

“We don’t change the city, the city
changes us.”

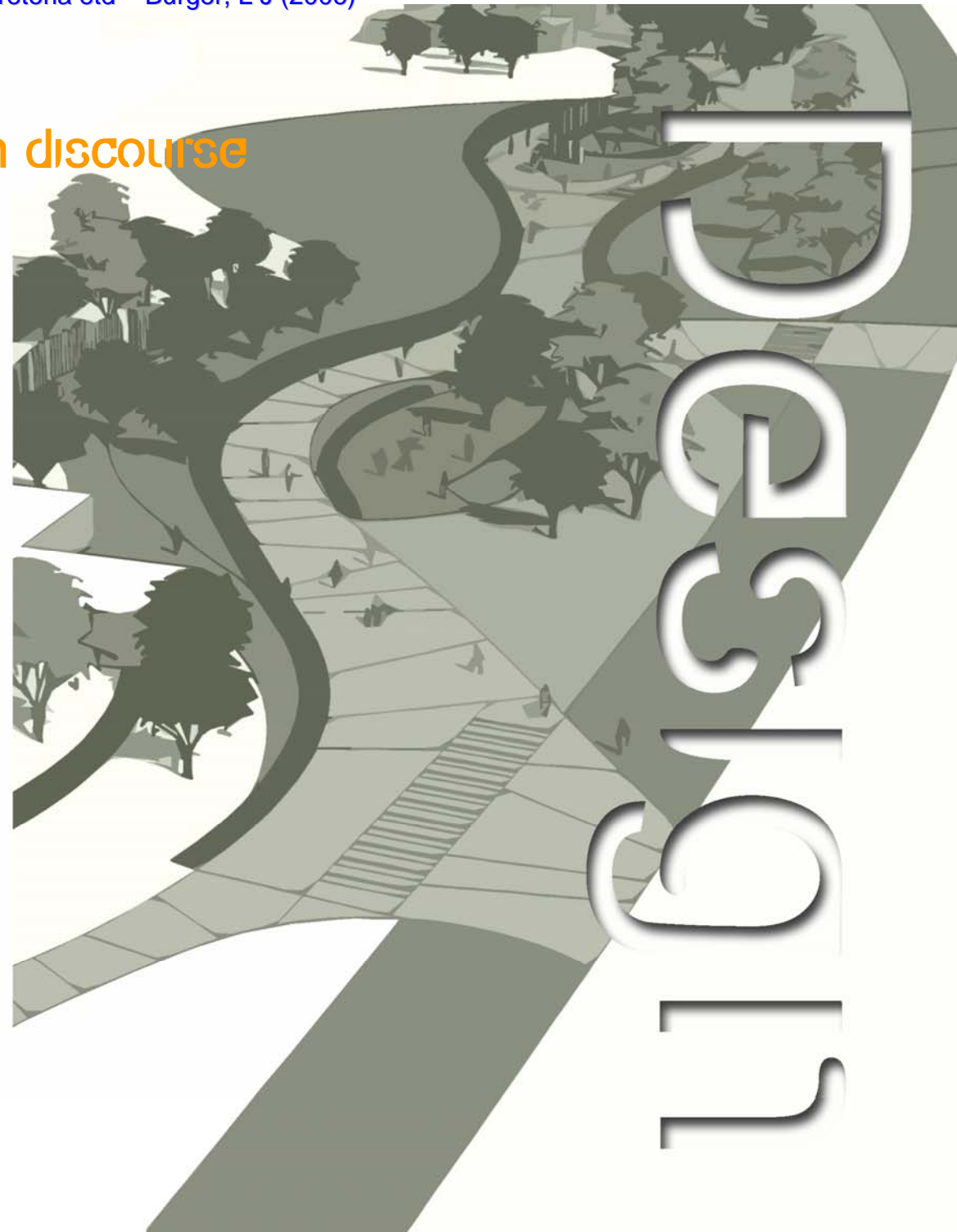
(By author)



H Design and construction discourse

Introduction

H. 1	What the design must do	78
H. 2	What the design is	78
H. 3	What the design is not	78
H. 4	How people will view the design	78
H. 5	Site Background	79
H. 6	How people will experience the design	80
H. 7	To what extent the design is going to regulate?	80
H. 8	What information will guide the design?	80
H. 8.1	The beliefs	80
H. 8.2	The history	80
H. 8.3	The people	80
H. 8.4	Sustainability	80
H. 8.5	The context	80
H. 9	Design process	
H. 9.1	Movement	82
H. 9.2	Elevation	83
H. 9.3	Space	84
H. 9.4	Legibility	85
H. 10	Site plan for the Bakgatla ba Kgafela Cultural precinct	86
H. 11	Routes and destinations	87
H. 12	Zones within the design intervention	88
H. 12.1	Gathering zone	89
H. 12.2	Trade zone	90
H. 12.3	Cultural arena wall	91
H. 13	Views of the design intervention	92
H. 14	Material use	95
H. 15	Construction details for the gathering space	97
H. 16	Construction details for the Trade space	98



Bakgatla ba Kgafela

Cultural precinct: Saulspoort

Introduction

The design intervention will exert itself within scenario 4; Development in Saulspoort. (see Fig. F.4). This scenario was chosen for the numerous positive outcomes and possibilities. According to the Context analysis (see timeline B.8, sections B.9.7 & B.9.8, C.3 and Fig C.3) Saulspoort is ideally situated to benefit from the secondary tourism industry proposed to mitigate the effect of post-closure mining operations. Saulspoort also have a high Cultural Heritage Preservation value. It is thus necessary to preserve and protect the rich cultural heritage of the Bakgatla ba Kgafela community by means of design.

One of the ways to preserve the character of the community is to secure the way in which the community live and move. It is not so much the space as what is happening in the space (Gooding 2002: 125) This is captured in the patterns the community engrave on the landscape in the form of the dust roads that are narrow and widens at places where people congregate. According to Betsky (2005:7) Architects can think of design as the thoughtful gathering together of what already exists to reveal the nature of a place. The design aspires to capture this at a place where there is a culmination of heritage, culture, movement and activity.

H. 1 What the design must do.

The design must be mitigation against the cultural and physical influences a mine can have on the community. The design must be a place of awareness and a place of rediscovery and meeting.

The design must preserve how people meet for a brief moment in their daily movements, and become a place that represents the way in which the people of Saulspoort live.

When people move and live, their way of live becomes evident in the patterns they form on the land. Richard Long (Landscape Artist) makes these patterns by

continuously walking in different directions to leave a Physical mark on the landscape. The art is a physical mark or pattern that connects to people on a psychological level. (Gooding. 2002:124) The design proposal for the cultural precinct of Saulspoort must capture the movement patterns and the way of life that the people of Saulspoort imprinted on the land, in a similar manner. (see Fig B.11)

The design intervention must remind the people of their cultural heritage and their present milieu. This might not transpire physically but it will most probably come about on a psychological level. Thus the intervention is a regeneration of an obvious, misunderstood, daily part of Saulspoort. It could be perceived as a membrane or place where transition happens.

H. 2. The design is the following:

- A place where people are made aware of their environment
- A compass, focusing the user and orientating the user
- A path junction
- A celebration of the way of life of the people of Saulspoort
- It can be a transport interchange
- It provides the opportunity for trade
- A meeting place
- A situate where people can wait
- A place where young people can come in search of employment from the mines and visa versa
- A symbol of hope and empowerment
- A gate to the cultural arena
- A intervention aimed at movement and orientation

H. 3 What the design is not

- A tourist attraction
- A tourist drop-off point
- It is not a Transport interchange but rather an expression of how transport is accommodated throughout Saulspoort

- It is not a trade center, but provides opportunities for specific trade that enhance the cultural heritage of the people of Saulspoort namely pottery
- A museum
- It does not house functions that continues for long periods of time

H. 4 How people will view the design

The proposed part of Saulspoort for development, (see Fig. H.1) is already seen as a place of culture, religion, authority, opportunity and expectation. The design might be seen as some sort of monument or park, but that is not the intention. It will be seen as a place of how people imprint their lives on the landscape. It is a celebration of their routine.

The intervention will enhance the sense of family and community as it is in this precinct where families gather to wait for family members returning from the nearby mines on Fridays. It will be seen as a destination of opportunity as taxi owners, traders and young people in search of employment will gather here. Most of all, it will be seen as a place of meeting and orientation as the design recognizes the views, routes and attractions of importance in the area. (see Fig.H.11) The tourist or newcomer will not necessarily understand this space with their first encounter. To the people of Saulspoort however it is an expression of their daily routines. This is further articulated in the elevation of the design intervention as horizontal undulating lines echo the topography and outlines the cell structure of the town. (see Fig. H.7)

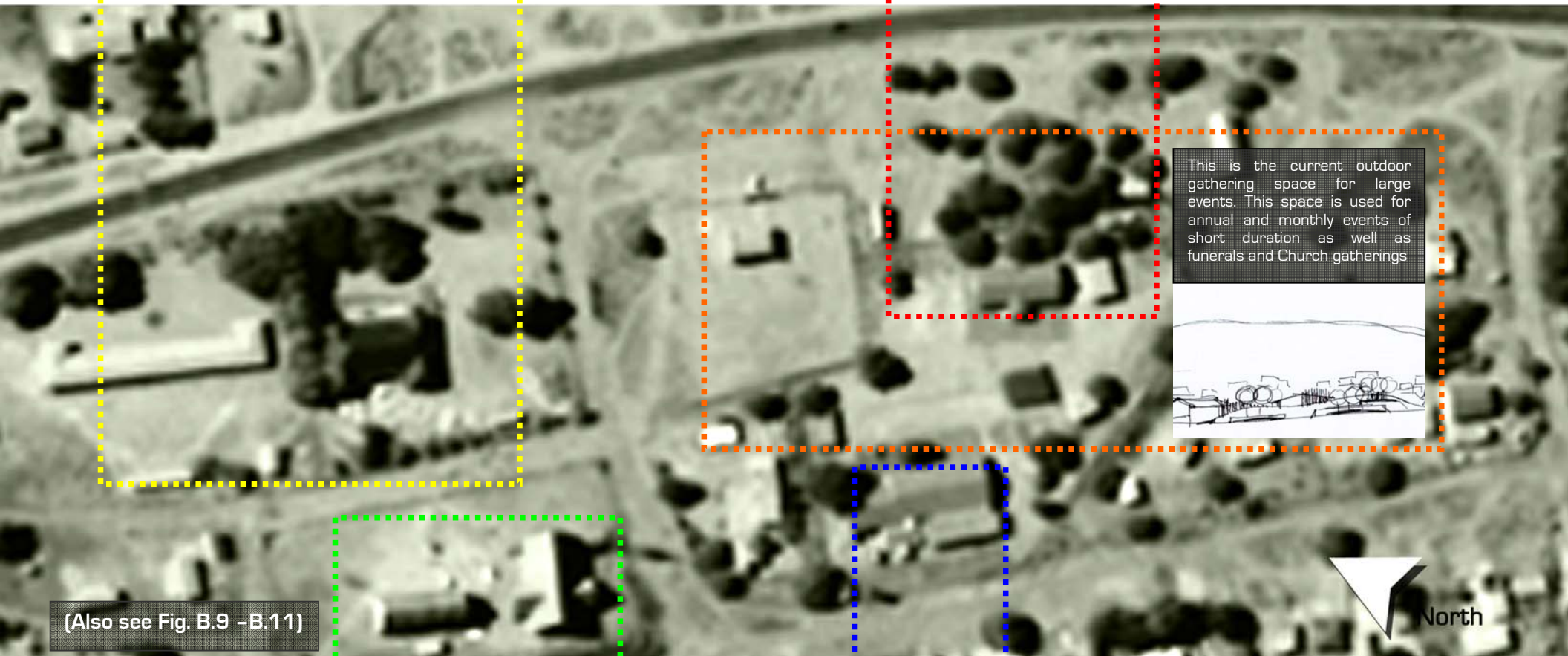
One can appreciate the architecture of the area by simply taking a leisurely drive on the main routes but the actual experience and importance of the town is somewhat lost on plan. The design attempts to explain this visually to the tourist driving past and the pedestrian provoking them to explore some more.



