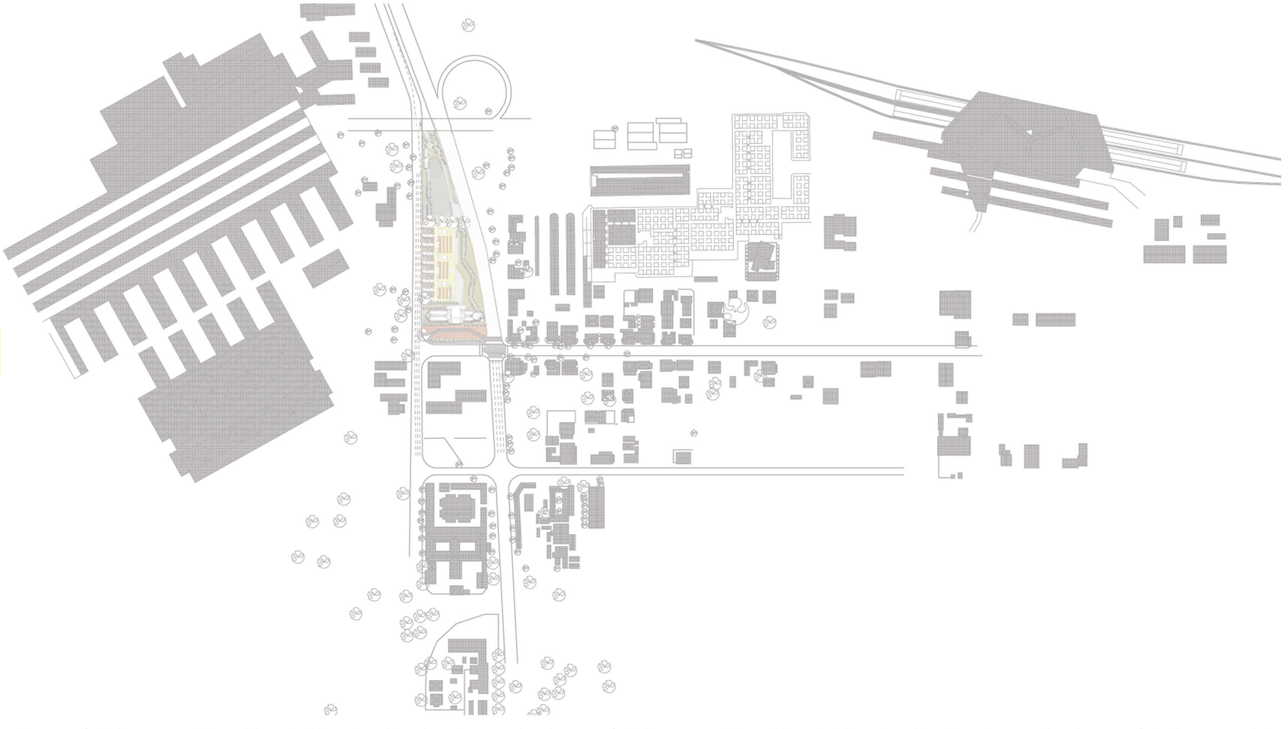

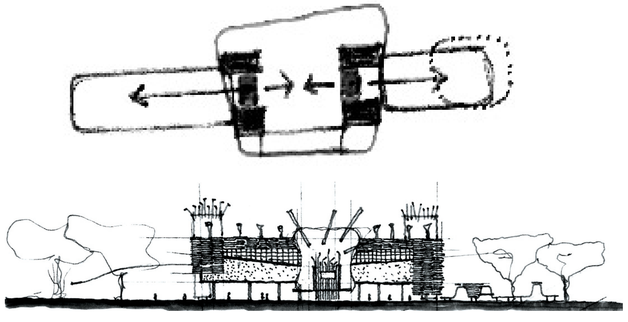

THE RESEARCH CENTRE FOR INDIGENOUS TRADITIONAL MEDICINES

By Mpho Selepe

Submitted in fulfillment of part of the requirements for the degree Magister in Architecture (Professional) in the Faculty of Engineering, Built Environment and Information Technology, University of Pretoria, South Africa

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Study Leader : Professor Karel Bakker

acknoledgements

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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1 Introduction

THE RESEARCH CENTRE FOR INDIGENOUS TRADITIONAL MEDICINES
PRETORIA, MARABASTAD

Intention of the thesis

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 to various forms of indigenous medicine – if they involve the use of herbal medicine animal parts and/or minerals – and non-medication therapies – if they are carried out primarily without the use of medication”. (WHO report 2002-2005)

According to the WHO, 80% of South Africans use traditional medicines for healing purposes. Even though considered to be of substandard or backwardness nature.

Every 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 able to absorb/allow for transformation of ill perceptions about traditional health practitioners. These perceptions are also reflected by the manner through which the “historical & current” urban fabric manifests itself, for example:

- Facilities for such activities are unavailable and when built they become artifacts of “cultural stun /disbelieve/ amusement”.

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 attempt to De-mystify the theories and assumptions that cloak the traditional healing culture in South Africa. To address the negative conations from a Western stance those correlate this practice with witchcraft, barbaric rituals and a sense of primitiveness. This view taken because of misrepresentation combined with the secrecy that follows traditional healing; irrespective of this outlook, it has remained a prominent characteristic in a lot of South Africans way of life and credence.

The proposal, at large, is intended to, and should not be view as competition to Western medicinal practices 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.
- De-mystify bad perceptions about traditional healing as a common medicinal practice.
- Create a platform on which the importance and use of traditional healing is maximized.
- Socially and economically uplift those that practice and embrace traditional healing.
- Contribute positively towards the urban and architectural developments of Marabastad.
- Distinguish Marabastad as a tourist and unique cultural destination.
- Address the issue of squatters, and hawkers within the area.

BRIEF DEVELOPMENT

To formalize this subject would be to lose the essence of traditional healing. In an attempt to promote and address the need for traditional healing in today’s society within an urban context, it becomes apparent that a recreation of traditional healing and/or its values becomes a contradiction of sorts. The provision of a platform however, on which the values, practices and beliefs of traditional healing are practiced becomes a more appropriate attempt to recognize a part of South African society that has long been dogged with negative stigmatization.

PROJECT BACKGROUND

The project is located within the inner of Pretoria. A part of the city that has the highest demographic that practice and believe in traditional healing. With a rich historic and cultural background, the area of Marabastad identified as a possible platform on which traditional healing could play out, grow and become acknowledged as a significant facet of South African tradition and culture.

For over a hundred years, the Marabastad Area has been a neglected corner of the Pretoria Inner City, having been allocated to the Black, Asian and Coloured communities under a succession of laws characterized by discriminatory approaches to land tenure. The Community Development Act of 1966 has effectively frozen all development in the area for the past thirty years, and as a result, the suburb has degraded into a slum, riddled with problems of crime, squatting, unregulated trading, inadequate services, disintegrated community life and numerous social problems.

The new national constitution, adopted in 1996, has finally cleared the path to redress past injustices, and embark on an urban up-liftment programme in Marabastad that truly has the interest of the hitherto ill-fated community of the suburb at heart. (The Integrated Urban Framework Document, 1997) . The purpose of this thesis is to contribute to the existing urban framework plans in the up-liftment and development of the area, by addressing an important part of life and culture within the area of Marabastad. A possible site for this is located in the Northwest area of Marabastad.

introduction

introduction

THE SITE

The site is a gateway into the Tshwane CBD for the masses of people from the outlying areas. The site is positioned in such a way that its the first landmark encountered when entering and leaving Marabastad. located in the North-west part of Marabstad, bordered by two busy high-speed highways. DF Malan East that's incoming to Pretoria CDB, and DF Malan West that exits from the Pretoria CBD towards Pretoria North and outlying areas. This site is currently zoned as a PUBLIC SPACE and/or PARK, and is currently used as a truck-drivers resting place alongside the sale of second hand tyres, for locality refer to sketch.....

As the pigments are but the vehicle of painting, so is building but the vehicle of architecture, which is the thought behind form embodied and realized for the purpose of its manifestation and transmission. Architecture, then, interpenetrates building, not for satisfaction of the simple needs for the body, but the complex one of the intellect. (Architecture Mysticism and Myth, 1974) Traditional healers are but the vehicles that brought about life, continuity and well being within indigenous culture. Not recognized as vehicles through which the modern day culture carried through and evolves the role of traditional healering is still an important one today and dogged 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 this business sector. Informal trade forms an important part of Marabastad trading activities, but its current unregulated nature causes a number of problems:

• Informal traditional medicines traders are struggling to operate properly do a lack of facilities

• The competition with rent paying formal traders that causes friction

• The lack of facilities, leads to unsanitary conditions for the hawkers and traditional healers. These include a lack of running water for food outlets, non-existent refuse facilities and or storage.

• Uncontrolled hawking is a negative urban influence, as it brings with it over crowding and invasion of "sensitive" urban areas.

Infrastructural/bio-physical problems:

- The negative visual impact with the current use of the site.
- Vegetation loss

Economical problems:

- Lack of employment opportunities
- Employment opportunities for local, unskilled and skilled individuals

Social problems:

- The uncontrolled influx of people into Marabastad. Especially the problem of illegal immigrants.
- HIV Aids
- Inadequate social facilities and services within Marabastad.
- Health and safety

DESIGN POSITIVES:

- De-mystification of traditional healers
- The proposed centre will allow the informal sector to recognition as a significant contributor to the economy.
- The traditional healing centre is a way in which the issue of job creation is addressed, this because of its association with various other commercial activities like informal trade and hawking.
- The proposed traditional healing centre can serve as a first to commercial activity in the area of Marabastad.
- Occasionally formal and informal traders in Marabastad work together in a symbiotic relationship. For instance, the former (the supplier, the shop owner) acts a supplier to the latter (the buyer, the tenant), in terms of space rentals.
- 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.
- The proposed traditional healing centre, can act as a catalyst in addressing the issues that are also currently pertaining to the formal trade existing in Marabastad, that include exposure and organization.

CLIENTS

Non-place based actors:

1. National Department of Health
2. The Institute for Traditional Medicines
3. The Medical Research Council
4. The Council for Scientific and Industrial Research
5. World Health Organization

National Department of Health, in conjunction with, The Institute for African Traditional Medicines, Medical Research Council (MRC) and the Council for Scientific and Industrial Research (CSIR)

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

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 African 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 in partnership with the Medical Research Council (MRC) and the World Health Organization (WHO) and various steakholders.

Place based actors:

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

2 Locality and context analysis

site context

location within the greater Tshwane

site context

fig.1

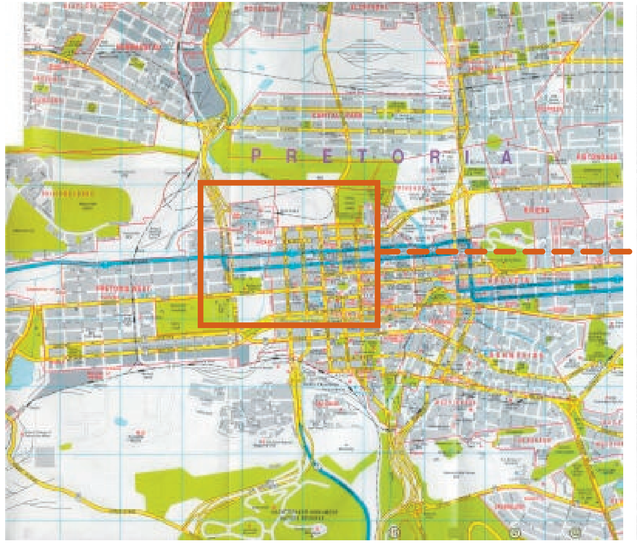
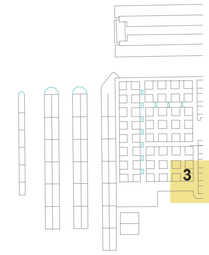


fig.2

fig.3



Tshwane — Marabastad — The proposed site

As a gathering, and trading space within Marabastad this market becomes a focal and destination point, allows for growth development within Marabastad. The location of the proposed site between two such focui, the fruit and the indoor market means that the proposed Traditional healers centre becomes a catalyst that draws these two nuclei together in a development corridor.

BAZAAR STREET

FRUIT MARKET

BUS STATION

INDOOR MARKET

THE PROPOSED SITE

BELLE OMBRE STATION

existing transport interchange. A multi model transport and informal trading hub, the bus and the Belle Ombre Railway stations facilitates pedestrian movement on and off the proposed adjacent site.

BOOM STREET

Trading along Boom street leading to Tshwane CBD.

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

DF MALAN

DF MALAN

site context

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

site context

figure ground study.

site context

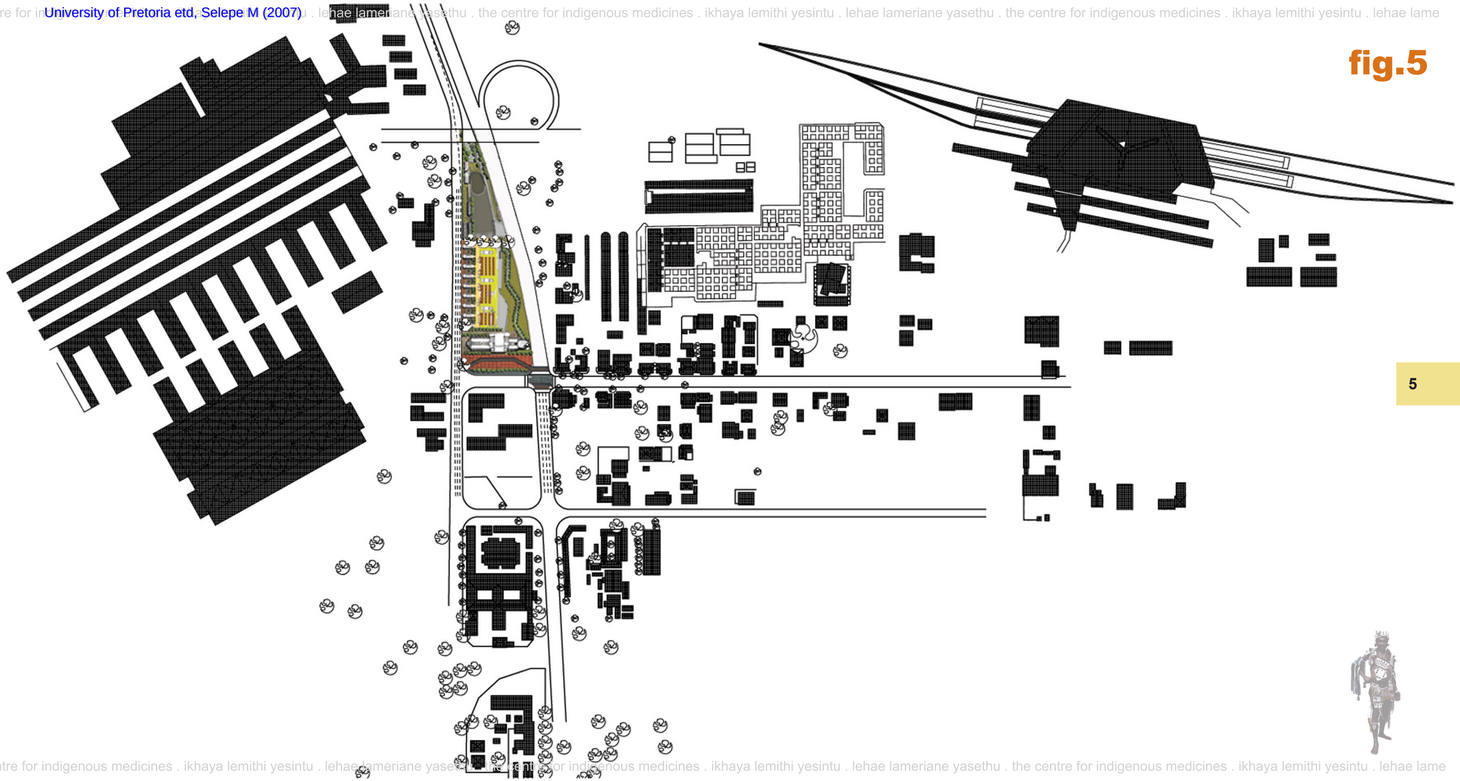
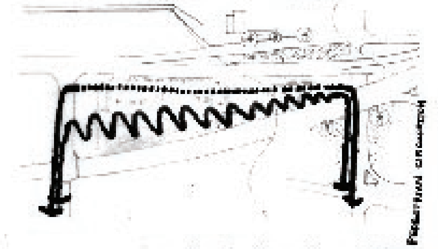


fig.5

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

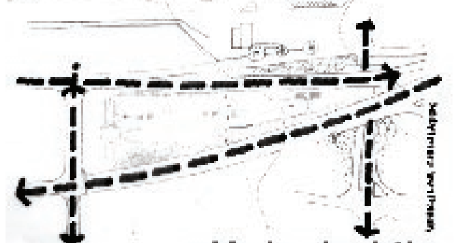
the site analysis

SITE USE



pedestrian circulation
thru the site

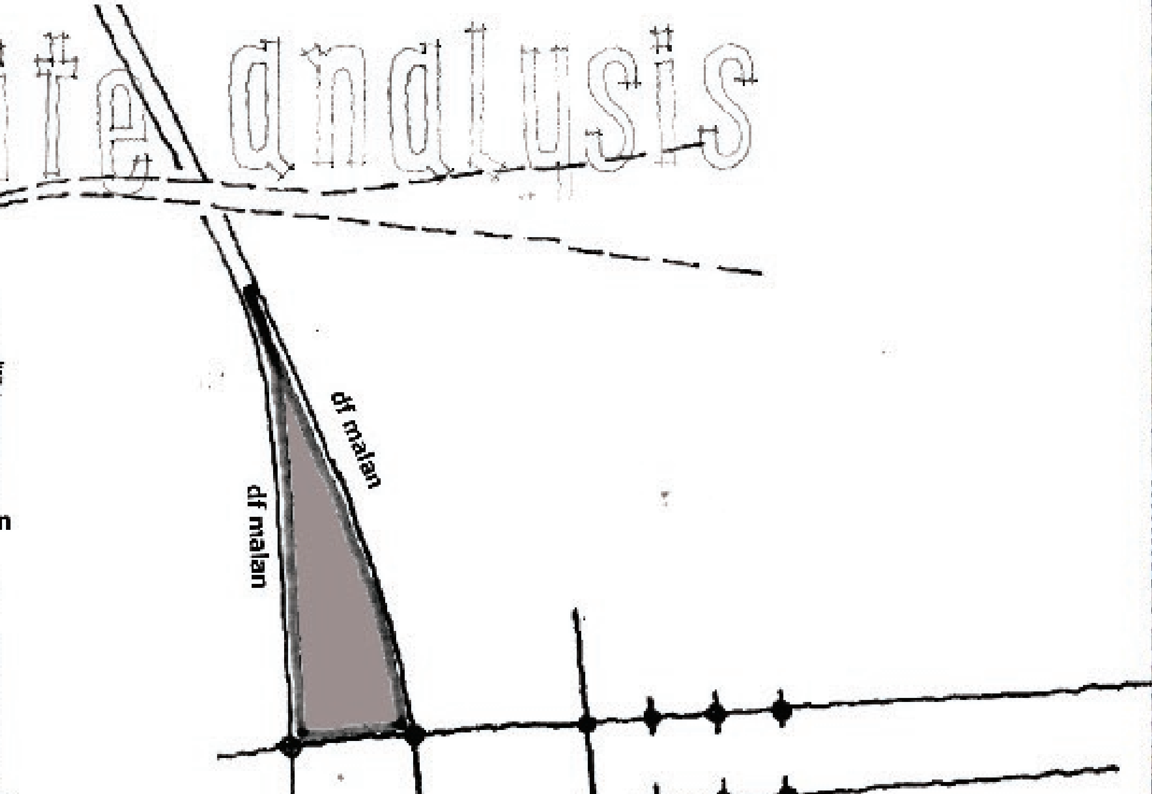
pedestrian circulation
public through fare.



vehicular circulation
traffic movement aound the site.

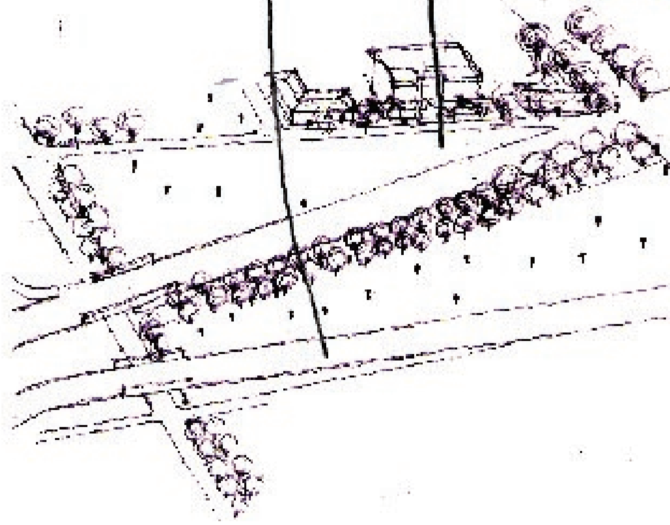
pedestrian access
entrance points to site

traffic calming
slowing down cars



VEGETATION

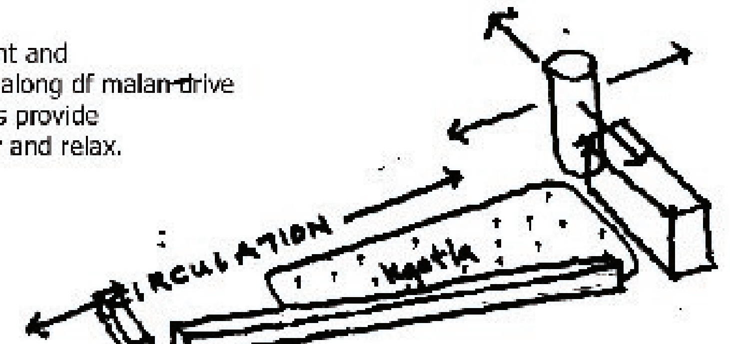
trees shade public movement and the busy traffic movements along df malan drive and where planted in groves provide spaces where people gather and relax.

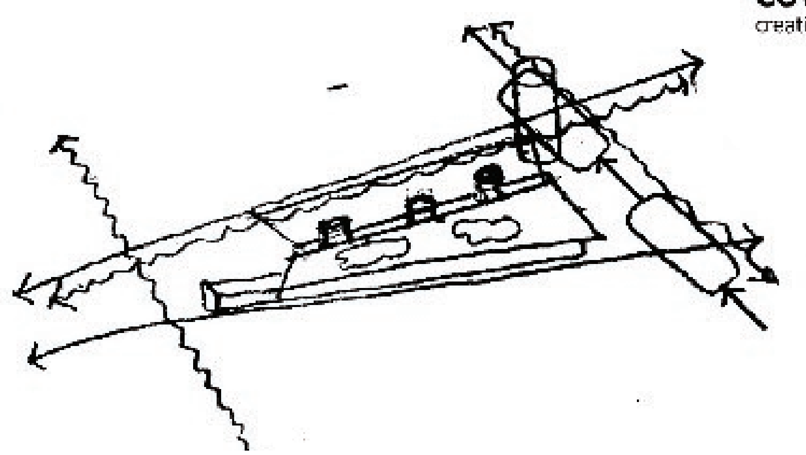


THE SITE

a logic for organisation.
all major public functions should be easily identifiable and accesible from a secure entrances.

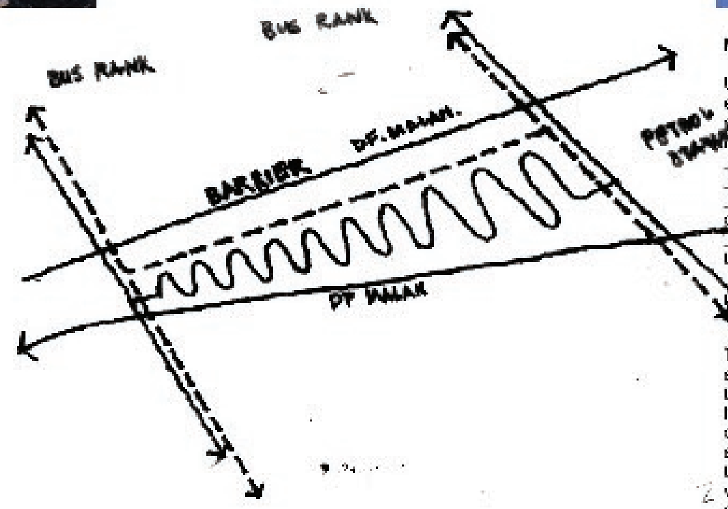
vegetation provides effective defination of space and its quality.

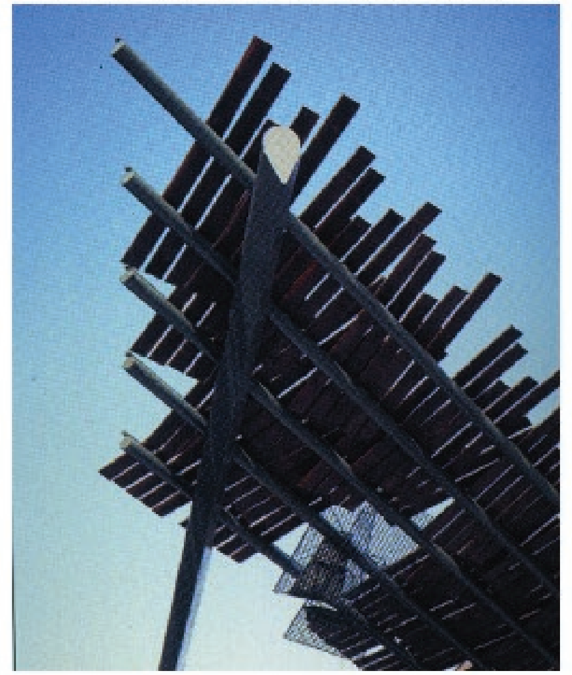




COVERINGS

creating sheltered



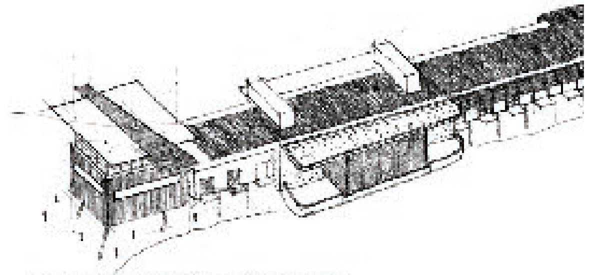


MAKING CONNECTIONS: Towards a centre for traditional healers

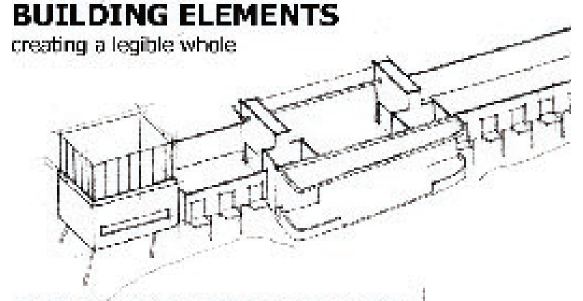
Unity in diversity the individual, the collective, we must become a unified people, enriched by our diversity, expressing our cultural differences. 'South Africa's History is studded with both great tragedy and celebration. Acts of immense cruelty have been committed by people against their fellow human beings, as have extraordinary incidents of compassion and sacrifice ..
_the centre is communal building, and it should reflect the diverseness of the people that will be utilising it.
_it should reflect the cultural richness of people and the rituals they perform day to day.
_it should express the identity, autonomy and dignity of the individual within the overiding strength of the collective.
_it should reflect the relationship between the people, and that pre-existed them the land and its resources the climate, culture and its products.
_the existing site qualities and characteristics, land form views, climate surrounding buildings on the site. provide the logics for the design which in turn amplifies the qualities and heightens the experience of the healing place

The Inner City already comprises a number of cultural and heritage assets, and by enhancing, expanding and elevating these aspects of the city, it will be possible to carve out a strong tourism niche for Tshwane that can be marketed nationally and internationally as a notable tourism destination. The term "culture" have many definitions from the idea of culture "as a way of life" to a description of art forms such as music or theatre. Culture is in essence about people their lives and the way in which they express themselves, and these aspects should be more prominent and celebrated in the Inner City. The Cultural City vision does therefore not only relate to buildings and places, but also to the appearance of the environment in terms of vibrancy, colour, texture, and the way in which the Inner City lends itself to both formal celebrations and events and the celebration of humanity in every day life.

