for education (seminar rooms / meeting / libraries) per occupied space (7%)</td>
<td>0.9</td>
</tr>
<tr>
<td>SO5.2</td>
<td>Safety All occupied spaces % of occupied spaces that all users used the stairs in and around building will fill (25%), all stairs and elevators visually supervised (25%), safety measures and access controls</td>
<td>0.8</td>
</tr>
<tr>
<td>SO5.3</td>
<td>Awareness % of users who can access information on health &amp; safety issues (a HAV/ADO), training and employment opportunities</td>
<td>0.8</td>
</tr>
<tr>
<td>SO5.4</td>
<td>Materials All materials/components used have no negative effects on indoor air quality (100%)</td>
<td>0.8</td>
</tr>
<tr>
<td>SO5.5</td>
<td>Process all accidents and incidents are reported (all inclusive)</td>
<td>0.8</td>
</tr>
</tbody>
</table>
### Building Performance - Economic

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Indicative performance measures</th>
<th>Measured</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC1.1</td>
<td>Local contractors % of value of the building constructed by local (within 50km) employees or contractors</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC1.2</td>
<td>Local contractors % of materials (sand, bricks, blocks, roofing material) sourced from within 50km</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC1.3</td>
<td>Local contractors % of components (windows, doors etc) made locally in the country</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC1.4</td>
<td>Local contractors % of furniture and fittings made locally in the country</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC1.5</td>
<td>Maintenance % of maintenance and repairs by value that can, and are undertaken, by local contractors (within 50km)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC2.1</td>
<td>Capacity % of building used on a daily basis (actual number of users / number of users at full capacity)*100</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EC2.2</td>
<td>Capacity % of time building is occupied and used (actual average number of hours used / all potential hours building could be used /24)*100</td>
<td>50</td>
<td>0.5</td>
</tr>
<tr>
<td>EC2.3</td>
<td>Space per occupant Space provision per user not more than 10% above national average for building type (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC2.4</td>
<td>Communication Building has access to internet and telephone (100%), telephone only (50%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC2.5</td>
<td>Materials &amp; Components Building design coordinated with material / component sizes in order to minimise wastage. Walls (50%), Roof and floors (50%).</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC3.1</td>
<td>Vertical heights % of spaces that have a floor to ceiling height of 3000mm or more</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EC3.2</td>
<td>External space Design facilitates flexible external space use (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC3.3</td>
<td>Internal partition Non loadbearing internal partitions can be easily adapted (loose partitioning) (100%), (50%), Masonry (50%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC3.4</td>
<td>Modular planning Building with modular structure, envelope (fenestration) &amp; services allowing easy internal adaptation (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC3.5</td>
<td>Furniture Modular, limited variety furniture - can be easily configured for different uses (100%)</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EC4.1</td>
<td>Induction Building cost not more than fifteen % above national average building costs for the building type (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC4.2</td>
<td>Consumption &amp; waste % of users exposed on a monthly basis to building performance figures (water (25%), electricity (25%), waste (25%),</td>
<td>80</td>
<td>0.8</td>
</tr>
<tr>
<td>EC4.3</td>
<td>Maintenance &amp; Cleaning % of maintenance and repairs by value that can, and are undertaken, by local contractors (within 50km)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC5.1</td>
<td>Capital costs: Local need Five percent capital cost allocated to address urgent local issues (employment, training etc) during construction process</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC5.2</td>
<td>Procurement Capital cost not more than 15% above national average building costs for the building type (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC5.3</td>
<td>Procurement Capital cost not more than 15% above national average building costs for the building type (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC5.4</td>
<td>Technology Existing buildings which are more energy efficient.</td>
<td>100</td>
<td>1.0</td>
</tr>
<tr>
<td>EC5.5</td>
<td>Existing buildings Building costs not more than fifteen % above national average building costs for the building type (100%)</td>
<td>100</td>
<td>1.0</td>
</tr>
</tbody>
</table>

#### Criteria Notes

<table>
<thead>
<tr>
<th>Reference</th>
<th>Criteria</th>
<th>Description</th>
<th>Examples of quantified performance indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECT</td>
<td>Local Economy</td>
<td>The construction and management of buildings can have a major impact on the economy of an area.</td>
<td>The centre for indigenous medicines - ikhaya lemithi yesintu - lehae lameriane yasethu.</td>
</tr>
<tr>
<td>EC2</td>
<td>Efficiency</td>
<td>Buildings cost money and make use of resources whether they are used or not.</td>
<td>Buildings cost money and make use of resources whether they are used or not.</td>
</tr>
<tr>
<td>EC3</td>
<td>Adaptable &amp; Flexible</td>
<td>Most buildings can have a life span of at least 40 years.</td>
<td>Most buildings can have a life span of at least 40 years.</td>
</tr>
<tr>
<td>EC4</td>
<td>Ongoing Costs</td>
<td>Buildings cost money to operate.</td>
<td>Buildings cost money to operate.</td>
</tr>
<tr>
<td>EC5</td>
<td>Capital Costs</td>
<td>Buildings are generally one of the most valuable assets that people, and organisations and governments own.</td>
<td>Buildings are generally one of the most valuable assets that people, and organisations and governments own.</td>
</tr>
</tbody>
</table>
### Site Buildings

Site Buildings have a footprint and a size that take up space that could otherwise be occupied by natural ecosystems which contribute to sustainability by helping create and maintain an environment that supports sustainability through maintaining existing ecosystems and avoiding the environmental impacts associated with for disposal of storm water and runoff.