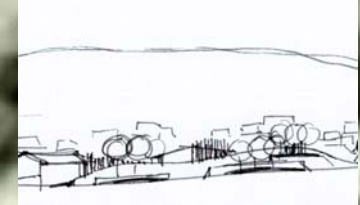
The museum and the primary school constitute part of the educational component of the cultural terrain. [see FigB.10] The museum has ample parking space that is currently fenced off with a low dilapidated fence. The museum consists of exhibition halls, an internet café, one of only a few public ablution facilities and a traditional kitchen where tourist and residents can enjoy traditionally prepared foods.



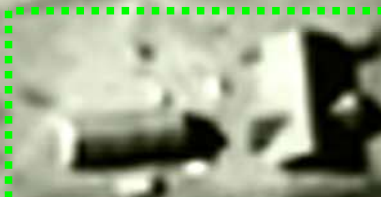
This area is currently used by young people waiting for employment and by woman and children waiting on the arrival of their husbands from the mines on Friday afternoons. It is a well shaded area with existing Acacia karoo and Acacia galpinii trees.



This is the current outdoor gathering space for large events. This space is used for annual and monthly events of short duration as well as funerals and Church gatherings



[Also see Fig. B.9 –B.11]



This area is the religious core of the whole cultural precinct and comprises of the a historical NG Church building, which was the first missionary station in the area and the new NG Church.



The Tribal office of the Bakgatla бага Kgafela. This is the authoritative core of Saulspoor. The building itself houses daily weekly and monthly gatherings. Larger monthly and annual meetings are held outside.



H.5 Site background

Figure H.1 Background information

H. 6 How will people experience the design?

What makes any design work is people. A place without people is like a body without a soul as the precedent studies suggests. The design intervention encourages the meeting of people in the course of their daily activities, and it is this interaction between people that enhances the experience of the design.

People also experience any design by moving through it. Thus the experience of the striking environment is enhanced by the design, and to some not the design itself. Furthermore the design can be experienced by the motorist through a series of different road surfaces to focus the attention on the cultural precinct of Saulspoort.

The design of over 100 m is an elevational expression of what happens on plan throughout Saulspoort. The pedestrian experiences views the surrounding area offers as well as textures that inspired by the precinct. The smaller sub-spaces will accommodate trade and small gatherings of people for short periods of time. The design thus enhances interaction between people. The road-facing component of the design is hidden from the residents and the reverse of the design is a subtle enclosure of the cultural arena. (see Fig. B.9 – B.10)

This enables the design to be less intrusive to the constant viewer and resident and more intense in its use and view from the road, giving the area instant recognition as more important in the urban fabric, acting as a gateway to the cultural arena.

H. 7 To what extent is the design going to regulate?

The design regulates the speed of the user and the motorist by changing road surfaces and noise producing strips but other than this no decision is irreversible and the intervention is seen more as a series of choices than a stringent regulator.

H. 8 What information will guide the design?

H. 8.1 The beliefs:

Information gathered in the context analysis regarding the values of the residents of Saulspoort will form the basis from which decisions can be made in the design process. (see B.9.5 and B.9.10)

Natural features that protrude or that appears to be rising from the surface is regarded as significant or even sacred by the community. Examples of this are the Pilanesberg mountain itself where a mystical serpent lives that guards the community. Other examples are the rocky outcrops near the Moruleng dam and the Rain praying site, an exposed piece of bedrock where men pray for rain in times of drought. (see Fig. H.11)

H. 8.2 The history:

The Dutch reformed Church Plays an integral part in the community, in its history and in the present. They are constructed from natural rock from the area. This might inform some of the material choices in the design as the design also serve as a gate or poort to the cultural and religious heart. There is an abundance of this rock in the area and through observation only buildings of importance or religion is built from rock. (see Timeline B.8 and Fig. B.9)

H. 8.3 The people:

Ultimately the design is for the people and people must be able to participate in the building process. Thus construction methods, materials and design must accommodate for the training of community members that are interested in the building trade, the ease of maintenance in the case of damage, make use of local labour and knowledge as supposed to specialist knowledge that require what is not available to the layperson, and lastly, be able to expand as the community's needs grow or shrink. According to the mining analysis, (see section D.6), the mine intends to employ and train people in the mine related industry which include improving the building industry.

H. 8.4 Sustainability:

Sustainability can not be guaranteed, but we do things in hopes of sustainability. In order for any design to be sustainable it must be sustainable in its planning or design, its construction and its maintenance, of which maintenance is the longest and ongoing influence. The design must thus be low in maintenance, make use of waste materials from the mine, and be constructed with sustainable building practice

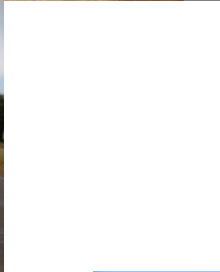
H. 8.5 The context:

The analysis for the town of Saulspoort (see pages B18-B22) shows that most of the activities happen outside under trees. One could say that buildings of cultural importance like the Tribal head office is placed in an open space or landscape void whilst other are surrounded by trees or a landscape grey zone. This enhances the authority and importance of such buildings. This is also the reason for the why the new tribal office will inherit the most architectural presence in the Cultural Arena. The building will form the pinnacle of the design elevation. (see Fig. H.9) The design must enclose the space surrounding these buildings in such a way so as not to disturb the landscape void. The architectural character of the design precinct can be seen in Figure H.2. The site is relatively flat and dusty. Even though dustiness might be seen as an obstacle to overcome, it is part of the overall character of the town. It is because of the dust roads and widening at certain sections in the routes that the movement outline and living patterns is so evident. Like Richard Long (Gooding. 2002:125) puts forward it is this borderless landscape that provides the freedom to etch individual motion onto the landscape, and in this freedom people choose the routes and places they love. Other factors concerning the context are the specific views the site present of the majestic mountains as a backdrop. (see Fig. H.2). The beauty of the scenery allows one to constantly escape for a few minutes to the splendor of the surrounding environment.



The Landscape

The Pilanesberg manifests itself on almost all the views from the South to the West. Saulspoor is situated almost entirely on a level grade at the foot of the mountain, and development does not occur higher up on the mountain due to traditional beliefs.



Architecture

Most of the Architecture related to retail and administrative functions encompass Western influences, but the dwellings poses an individual identity expressed mostly by the wall castleation of the walls and crimped columns



Figure H.2

In the early stages of the design the initiative was to create a mitigation measure against the influences the mining operations might have on the culture of the Bakgatla ba Kgafela community. One of the ways to preserve the character of the community is to secure the way in which members of the community move around. This is captured in the patterns the community live in the form of the dust roads that are narrow and wider at places where people meet. (see Fig B.11) The design aspires to capture this at a place where there is serendipity of sorts, thus a design that offers people the opportunity to meet. If different forms of transportation meet it provides the ideal opportunity. (See Fig H.3)

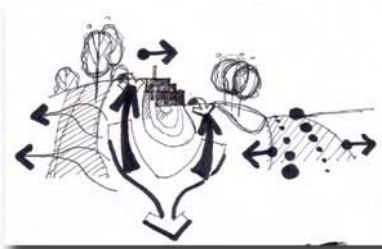


Fig H.3 Left
Depiction of how different forms of transport can meet at the same place and time

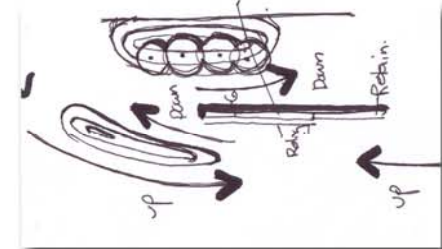
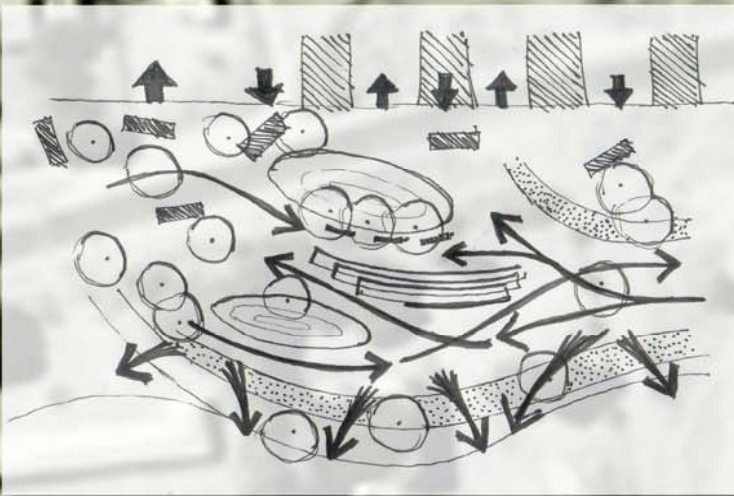
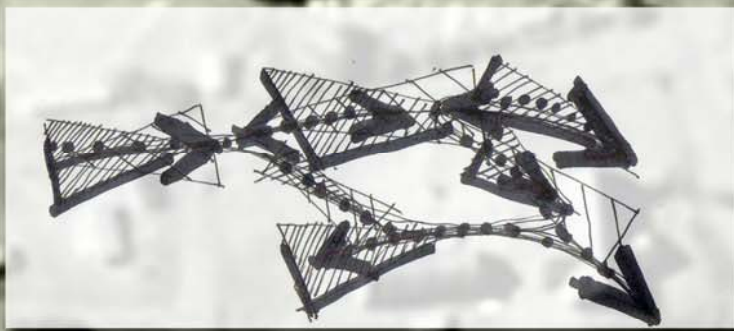
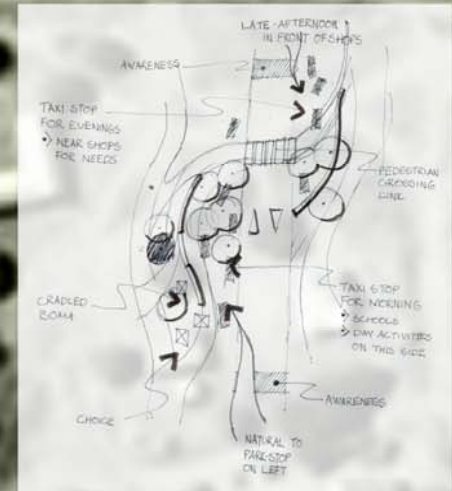


Fig H.4 Right
How the safety of pedestrians can be achieved through elevating the surface members



Transition zone

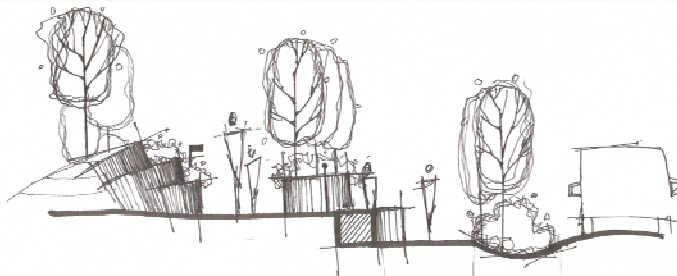


Transition zones

Next to the road the urban fabric of Saulspoor gradually changes from on zone to the other. Right next to the road there is a wide road reserve where the pedestrian and vehicle meet. There are no designated parts of the road for this interaction. It occurs along the whole length of the road and the design had to address this. There are also no curb stones to prohibit this interaction between pedestrian and vehicle. The definition of what a urban block is, differs from other cities as the boundaries are overlapping with each other sharing their influences. This zone can also be described as the glue or gel that transpire in the urban Fabric of Saulspoor. (see fig B.10-B.11)