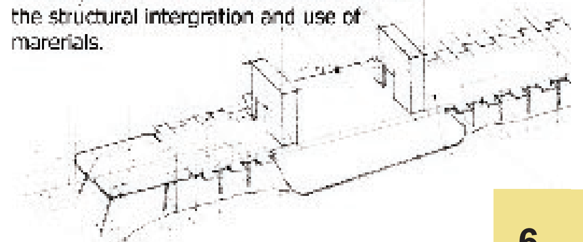
BUILDING ELEMENTS
creating a legible whole



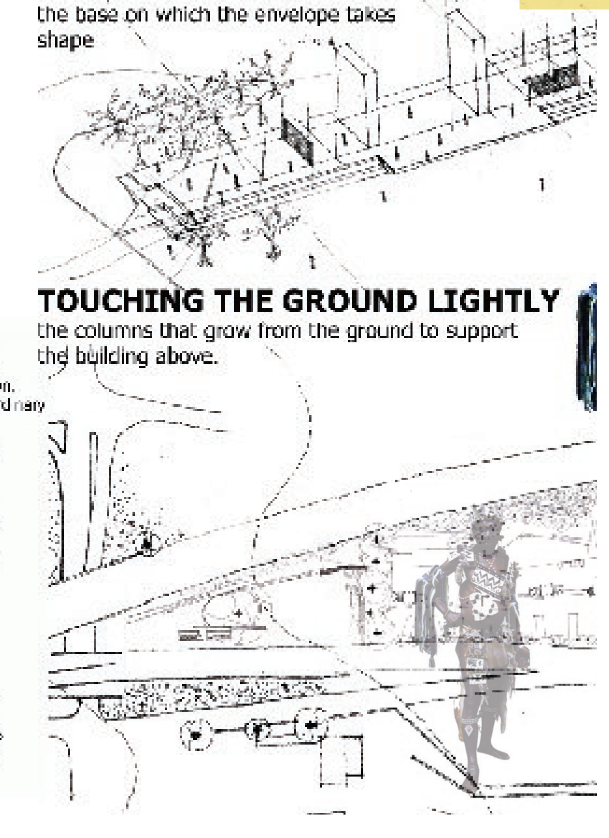
THE BUILDING ENVELOPE
the structural intergration and use of materials.



THE BUILDING PLATFORM
the base on which the envelope takes shape



TOUCHING THE GROUND LIGHTLY
the columns that grow from the ground to support the building above.



context analysis

Location and accessibility and site use

site context

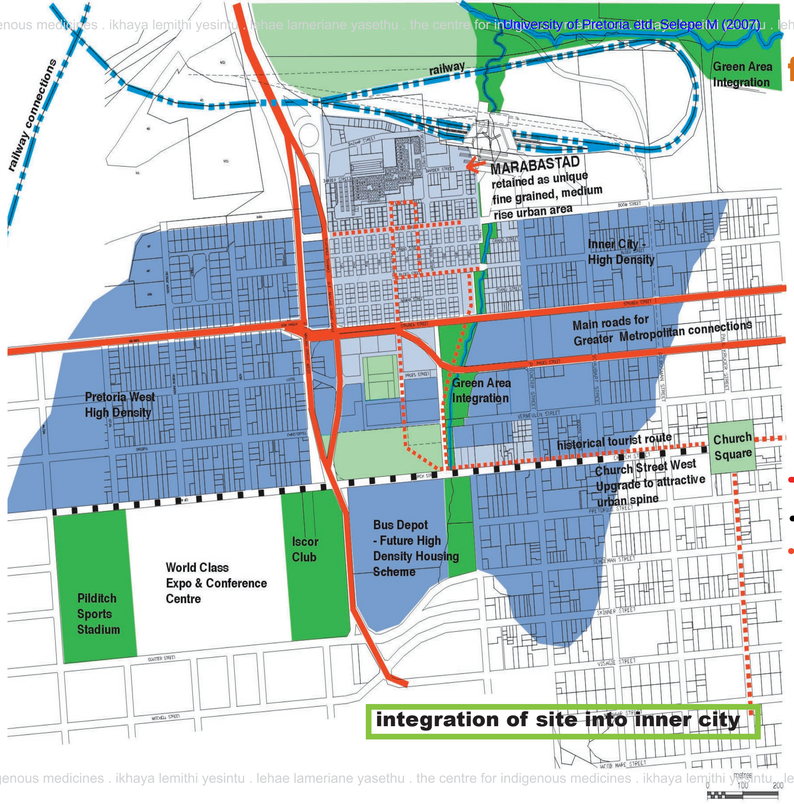
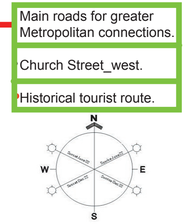


fig.6



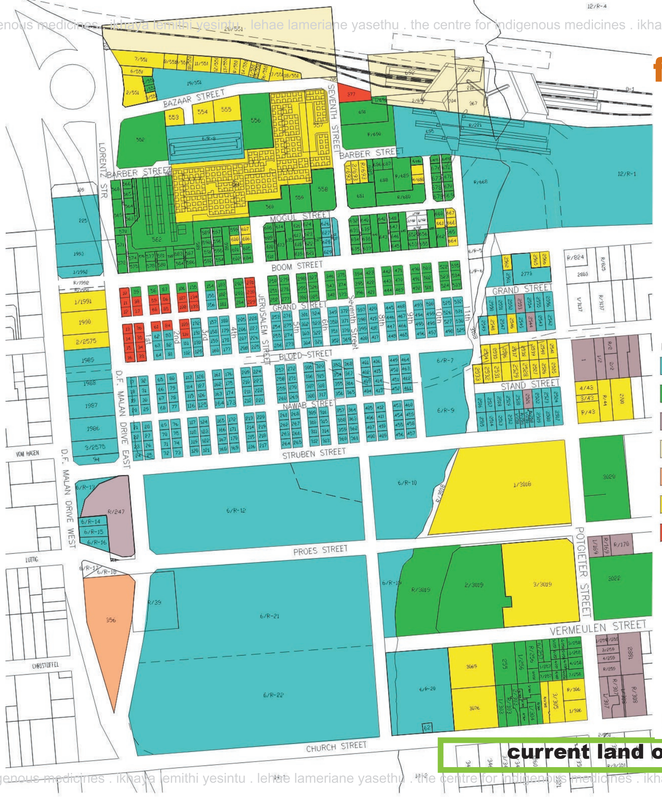
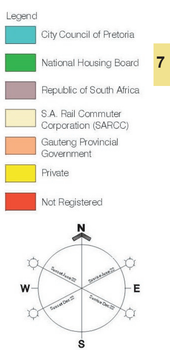


fig.7



current land ownership

context analysis

site context

Physical Dislocation

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

To the east the canalized Steenhoven Spruit and tracts of vacant land.

To the north the successive barriers of the railway line, the sewage farm, the Apies River and the Daspoort 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.

Social Dislocation

The respective communities within Marabastad have, since the origins of the suburbs, been marginalized. 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 slum, and it is shunned by most of Greater Pretoria. The traders survive mostly on the patronage of the Black population, many of whom pass through Marabastad, today a major public transportation node, to outlying regions. From a social point of view Marabastad remains marginalized within the Inner City.

fig.8

history

1934

The historic section through the site, the site was designated for residential housing.1912 saw the first resettlement out of the Marabastad area, when the Pretoria Town Council started to move the residents of Old Marabastad to a township initially called New Location, but later in 1925 formally proclaimed as a location under the name Bantule, situated to the northwest of Marabastad on the grounds now occupied by the Technikon Pretoria campus. The last of the dwellings of Old Marabastad were demolished in 1918, following the 1913 Natives Land Act of the Transvaal.

1965

sports grounds

boy's school

church

girl's school

primary school

current

current

2006 proposed

fig.9

EXISTING URBAN FABRIC

Marabastad had always been characterized by a fine-grained urban fabric, which was the direct result of the relatively small stands (248m²) grouped into city blocks of around six to eight stands each, strung 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 closest to Bloed Street, however, badly eroded. The ban on 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 this area, and will blend in with the and complement the existing fabric.

The zone 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 Proes Street, which formerly housed the municipal compounds, has also been demolished and is vacant land except for a shopping development between Steenhoven Spruit and Potgieter Street in the west, and a motor service facility on the corner of Struben and 7th Streets.

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.

These include the Maraba Shopping Centre inside the northern Asiatic Bazaar, the Belle Ombre railway station and adjacent bus-and shopping facilities on the northern edge, and the Kruger Park high-rise social housing block on the south-eastern edge of Marabastad. These have a detrimental effect on the character of the area, but must be accepted as fixtures.

In summary the urban fabric of Marabastad reflects extreme contrasts, from the intimate scale of the original fine-grained environment, over large tracts of wasteland to harsh structures of oversized mass

The ASIASTIC BAZAAR PRECINCT

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

The area comprises predominantly retail and wholesale outlets and vacant, undeveloped pieces of land, with limited entertainment and religious activities. The western part of this area formerly housed schools, but has now been isolated from the Asiatic Bazaar, essentially forming a traffic island been D F Malan Drive, East and –West, containing a filling station, some government buildings and vacant land.

Typical corner in Asiatic Bazaar Area

This area contains the following main elements:

i. **Maraba Shopping Complex:**

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.

ii. Boom Street

Boom Street is the historic east-west shopping street in this part of town with shops on both sides of the street for the full length of the Asiatic Bazaar.

iii. Indian Retail Fruit and Vegetable Market

The Indian Retail Fruit and Vegetable Market is located on the south-western corner of Maraba Shopping Complex, with a parking facility immediately west of it. It is possibly the only shopping activity that draws a recognized white clientele into the Asiatic Bazaar because of its access from D F Malan Drive, and isolation of the parking facility from the Maraba Centre.

iv. Bus Depot

The PUTCO bus depot is located in the southern part of the Asiatic Bazaar, between Bloed, Struben and 7th Streets.

THE BELLE OMBRE STATION PRECINCT

The area directly east of the township Asiatic Bazaar Extension 1 up to Boom Street, comprises the Belle Ombre Station precinct, railway lines, bus terminus and Boom Street taxi rank.

The Belle Ombre Station acts as a collecting 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.

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.

A pedestrian bridge with a stair from 11th Street allows commuters from Potgieter Street to gain access to the station concourse.

context

natural environment

environmental response

In the ISDN (1998) for Marabastad report,

Natural environment:

slope: Marabastad has a gentle slope from the south-west to the north-east at about 1in 36, this poses good and bad constrains 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 is plays a vital role in distinguishing between different thresholds.
iii. Storm water drainage will gravitate easily to a point of catchment.

.

climate: Marabastad is characterisesed by generally high temperatures, relatively high local humidity frequently combines with high afternoon temperatures in summer. Rainfall is seasonal (summer rains) with and 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 use passive ventilation generally, on generally high temperatures where passive ventilation is not efficient, air-conditioning will be used.
ii. Rainfall is adressed with the sloping corrugated roof to disperse the water, and the utilization of rain water downpipes at efficient points to dispose of the water evenly throughout the site

fig.10

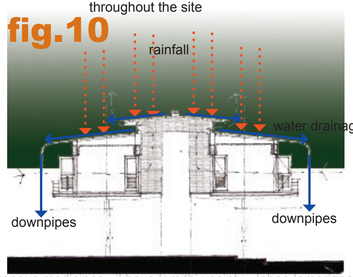
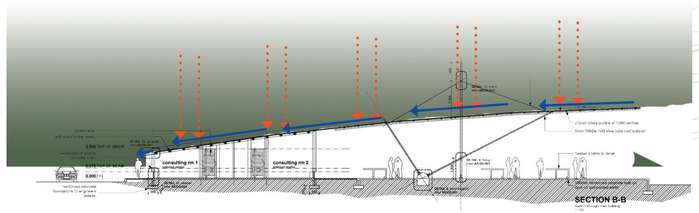
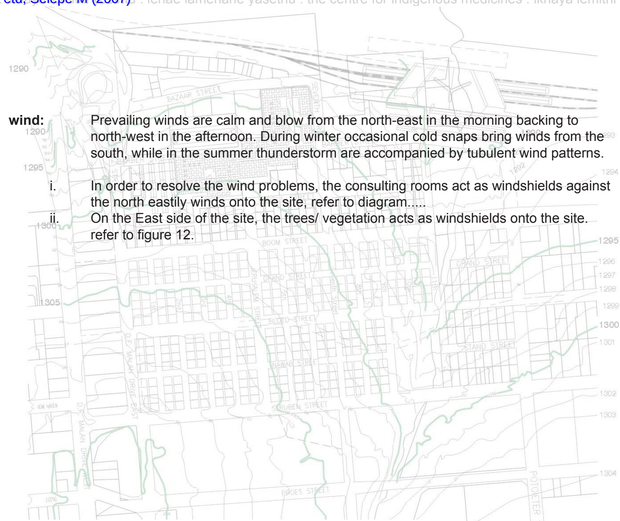


fig.11

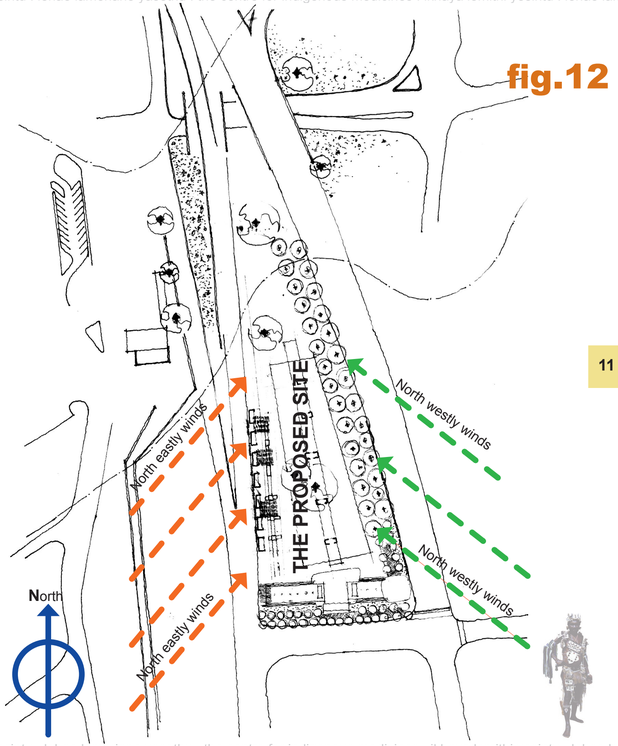




wind: Prevailing winds are calm and blow from the north-east in the morning backing to north-west in the afternoon. During winter occasional cold snaps bring winds from the south, while in the summer thunderstorm are accompanied by tubulent wind patterns.

i. In order to resolve the wind problems, the consulting rooms act as windshields against the north eastily 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.

fig.12



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 industries and 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 Maraba 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 Maraba 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.

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

Modal integration of the various public transport systems suffers from the lack of properly serviced infrastructure, and formalized ranks for taxis. This aspect of 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.

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.

PLAYING AND RELAXING IN MARABASTAD

Family relationships, social networks and neighborhood recreation were important defence strategies for the urban poor. For some, economic survival was dependant 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 practiced 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 form cantered around drinking and "wild dancing". A café owner Galom Hassain was renowned for holding tea meetings or dances every night of the week. According to some scholars the so called "marabi" culture associated with the slum yards of Johannesburg, originated in Marabastad.

Beer drinking and beer brewing became visible symbols of the struggle between the dominating classes and the ruling classes. Makeshift shebeens where liquor was sold and dancing occurred were commonplace. From the 1910s Chinese residents of the Asiatic Bazaar also began to supply "hopan" (an intoxicating brew) to local residents. Policeman earning small wages also took part in the illicit trade.

Marabastad boasted three bioscopes, the Empire, the Orient and the Royal where Western and Indian movies were screened.

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 steel plates, were even worse. There were no proper water supply and sanitation (one outside toilet for ten persons) and overcrowding put their health at risk.

Despite these conditions, the Cape Location was a safe place to live in. You could walk around the location and even to the city centre (Pretoria) at all hours of the day and no one would bother you. There were no house or car burglaries in those days. The community was a group of cheerful, friendly, caring, sharing and helpful people. They all lived in harmony, young and old. The elderly played an important role in educating the young, teaching them to respect themselves and other people.

WORKING IN MARABASTAD

Marabastad used to be 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, cafes, butchers, tailors, bicycle shops, barbers, shoe repairers, furniture dealers, dry cleaners, dairies, jewellers 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 1966] the last of the blacks were moved to Atteridgeville, Coloreds to Eersterus 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.

The legislation was intended to accommodate Indian shops that were removed from central Pretoria in terms of apartheid legislation.

During 1867, in the newly established town of Pretoria an area was set aside for the housing of the Black community at the confluence of the Apies River and Steenhoven Spruit to the northwest of town. Here Dr. F C A Grünberger from the Berlin Missionary Society established his Evangelical Lutheran Mission in the 1870's. The area, known as "Schoolplaats" is on the eastern bank of the spruit, was an accumulation of some eighty small structures arranged in six rows, parallel to the spruit.

Across the spruit from Schoolplaats lay the kraal of the Chief of the Mashashane section of the Ndebele group inhabiting the Apies River valley. Blacks who had found their way into Pretoria as servants had to find shelter at nightfall at Maraba's kraal, and a larger settlement developed almost unnoticed on the banks of the Apies River and against the slope of the ridge to the west of the Apies River/Steenhoven Spruit junction. It became known as Marabastad.

Lack of land for the Black population in the Transvaal Republic caused friction, and to complicate matters Britain annexed the Transvaal in 1877. This led to the First Boer War, which was concluded with the 1881 Pretoria Convention after a Boer victory. One outcome of the convention was the provision for appointment of a "location commission" in order to allocate adequate land to Blacks.

In the 1880's additional sites for Marabastad were made available to the south of the river in the area today occupied by the Daspoort Sewage Works. Notwithstanding the general improvements in other parts of Pretoria, Marabastad developed without any proper infrastructure or supervision.

As the population of the old Marabastad increased, a new township to its south was proclaimed, the so-called New Marabastad. In 1905, by virtue of Notice 151 of 1905 of the Government Gazette (dated 01 December 1905), the boundaries of Schoolplaats and Marabastad were described with reference to the area as "an area set apart as the location for the exclusive occupation of natives not living on the premises of their employers".

1912 saw the first resettlement out of the Marabastad area, when the Pretoria Town Council started to move the residents of Old Marabastad to a township initially called New Location, but later in 1925 formally proclaimed as a location under the name Bantule, situated to the northwest of Marabastad on the grounds now occupied by the Technikon Pretoria campus. The last of the dwellings of Old Marabastad were demolished in 1918, following the 1913 Natives Land Act of the Transvaal.

However, still no proper planning or services were provided for the area. Houses were built of inferior materials, there was no recognized structure to the township, no water supply and a lack of hygienic standards. The lack of land and growth of the community led to a worsening situation with the passage of time. The area was characterized by poverty, squalor and promiscuity. But notwithstanding the physical, social and economic problems of old Marabastad, the area was home to a vibrant community.

In a further move to curb Black urbanization, the Slums Act of 1934 was applied for demolition of certain dilapidated inner-city suburbs, and formed the basis of relocation of numerous black communities from inner city areas. Due to overpopulation Schoolplaats was de proclaimed in 1930, and its population was partly resettled in Marabastad, the rest being moved to the mixed-race freehold area Lady Selborne, and Eersterus. Marabastad itself, which in the 1930's, was a fine-grained, dense urban environment, was however soon also seen as a slum. In 1940 the process of clearing the Black suburb began, as residents were moved to new remote townships such as Atteridgeville, established in 1939

The Natives (Urban Areas) Consolidation Act of 1945 with its various amendments provided the basic framework for Black township control. After the National Party came to power in 1948 this act, with other measures passed by previous administrations, was rigorously enforced, and by 1953 the last of Marabastad's Black residents, as well as those from Bantule had been resettled.

The Group Areas Act of 1950, administered by the Group Areas Board, was targeted primarily at Indian and Colored groupings, while Dr Verwoerd's Department of Native Affairs retained control over the Black population, following an agenda aimed at eventual self-rule of Blacks in areas removed from white concentrations. To this effect the Natives Resettlement Act of 1954 was introduced, which opened the way for the most notorious forced removals of Blacks from urban areas, during which entire suburbs, such as Sophiatown in Johannesburg, were eradicated.

Marabastad was by then already lost to the Black people, though it lingers in their memory. In a recent critique of a Jazz performance by Abdullah Ibrahim, for instance, Mail and Guardian critic Meshack Mabogoane enthuses over the "tunes that resonated with the earthy gaiety of District Six, Marabastad and Sophiatown".

Much of the resulting commuter traffic feeds directly into Marabastad. The new Belle Ombre Railway station with associated bus-and taxi ranks was first proposed in 1965 in the Asiatic Bazaar was completed in 1981. The Mabopane-Belle Ombre Metrorail service is a major link between the city centre and the Black urban areas to the north, transporting more the 40 000 commuters daily.

Some Black squatters have moved into the Marabastad area over the past years of legislative indecision, and some hawkers and micro-enterprises conduct their business there, but apart from that Marabastad has today become to the Black population a thoroughfare in the form of a major public transportation node to and from outlying regions. It is a cruel irony that the railway station, straddling a Steenhoven Spruit forced underground, lies on the original Marabastad site and has been named "Belle Ombre", which means " beautiful shadow". Source: (Marabastad Integrated Urban Design Framework, 1998)

The history of traditional healing

history

History of Traditional Healing

In attempting to understand, anaylse 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 dynamics of culture (Loustaunau 1997:17)

Sangomas are the traditional healers in the Zulu, Swazi, Xhosa, and Sotho, Tswana, Venda and Tsongo/ Shangaan traditions in southern Africa. They perform a holistic and symbolic form of healing. They have 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. They are highly revered and respected in their society.

There are two types of healers in South Africa, the first being the "ukuthwasa" an initiation by spirit and ancestral purification into the many rites of passage to become a Sangoma. In this instance the person receives a powerful spiritual calling from the ancestors, that is not easy to resist and can have physical complications if they do resist (Schuster & Campbell, 1998:79). With a strict code of conduct, they are generally referred to as Sangoma's or Inyanga's and are believed to have the highest spiritual ethic.

The second category, trains for and studies Traditional Healing and medicines out of interest and are often referred to as Herbalists (Schuster & Campbell, 1998:80). They are students that merely learn about herbs and treatments and apply this knowledge. Without psychic abilities, their knowledge based on years of experience in assisting a Sangoma or experienced herbalist. Herbalists are big contributors to Primary HealthCare.

These healers are able to access advice and guidance from the ancestors for their patients in many ways: channeling; dream interpretation, divination and psychic analysis to name a few. In possession states, the Sangoma works herself into a trance, through drumming, dancing, invokations and chanting.

Some Sangomas may speak in tongues, or foreign languages according to the specific ancestor they have activated to speak.

The Sangoma may possesses a collection of bones and other small objects like seeds, sea shells etc, each with a specific significance to human life, Amathambo, which they use for divination. The Sangoma or the patient throws the bones and interprets them in relation to the patient's life. In the same way, Sangomas will interpret the metaphors present in either dreams, their own or patients'.

Where as in fact the role of African Traditional Healers was to diagnose illness, prescribe and prepare herbal medicines, provide counseling and other spiritual support (Schuster & Campbell, 1998:7). Traditional African medicine and treatments address the healing of both the body and spirit and can be a catalyst for subtle yet profound changes within a society. The treatment used by Traditional Healers and/or Sangoma's varies greatly and depends on the healers own knowledge and skills as well as the patients illness. The treatment of a patient involves:

Ukuhlola Ngomoya (Reading the Psyche or Energy)

This type of reading and diagnosis is common to most Sangomas After prayer and invocation, the Sangoma narrates visions and messages from ancestors, which relate to the patient's issue or problem. From this, the Sangoma gleans history of the patient often. This type of reading is by skilled clairvoyant Sangomas. It is similar to dreaming awake or Trans visioning someone's story or the patient's history.

Amathambo (Bones)

Amathambo are bones. Primarily Nyangas use bone divination while most Sangomas use clairvoyance, water and Ukubhula (consultation) for divination. Bones are like numbered or pre identified objects. they fall and form patterns which in the eyes of a skilled practitioner can tell accurate history or story of the patient's.

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 purpose of a body scan is primarily to view the spirit pathways and their clearness to ensure that ancestors are able to communicate clearly with the patient (particularly an initiate) through intuition or dreamtime. Sometimes and often, the Sangoma will come across illness in the body where tissue or organs have been distracted by improper flow of energy or ancestral connections.

Muti or traditional medicine plays an important role in the lives of many South Africans. They rely on its practitioners – called either 'sangomas' or 'inyangas' - for herbal remedies to overcome sickness and avoid bad luck.

Satisfactory healing does not only involve restoration from physical symptoms but social and psychosomatic re-integration of the patient into society.

Mainstream Sangomas use nothing more sinister than roots and leaves to produce their cures. But there is a dark side to Muti. Some practitioners – a minority – insist on using human body parts to add power to their craft. will give their patients medications of plant and animal origin imbued with spiritual significance, often with powerful symbolism - There are medicines for everything from physical and mental illness, social disharmony and spiritual difficulties to potions for love and luck. Medicines can be

drunk, smoked, inhaled, used for washing, smeared on the body, given as enemas, or directly injected into the blood stream.

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 enlisting 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) anti-retroviral drugs.

Traditional healers have been practicing in Africa for about 4500 years, before there was any knowledge of the Western medial system. 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.