Waste Raw materials and new components used in buildings consume resources and energy in their manufacture and use. Using less energy or using renewable energy in buildings therefore can make a substantial contribution to sustainability.

Reliable energy is used to power Site Buildings and in the activities accommodated and reducing waste by recycling and reusing materials and parts within the building. Reducing the use of non-performing materials and new components in buildings and in the activities accommodated and replacing them by reusable and recyclable components is an efficient way of reducing overall energy consumption and material consumption.

### Water

Buildings consume a large proportion of all energy produced. Conventional energy production is responsible for making a large contribution to environmental damage and non-renewable resource depletion. Using less energy or using renewable energy in buildings therefore can make a substantial contribution to sustainability.

Components in buildings and in the activities accommodated and reducing waste by recycling and reusing materials and parts within the building. Reducing the use of non-performing materials and new components in buildings and in the activities accommodated and replacing them by reusable and recyclable components is an efficient way of reducing overall energy consumption and material consumption.

### Energy

Energy saving and efficient energy use in buildings is important. Buildings need to cater for the well-being, development, health and safety of the people that use them. Buildings should be designed to accommodate and be accessible to everyone, or specially designed for vulnerable groups. Buildings need to cater for the well-being, development, health and safety of the people that use them. Buildings need to cater for the well-being, development, health and safety of the people that use them. Buildings need to cater for the well-being, development, health and safety of the people that use them.

### Reference Criteria Description

<table>
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<tr>
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<th>Description</th>
<th>Examples of quantified performance indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN1 Water</td>
<td>The large-scale provision of conventional water supply has many environmental implications. Water needs to be stored (sometimes taking up large areas of valuable land and disturbing natural drainage patterns with associated problems from erosion etc). It also needs to be pumped (using energy) through a large network of pipes (that need to be maintained and repaired). Having delivered the water over long distances, parallel efforts are then required to dispose of the excess after it is used in the buildings. Reducing water consumption supports sustainability by reducing the environmental impact required to deliver water, and dispose of this after use. Maintaining natural ground water systems also supports sustainability through maintaining existing ecosystems and avoiding the environmental impacts associated with for disposal of storm water and runoff.</td>
<td></td>
</tr>
<tr>
<td>EN2 Energy</td>
<td>Buildings consume a large proportion of all energy produced. Conventional energy production is responsible for making a large contribution to environmental damage and non-renewable resource depletion. Using less energy or using renewable energy in buildings therefore can make a substantial contribution to sustainability.</td>
<td></td>
</tr>
<tr>
<td>EN3 Waste</td>
<td>Waste Materials and new components used in buildings consume resources and energy in their manufacture and processes. Buildings accommodate activities that consume large amounts of resources and products and produce large amounts of waste. Reducing the use of new components and old materials in buildings and in the activities accommodated and reducing waste by recycling and reusing materials and parts within the building. Reducing the use of non-performing materials and new components in buildings and in the activities accommodated and replacing them by reusable and recyclable components is an efficient way of reducing overall energy consumption and material consumption.</td>
<td></td>
</tr>
<tr>
<td>SN1 Site</td>
<td>Buildings have a footprint and a size that take up space that could otherwise be occupied by natural ecosystems which contribute to sustainability by helping create and maintain an environment that supports sustainability. By, for instance, controlling the carbon dioxide and oxygen balance and maintaining temperatures within a limited range. Buildings can support sustainability by, limiting development to sites that already have been disturbed, and working with nature by including aspects of natural ecosystems within the development.</td>
<td></td>
</tr>
<tr>
<td>EM1 Materials &amp; Components</td>
<td>The construction of buildings usually requires large quantities of materials and components. These may require large amounts of energy to manufacture. Their manufacture may also requires processes and steps that are harmful to the environment and consume non-renewable resources. It is therefore important to carefully select materials and components and construction methods.</td>
<td></td>
</tr>
</tbody>
</table>
Cortez, J and Cortez, M, 2000, Designing Sustainable Communities, Island Press, Washington DC.


the centre for indigenous medicines.

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University of Pretoria et al. [ailemo M (2017)]

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University of Pretoria, Gables 51 (2007)

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the centre for indigenous medicines. ikhaya lemithi yesintu. lehae lameriane yasethu. the centre for indigenous medicines.

University of Pretoria, Selapa Mill (2007)