H.9.1 Design process: movement

Figure H.5 Design process: movement



The elevation

The architecture of Saulspoor is in its own a travelers' marvel. All the dwellings can be observed when driving past. This was the inspiration to explain in the elevation of the design the inner workings of the cell structure of Saulspoor. The design gradually rises to its peak, the proposed new Tribal offices, and descends slowly down on the other side, mimicking the transition zones of the area. The undulating wall crowns represent the castellations of the dwellings and the different enclosures, together with the enclosing wall of the cultural terrain, express the moving patterns of the residents on plan, in elevation. (see Fig. H.6)

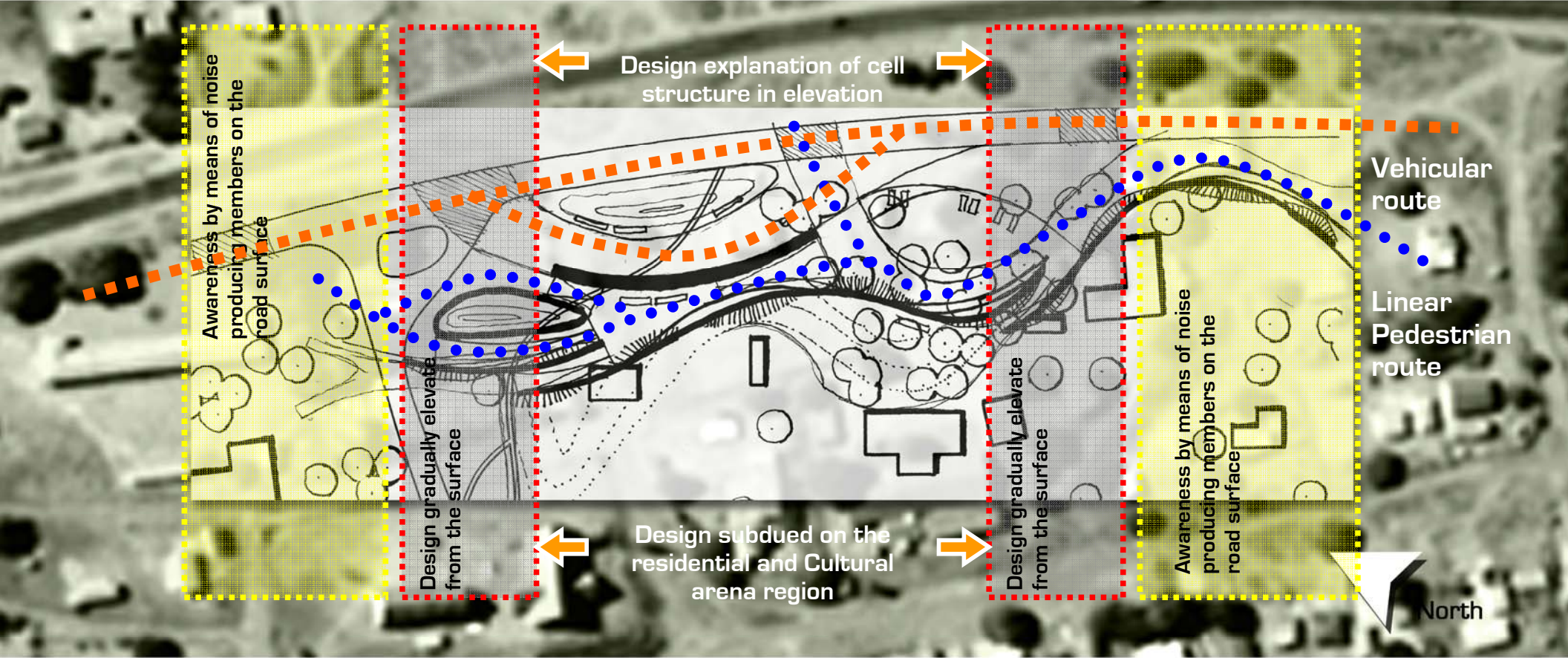
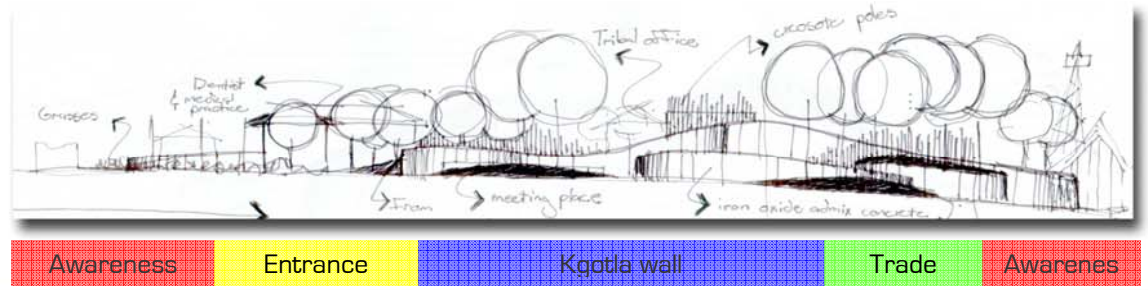


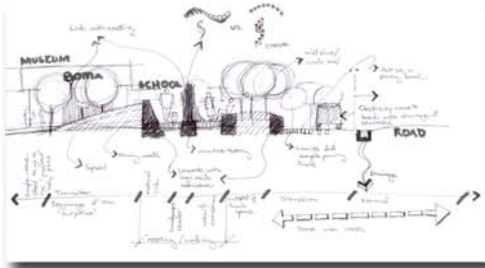
Figure H.6 Elevational expression of plan



Castellation of the wall crown

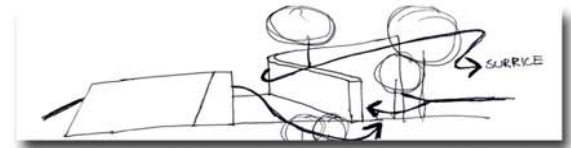
H.9.2 Design process: elevation

Figure H.7 Design process: elevation



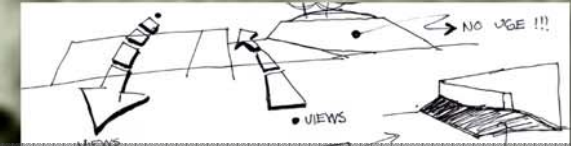
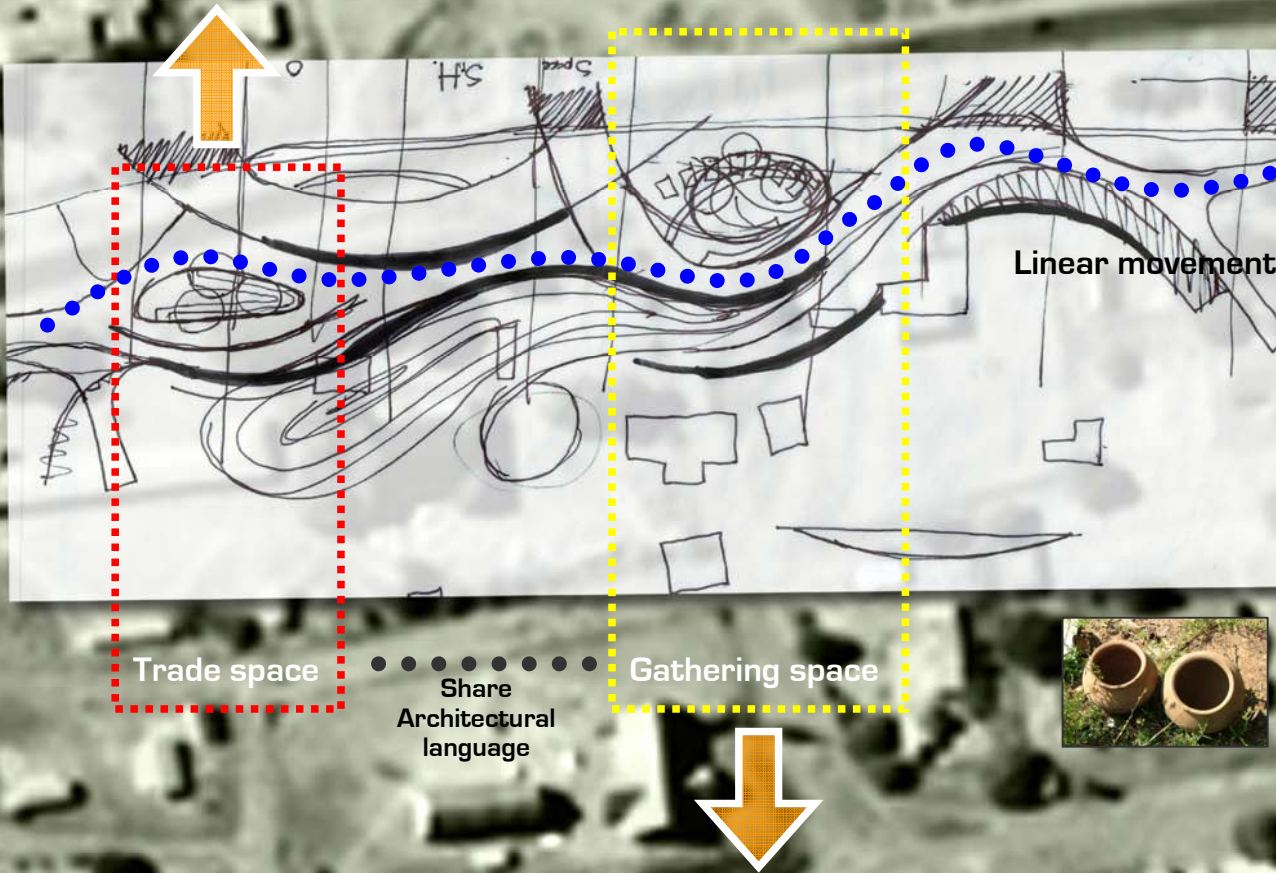
The trade space

Local crafts consist primarily out of handmade clay pots. These pots are often sold at Sun City but there is an enormous need to trade with pots in Saulspoort as the town is situated on the route to the Bakgatla gate into the Pilenesberg National Park. The process of making the clay pots is time consuming and even though there is a tremendous interest it is not viable to create a pottery studio in this space. A more feasible solution would be to convert an unused building to a studio and to have a separate outdoor trade space for finished clay products. In order for this space to benefit from tourist interest it must be situated in close proximity which attracts the most interest in Saulspoort. (See G. Conclusion)



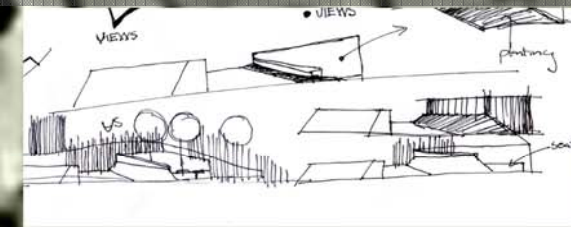
Circulation

The circulation in and around the trade space was designed in such a way that the main route would terminate in the space if one approach from the north



Access

Initially the access into the space would have been on a higher level of the incline. This would have made it difficult to carry larger pots into the space and might have influenced the exposure of the space and the decision was made to design on ground level with the entrance to the north facing the Museum.