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

Traditional Healing	Western Medicine
Focus is on the individual client and their whole family	Focus is usually on the individual client with an option for family involvement.
Main tool is divining bones, and the incorporation of rituals that can include music and dance.	The main tools are the psycho therapeutic interview, assessment and specific therapeutic counseling strategies

3 Precedent studies

precedent [1]

“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 bus ranks, taxi 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 space available.

fig.13

KZ-NIA Journal 3/2001 p7

fig.14


...and after. (View towards city)

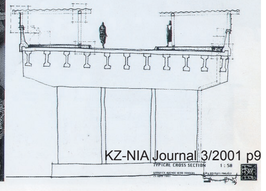
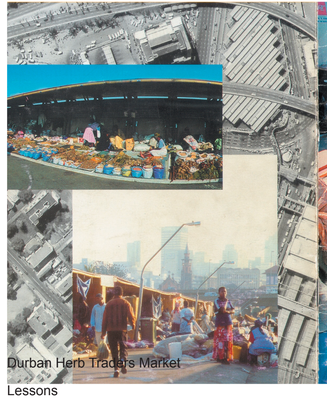
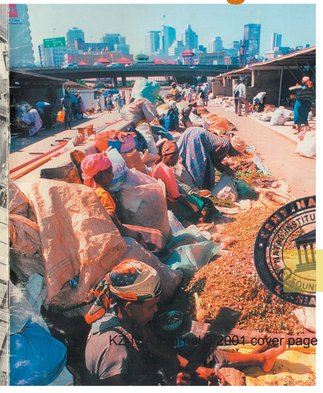

KZ-NIA Journal 3/2001 p9

fig.15


Durban Herb Traders Market


KZ-NIA Journal 3/2001 cover page

Lessons

- It acts a 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

precedent [2]

fig.16

fig.17

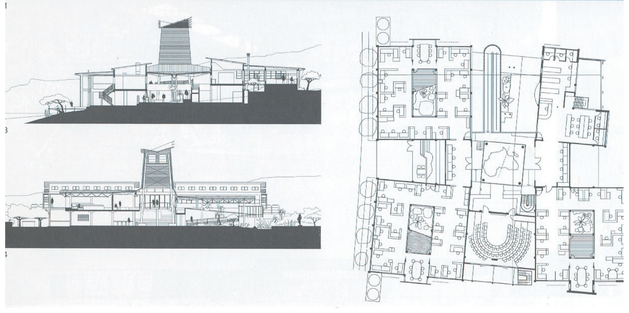


fig.18

fig.19

KZ-NIA Journal 1/2002 cover page

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 in 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 reflective 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

precedent [3]

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 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 motorway. 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 from outlying areas. The area was home to the Miners Employment Bureau, the infamous native “pass” 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)

Farraday was identified 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, citied on a disused bus depot next to 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 by maximize the opportunities for both formal and informal trading. The old industrial buildings and sheds, refurbished to accommodate trading and consulting for both traditional healers and centre management.

fig.20

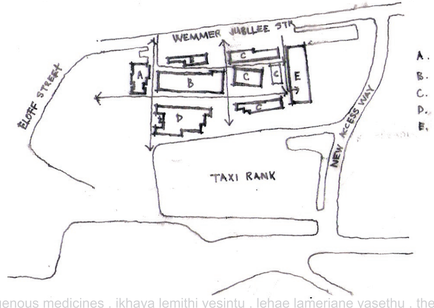


fig.21

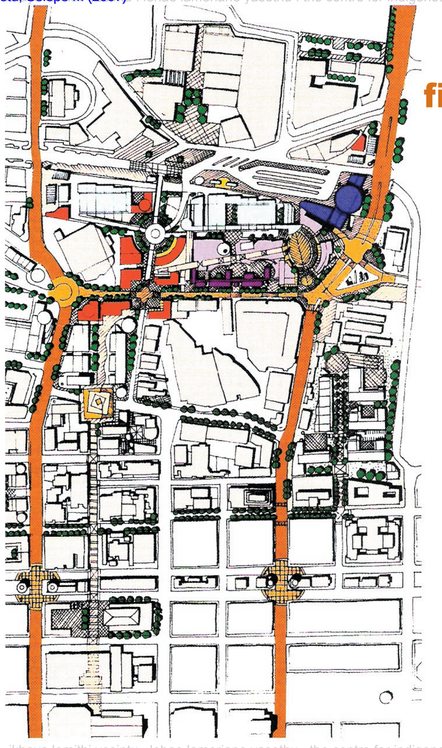


fig.22

The various other market buildings, designed to reflect a relatively flexible and open experiential space undercover and allow for future changes in use, which encourage a variety of trading spaces, and opportunities. A dynamic diverse space is created, that sets the stage for appropriation and human interaction. Linking the Farraday precinct with the Johannesburg CBD.

The traditional healing centre, a shift category which defied town-planning use categorization, consist of various forms of trading both casual and more permanent, consulting and procedure rooms for diviners and social spaces for training and management. Consultation with traders revealed that privacy and discretion were important attributes to a centre that combines retail, health and religion, and where the sacred and profane come together in new ways. This confluence captured in the architecture by combining the urban and rural. The objective of the architecture responds to the existing industrial and urban setting whilst incorporating elements of (displaced)traditional symbolism both visual and spatially. (Digest of South African Architecture 2004:33)

Lessons learnt

- Integration of traditional healing and healers into an existing urban fabric
- The use of materials to depict of (displaced) traditional African symbolism in architecture
- The use of a particular site and function to as a link in the urban fabric, as suggested in the proposed Traditional Healers Centre in Marabastad
- Drawing on existing urban energies like movement, transport and nuclei to give credibility to a proposed development
- The use of a historic site as a gateway within the urban fabric, suggested in the proposed Traditional Healers Centre
- The use of interlocking spaces, used to create a hierarchy in terms of privacy on the site. By the separation and emphasis on privacy for divination and consulting, while retaining an open flexible circulation pattern and movement on site.

4 Design investigation

design philosophy_the idea

According to the WHO Traditional Medicine Strategy 2002-2005 traditional medicine is referred to as "traditional Chinese medicine, Indian ayurveda and Arabic unani medicine and to various forms of indigenous medicine – if they involve the use of herbal medicine animal parts and/or minerals – and non-medication therapies – if they are carried out primarily without the use of medication".

Today traditional South African Healers commonly referred to as Sangoma's or Inyanga's would fall into this category.

The concept of traditional healers is one that is as real in any African context as the ground that defines this continent.

Today the healers practice from market places and sometimes their homes. What is referred to today as a traditional healer would have been within a village or settlement organization the person that was not only taxed with the health of the settlement but also with the spiritual well-being of the people within that community.

The channel and way through which the ordinary people communicated and interceded to and on behalf of the various deities and gods. They held a senior position within there societies ascending time and time again into the super – natural realm that protected provided for and enriched the community.

As persons entrusted with the spiritual, physical and cultural well-being of society they carried out rituals that brought the community together, advised rulers and where considered a source of wisdom and a hope through which futures and destiny's were lived and relived. With them came traditions and culture, these were matured evolved and sometimes born because of traditional healers.

As with a painting, the pigmentations are the vehicle through which they are brought to life, traditional healers it can be said where the vehicles that brought about life in culture.

Though not recognized as vehicles through which the modern day culture is carried through and evolves the role of traditional healers is still an important one today. A larger majority of African's and within context South African still practice and believe in the powers and remedies that are passed on through traditional healers. An alignment to what was a medium through which people could allow themselves a connection, ascension into a spiritual realm that provided peace comfort hope and a sense of protection. Arguably, also used for evil, but a place of knowing nonetheless.

This 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 governs a lot of South Africans was derived.

In this instance the architecture then, interpenetrates building not for the simple satisfaction of the simple needs of body, but the complex ones of intellect. (W.R. Lethaby: 1).

Taking into account the realization, or the code of symbols, accompanied by traditions that govern the discipline of architecture. In an attempt to create a sacred architecture whose purpose is the translation of the perception of the super-natural and the divine. Allowing for an architecture that ascends within itself and within its context to a place where the tensions between tradition and modernity play out. Where modifications to what the indigenous and/or traditional can with an equal footing compete and highlight itself in a context otherwise governed by the rules of modernity.

This thesis proposes to create a sense of place that is symbolic of the autonomous mode of cognition. Symbolically restoring a tradition that is sometimes referred to as archaic and primitive. This symbolic thinking is consubstantial with human existence; it comes before language and discursive reason (Eliade: 12).

By envisaging the study of man not only inasmuch as he is a historic being, but also as a living symbol, a reawakening and renewal of consciousness through symbols and ideals that reach into the traditions and cultures translated into architecture then become more of a reality as opposed to a nostalgic need to recreate the past.

Building elements used to create this architectural typology are key in the symbolizing the traditions and the roles that the traditional healers played and are still playing out today.

The column:

A symbolic representation of the tree, a source of life food and in some instances shelter. The column not only holds up the roof covering it also allows for a building's skin to happen, it is fundamental to any building structure. This thesis uses the column as a symbolic representation of the characteristic nature of the medicine delivered by traditional healers. In more cases than not is a derivative from a natural source. The translation of nature through the idea of a tree is indicative of the life giving qualities that are associated with trees.

The column divided up into three parts:

1. The base
2. The shaft
3. The capital

fig.23

design philosophy_the idea

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 carry's. 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: *capitelum* 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.

design philosophy_the urban context

The design philosophy centered on the concept of urbanism as an essential attitude in urban design, favoring the spatially connected public environment over the mere master planning of objects on the landscape as well as making figurative space out of the lost landscape.

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. (Swanepoel, Campbell, Moffatt: 5)

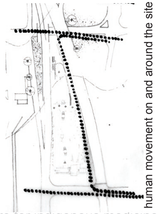
As a form of catalyst, the design of multi-use space with flexibility in its structures increases the capability of all pieces of the proposed development to be adaptable to multiple uses, simultaneously and in the short and long-terms.

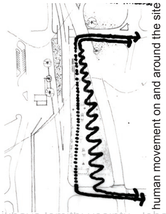
A sense of connectedness to it surroundings and between the various functions and activities accommodated so that all its pieces are finely linked into an integrated network that is well defined.

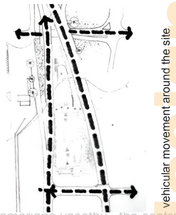
Designing within the urban landscape

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.
- Inclusion 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.


human movement on and around the site


human movement on and around the site


vehicular movement around the site

Urban generation

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

- Urbanization 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, it is affected by the way the city is structured.
- In developing countries where urban growth is rapid, the need to generate opportunities for self-generating economic activity is of particular importance. Therefore taking a facet of society, 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 there own ingenuity and creativity. This thesis attempts to introduce this with a traditional healer's complex that then 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).

The compaction of the city allows for parts of the urban fabric 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.

In compacting the urban environment there is an allowance 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.

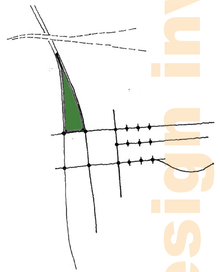
In terms of the SMME's this compaction allows for their growth and success, as the costs of distribution are minimized. This allows for growth and creates a sustainable environment for them to operate.
The proposed Traditional Healers complex draws on this urban generation philosophy, as situated in a dense part of the city it taps into the human and social aspects of the area of Marabastad.

Through structure, function and form, an enhanced urban activity and process of urban life, allows for all people easy access to the opportunities generated.
Intensity, diversity and necessary complexity

On an urban level this thesis attempts to encourage the following:

- Generation of urban opportunities created through interaction of popular support.
- The ease of access demand diverse activities over relatively small distances.
- Specialization, which in turn is dependant on high level of support over relatively small areas.

design philosophy_the urban context



Creating a continuity in the urban landscape

In being, a connection through which the different parts of Marabastad are connected the proposed Traditional Healers complex allows for the formation of a dense urban fabric, the need for access through the urban fabric, while allowing for privacy and continuity. (Dewar and Uytenbogaardt: 48)

Within most cities, the movement or energy routes determine the intensity of the activities in the cities. These energy routes are again dependant on the pedestrian/public interaction and use of the same. The proposed Traditional Healers complex falls on one of these routes and allows for the channeling of the same while drawing on this urban energy.

Clearly the case with the "link' suggested. Which allows for more intensive activities to respond directly to the movement flows by locating along them – to allow a symbiotic and mutually-generative relationship between movement-intensive flows and human intensive activities, resulting in linear corridors of activities or "activity spines" (Dewar and Uytenbogaardt: 49)

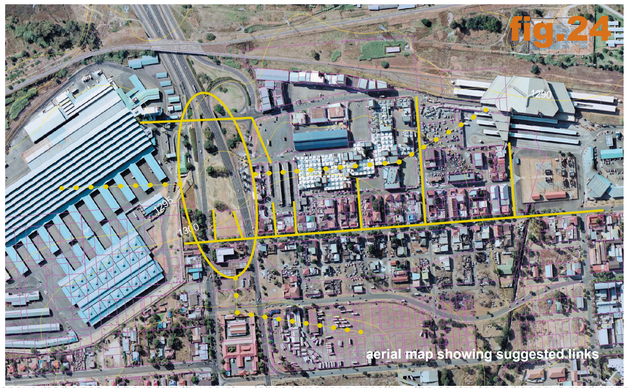


fig.24

aerial map showing suggested links

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) accommodates, promotes and enhances the activities and events which define urban life.
Certain structural configurations generate greater opportunities for people and enhance living to greater degrees than others.

Part of this balance relates to access – ensuring relatively equitable access to urban opportunities and facilities for all urban dwellers

This thesis also attempts to promote the urban environment through the maximum positive freedom for individuals to act.

The Traditional Healers complex can be seen to release the energies and talents of many people in the making of environments.

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 flexible in terms of movement. Several factors considered in the design of the public space. These include:

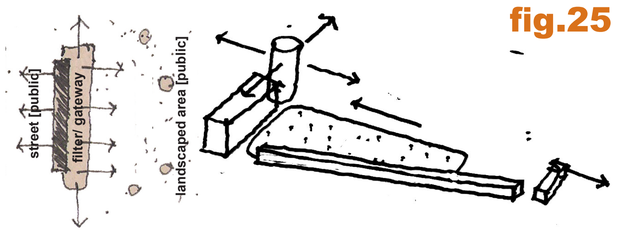


fig.25

- Appropriateness_ where the public space fits within the urban context and is usable in a manner that is both convenient and effective. Notably is that 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 interlinking 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 level changes and overhead 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 sits.

site use and circulation

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.

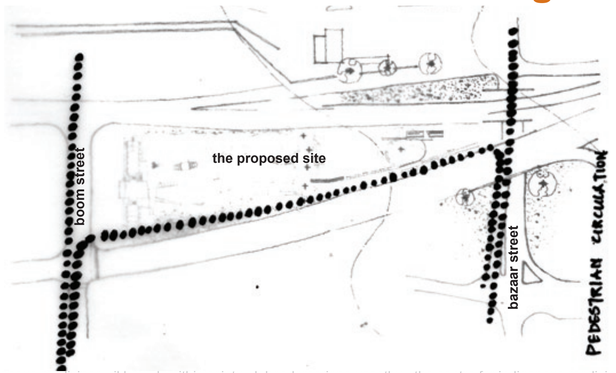
People have freedom of movement and can filter through the site with no restrictions, only to the office building where there is access control as not to disturb the working staff.

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.

fig.26



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

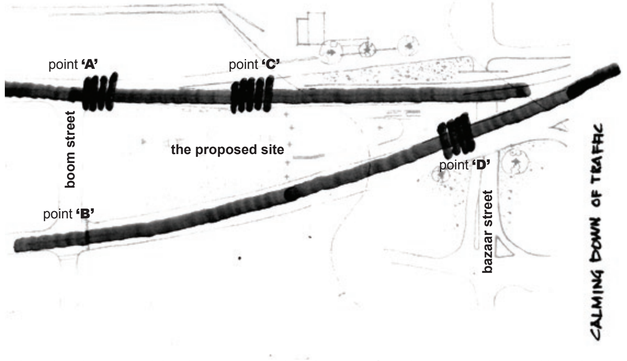
i. Point **'A'** car tend to speed as they approach this point, the solution is to install a set of traffic lights to control and curb the speed of the cars.

ii. Point 'C' speed humps/ rumble strips to be implemented to alert the 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 controling vehicles speeding into town.

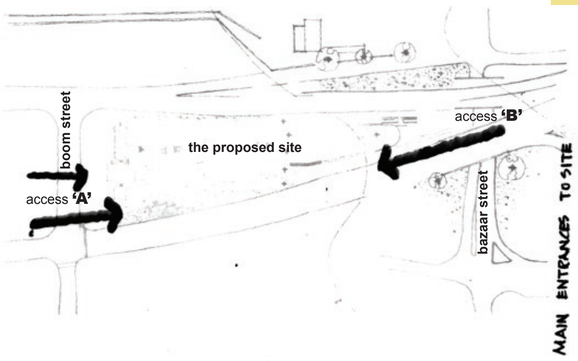
fig.27



i. 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 block 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 hierachical orderly manner. The site is open and accessible to all regardless of the persons disability/ abilities, gender, age.

ii. Along Bazaar Street, under the vehicular bridge.

fig.28



site use and circulation

fig.29

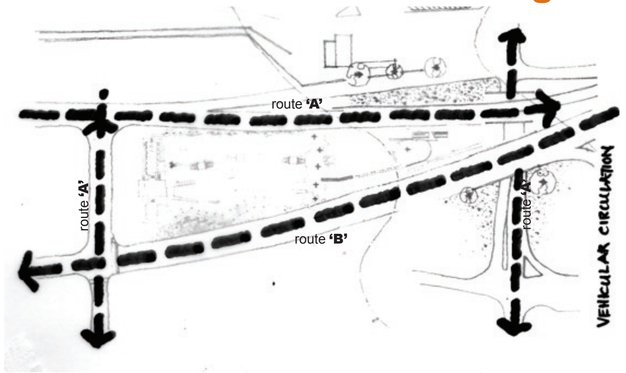
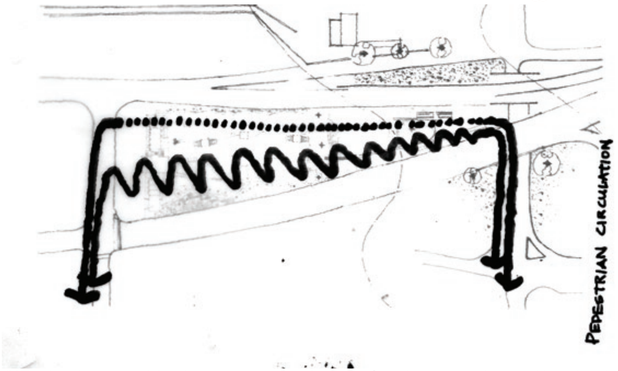


fig.30



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

integration of Marabastad's best qualities into the chosen site, **heritage**, natural environment, climate, scale, diversity, public space

THE GATHERING SPACE

fig.31

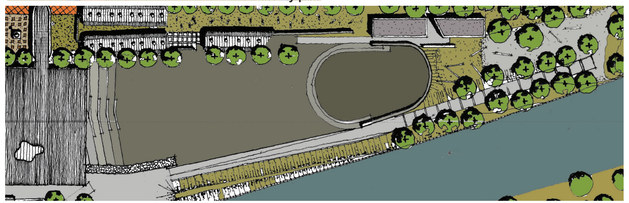


fig.32

THE CONSULTING ROOMS

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.

fig.33

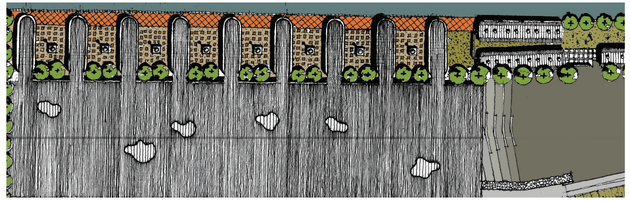
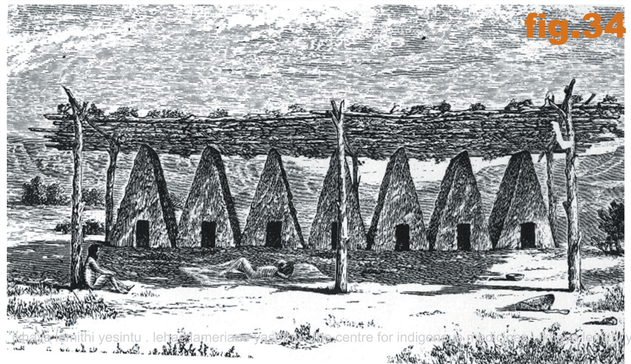


fig.34



THE RECREATIONAL SPACE

fig.35

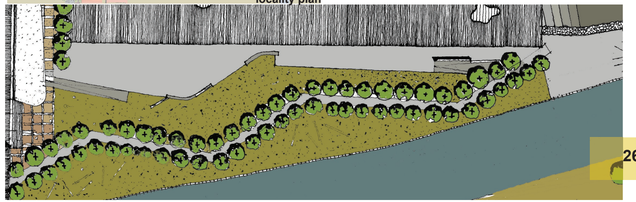
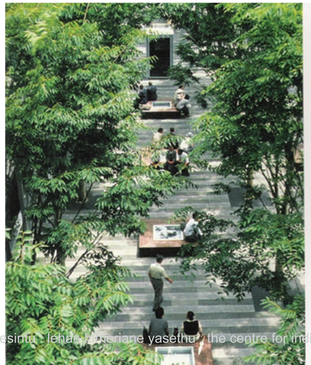


fig.36



design investigation

building shape and form
integrate Marabastas's best qualities.

MARABASTAD
the experience

heritage
the history of marabastad
the people
diversity
built environment

multi-dimentional
multi-cultural
continuously evolving:

land, values, traditions, customs, buildings

natural environment
the natural vegetation
existing fabric
padestrian movement

climate

appropriate response

cross ventilation
orientation
external sun shading

scale
industrial
small scale
intimate
unintruding

elevation/views
soft to the eye
aesteticaly pleasing
not dominating

aesthetic
pleasing to the enduser
complement the existing fabric

publicness
open to the public
for the public
inviting to all
safe

public space

public amenity
credible

diversity

THE NETWORK

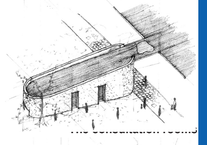
INTERGRATE

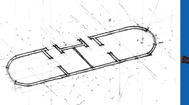
MARABASTAD

BEST

QUALITIES

THE SITE





BUILDING MATERIALS/ ELEMENTS

A robust building reflecting our time, creating a legible whole

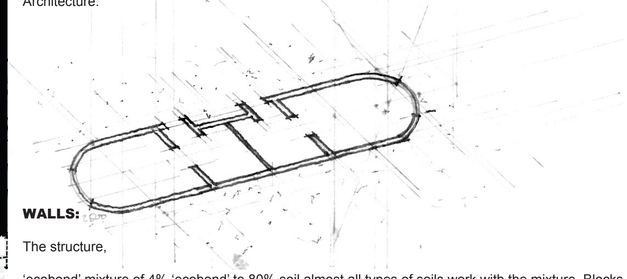
Building materials are used with historical and cultural reference, the association of materials and elements to their originating source makes present that memory in the new context. Materials are therefore a means of commemorating places, events, our cultural and social heritage.

Building of the centre in its context gives opportunity to elevate the status of informal and alternative building technologies and materials, exposure will be given to the possibilities resulting from the integration of urban and rural building practice, craft and hi_technology.

The design of the building as a collection of parts that are of a standard construction technique, allows for it to be constructed and put together by smaller contractors and gives opportunity for building the economic and social empowerment.

THE CONSULTING 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:

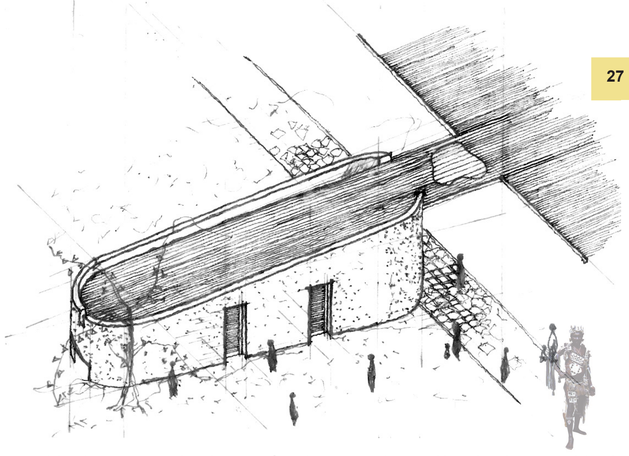
The structure,

'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,

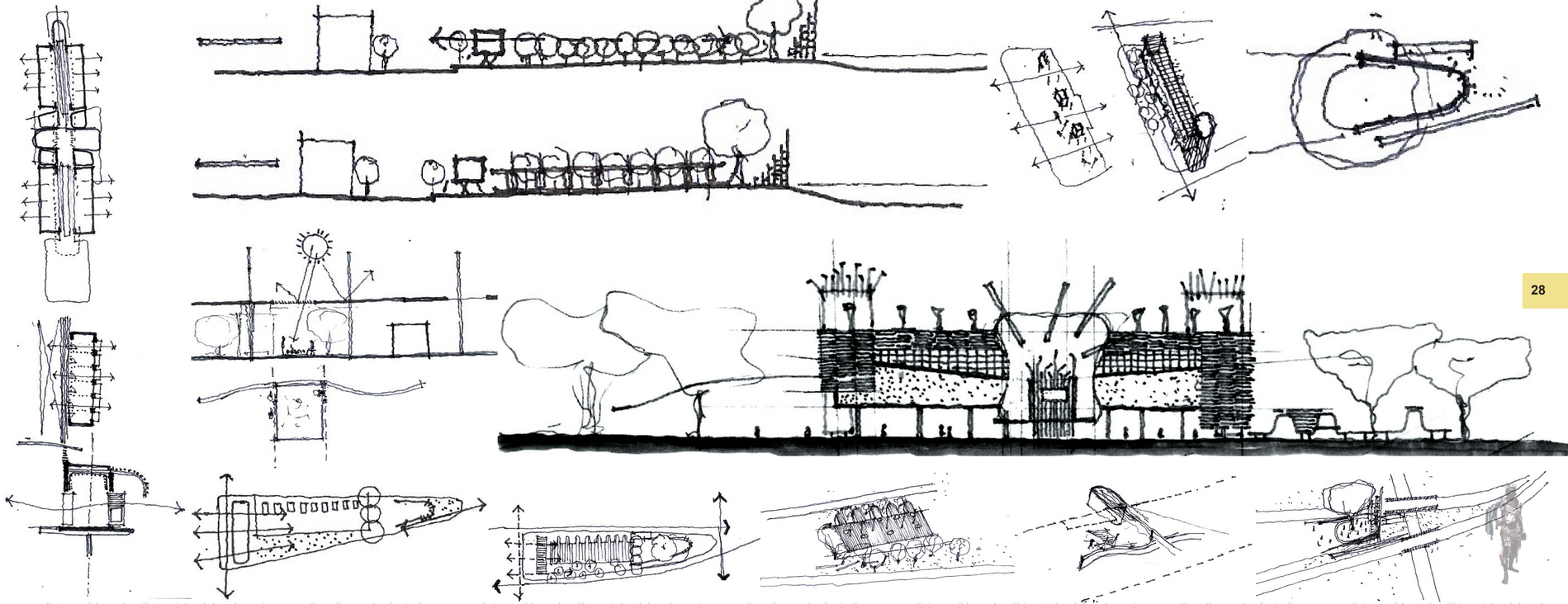
Polished textured walls, atrwork to be done by the people, according to approval of the design.

fig.39



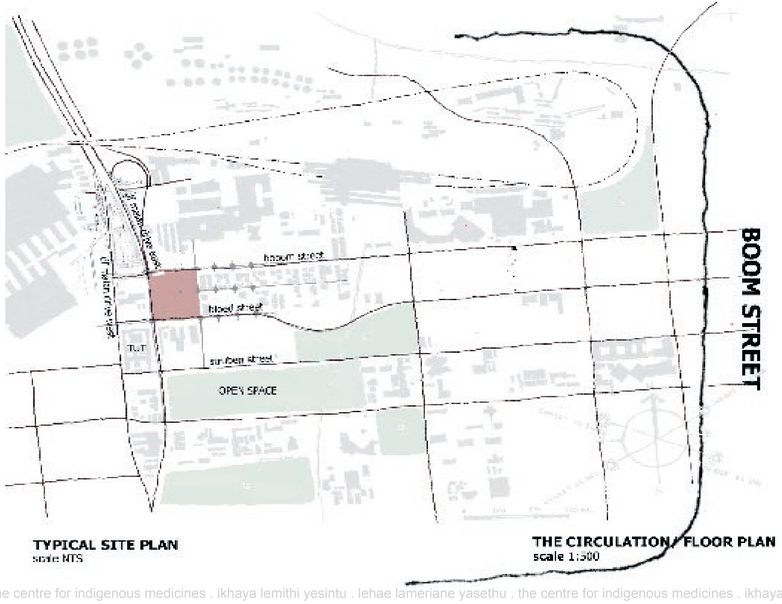
concept

design development



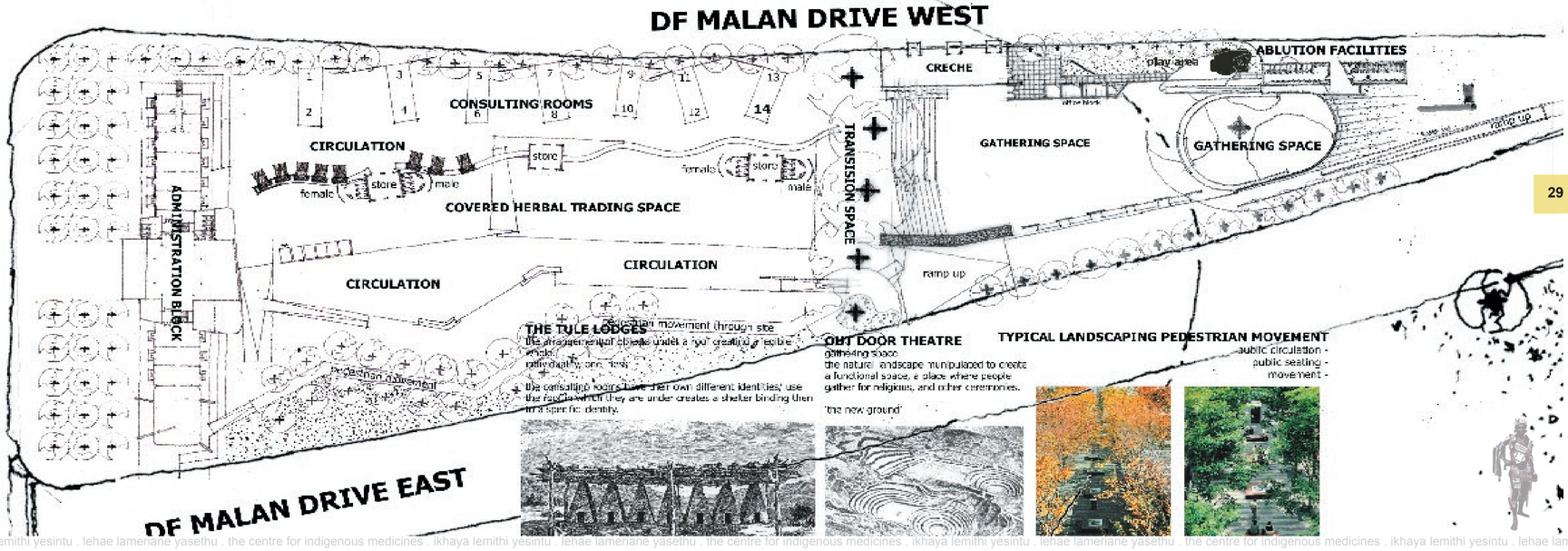
the design as it develops

THE LOCATING THE SITE



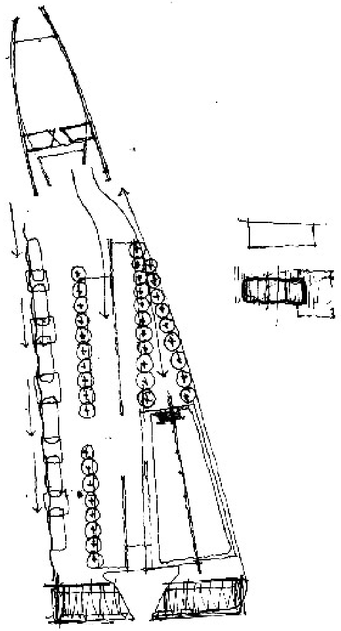
TYPICAL SITE PLAN
scale: NTS

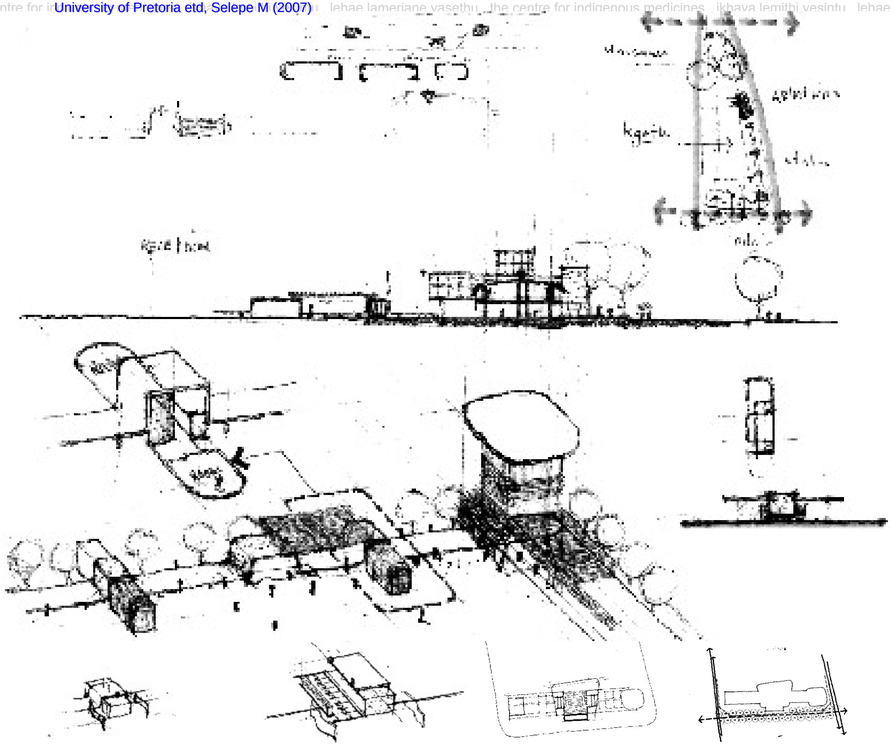
THE CIRCULATION / FLOOR PLAN
scale 1:500

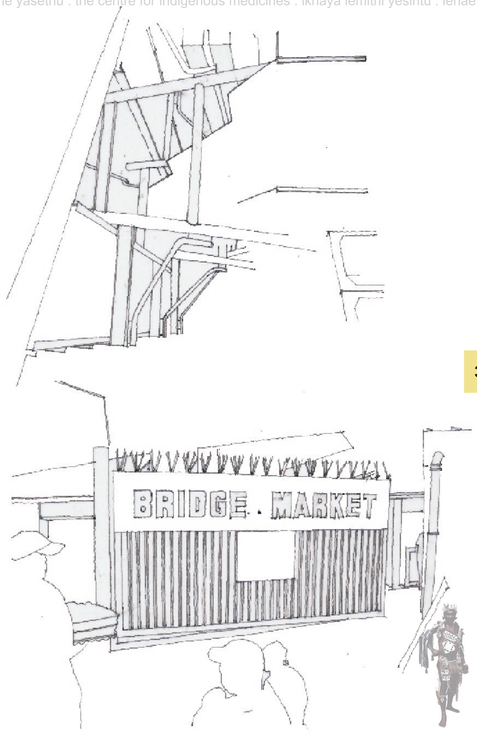


concept

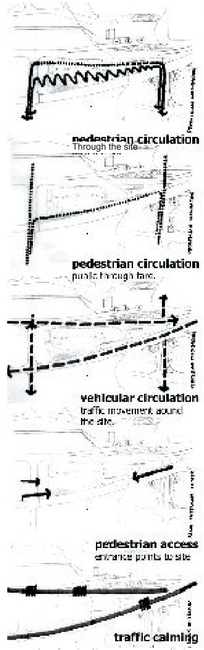
design development

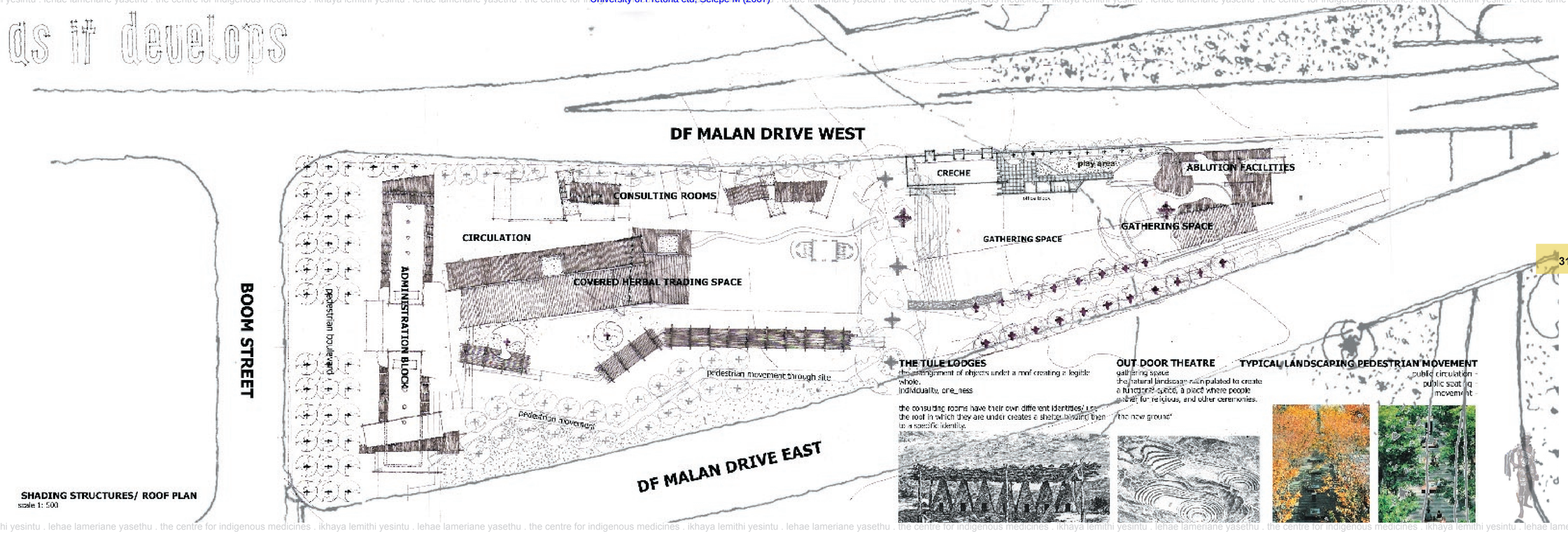






the design as it develops

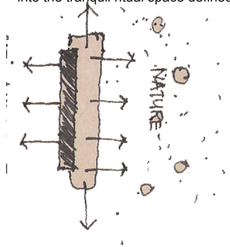


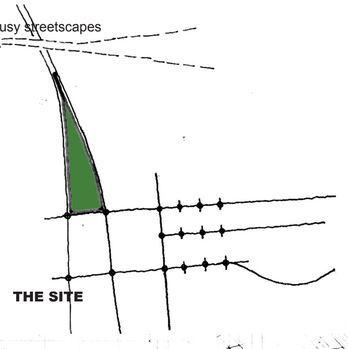


SHADING STRUCTURES/ ROOF PLAN
scale 1: 500

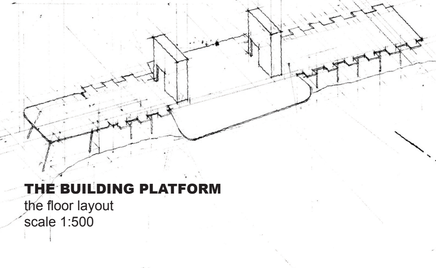
the design as it develops

PERMEABILITY
a permeable barrier, filtering through site, from the busy streetscapes into the tranquil ritual space defined by the greenery

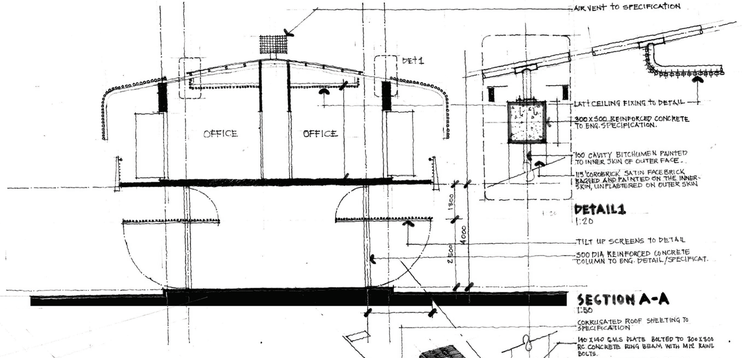




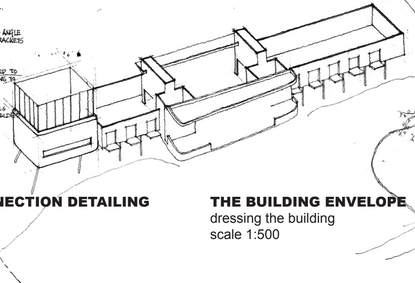
THE SITE



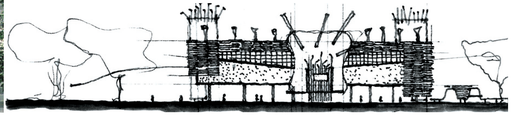
THE BUILDING PLATFORM
the floor layout
scale 1:500



BUILDING ELEMENTS
creating a legible whole
scale 1:500

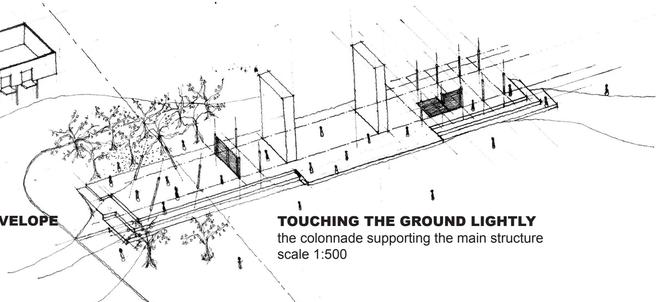


TYPICAL CONNECTION DETAILING
detailing
scale 1:20



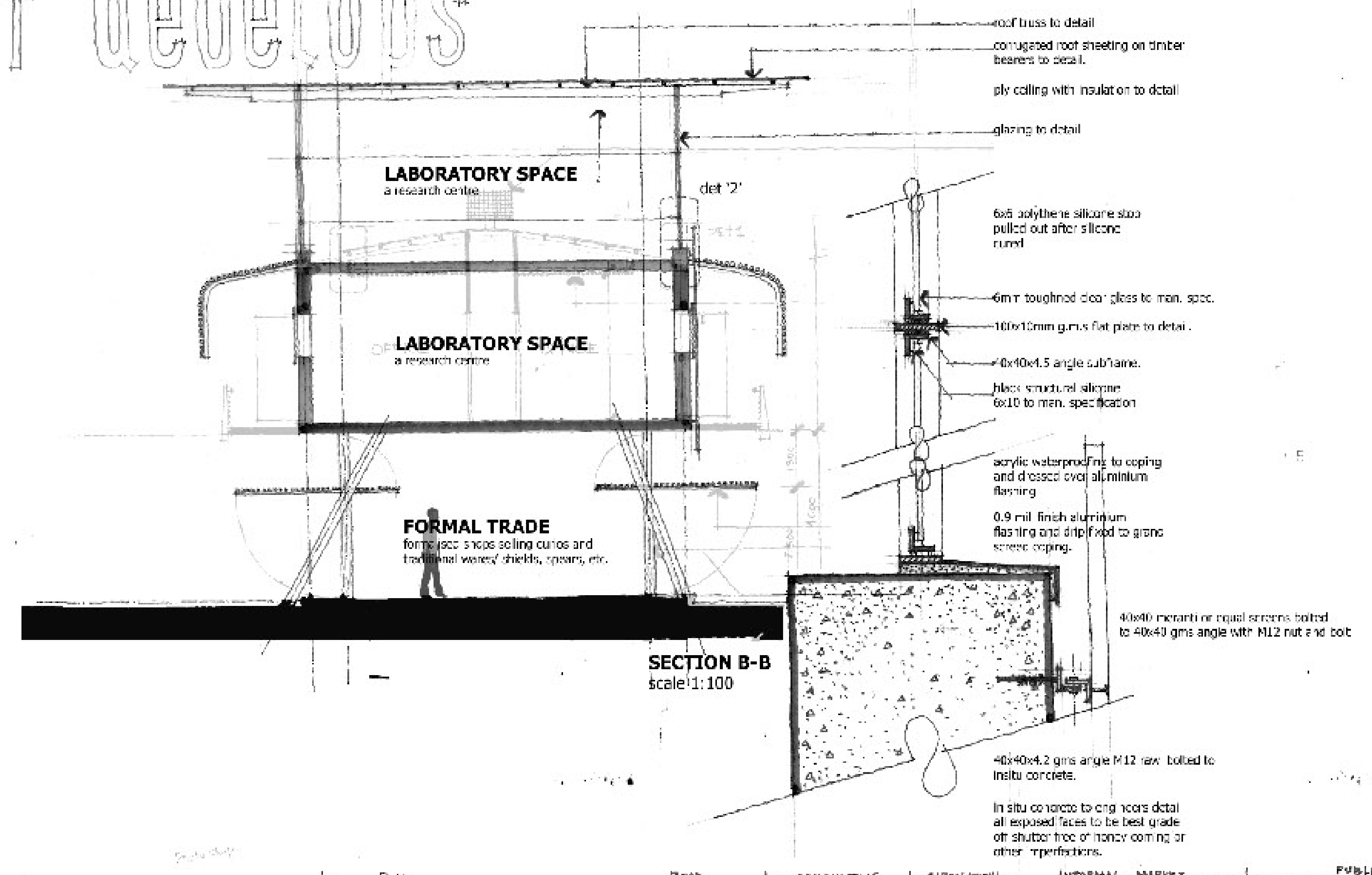
TYPICAL LANDSCAPING PEDESTRIAN MOVEMENT
public circulation -
public seating -
movement -

THE BUILDING ENVELOPE
dressing the building
scale 1:500



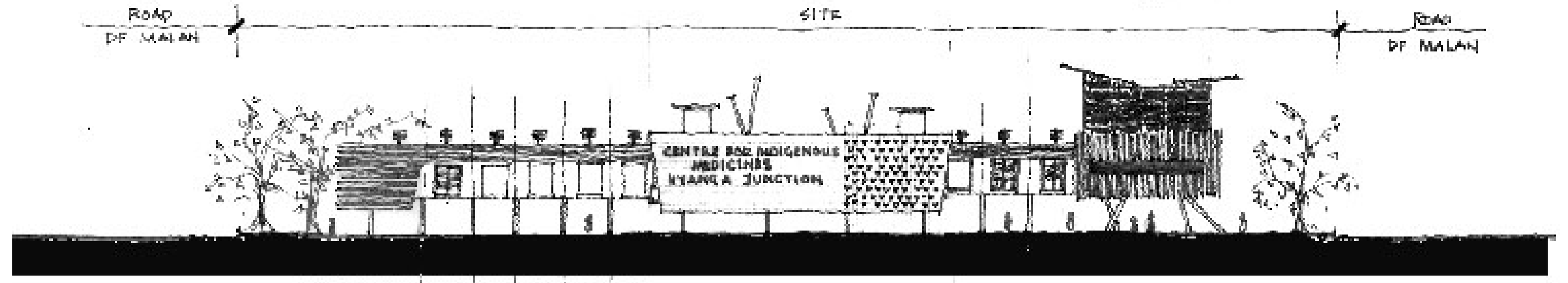
TOUCHING THE GROUND LIGHTLY
the colonnade supporting the main structure
scale 1:500

the design as it develops

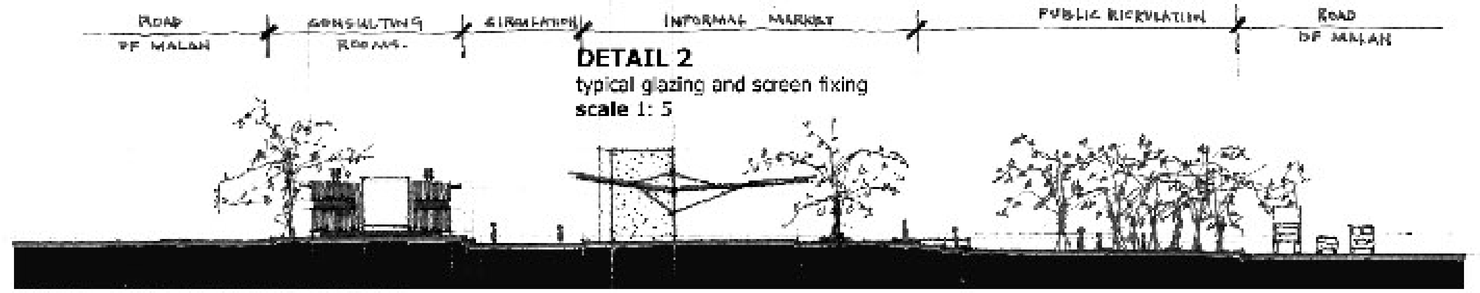


SECTION B-B
scale 1:100

DETAIL 2
typical glazing and screen fixing
scale 1: 5



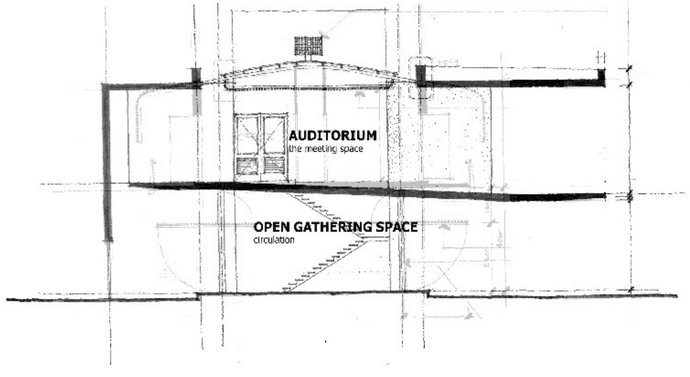
THE STREET ELEVATION
towards a centre for indegenous traditional medicines
scale 1:500

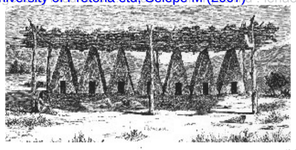


SECTION THRU THE SITE
scale 1:500

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

the design as it develops





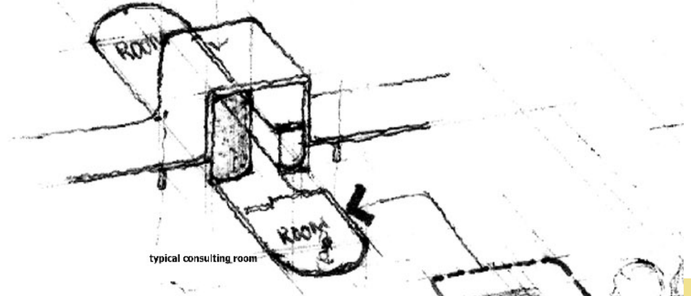
light slats on the concrete wrap.

off shutter concrete seating/ trading platform on bagged brickework base to detail.

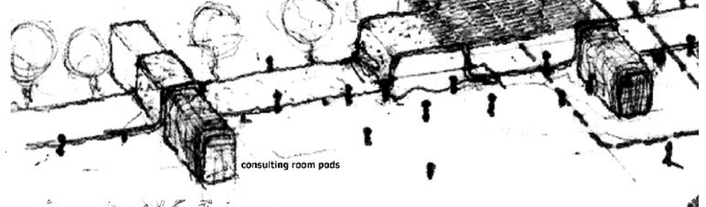
consulting rooms, brickwork bagged on inside unfinished on the outside with timber screening to detail

timber latte roof to detail.