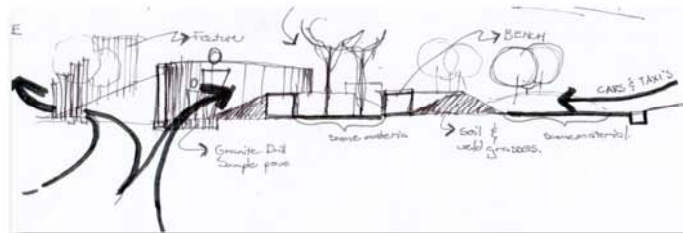
Form

The oval shape was partly inspired by the rounded shapes of the pots that will be sold here but is mainly derived from the cell structure of Saulspoort in an attempt to preserve the way in which the residents imprint their daily lives onto the landscape.

North

Gathering space

A second gathering space was needed to accommodate the youth that gather in the shade on a daily basis and women and children who await the homecoming of their husbands from the mines on Friday afternoons. This space was designed to share the architectural language of the trade space but the circulation differs in the way that this is a pass through space with lower levels of enclosure to access transport quickly.



H.9.3 Design process: space

Figure H.8 Design process: space

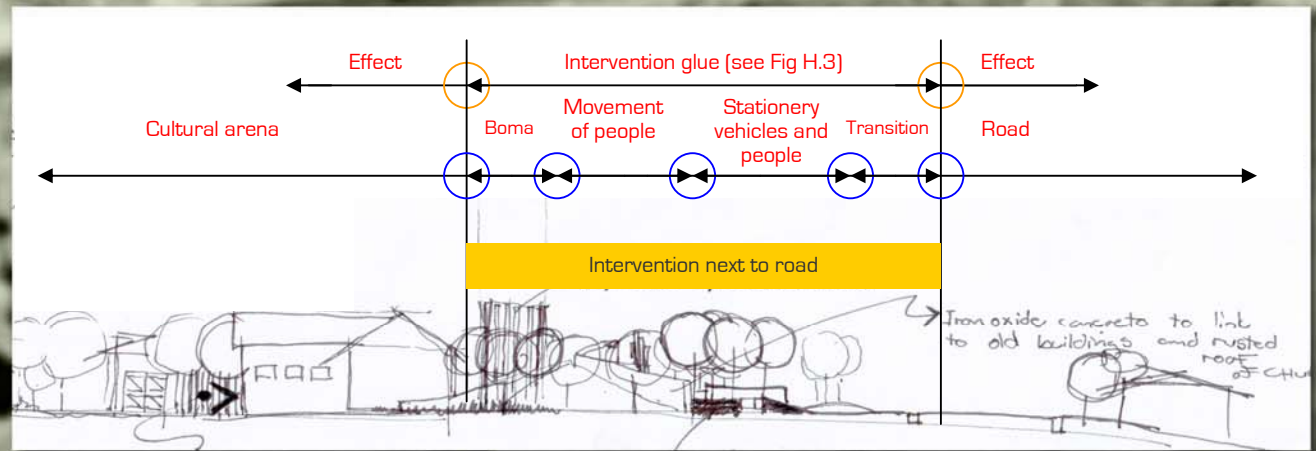


Linear elements of enclosure

To enhance the legibility of the gathering spaces linear vertical elements had to be introduced. These linear elements read as smaller gathering spaces to the people of Saulspoot as smaller gathering spaces are usually fenced off with vertical wooden members. The new tribal office will form the pinnacle of the design inheriting architectural features from the landscape design which capture the linear movement patterns of the people on plan and elevation.

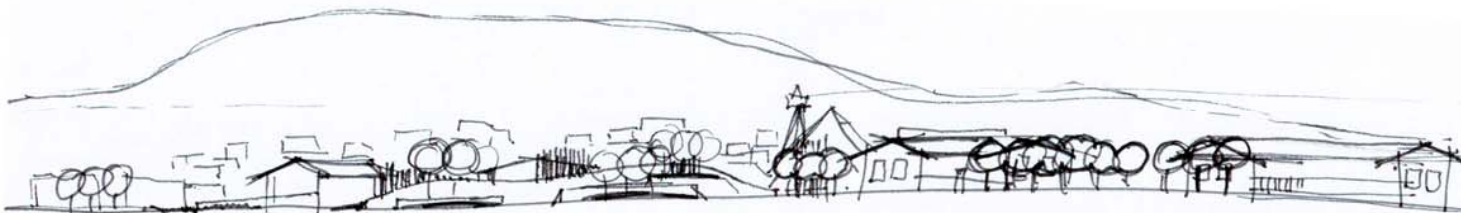
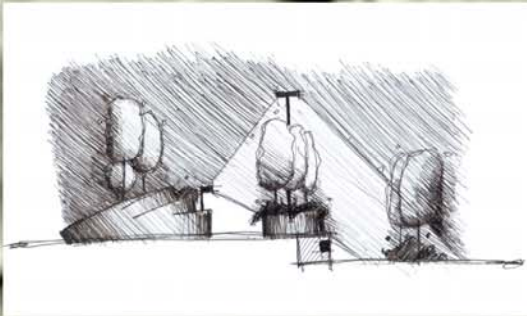
Light

Lighting is an almost essential component in most design schemes. For the design intervention proposed for the cultural precinct of Saulspoot however this is not the case. Although Saulspoot is situated in a less sensitive visual field than Rooderand where the mining operation will be developed, it is still not preferred to light up spaces at night. The town is relatively safe at night. Due to this, the visual impact at night, and milieu of Saulspoot, night lighting was decided against. Provision for lighting will be made for future development.



Design intervention next to road

The design gradually protrudes from the surface to enhance the idea that the Cultural terrain is more momentous than the surroundings. This terrain can be seen as the heart or core of the design and it consists out of the tribal center for the Bakgatla бага Kgafela for North West, religious buildings of Saulspoot, the museum, historical buildings like the first missionary station of the area, a large outdoor gathering space, and the traditional kitchen.

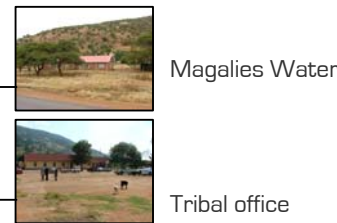
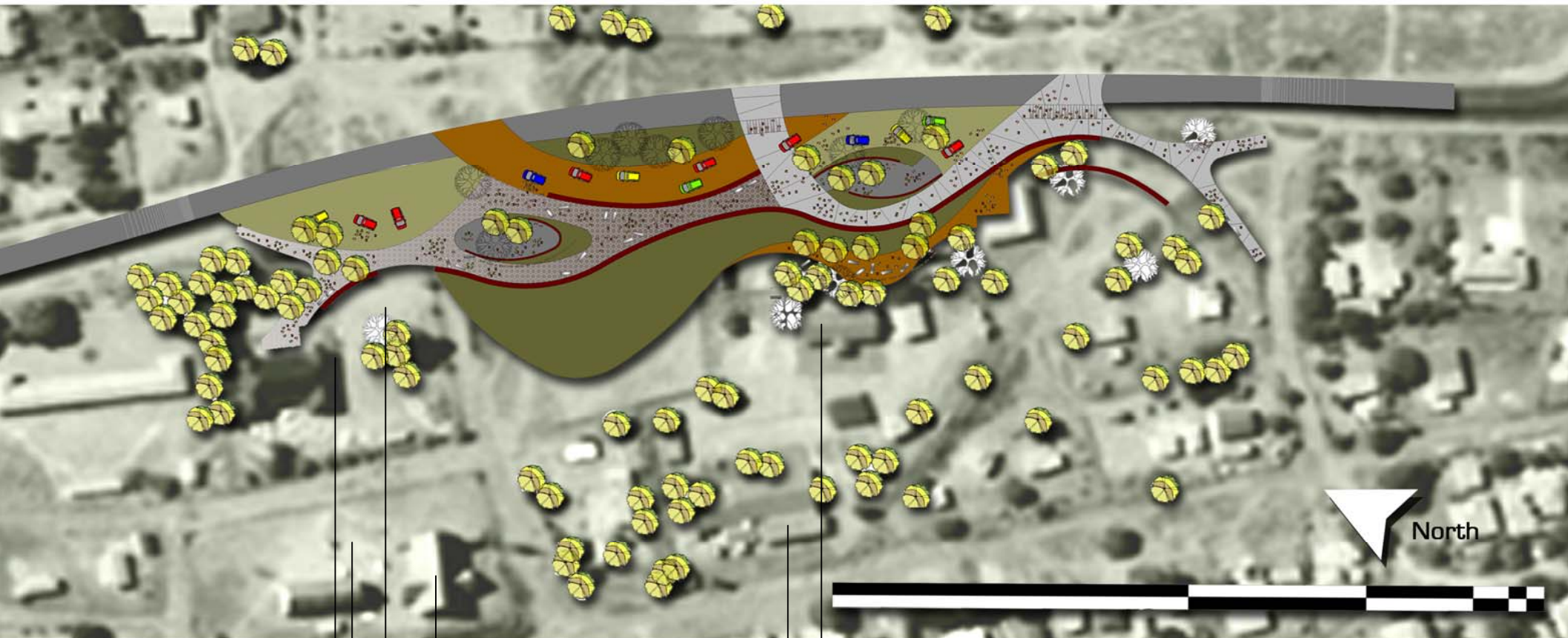