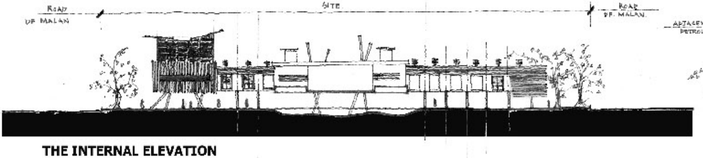
paving infront of the consulting rooms to specialist detail. pattern to be approved by the design architect



typical consulting room

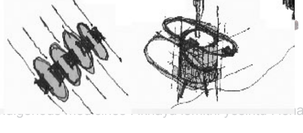


consulting room pods



THE INTERNAL ELEVATION
the view from the trading stalls
scale 1: 500

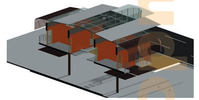
THE LONG SECTION, SECTION A-A
cutting thru the site, the slope simulation
scale 1: 500

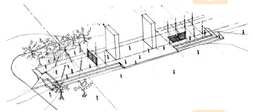


design investigation

structure
material
internal
external

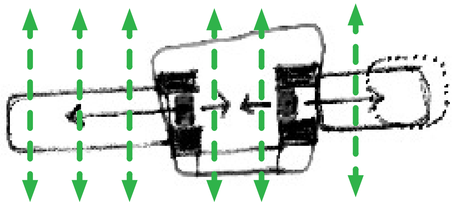
STRUCTURE





THE STRUCTURE

fig.41



THE FLOOR SLAB

fig.42

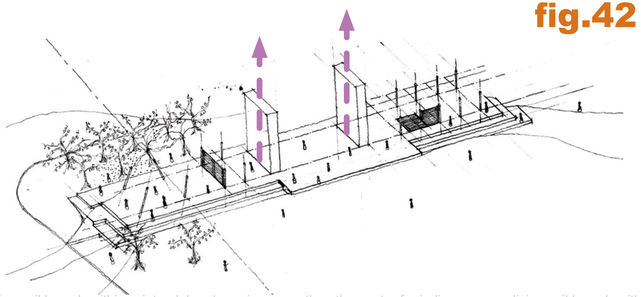
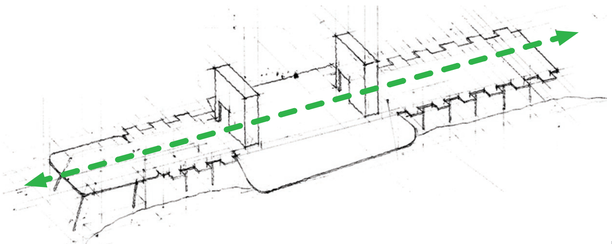


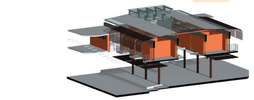
fig.43

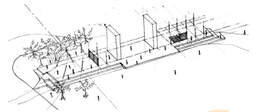


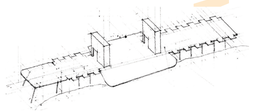
design investigation

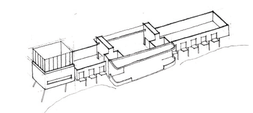
THE BUILDING ENVELOPE

structure
material
internal
external









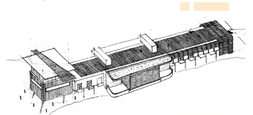
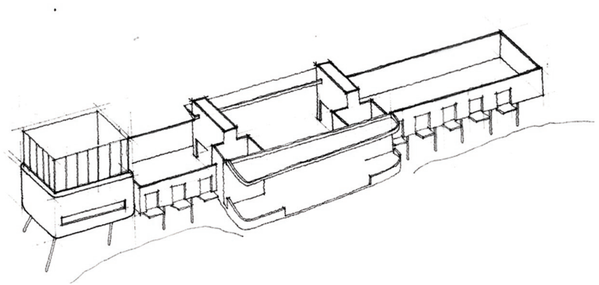
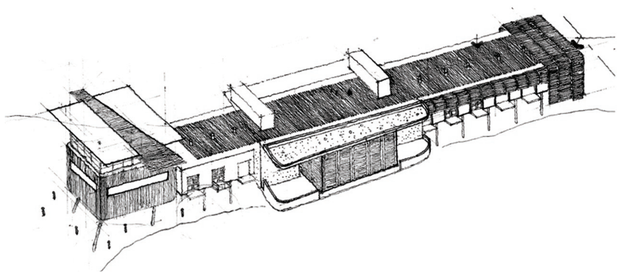


fig.44



THE ROOF

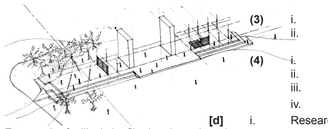
fig.45



building use / accommodation schedule

[A] OFFICE BLOCK
Ground floor

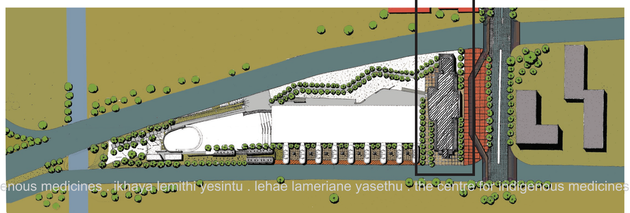
[a]		**main foyer**	
	i.	Foyer / security	
	ii.	Security control room.	
	iii.	Security rest room	
	iv.	Security ablution	*[unisex]*
[b]		**foyer b**	
	i	security	
	ii.	Ablution	*[unisex]*
		First floor	
[c]		**administration**	
	(1) i.	Reception	
	ii.	Reception foyer	
	iii.	Directors office	
	iv.	Deputy directors office	
	v.	Secretary's office	
	(2) i.	Offices for different organizations	*[15 off]*
	(3) i.	Board rooms	*[2 off]*
	ii.	Open plan offices	
	(4) i.	Kitchenette	
	ii.	Staff cleaning room	
	iii.	Male ablutions	
	iv.	Female ablutions	
[d]	i.	Research laboratory	



Entry to the facility is by filtering through under the administration, office block.

ADMIN. BLOCK

fig.46



[B] OPEN PLAN TRADE AREA
ground floor

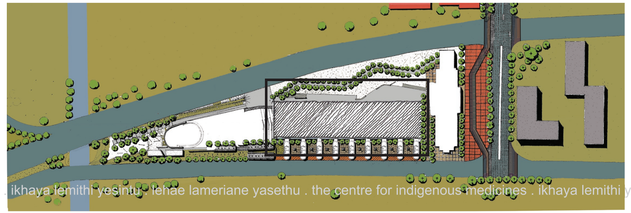
[a]		**covered roof**	
	i.	Trade area	
[b]		**ablution/ storage facilities**	
	i	male ablutions	*[3off]*
	ii.	Female ablution	*[3off]*
	iii.	Storage area	*[3off]*
	ii.	Reception foyer	

[C] CONSULTING ROOMS
Ground floor

[a]		**rooms**	
	i.	Consulting rooms	*[18off]*
	ii.	Reception/ waiting/ medicine display area	
	iii.	Courtyard.	

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

fig.47



[C] CRECHE
ground floor

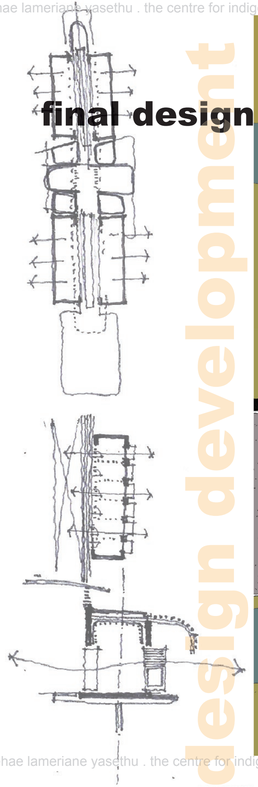
[a]		**covered roof**	
	i.	trade area	
[b]		**ablution/ storage facilities**	
	i	male ablutions	*[3off]*
	ii.	female ablution	*[3off]*
	iii.	storage area	*[3off]*
	ii.	reception foyer	

[C] CONSULTING ROOMS
ground floor

[a]		**rooms**	
	i.	consulting rooms	*[18off]*
	ii.	reception/ waiting/ medicine display area	
	iii.	courtyard.	

fig.48

final design



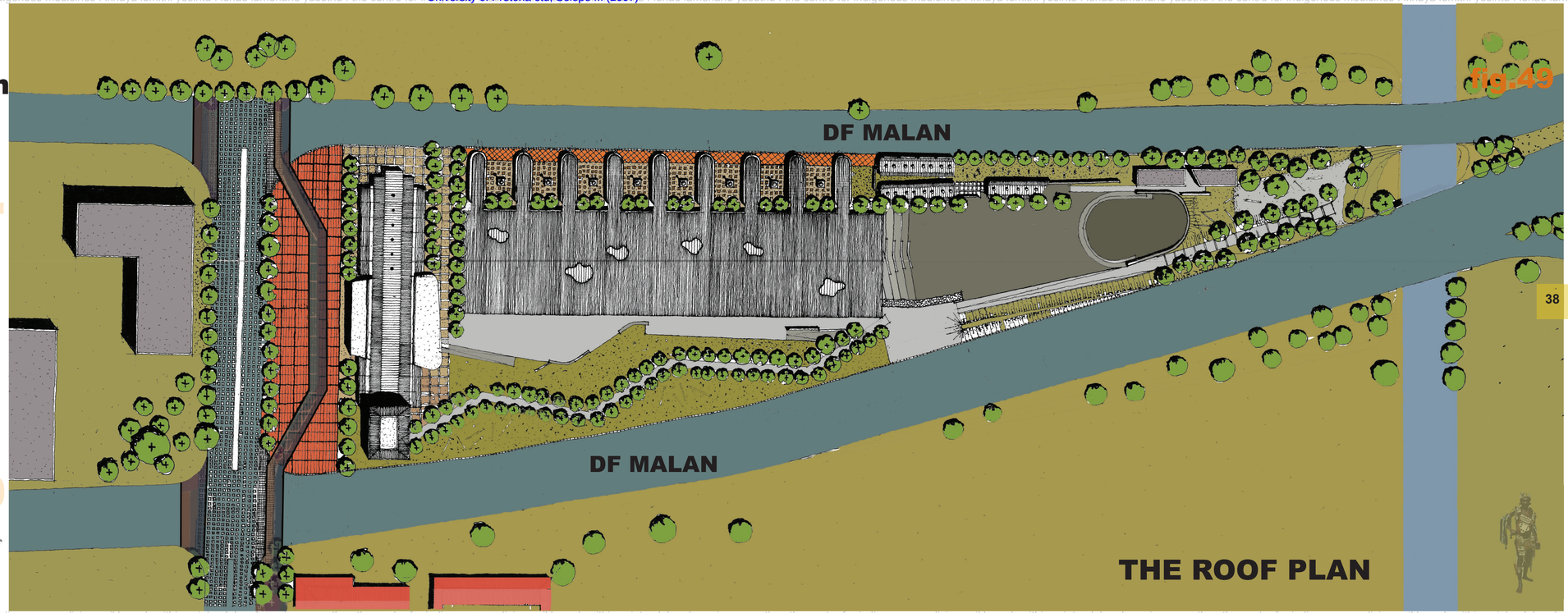
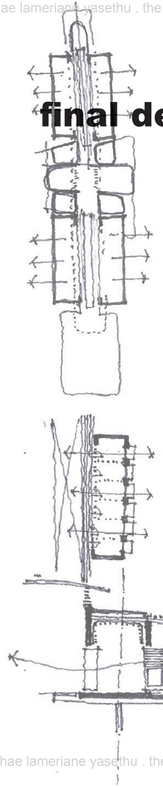


fig.49

final design



design development

fig.50

THE GROUND FLOOR PLAN

final design

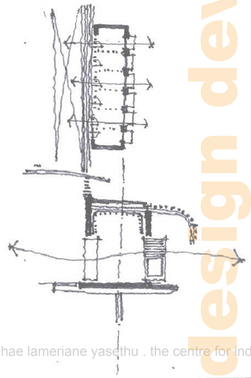
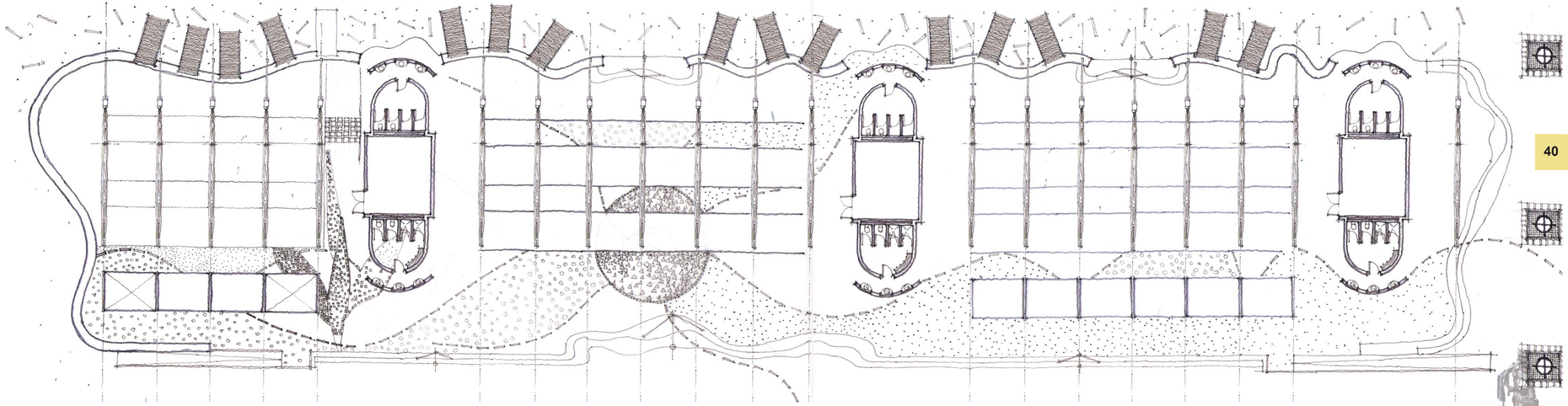
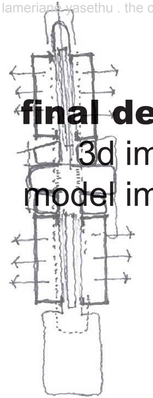


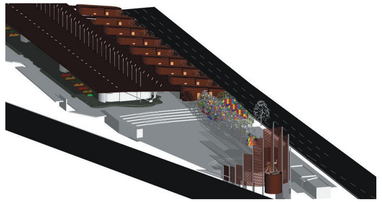
fig.52

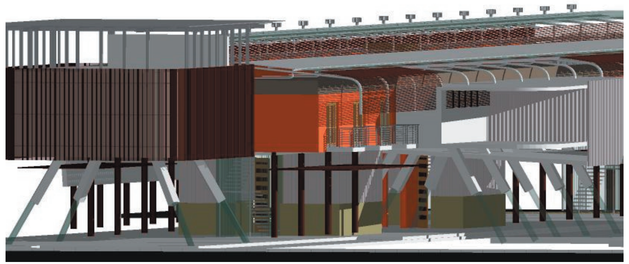


final design
3d images
model images

design development







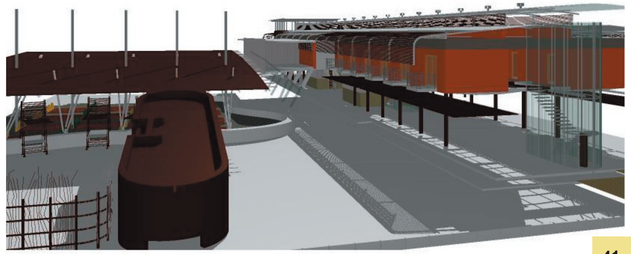
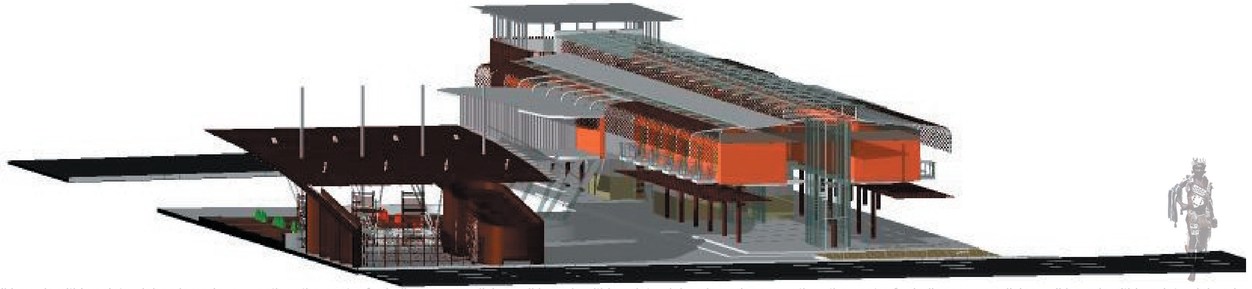


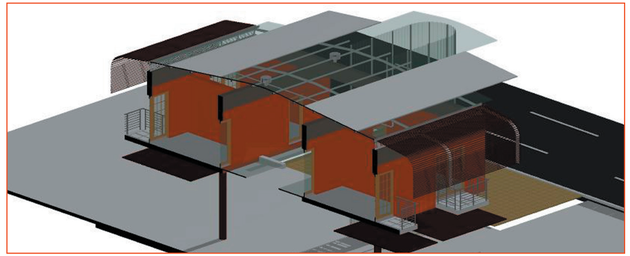
fig.51



final design

3d images

model images



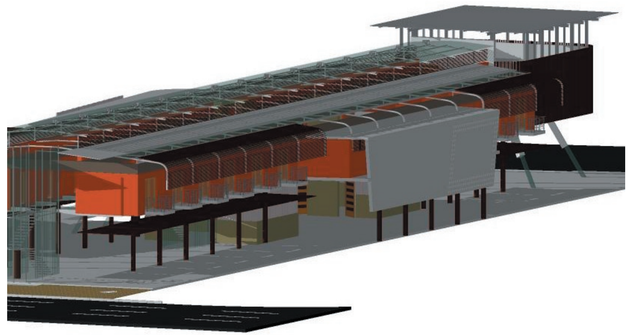


fig.53

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

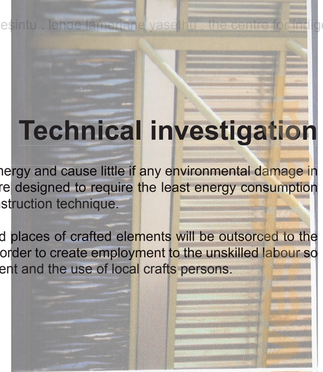
final design
3d images
model images

fig.54

5 Technical investigation

All materials are selected to consume the least energy and cause little if any 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 areas requiring a high technical precision and places of crafted elements will be outsorced to the skilled persons and will be brought in to the site in order to create employment to the unskilled labour so to satisfy the aspirations for technological refinement and the use of local crafts persons.



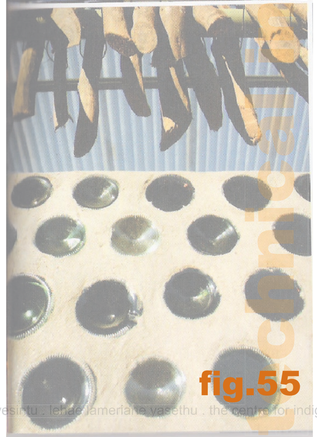
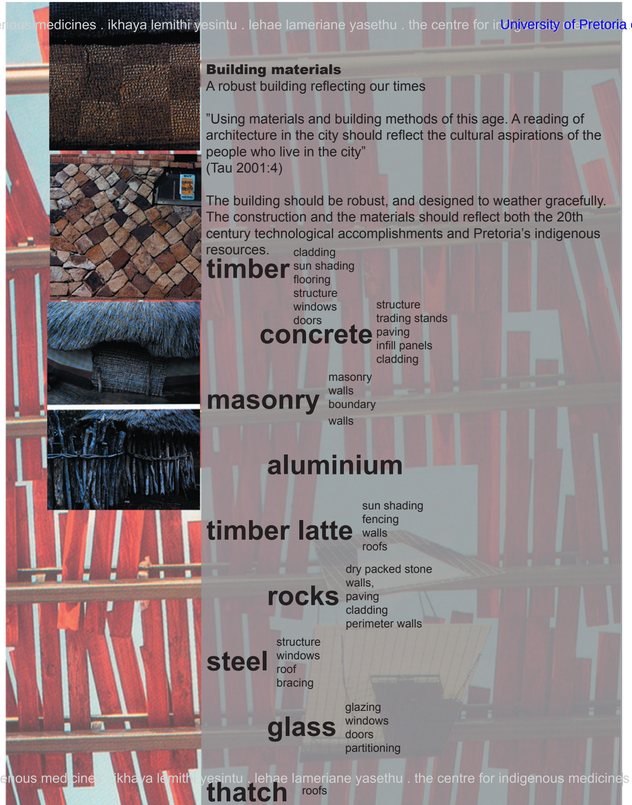


fig.55



Building materials
A robust building reflecting our times

"Using materials and building methods of this age. A reading of architecture in the city should reflect the cultural aspirations of the people who live in the city"
(Tau 2001:4)

The building should be robust, and designed to weather gracefully. The construction and the materials should reflect both the 20th century technological accomplishments and Pretoria's indigenous resources.

timber cladding, sun shading, flooring, structure, windows, doors

concrete structure, trading stands, paving, infill panels, cladding

masonry masonry walls, boundary walls

aluminium

timber latte sun shading, fencing, walls, roofs

rocks dry packed stone walls, paving, cladding, perimeter walls

steel structure, windows, roof bracing

glass glazing, windows, doors, partitioning

thatch roofs

ADMIN. BLOCK finishes schedule

Finishes columns and beams

fc1 - off shutter concrete
fc2 - plaster & paint
fc4 - patterned mosaic tiled

Finishes walls

fw1 - off shutter concrete.
fw2 - plaster & paint.
fw3 - bagged finish.
fw3 - flush jointed face brick.

Finishes floors

ff1 - granolithic
ff2 - off-concrete
ff3 - gravel
ff4 - loose pavers
ff5 - carpet
ff6 - soft wood timber

Finishes soffits

fs - off shutter concrete
fs - plaster & paint

Finishes ceiling

fcl1 - off-shutter
fcl2 - timber slats

finishes door and windows

fdw1 - timber painted
fdw2 - aluminium factory finish

Balustrade type

bl1 - type 1, balconies
bl2 - type 2, walkways and stairways.

CONSULTING ROOMS finishes schedule

Finishes walls

fw1 - plaster & paint.
fw2 - bagged finish.

Finishes floors

ff1 - granolithic
ff2 - gravel
ff3 - loose pavers

Finishes ceiling

fcl1 - timber slats

Finishes door and windows

fdw1 - timber painted

STORE & ABLUTIONS finishes schedule

Finishes walls

fw1 - plaster & paint.
fw2 - bagged finish.
fw3 - mosaic finish.

Finishes floors

ff1 - granolithic

Finishes ceiling

fcl1 - timber slats

Finishes door and windows

fdw1 - timber painted

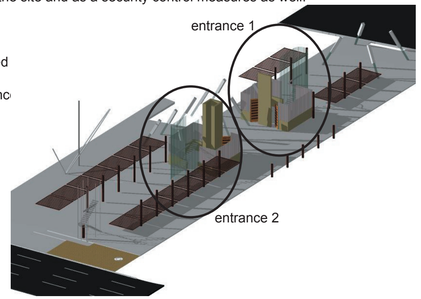
tectonic investigation

building organization

The office building:

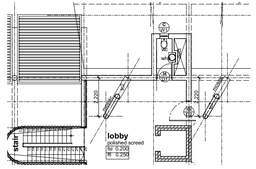
The building is legible, this is achieved by placing the easily recognizable parts each of which looks like the function it serves. It is elevated on a cluster of columns so people can filter through under the building, creating the gateway to the site and as a security control measures as well.

There are 2 major entrances that serves the building each dedicated to the staff members and the visitors to the building. The entrance foyers are easily identiyable and signage suggests to the visitors which entrance to utilize.

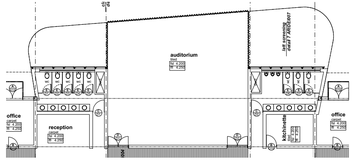


Access stairs and a lift are means in each entrance to access the office and auditorium floor above. Circulation along the first floor is linear via timber covered verandah.

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.

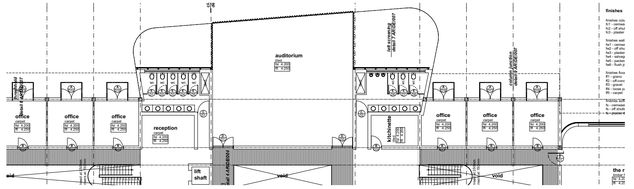


Ablution facilities on the ground floor

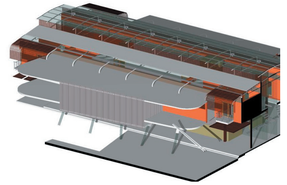


ablution facilities on the first floor

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

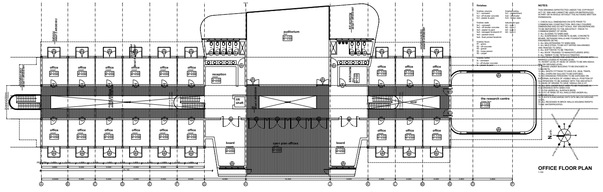


plan at first floor [auditorium]

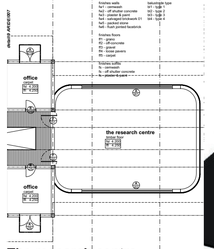


3d image [auditorium]

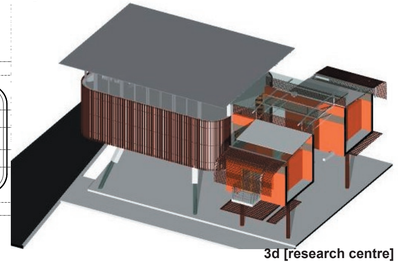
The remainder of the building is general office space and is spread evenly over the functions mentioned above.



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



The research centre



3d [research centre]

The building is designed to accentrically 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 de constructed as well to break the formality.

natural environment

Comfort being the primary influence on productivity

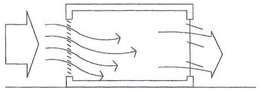
The building is divided into 3 climatic zones namely:

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

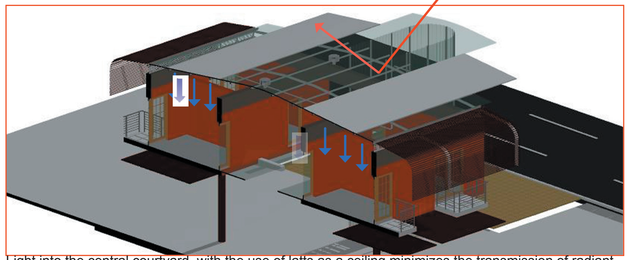
ii. Passive climatic control to central/ circulation space and collective zones.

iii. Ambient air temperature.

fig.56



Offices internal climate modification is through cross ventilation, by allowing the air to flow through one opening to another cools down the interior of the space. Ideally by placing the openings opposite the 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.



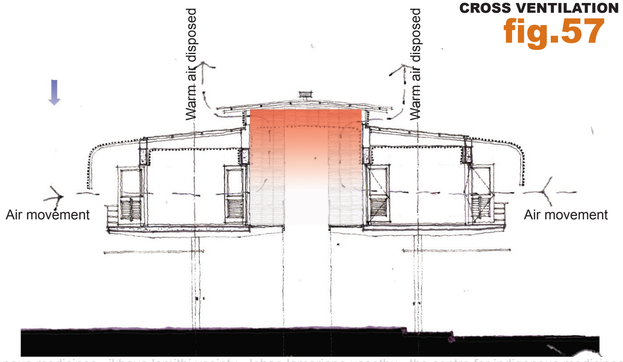
Light into the central courtyard, with the use of latts as a ceiling minimizes the transmission of radiant heat.

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

Under calm conditions warmer air within a space moves upwards to the ceiling, leaving the cooler air below, the idea with creating the central courtyard is to have open circulation space, also working as a cooling stack effect drawing hot air from the building, in turn cooling the spaces within the courtyard.

CROSS VENTILATION

fig.57



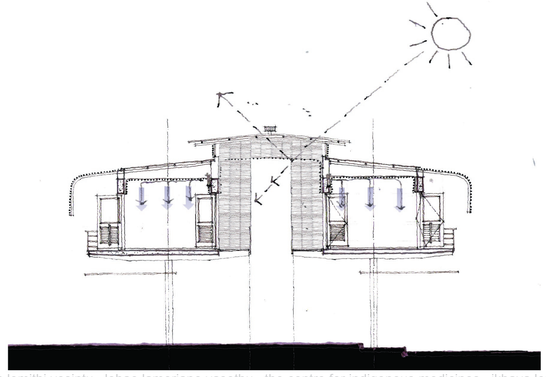
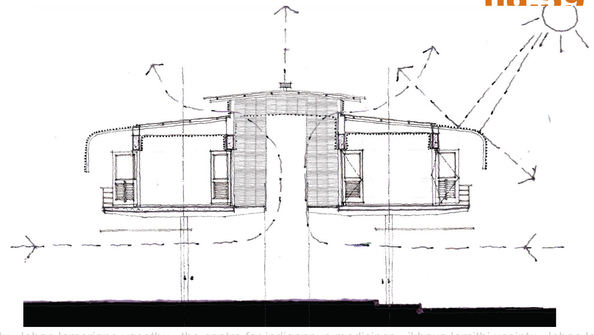
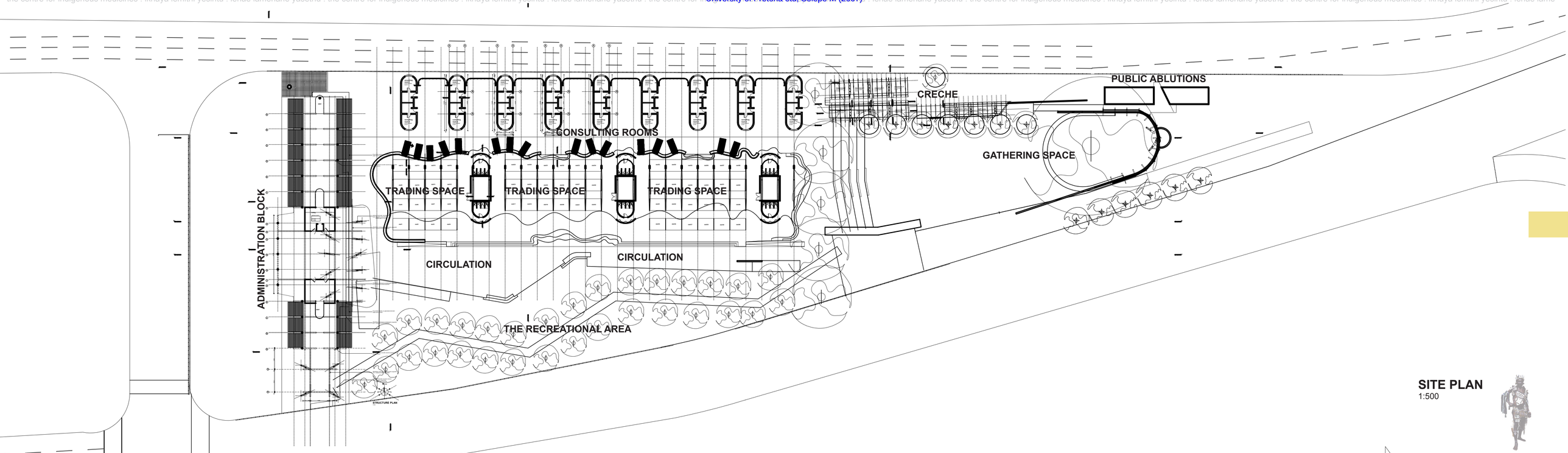


fig.59

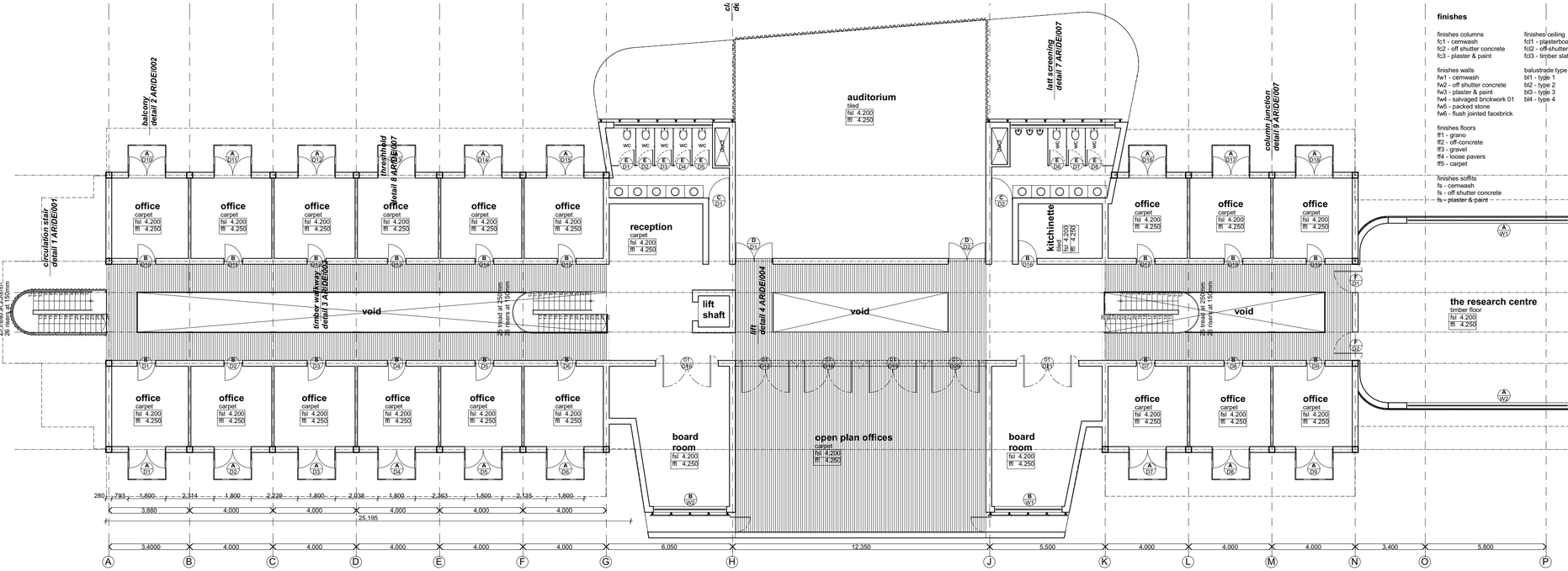




SITE PLAN
1:500

the drawings
building organisation

the drawings



finishes

finishes columns
fc1 - cemwash
fc2 - off shutter concrete
fc3 - plaster & paint

finishes walls
fw1 - cemwash
fw2 - off shutter concrete
fw3 - plaster & paint
fw4 - salvaged brickwork 01
fw5 - packed stone
fw6 - flush jointed facebrick

finishes floors
ff1 - grano
ff2 - off-concrete
ff3 - gravel
ff4 - loose pavers
ff5 - carpet

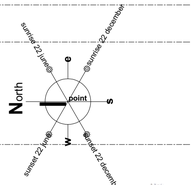
finishes softits
fs - cemwash
fs - off shutter concrete
fs - plaster & paint

finishes ceiling
fc1 - plasterboard
fc2 - off-shutter
fc3 - timber slats

balustrade type
bt1 - typle 1
bt2 - type 2
bt3 - type 3
bt4 - type 4

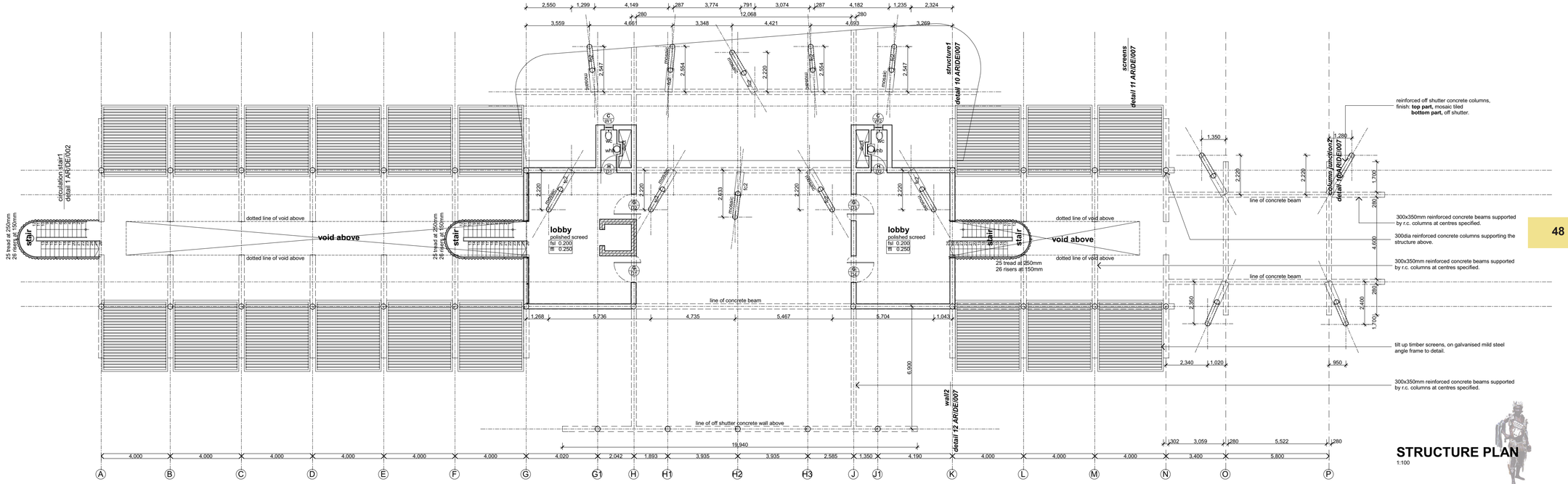
NOTES:

1. CHECK ALLL DIMENSIONS ON SITE PRIOR TO COMMENCING CONSTRUCTION. RED ONLY FIGURED DIMENSIONS AND DO NOT SCALE. ANY DISCREPENCIES TO BE REPORTED TO THE ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
2. ALL GLAZING TO SABS 0400
3. ALL SUSPENDED CONCRETE SLABS, CONCRETE BEAMS, RETAINING WALLS AND FOUNDATIONS TO ENGINEERS DETAIL.
4. ALL BALUSTRADING TO SABS 0400.
5. ALL MILD STEEL TO BE HOT DIPPED GALVANISED AND PAINTED TO SPEC.
6. ALL SOFTWOOD TO BE TREATED.
7. ALL ROOF TRUSSES TO MANUFATCURERS SPEC.
8. ALL TIMBER TO BE TBTA/CCA TREATED.
9. I E S TO ALL BENDS AND JUNCTIONS IN DRAINS WITH MARKED COVERS AT ROUND LEVEL.
10. INVERT LEVEL AT HEAD OF DRAIN TO BE MIN 450mm BELOW GROUND LEVEL.
11. DRAINS UNDER BUILDING TO BE ENCASED IN CONCRETE.
12. ALL WASTE FITTINGS TO HAVE R.E. SEAL TRAPS.
13. ALL OVERLOW GULLIES TO BE EXPOSED.
14. NO DRAINAGE PIPEWORK TO BE EXPOSED ON EXTERNAL SUFACES OF VISIBLE WALLS. POSITION OF ALL PIPEWORK TO BE AGREED WITH THE ARCHITECT.
15. HEAD OF DRAINS TO HAVE 1000mm DIA S.V.P.
16. ALL SOIL UNDER BUILT AREA TO BE POISONED IN ACCORDANCE WITH SABS 0124.
17. D.P.M UNDER ALL SURFACE BEDS.
18. D.P.C AT BASE OF ALL WALLS AND UNDER ALL WINDOW CILLS.
19. R.W.P.D'S DISCHARGE ONTO SITE BELOW GROUND LEVEL.
20. ALL RECESSES IN BRICK WALLS HOUSING RWDP'S TO BE WATERPROOFED.



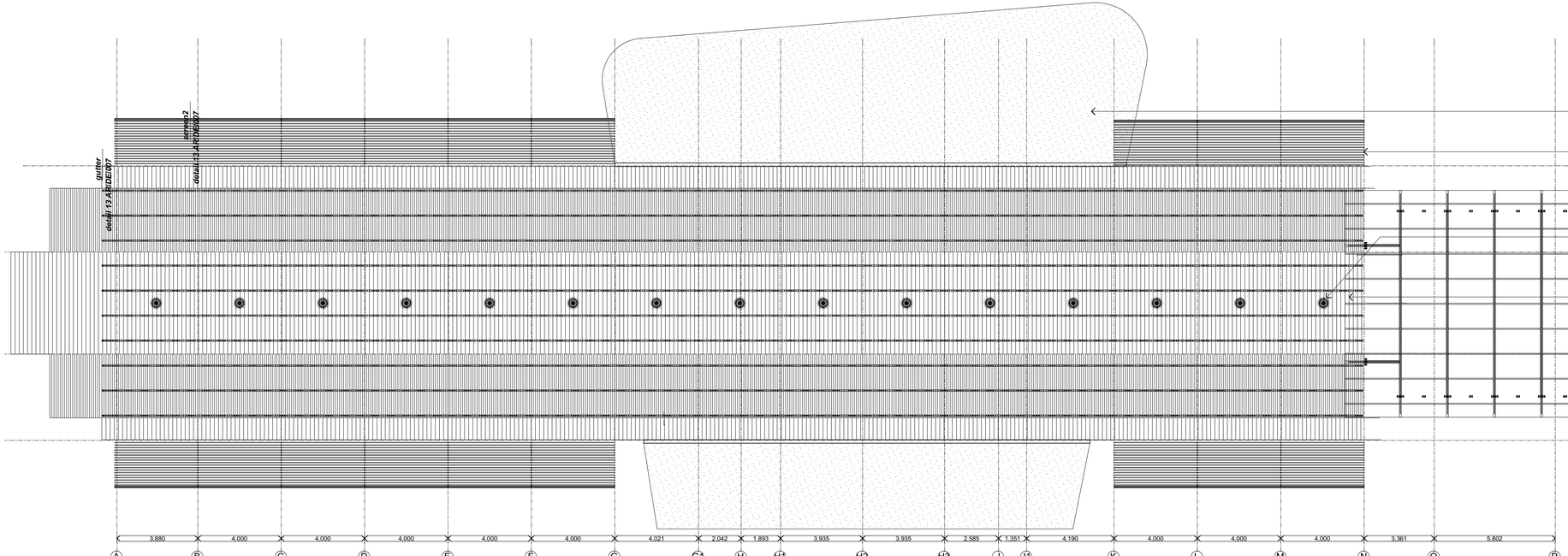
OFFICE FLOOR PLAN

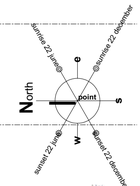
1:100



STRUCTURE PLAN

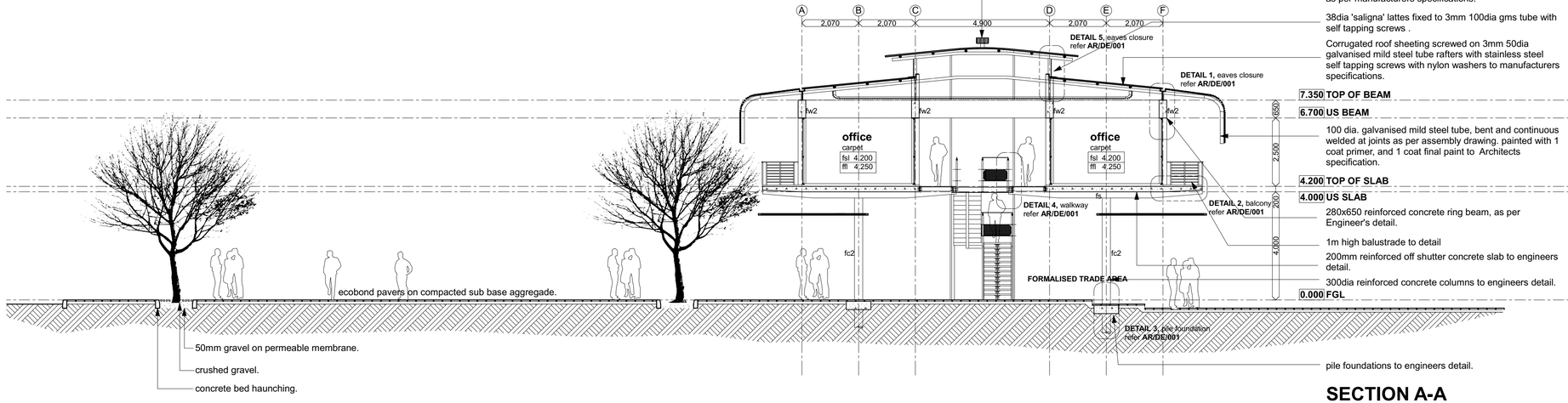
1:100





ROOF PLAN

1:100



SECTION A-A

section through main building
1:100

finishes

finishes columns
fc1 - cemwash
fc2 - off shutter concrete
fc3 - plaster & paint

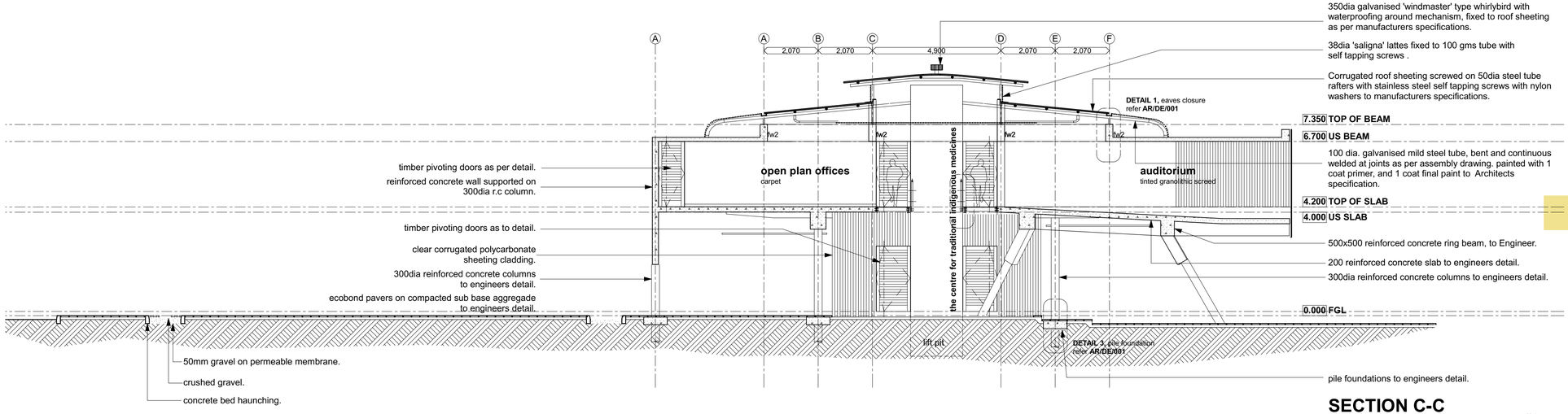
finishes walls
fw1 - cemwash
fw2 - off shutter concrete
fw3 - plaster & paint
fw4 - salvaged brickwork 01
fw5 -
fw6 - packed stone
fw7 - flush jointed face brick

finishes floors
ff1 - granolithic
ff2 - off-concrete
ff3 - wilson stone
ff4 - gravel
ff5 - loose pavers
ff6 - carpet
ff7 - parquet
ff8 - khars

finishes soffits
fs - cemwash
fs - off shutter concrete
fs - plaster & paint

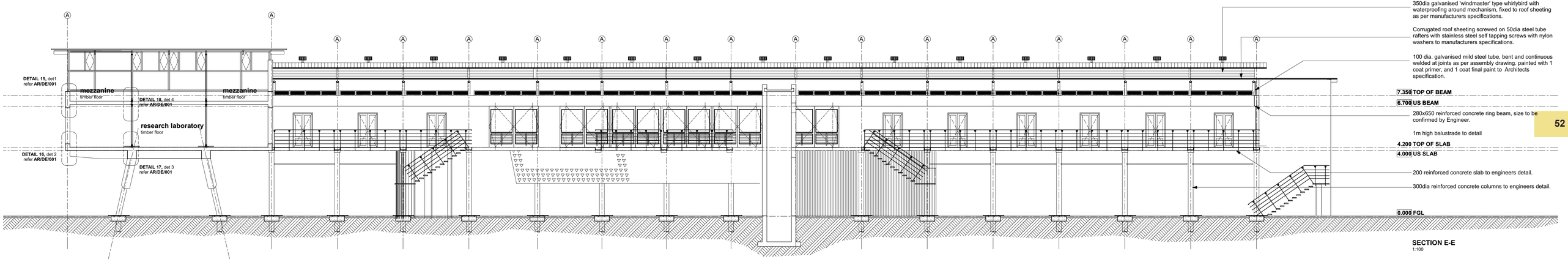
finishes ceiling
fc1 - plasterboard
fc2 - off-shutter
fc3 - timber slats