The proposed design for the cultural precinct in the context of Saulspoot

H.9.4 Design process: Legibility

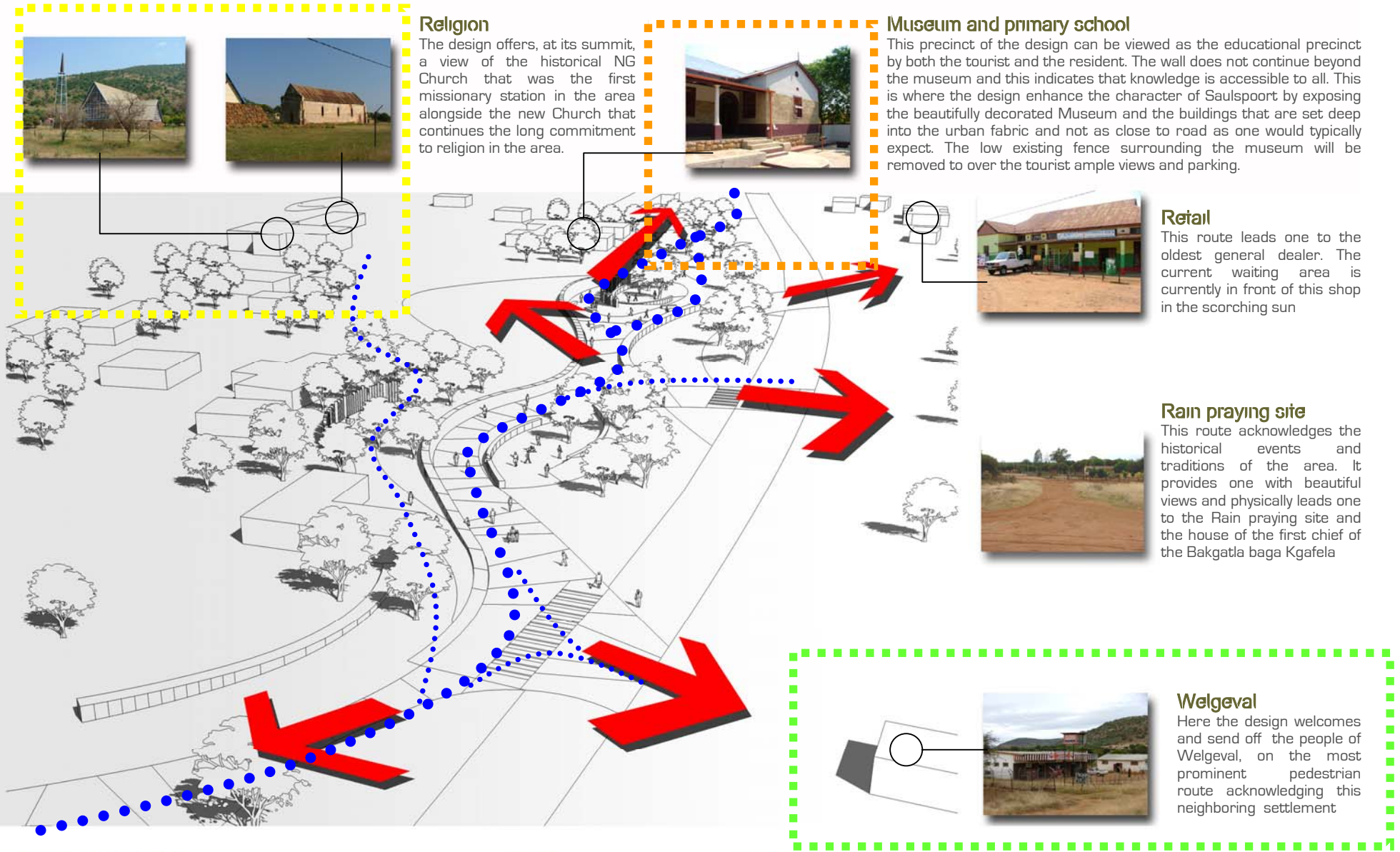
Figure H.9 Design process: legibility

- 
Cast in place concrete with expansion joints (see materials H.17.1)
- 
Granite drill sample paving (see materials H.17.1)
- 
Toned brown asphalt (see materials H.17.2)
- 
Soil stabilized with grasses (see materials H.17.1)
- 
Dry packed retaining rock wall. (see materials H.17.2 and detail H. 18.1)
- 
Tanalith pole structure (see materials and H.17.2 and detail H.17.2.1)
- 
Gravel from mining operations
- 
Pre-cast concrete benches / Bollards



H.10 Site plan for the Bakgatla ba Kgafela Cultural precinct

Figure H.10 Site plan



Religion

The design offers, at its summit, a view of the historical NG Church that was the first missionary station in the area alongside the new Church that continues the long commitment to religion in the area.



Museum and primary school

This precinct of the design can be viewed as the educational precinct by both the tourist and the resident. The wall does not continue beyond the museum and this indicates that knowledge is accessible to all. This is where the design enhance the character of Saulspoort by exposing the beautifully decorated Museum and the buildings that are set deep into the urban fabric and not as close to road as one would typically expect. The low existing fence surrounding the museum will be removed to over the tourist ample views and parking.



Retail

This route leads one to the oldest general dealer. The current waiting area is currently in front of this shop in the scorching sun



Rain praying site

This route acknowledges the historical events and traditions of the area. It provides one with beautiful views and physically leads one to the Rain praying site and the house of the first chief of the Bakgatla бага Kgafela



Welgeval

Here the design welcomes and send off the people of Welgeval, on the most prominent pedestrian route acknowledging this neighboring settlement



South

This route leads the user to the south of Saulspoort, and to the Bakgatla gate into the Pilanesberg National Park



Far left: George Stegman hospital

Left: Bakgatla Resort

Right: T-junction to Sun City



H.11 Routes and destinations

Figure H.11 Routes and destinations

Trade zone (see Fig. H.14)

As previously mentioned the most probable trade is the selling of traditionally made clay pots. This space opens up to the North allowing visitors to the Museum the opportunity to walk to and through the space. The fact that it opens up to the Northern side is also due to the reality that most tourists will park in front of the museum for information on activities in the area, traditional meals from the kitchen, and the use of its facilities.



Selling of clay pots



Linkage to the Museum



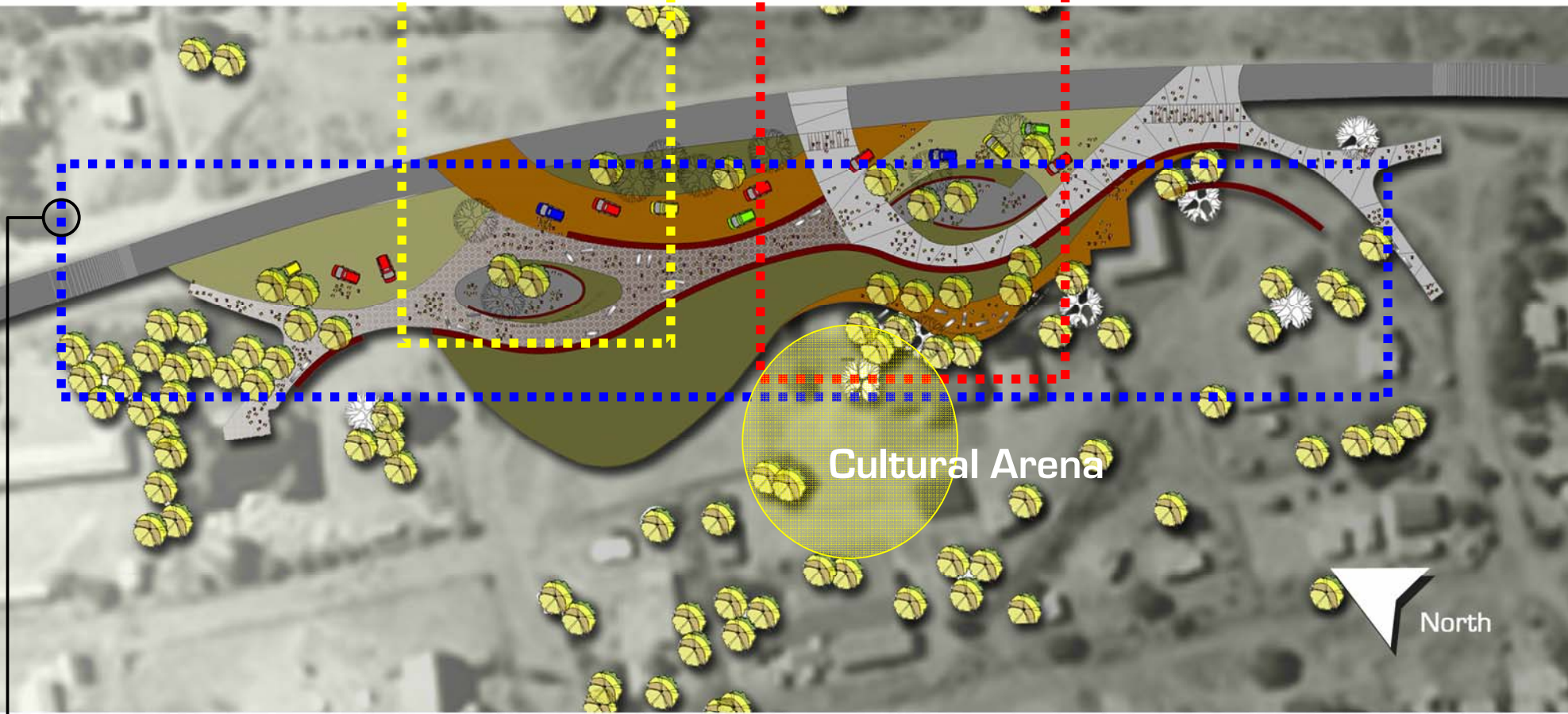
Job opportunities
Youth social facilities



Waiting area for women and children on Fridays

Waiting and gathering zone (see Fig. H.13)

This area is currently used as a gathering space where possible young workforce gather in search of work opportunities. In the design this space is divided up into two zones. One that is closer to the road and transportation stops, and a second that is next to the cultural arena and serves as an entrance to the people approaching it from the South. There are ample existing trees to provide shade. On Fridays this space is also used as a waiting area where women and children wait for their husbands that has been working at nearby mines



Cultural Arena

North



Mitigation measure against the cultural influences of the proposed mine.



Large annual and weekly gatherings. Spill over space for Sunday services. Funeral services.

Cultural arena wall (see Fig. H.15)

This wall serves a remembrance of the Bakgatla baka Kgafela's Tswana heritage. It also offers enclosure to the cultural arena which now operates just like a Kgotla in Tswana cultures did. The arena is used for larger gatherings concerning community issues, as well as host annual and monthly events. This upgrading of the cultural terrain includes a new tribal office designed by the architects in the project team. The wall does not surround the Tribal area because it is specifically designed to include the residents living to the back of the terrain. The street façade is thus secondary and provides the tourist with some idea of how the town works on plan

H.12 Zones within the design

Figure H.12 Design zones

Walls are made out of stone from the area due to availability, and its prominence as a building material

Waste rock from the mine that is crushed into gravel

Cast in place concrete walkways that mimic the unplastered walls of the dwellings

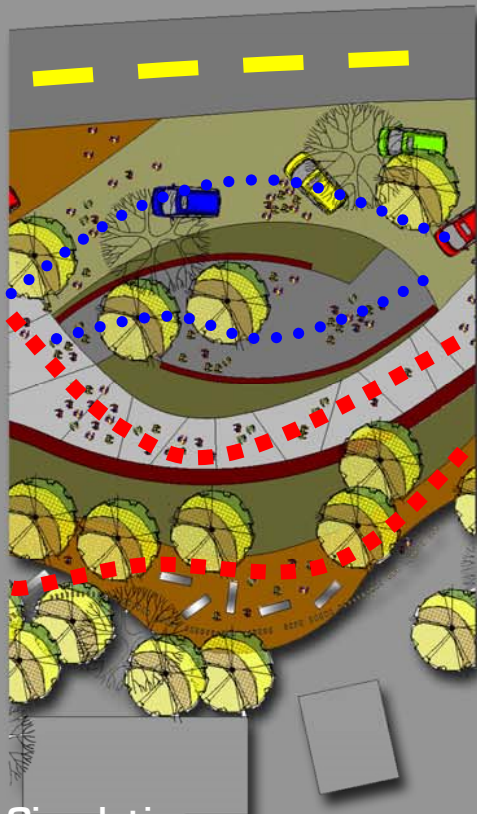


Zone 1 & 2 (see Fig. H.13.2)

This section of the design will serve a more social purpose. It is divided up into zones that spread from the main road. The two zones closest to the road will be used for the washing of vehicles and taxi's and it shifts to a transitional zone comprising of a mound barrier, a gathering space through which movement is possible but the surface material hinders, and a concrete walkway.

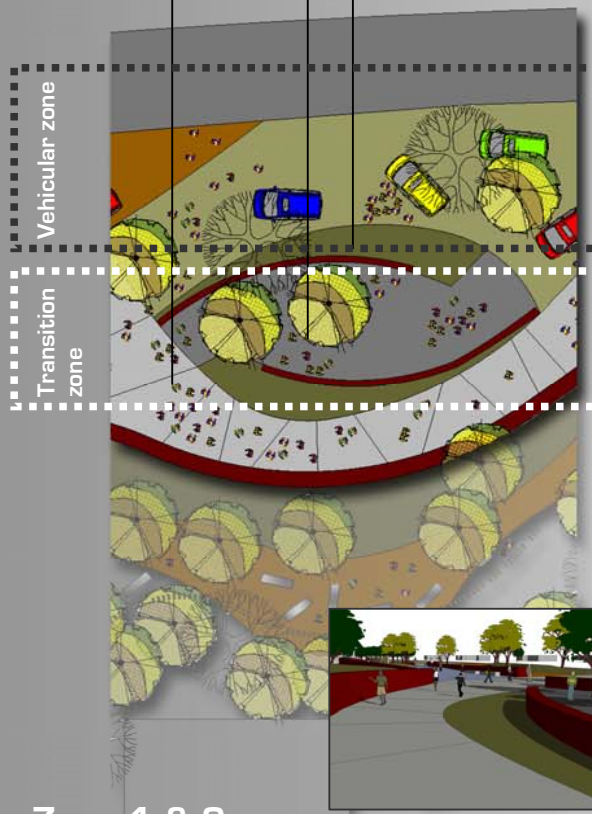
Zone 3 (see Fig. H.13.3)

This zone is set behind the lowest part of the enclosing wall. This provides a save place for women to await their husbands, weekly occurrence, and an entrance "foyer" to the Cultural arena.