balustrade type
bl1 - type 1
bl2 - type 2
bl3 - type 3
bl4 - type 4

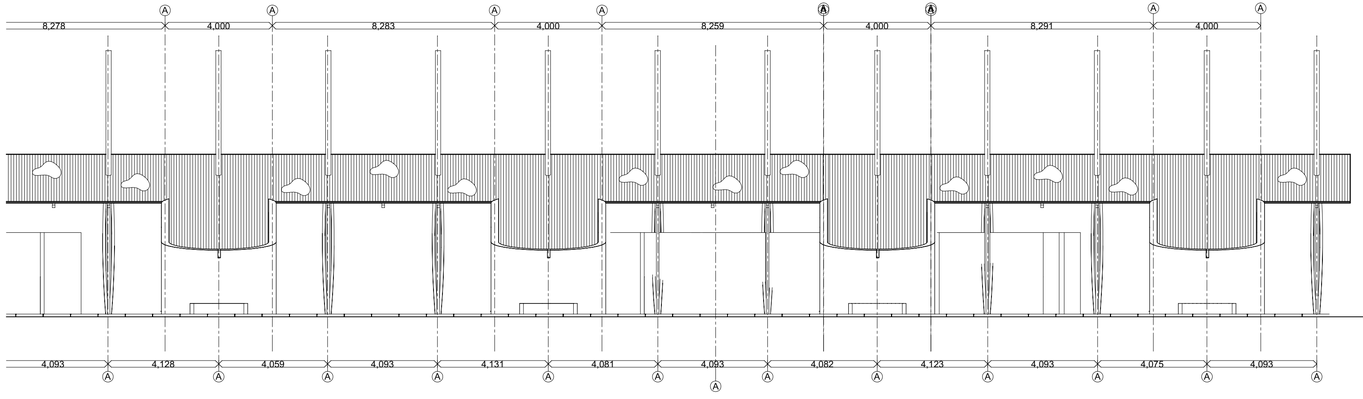


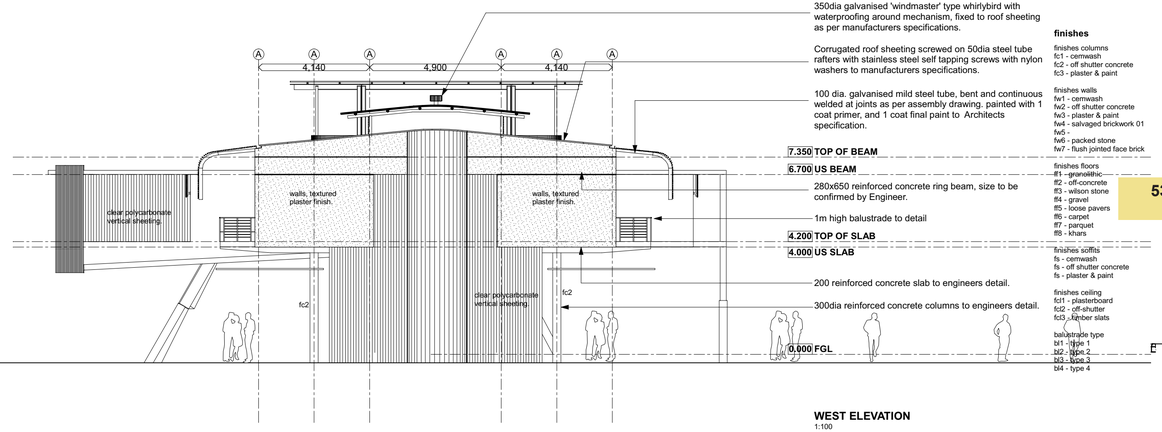
SECTION C-C

section through main building
1:100

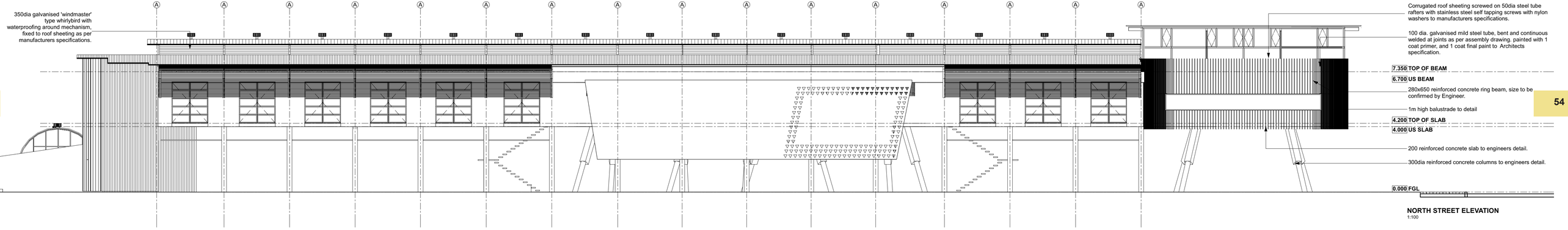


SECTION E-E
1:100

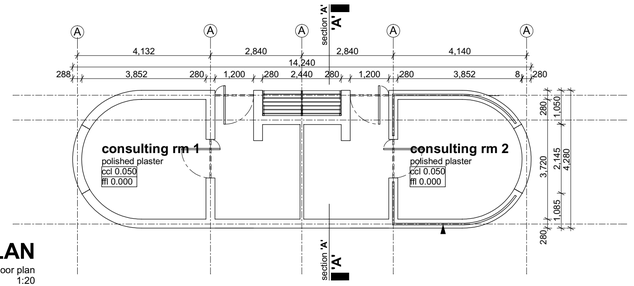




WEST ELEVATION
1:100

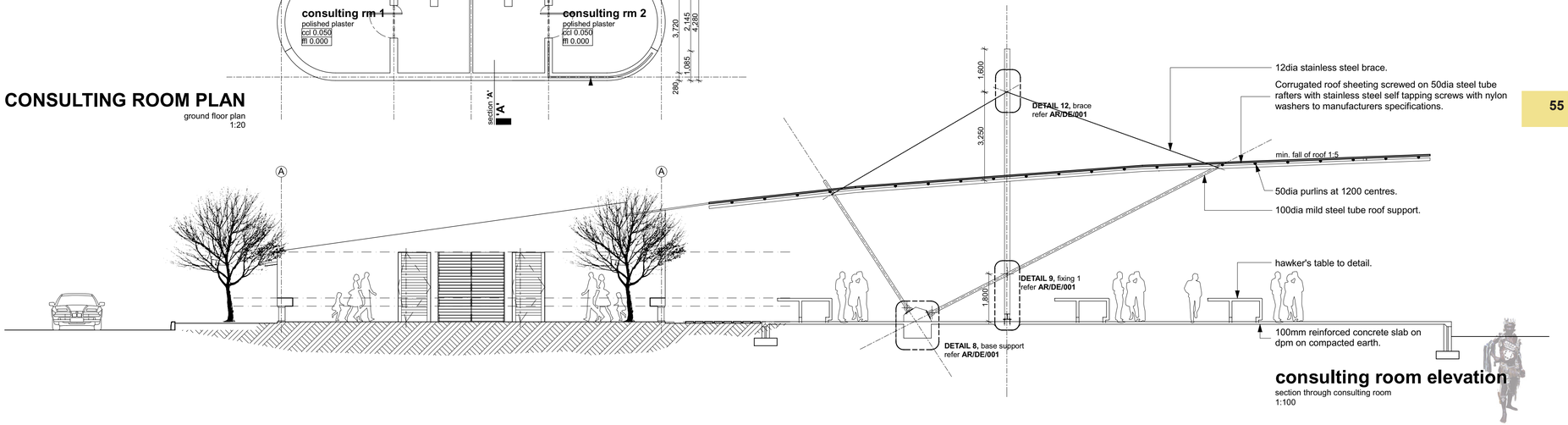


NORTH STREET ELEVATION
1:100



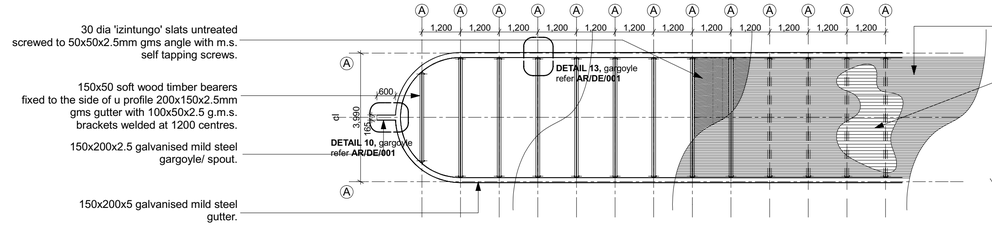
CONSULTING ROOM PLAN

ground floor plan
1:20



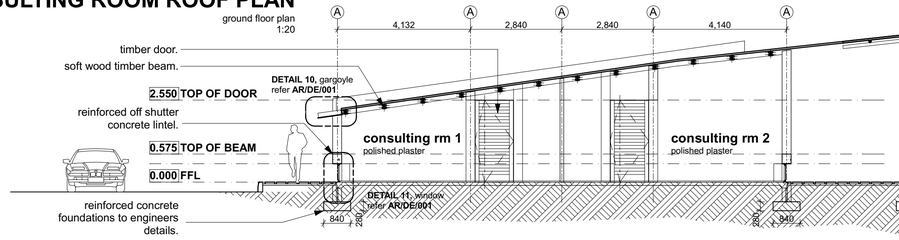
consulting room elevation

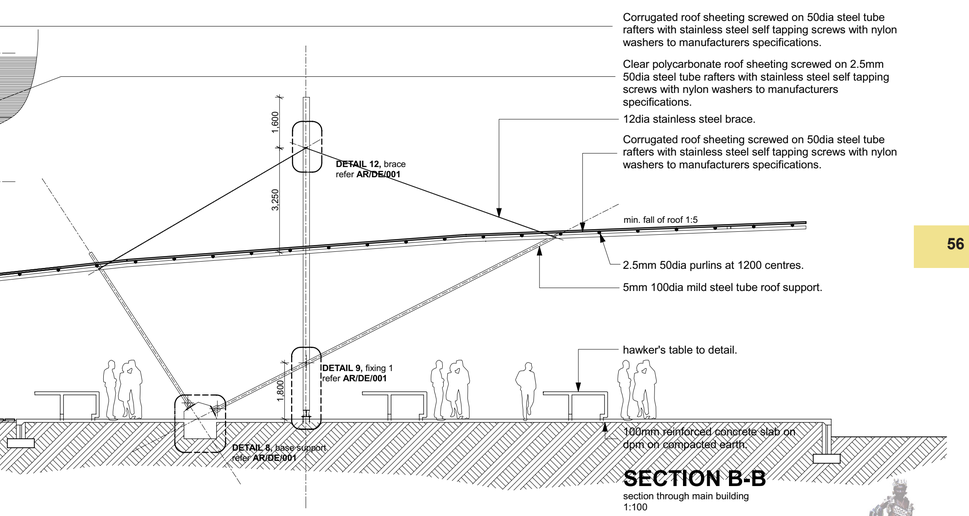
section through consulting room
1:100



CONSULTING ROOM ROOF PLAN

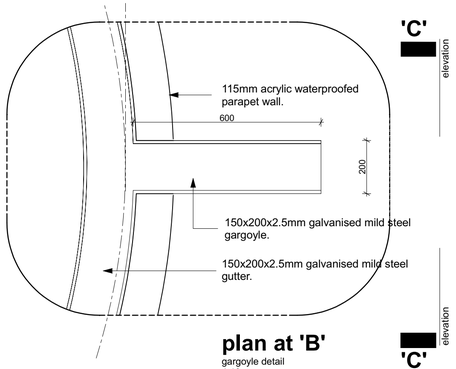
ground floor plan
1:20





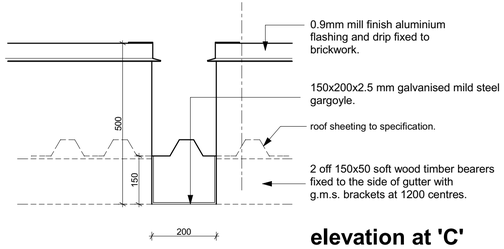
SECTION B-B

section through main building
1:100



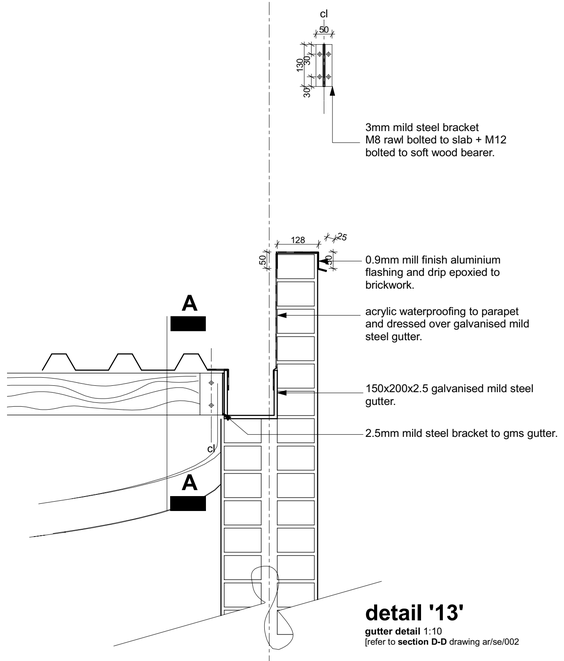
plan at 'B'

gargoyle detail
1:10



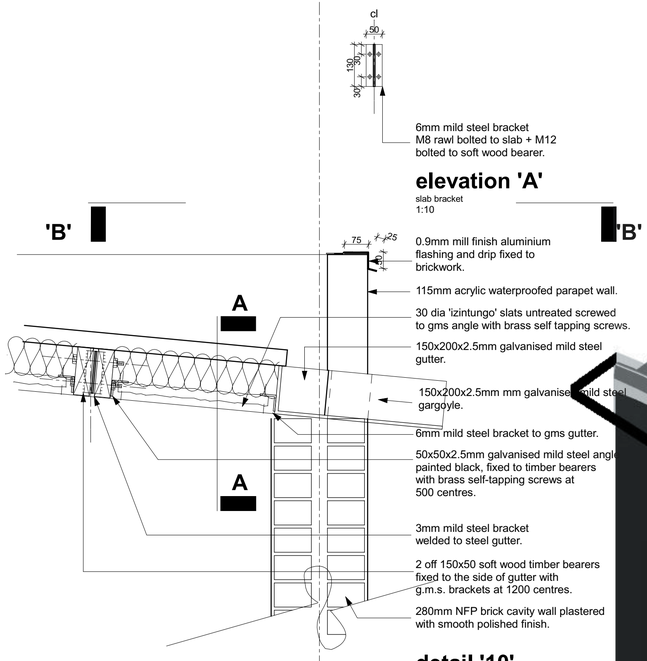
elevation at 'C'

gargoyle detail
1:10



detail '13'

gutter detail 1:10
[refer to **section D-D** drawing ar/se/002

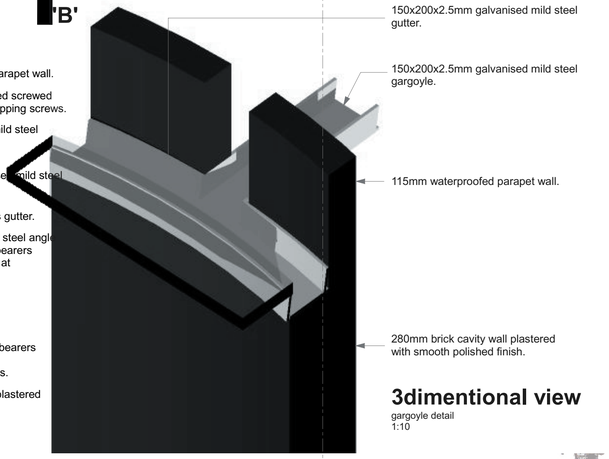


elevation 'A'

slab bracket
1:10

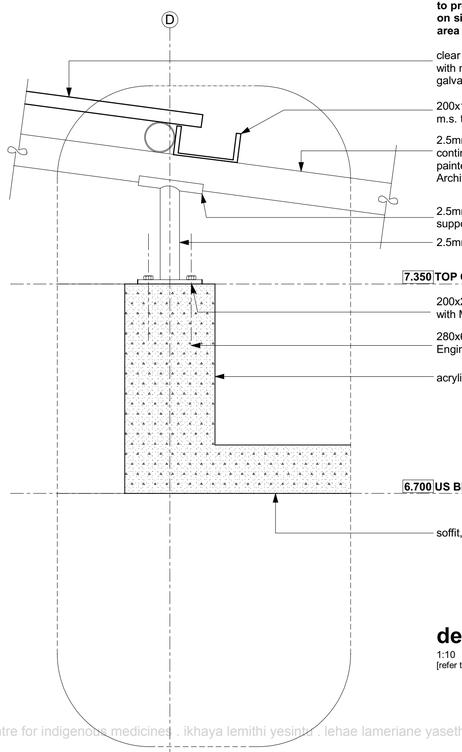
detail '10'

gargoyle 1:10
[refer to **section B-B** drawing ar/se/001



3dimentional view

gargoyle detail
1:10

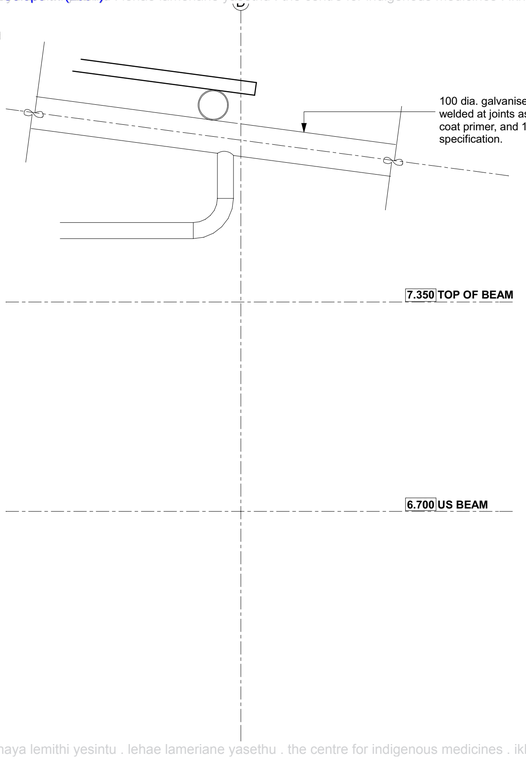


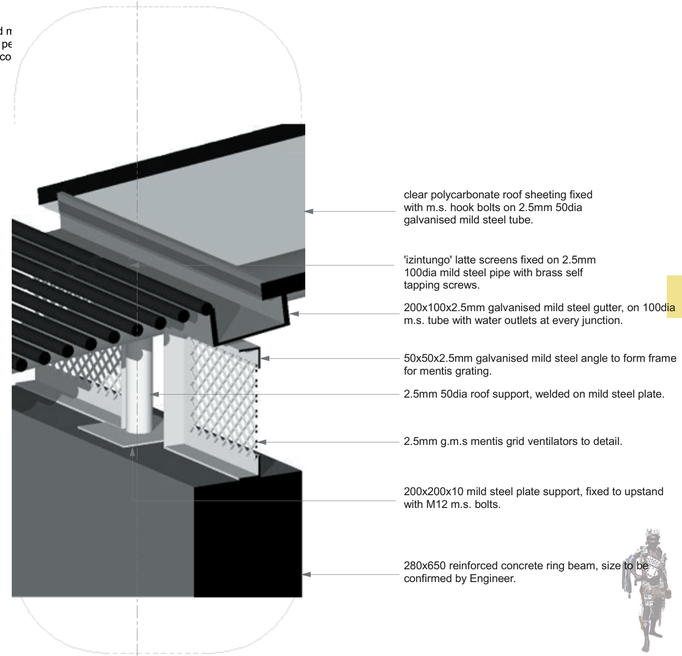
all welding to be done off site prior to galvanising to prevent welding on site: should a need be to weld on site, prepare the surfaces well, finish off the welded area with 'coldgalv'

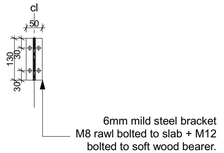
detail '2'

1:10

[refer to drawing ar/sel/001

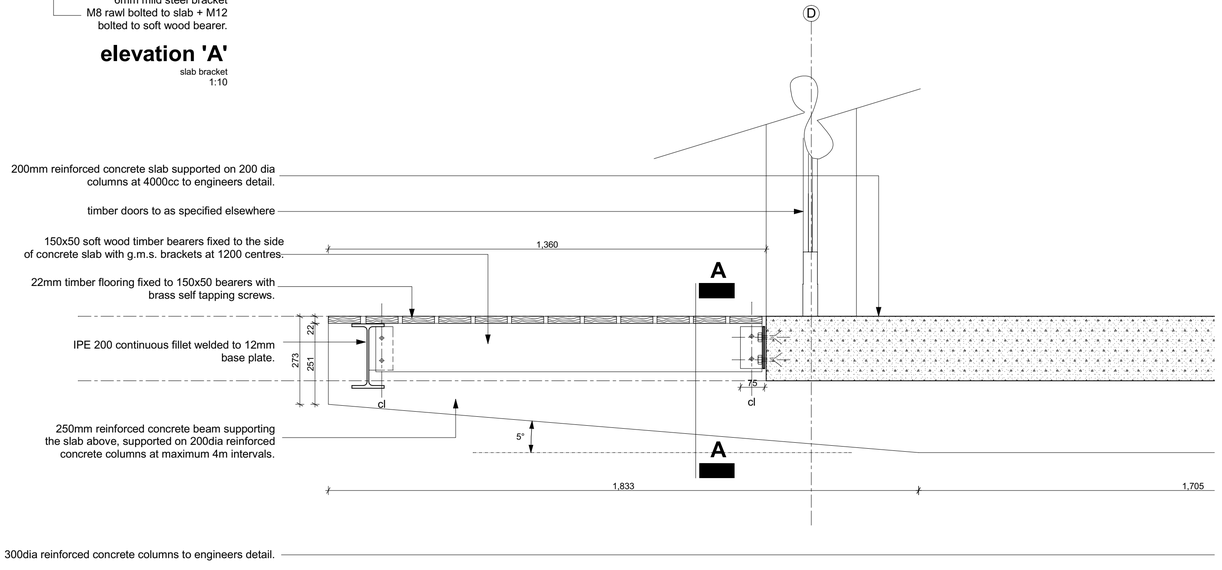


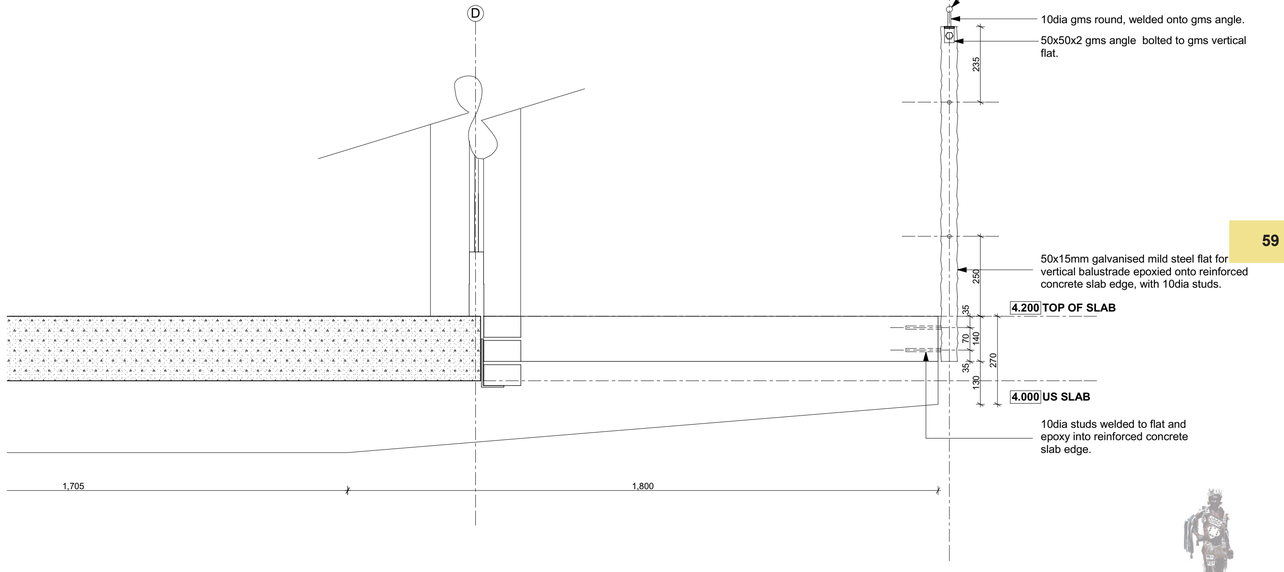




elevation 'A'

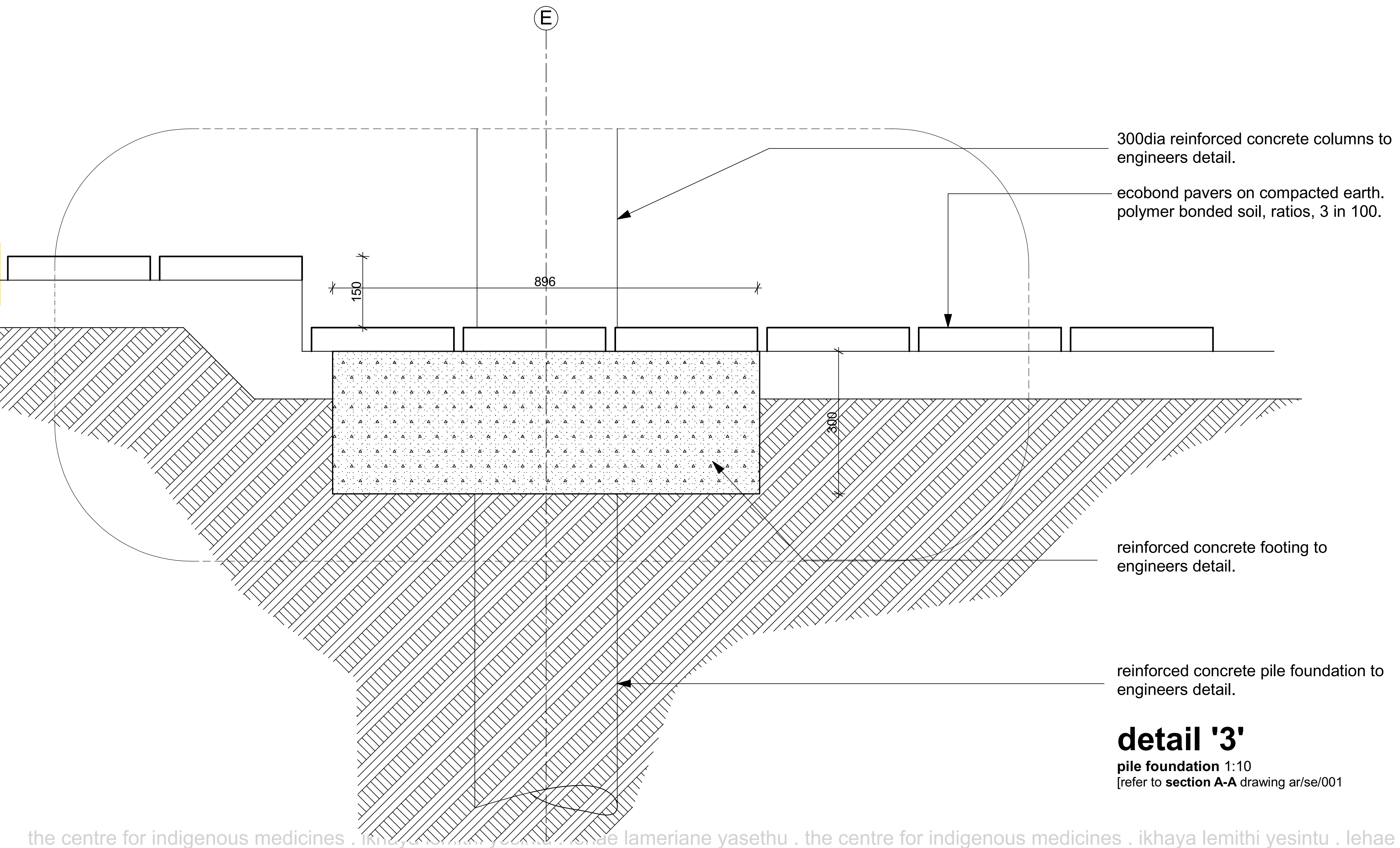
slab bracket
1:10



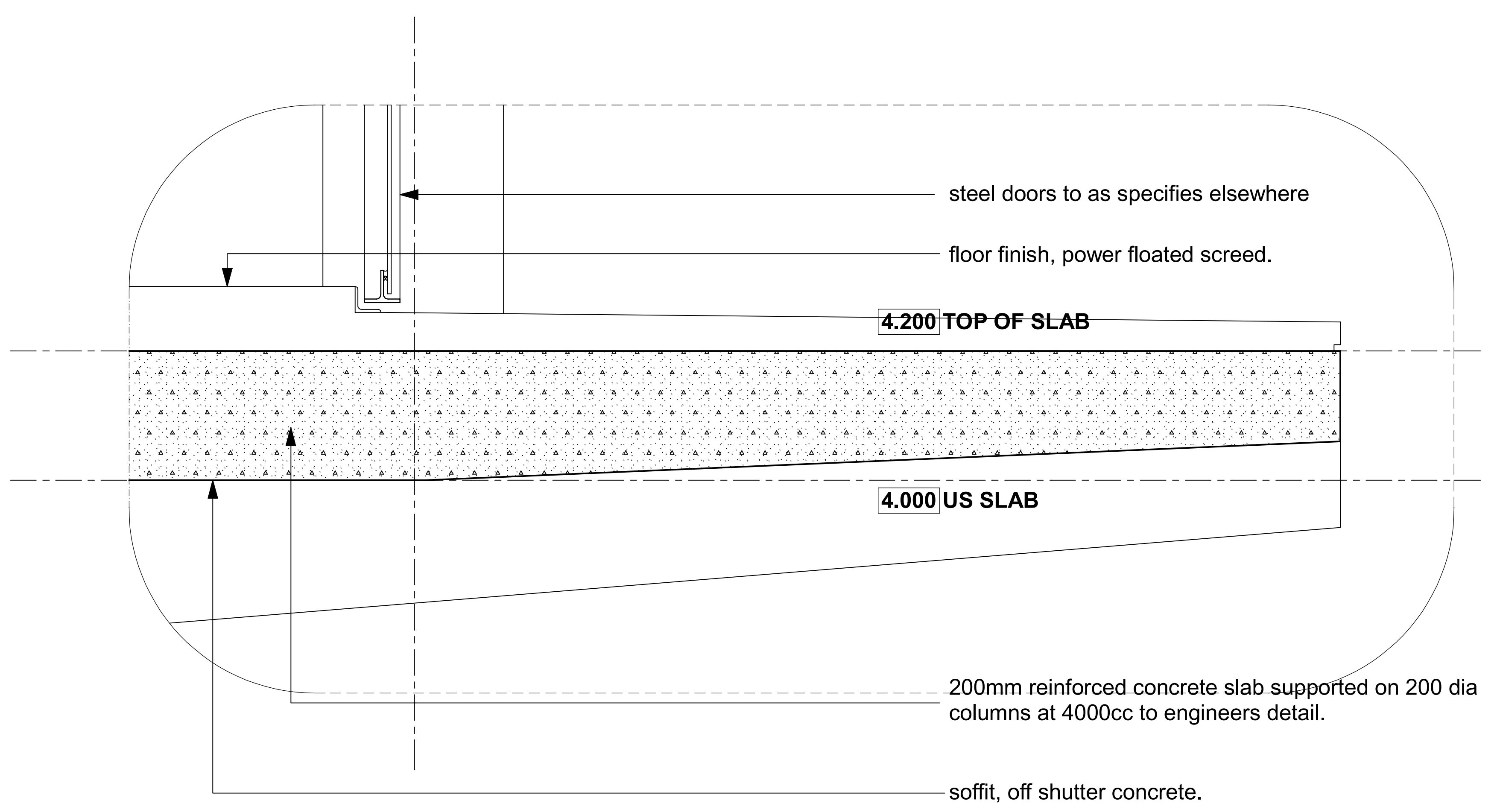


detail '4'