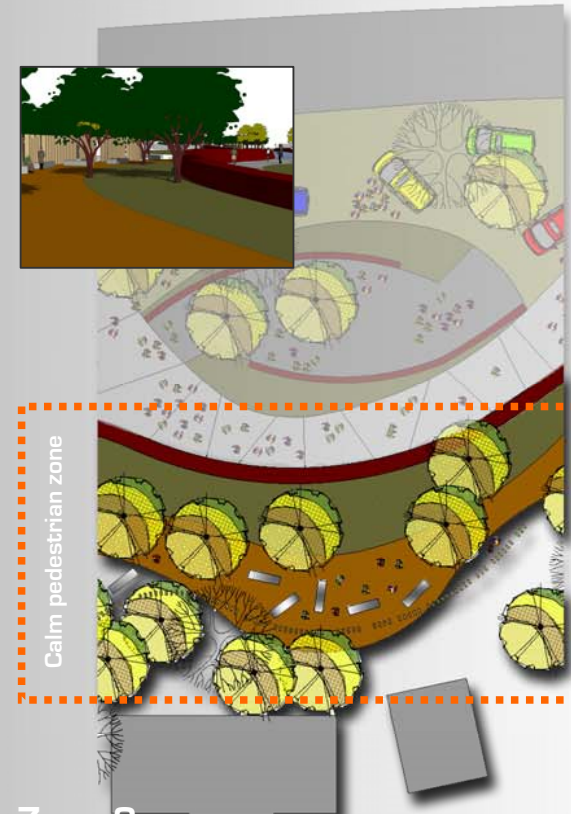
Circulation

Figure H.13.1 Gathering space circulation



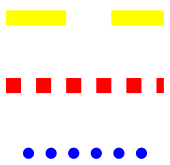
Zone 1 & 2

Figure H.13.2 Gathering space zone 1 & 2



Zone 3

Figure H.13.3 Gathering space zone 3



Main vehicular road
Main pedestrian route
Secondary pedestrian route

Circulation

The circulation was designed to enhance the experience of meeting people. The walkways are a combination of open on one side, open on both sides and semi-enclosed on different linear routes. The main circulation route from the north is closed on the left hand side, after an immaculate view of the mountain and is open to the left hand side to enhance the gathering space. From the south the pedestrian is offered a choice of either entering the cultural terrain or continuing on towards the museum. An alternative route is to pass through the space where the surface material is specifically chosen to slow the user down.

H.12.1 Gathering space

Figure H.13 Gathering space

North

Trade space

This part of the design will provide local potters to sell and exhibit their work. The space is orientated to the north and opens on ground level for ease of movement of the pots and to link with the Museum.

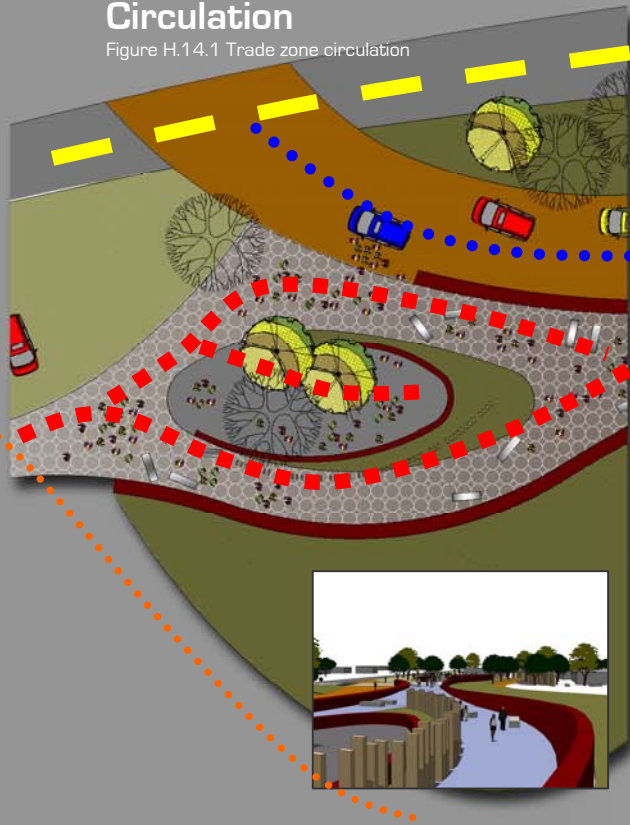
Circulation

This space is situated in a fork in the main pedestrian route. The route to some extent terminates in this trade space when one walks from north to south. When the user walks in a opposite direction the broader circulation space is enclosed on both sides with the trade space in between. Because the user walks down the mound when walking from south to north there is a natural tendency to enter the trade space. Most tourists however will still enter from the north. [see Fig. H.14.1]



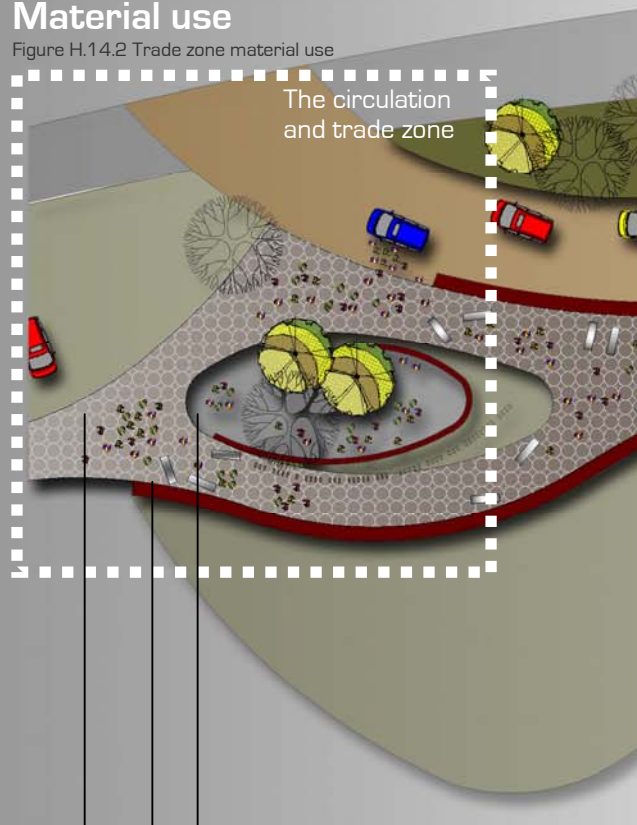
Circulation

Figure H.14.1 Trade zone circulation



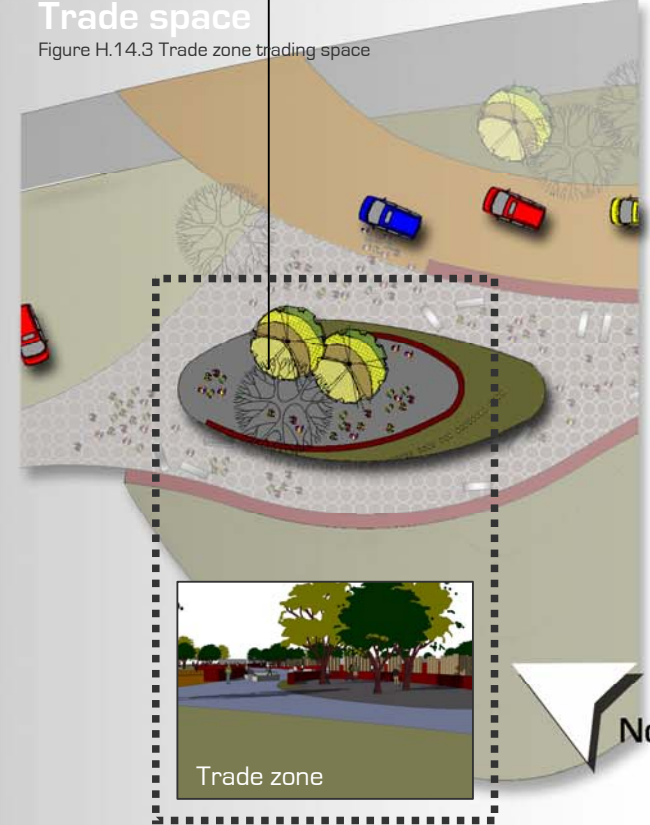
Material use

Figure H.14.2 Trade zone material use



Trade space

Figure H.14.3 Trade zone trading space



- — — — — Main vehicular road
- • • • • Secondary vehicular drop-off road
- ■ ■ ■ ■ Main pedestrian route
- • • • • Secondary pedestrian route

H90



Waste rock from the mine that is crushed into gravel



Walls are made out of stone from the area due to availability, and its prominence as a building material



This section will be paved with waste granite drill samples and resembles the mines' involvement to the project

**H.12.2
The trade zone**

Figure H.14 Trade zone

The Kgotla

The design aid in the functioning of the kgotla and does not address the physical requirements. The design suggests kgotla, but does not define it. The internal organization of the Tswana settlements was not geometrically organized according to physical elements but its form was derived from the conceptual model of the social structure of the society. A settlement started with the strategic placement of the main kgotla. This is a large open space surrounded by stout poles and a low rock wall, usually with a few big trees for shade. In this main kgotla would be the cattle kraal that housed the community livestock and that of the chief or Ama Kgosi. Everything was then radiated hierarchically from the kgotla. The chief Ama Kgosi would have his compound right off the main kgotla and next to settle closest to him were his abasiimane. His "boys" or guards and after this the royal family settled. [Archival 2001]



Material use

Only two materials that are also prominent in the area will be able to bring forth such a wall namely concrete and stone. There are numerous stone masons available and with the mining operations stone from the area can be sourced. Traditionally the Kgotla would have been built from stone and that informed the decision on the material