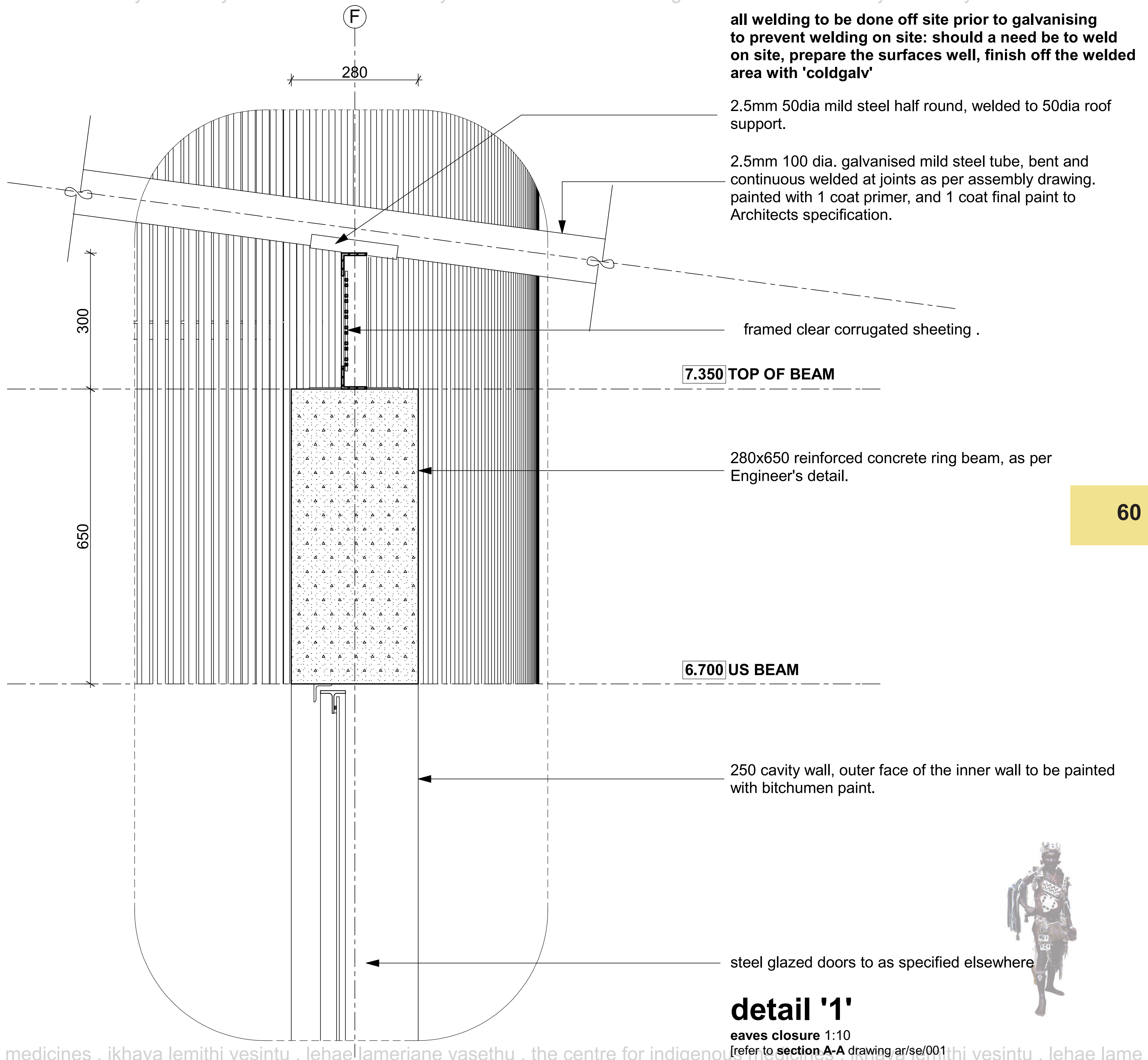
walkway 1:10
[refer to **section A-A** drawing ar/se/001



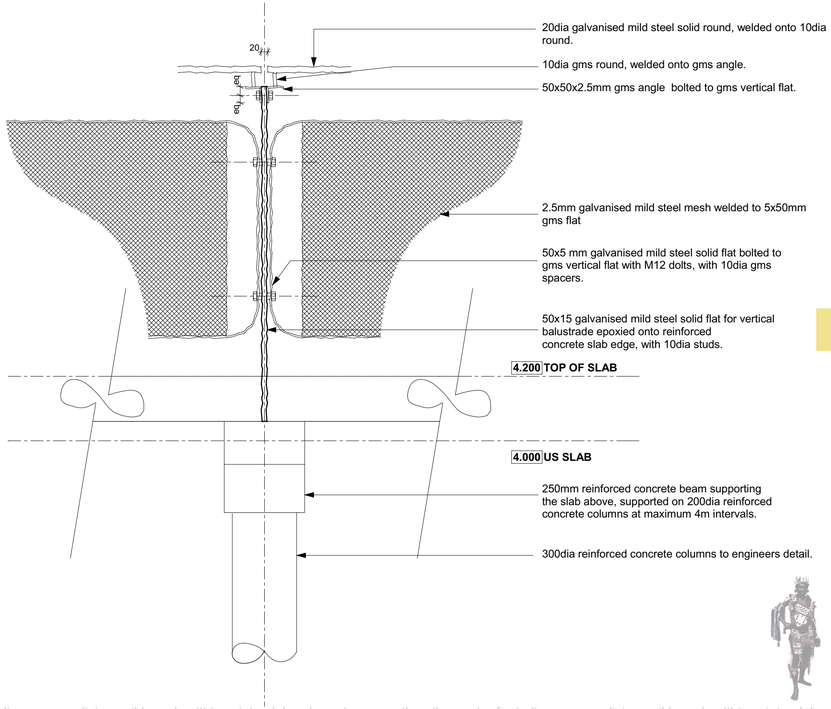
detail '3'
pile foundation 1:10
[refer to section A-A drawing ar/se/001



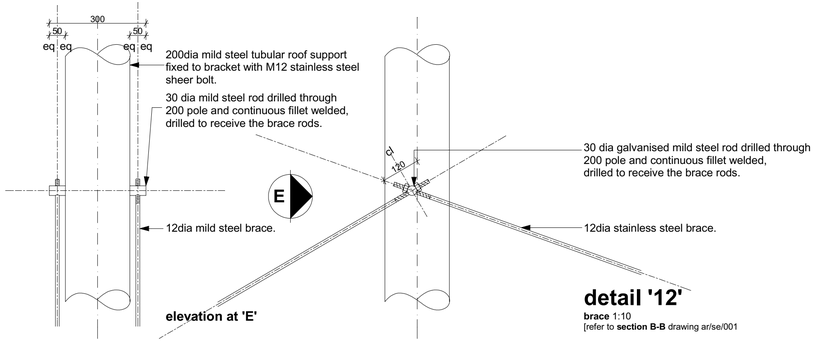
detail '2'
balcony 1:10
[refer to section A-A drawing ar/se/001



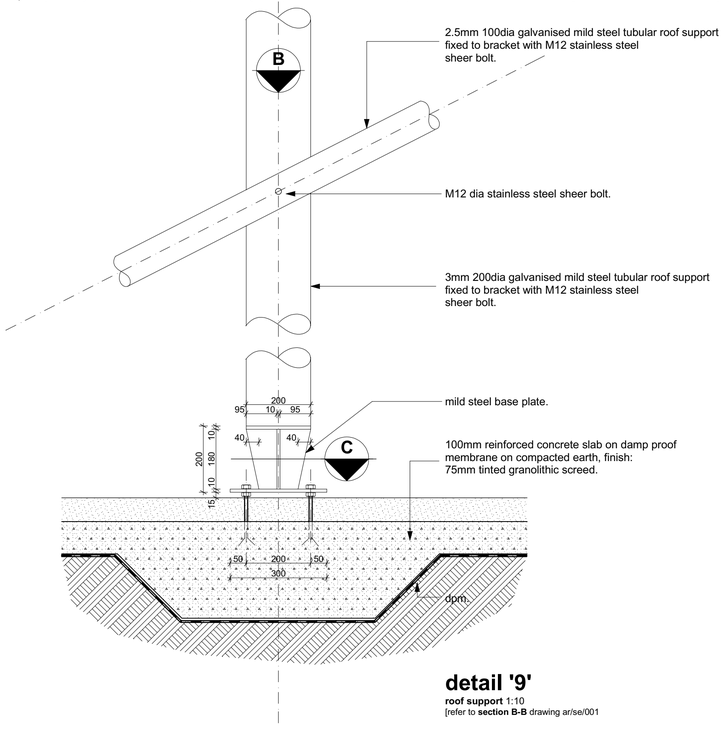
detail '1'
eaves closure 1:10
[refer to section A-A drawing ar/se/001



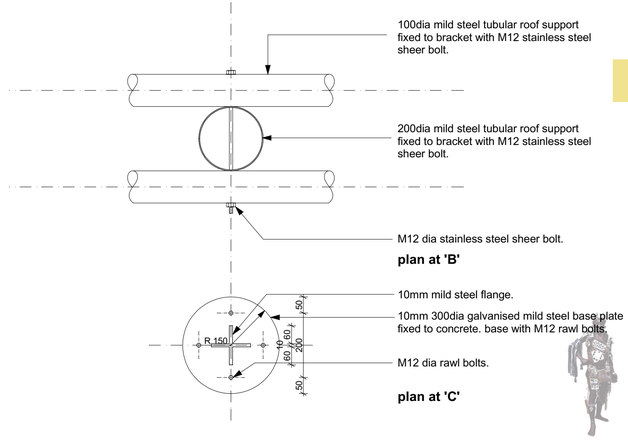
the centre for indigenous medicines . ikhaya lemithi yesintu . lehae lameriane yasethu . the centre for indigenous medicines . ikhaya lemithi yesintu . lehae lameriane yasethu . the centre for indigenous medicines . ikhaya lemithi yesintu . lehae lameriane yasethu . the centre for indigenous medicines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

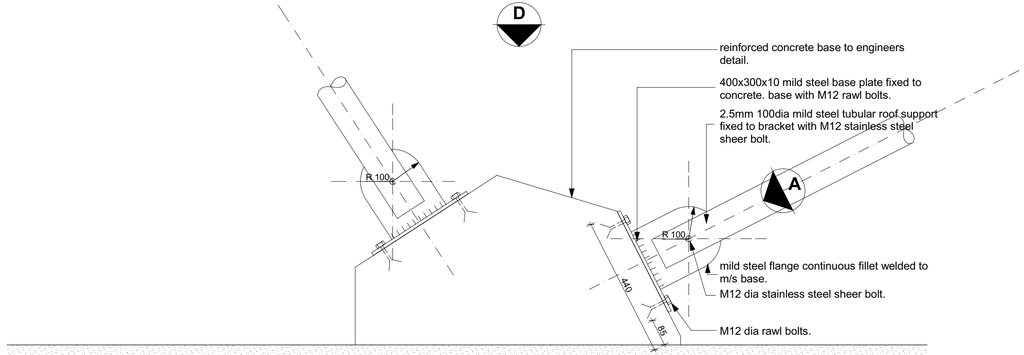


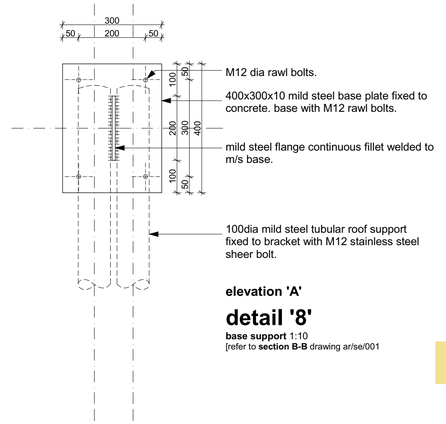
detail '12'
brace 1:10
[refer to **section B-B** drawing ar/sel/001



detail '9'
roof support 1:10
[refer to **section B-B** drawing ar/sel/001



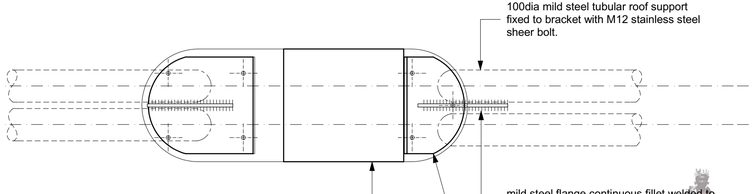




elevation 'A'

detail '8'

base support 1:10
[refer to **section B-B** drawing ar/se/001



plan at 'D'

conclusion

conclusion

In conclusion, the proposed Traditional Healers Centre incorporates the culture traditional healing into an existing urban fabric, Marabastad.

The proposed Traditional Healers Centre allows for the de-mystification of traditional healing, as it allows for the displaying of the same in daily urban life. Located on a site that acts as a movement link between [fill in], the Centre given 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 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 Marabastad.

The proposed Traditional Healing Centre is a start to the redevelopment 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 Marabastad 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 Marabastad.

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Non-renewable resources are being depleted and there is increasing environmental damage as a result of human activities. It is therefore increasingly important that this is addressed, and sustainability becomes an key issue in the way we live and work. Buildings can play an important role in supporting sustainability. 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.

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.

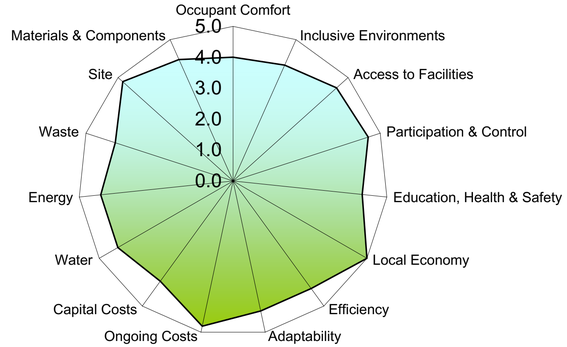
The SBAT tool is used in design stages of a new building. It is designed to encourage the development of more sustainable buildings by enabling different options to be evaluated rapidly and compared. The tool also enables a building to be rated in terms of its sustainability. This enables buildings to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

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? is sustainable, it fulfills all the reqired standards set by the tool to assess the building.

SUSTAINABLE BUILDING ASSESSMENT TOOL (SBAT- P) V1

PROJECT		ASSESSMENT	
Project title:	**The research centre for indigenous traditional medicines**	Date:	**26-Oct-06**
Location:	**Pretoria, Marabastad**	Undertaken by:	**Mpho Selepe**
Building type (specify):	**Community and Commercial**	Company / organisation:	**University Of Pretoria**
Internal area (m2):		Telephone:	Fax:
Number of users:		Email:	mphoselepe@tuks.co.za
Building life cycle stage (specify):	**Design**		



Social	4.3	Economic	4.5	Environmental	4.3

Overall	4.4

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Criteria Notes

Reference	Criteria	Description	Examples of quantified performance indicators
SO1	Occupant Comfort	The quality of environments in and around buildings has been shown to have a direct impact on health, happiness and productivity of people. Healthier, happier, more effective people contribute to sustainability by being more efficient and therefore reducing resource consumption and waste.	
SO2	Inclusive Environments	Buildings should be designed to accommodate and be accessible to everyone, or specially designed buildings need to be provided. Ensuring that buildings are inclusive supports sustainability as replication is avoided and change of use supported. It also ensures that as legislation in this area tightens, expensive retrofits are not required in order to ensure compliance	
SO3	Access to Facilities	Conventional living and working patterns require regular access to a range of services. Ensuring that these services can be accessed easily and in environmentally friendly ways supports sustainability by increasing efficiency and reducing environmental impact.	
SO4	Participation & Control	Enablingusers to participate in decisions about their environment helps ensure that they care for and manage this properly. Control over aspects of their local environment enables personal satisfaction and comfort. Both of these support sustainability by promoting proper management of buildings and increasing productivity.	
SO5	Education Health and Safety	Buildings need to cater for the well-being, development, health and safety of the people that use them. Learning and access to information is increasingly seen as a requirement of a competitive work force. All of these factors contribute to sustainability by helping ensure that people remain healthy and economically active, thus reducing the 'costs' (to society, the environment and the economy) of unemployment and ill health.	

Building Performance - Social

	Criteria	Indicative performance measure	Measured	Points
SO 1	**Occupant Comfort**	Explanatory notes		4.0
SO 1.1	Daylighting	% of occupied spaces that are within distance 2H from window, where H is the height of the window or where there is good daylight from skylights	80	0.8
SO 1.2	Ventilation	% of occupied spaces have equivalent of opening window area equivalent to 10% of floor area or adequate mechanical system, with upolluted air source	80	0.8
SO 1.3	Noise	% of occupied spaces where external/internal/reverberation noise does not impinge on normal conversation (50dbA)	80	0.8
SO 1.5	Thermal comfort	Tempreture of occupied space does not exceed 28 or go below 19oC for less than 5 days per year (100%)	80	0.8
SO 1.5	Views	% of occupied space that is 6m from an external window (not a skylight) with a view	80	0.8
SO 2	**Inclusive Environment**	Explanatory notes		4.1
SO 2.1	Public Transport	% of building (s) within 400m of disabled accessible (20%) and affordable (80%) public transport	90	0.9
SO 2.2	Information	Comprehensive signage provided (50%), Signage high contrast, clear print signage in appropriate locations and language(s) / use of understandable symbols / manned reception at all entrances (50%)	80	0.8
SO 2.3	Space	% of occupied spaces that are accessible to ambulant disabled / wheelchair users	80	0.8
SO 2.4	Toilets	% of occupied space with fully accessible toilets within 50m along easily accessible route	80	0.8
SO 2.5	Fittings & Furniture	% of commonly used furniture and fittings (reception desk, kitchenette, auditorium) fully accessible	80	0.8
SO 3	**Access to Facilities**	Explanatory notes		4.5
SO 3.1	Children	All users can walk (100%) / use public transport (50%) to get to their childrens' schools and creches	90	0.9
SO 3.2	Banking	All users can walk (100%) / use public transport (50%) to get to banking facilities	90	0.9
SO 3.3	Retail	All users can walk (100%) / use public transport (50%) to get to food retail	90	0.9
SO 3.4	Communication	All users can walk (100%) / use public transport (50%) to get to communication facilities (post/telephone/internet)	90	0.9
SO 3.5	Exercise	All users can walk (100%) / use public transport (50%) to get to recreation/excercise facilities	90	0.9
SO 4	**Participation & Contro**	Explanatory notes		4.6
SO 4.1	Environmental control	% of occupied space able to control their thermal environment (adjacent to openable windows/thermal controls)	90	0.9
SO 4.2	Lighting control	% of occupied space able to control their light (adjacent to controllable blinds etc/local lighting control)	90	0.9
SO 4.3	Social spaces	Social informal meeting spaces (parks / staff canteens / cafes) provided locally (within 400m) (100%)	100	1.0
SO 4.4	Sharing facilties	5% or more of facilities shared with other users / organisations on a weekly basis (100%)	100	1.0
SO 4.5	User group	Users actively involved in the design process (50%) / Active and representative management user group (50%)	80	0.8
SO 5	**Education, Health & Sa**	Explanatory notes		4.2
SO 5.1	Education	Two percent or more space/facilities available for education (seminar rooms / reading / libraries) per occupied space (75%). Construction training provided on site (25%)	100	1.0
SO 5.2	Safety	All well used routes in and around building well lit (25%), all routes in and around buildings visually supervised (25%), secure perimeter and access control (50%), No crime (100%)	80	0.8
SO 5.3	Awareness	% of users who can access information on health & safety issues (ie HIV/AIDS), training and employment opportunities easily (posters/personnel/intranet site)	80	0.8
SO 5.4	Materials	All materials/components used have no negative effects on indoor air quality (100%)	80	0.8
SO 5.5	Accidents	Process in place for recording all occupational accidents and diseases and addressing these	80	0.8

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Criteria Notes

Reference	Criteria	Description	Examples of quantified performance indicators
EC1	Local Economy	The construction and management of buildings can have a major impact on the economy of an area. The economy of an area can be stimulated and sustained by buildings that make use of, and develop, local skills and resources.	
EC2	Efficiency	Buildings cost money and make use of resources whether they are used or not. Effective and efficient use of buildings supports sustainability by reducing waste and the need for additional buildings.	
EC3	Adaptability and Flexibility	Most buildings can have a life span of at least 50 years. It is likely that within this time the use of the building will change, or that the feasibility of this will be investigated. Buildings, which can accommodate change easily, support sustainability by reducing the requirement for physical adaptation and associated disruption, energy consumption and cost as well as the need for new buildings.	
EC4	Ongoing Costs	Building cost money to operate. These costs include cleaning, maintenance, security and energy. These costs are often indicative of consumption and waste in the building. It is therefore important to monitor them. In addition operational budgets can be used to support the development of local economies.	
EC5	Capital Costs	Buildings are generally one of the most valuable assets that people, and often organisations and governments own. Money spent on buildings is not available for other uses such as health, education and business development. In addition,expensive buildings may mean that the services (i.e. health and education) they contain or the accommodation (for work and living) they provide is beyond the means of most users.	

Building Performance - Economic

	Criteria	Indicative performance measure	Measured	Points
EC 1	**Local economy**	Explanatory notes		5.0
EC 1.1	Local contractors	% value of the building constructed by local (within 50km) small (employees<20) contractors	100	1.0
EC 1.2	Local materials	% of materials (sand, bricks, blocks, roofing material) sourced from within 50km	100	1.0
EC 1.3	Local components	% of components (windows, doors etc) made locally (in the country)	100	1.0
EC 1.4	Local furniture/fittings	% of furniture and fittings made locally (in the country)	100	1.0
EC 1.5	Maintenance	% of maintenance and repairs by value that can, and are undertaken, by local contractors (within 50km)	100	1.0
EC 2	**Efficiency**	Explanatory notes		4.3
EC 2.1	Capacity	% capacity of building used on a daily basis (actual number of users / number of users at full capacity*100)	80	0.8
EC 2.2	Occupancy	% of time building is occupied and used (actual average number of hours used / all potential hours building could be used (24) *100)	50	0.5
EC 2.3	Space per occupant	Space provision per user not more than 10% above national average for building type (100%)	100	1.0
EC 2.4	Communication	Site/building has access to internet and telephone (100%), telephone only (50%)	100	1.0
EC 2.5	Material & Components	Building design coordinated with material / component sizes in order to minimise wastage. Walls (50%), Roof and floors (50%)	100	1.0
EC 3	**Adaptability**	Explanatory notes		4.4
EC 3.1	Vertical heights	% of spaces that have a floor to ceiling height of 3000mm or more	80	0.8
EC 3.2	External space	Design facilitates flexible external space use (100%)	100	1.0
EC 3.3	Internal partition	Non loadbearing internal partitions that can be easily adapted (loose partioning (100%), studwall (50%), masonary (25%)	80	0.8
EC 3.4	Modular planning	Building with modular stucture, envelope (fenestration) & services allowing easly internal adaptaptation (100%)	80	0.8
EC 3.5	Furniture	Modular, limited variety furniture - can be easily configured for different uses (100%)	100	1.0
EC 4	**Ongoing costs**	Explanatory notes		4.8
EC 4.1	Induction	All new users receive induction training on building systems (50%), Detailed building user manual (50%)	100	1.0
EC4.2	Consumption & waste	% of users exposed on a monthly basis to building performance figures (water (25%), electricity (25%), waste (25%), accidents (25%)	80	0.8
EC 4.2	Metering	Easily monitored localised metering system for water (50%) and energy (50%)	100	1.0
EC4.3	Maintenance & Cleaning	% of building that can be cleaned and maintained easily and safely using simple equipment and local non-hazardous materials	100	1.0
SO 4.5	Procurement	% of value of all materials/equipment used in the building on a daily basis supplied by local (within the country) manufacturers	100	1.0
EC 5	**Capital Costs**	Explanatory notes		4.0
EC 5.1	Local need	Five percent capital cost allocated to address urgent local issues (employment, training etc) during construction process (100%)	100	1.0
EC5.2	Procurement	Tender / construction packaged to ensure involvement of small local contractors/manufacturers (100%)	100	1.0
EC 5.3	Building costs	Capital cost not more than fifteen % above national average building costs for the building type (100%)	100	1.0
EC5.4	Technology	3% or more of capital costs allocated to new sustainable/indigenous technology (100%)	100	1.0
EC 5.5	Existing Buildings	Existing buildings reused (100%)	0	0.0

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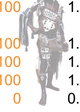

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Criteria Notes

Reference	Criteria	Description	Examples of quantified performance
EN1	Water	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, parallel efforts are then required to dispose of this after it is used in reticulation and sewerage systems. 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 impact associated with for disposal of storm water and runoff.	
EN2	Energy	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	
EN3	Waste	Raw 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 materials and components in buildings and in the activities accommodated and reducing waste by recycling and reuse supports sustainability by reducing the energy consumption and resource consumption.	
EN4	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 life. (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 have already been disturbed, and working with nature by including aspects of natural ecosystems within the development.	
EN5	Materials and Components	The construction of buildings usually requires large quantities of materials and components. These may require large amounts of energy to produce. Their manufacture may also require processes that are harmful to the environment and consume non-renewable resources. It is therefore important to carefully select materials and components and construction methods.	

Building Performance - Environmental

	Criteria	Indicative performance measure	Measured	Points
EN 1	**Water**	Explanatory notes		4.3
EN 1.1	Rainwater	% of water consumed sourced from rainwater harvested on site	80	0.8
EN 1.2	Water use	% of equipment (taps, washing machines, urinals showerheads) that are water efficient	100	1.0
EN 1.3	Runoff	% of carparking, paths, roads and roofs that have absorbant/semi absorbant/permeable surfaces (grassed/thatched/looselaid paving/ absorbant materials)	100	1.0
EN 1.4	Greywater	% of water from washing/relatively clean processes recycled and reused	50	0.5
EN 1.5	Planting	% of planting (other than food gardens) on site with low / appropriate water requirements	100	1.0
EN 2	**Energy**	Explanatory notes		4.3
EN 2.1	Location	% of users who walk / cycle / use public transport to commute to the building	100	1.0
EN 2.2	Ventilation	% of building ventilation requirements met through natural / passive ventilation	80	0.8
EN 2.3	Heating & Cooling	% of occupied space which relies solely on passive environmental control (no or minimal energy consumption)	80	0.8
EN 2.4	Appliances & fittings	% of appliances / lighting fixtures that are classed as highly energy efficient (ie energy star rating)	90	0.9
EN 2.5	Renewable energy	% of building energy requirements met from renewable sources	80	0.8
EN 3	**Waste**	Explanatory notes		4.0
EN 3.1	Toxic waste	% of toxic waste (batteries, ink cartridges, flourescent lamps) recycled	100	1.0
EN 3.2	Organic waste	% of organic waste recycled	100	1.0
EN 3.3	Inorganic waste	% of inorganic waste recycled.	100	1.0
EN 3.4	Sewerage	% of sewerage recycled on site	20	0.2
EN 3.5	Construction waste	% of damaged building materials / waste developed in construction recycled on site	80	0.8
EN 4	**Site**	Explanatory notes		4.8
EN 4.1	Brownfield site	% of proposed site already disturbed / brownfield (previously developed)	100	1.0
EN 4.2	Neighbouring buildings	No neighbouring buildings negatively affected (access to sunlight, daylight, ventilation) (100%)	100	1.0
EN 4.3	Vegetation	% of area of area covered in vegetation (include green roofs, internal planting) relative to whole site	100	1.0
EN 4.4	Food gardens	Food gardens on site (100%)	100	1.0
EN 4.5	Landscape inputs	% of landscape that does not require mechanical equipment (ie lawn cutting) and or artificial inputs such as weed killers and pesticides	80	0.8
EN 5	**Materials & Componen**	Explanatory notes		4.3
EN 5.1	Embodied energy	Materials with high embodied energy (aluminium,plastics) make up less than 1% of weight of building (100%)	100	1.0
EN 5.2	Material sources	% of materials and components by volume from grown sources (animal/plant)	80	0.8
EN 5.3	Ozone depletion	No materials and components used requiring ozone depleting processes (100%)	80	0.8
EN 5.4	Recyled / reuse	% of materials and components (by weight) reused / from recycled sources	80	0.8
EN 5.5	Construction process	Volume / area of site disturbed during construction less than 2X volume/area of new building (100%)	90	0.9

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