The mound

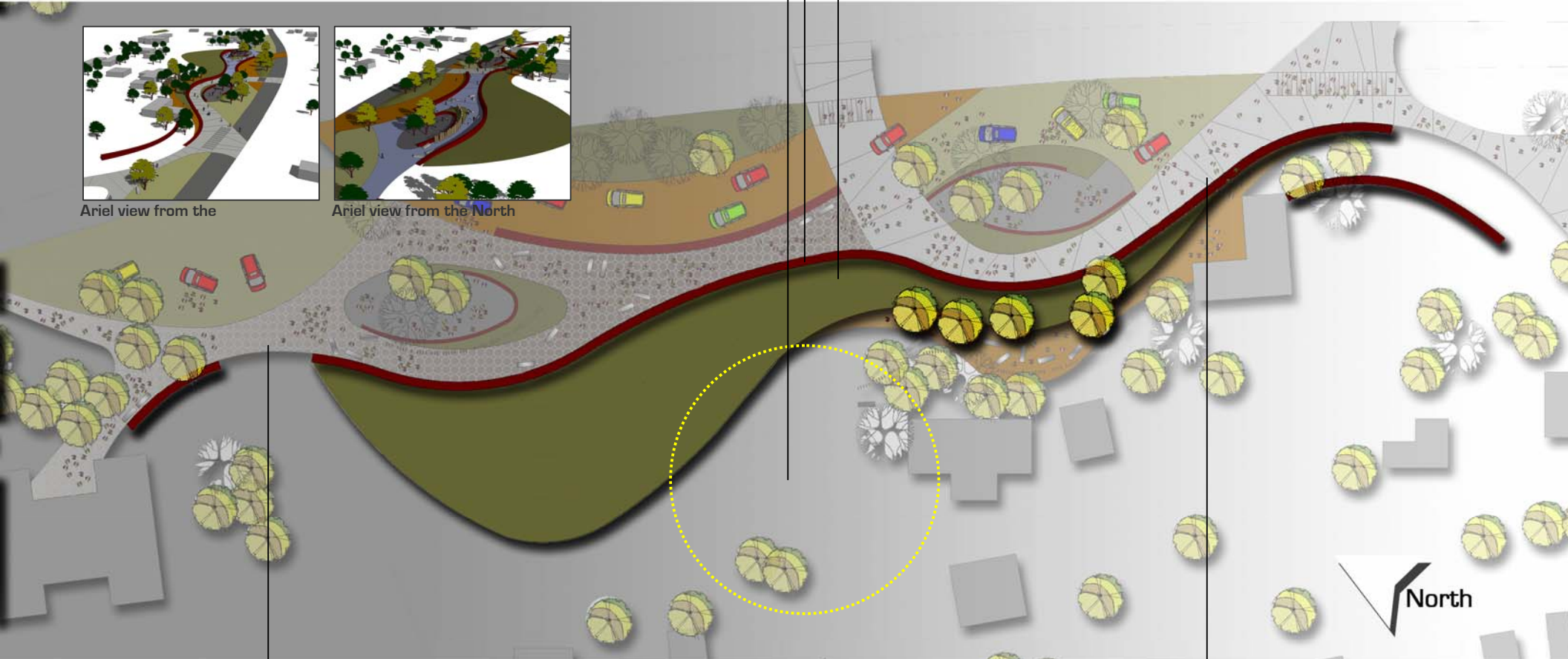
All the natural elements that protrude from the surface is considered by the people as important or even holy. In order to create a sentiment of prominence it was necessary to raise this area of the design from the surface.



Ariel view from the West



Ariel view from the North



The vehicular entrance gate

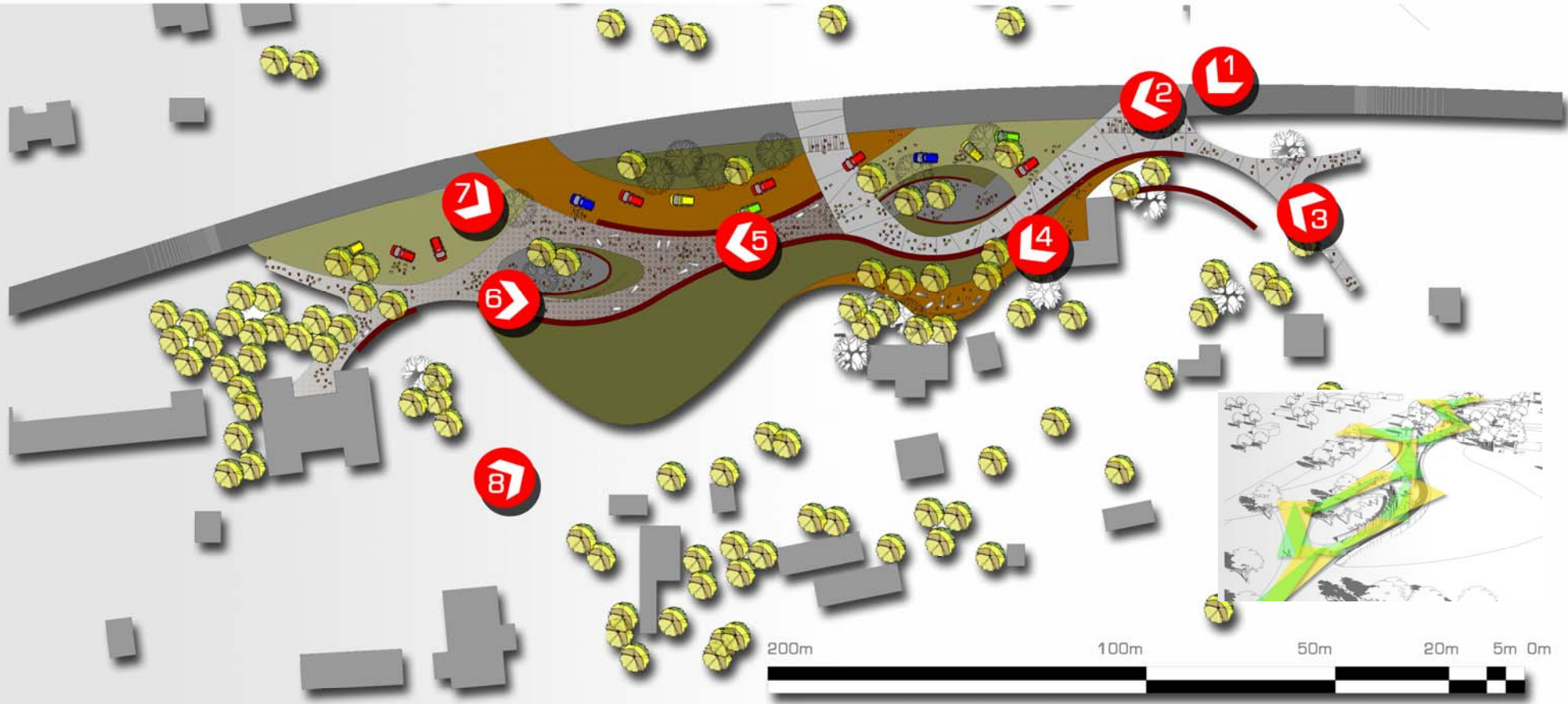
Traditionally a Kgotla would only have one entrance. For this reason the only disappearance of the wall material or gate had to be the vehicular entrance. This entrance is situated on the most prominent dust road entering the Western side of the main road.

Pedestrian entrance from the South

In order not to weaken the legibility of the wall as the enclosing element of the Cultural arena the wall simply declines into a pattern on the ground but is not broken to form an entrance on this side of the terrain. More openings would weaken the effect of the wall. This entrance is within comfortable walking distance from the other entrance. [see Fig. H.16]

H.12.3 The Cultural arena wall

Figure H.15 cultural arena wall



H92



H.13 Views of the design intervention

Figure H.16 Views of the design intervention



1

View into the designed precinct to the pedestrian from Welgeval, the neighboring settlement, looking West. In this view one can see the previously discussed waiting and small gathering area. One can also see the cultural arena wall and linear vertical elements at the back that like the numerous boma's in the area suggests a place of gathering.



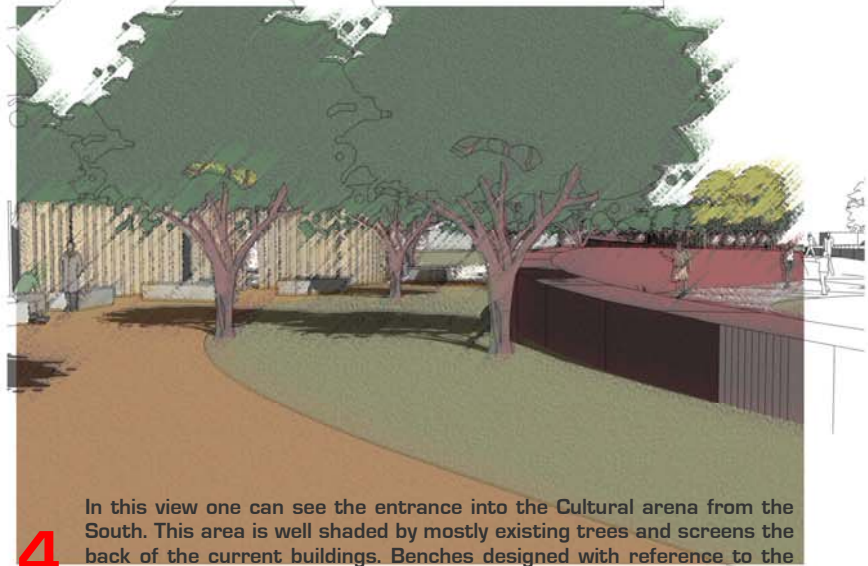
2

View into the designed precinct to the pedestrian from the South. The concrete walkway was inspired by the unplastered walls of the dwellings to the south of Saulspoort. 40 mm Deep indentations into the concrete hinders vehicles from driving onto the walkway.



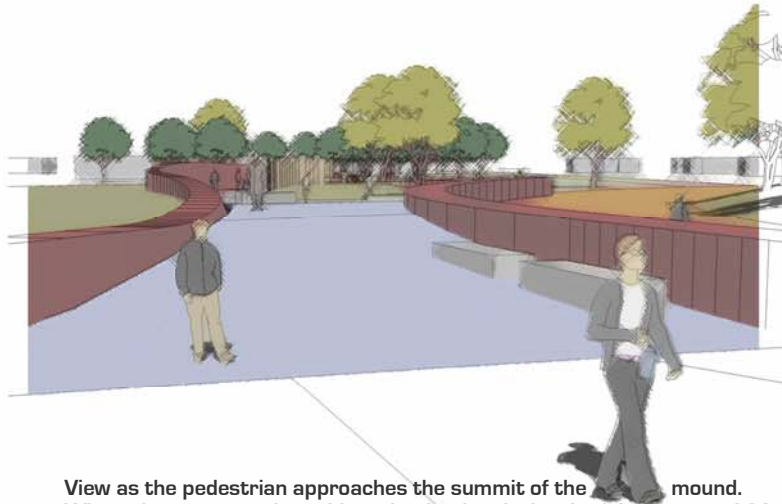
3

View as the pedestrian approaches the design intervention from the south and the immediate residential area. The crossing to the Right leads the pedestrian to Welgeval, a neighboring settlement. One can also see the beginning of the Cultural arena wall as it invites the pedestrian into the Tribal area.



4

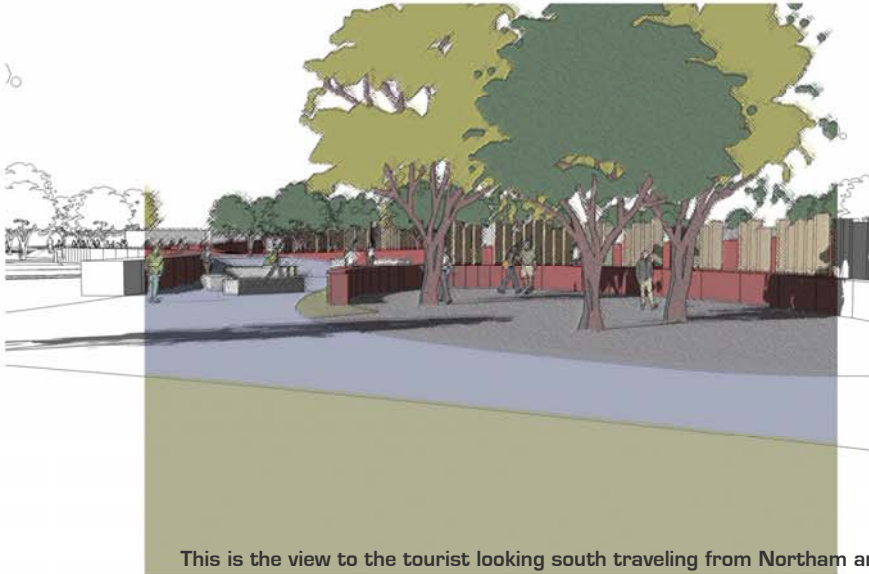
In this view one can see the entrance into the Cultural arena from the South. This area is well shaded by mostly existing trees and screens the back of the current buildings. Benches designed with reference to the castellations of the dwellings are scattered around in this space.



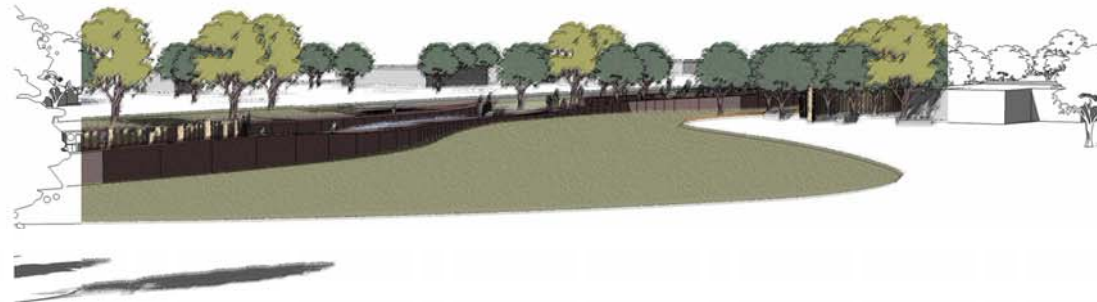
5 View as the pedestrian approaches the summit of the mound. When the user reaches this point in the design he/she have a 360 degree view of the entire precinct. If the pedestrian is walking north the view of the museum and NG churches are emphasized. If the Pedestrian is walking South though, the Majestic mountain forms part of the visual realm



6 View around the Western route around the trading area. Here one can see how the design was formed around the cell Structure of Saulspoor with pathways of different widths and choices. One can also clearly see the Idea of the Kgotla surrounded with a Rock wall taking



7 This is the view to the tourist looking south traveling from Northam and the proposed mine at Rooderand. This offers optimum exposure to the traders displaying clay pots and also links to the Museum benefiting both parties. The linear vertical poles reads as a place of gathering to the people of Saulspoor

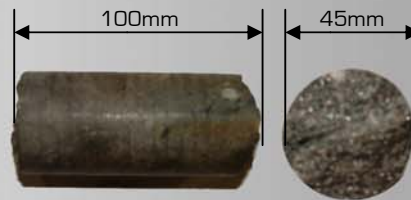


8 This is the view to most residents and visitors once they are inside the cultural terrain. The design is less demanding, emphasizing the proposed Tribal office and other historical buildings. The raised mound protruding from the surface, though gradual, signifies the Cultural area.

H.14 Material use [Refer to Fig. H.10]



Cast-in-place concrete is defined as concrete that is poured directly on site. An advantage to this site-specific method is that the concrete is cast specifically for one work, allowing for an unlimited sculptural quality with no restrictions on size or shape since it is cast exactly where it will remain. However, the construction process can be slow since more time is needed to build or set the formwork at the site. Additionally, the costs can be higher since the formwork is made on site and in some cases is not reused. This cost can be defrayed if pre-made, reusable formwork is used. The formwork into which the concrete is cast acts as a mold that holds the shape of the concrete until it has hardened and has developed sufficient strength to support its own weight. Formwork can be a major cost consideration. It can be reusable, prefabricated units of standard lumber, plywood, metal, fiberboard, or reinforced synthetics. The key to typical formwork is that it be strong and stiff enough to support the large weight and fluid pressure of wet concrete. Forms must also be tight to prevent loss of liquid or cement paste. Generally, the higher the quality of formwork, the better the resulting concrete will be. Formwork is usually coated with a suitable release agent or other material before the concrete is cast to prevent water absorption or unwanted bonding between the form and the concrete. (Bell 2006:55)



Granite drill sample used as pavers. There is an abundance of these drill samples before mining operation start. When used as a paving stone it can provide a continuous slip resistant, durable, grey brown surface. Due to the size of the test drill samples the process of laying them can be labour intensive, but there are no costs involved to obtain the product as it is regarded as waste after testing have been done.

Grasses to stabilize soil mound

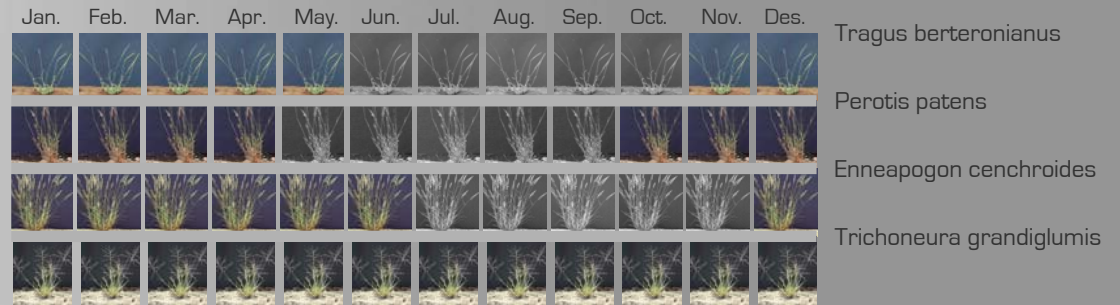


Figure H.17.1 Material use



Rammed Earth and Tinted Asphalt

Rammed Earth construction is the forceful tamping to compact a mixture of earth and cement into a formwork system to create a dense and structurally stable surface. Professionally constructed rammed earth involves using heavy mechanized pneumatic equipment with a rubber or steel tip to efficiently compact the suit. The mix is approximately 8% water, 3% cement, and 89% soil. Ideal soil contains both sand and clay, but should not contain organic materials such as peat or loam, which would decompose. Formwork must be reinforced to withstand the force of the compactor. Disadvantages include the risk of not ensuring the correct earth mix.

In order for the road surfaces to carry heavy traffic over the main road, asphalt of a different colour will be used. This is done by adding a neutral base to the liquid road tar, enabling the contractor to tint the tar into a variety of mainly browns and reds, using a colour tint or seal. Testing samples are made beforehand to ensure the correct colour mix. Product: APMS asphalt products: Brownstone colour SealMaster.



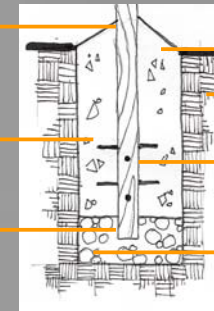
Dry packed retaining rock wall
[see H.18.1]

Rock cladded Clay brick seating wall
[see H.18.2]

Tanalith wooden post structure with concrete footing.

Figure H.17..2.1 Tanalith post foundation

Pressure treated wood pole
Concrete
Concrete collar do not encase bottom of post



Concrete pitched to drain
Undisturbed soil
Steel rods to prevent theft and improve final adhesion stability
150 mm gravel sub-base

Figure H.17..2 Material use

Detail of Retaining Rock wall
Figure. H.18.1

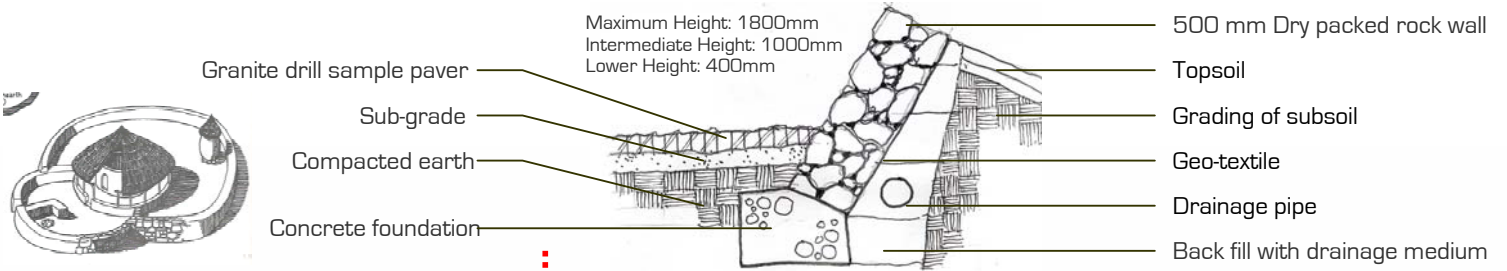
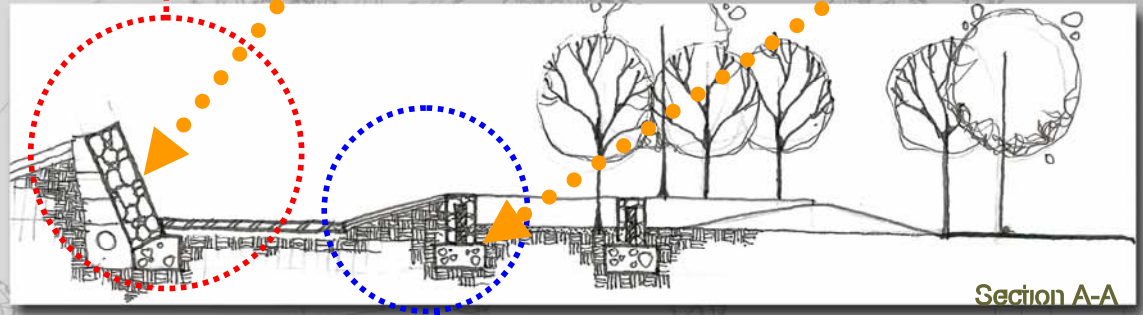
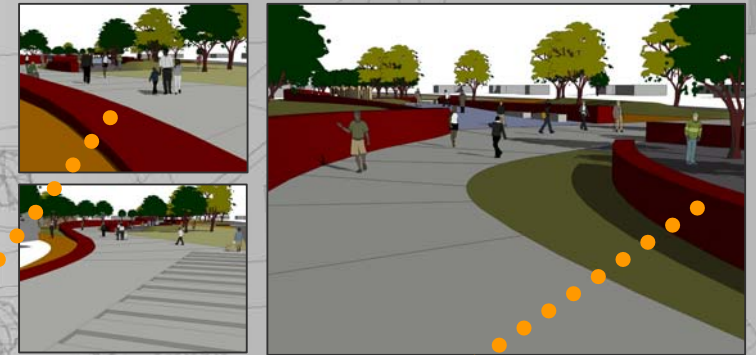
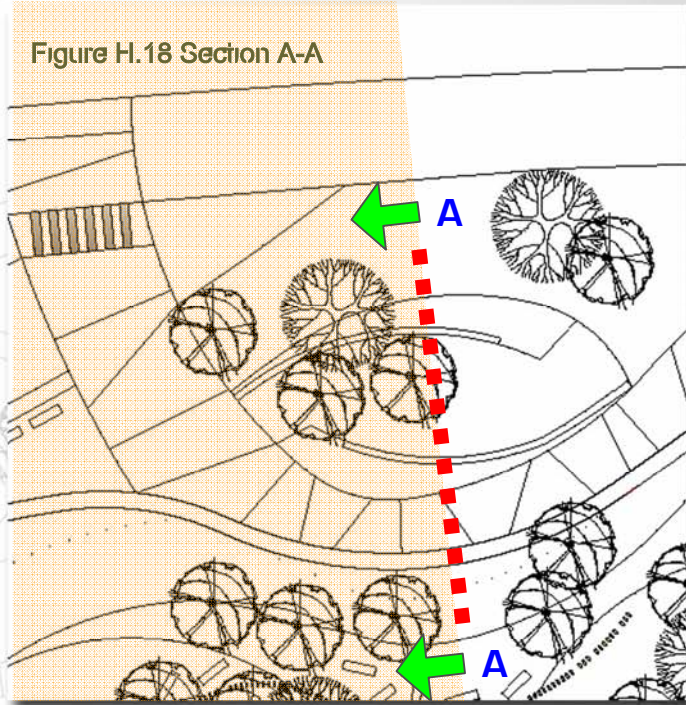


Figure H.18 Section A-A



Detail of Low seating wall
Figure. H.18.2

H.15 Construction details for the gathering space

Pre-cast concrete benches.

Pre-cast concrete is generally made at a factory before being moved to and installed at the site. It uses an automated system of mixing and casting in a controlled environment, which yields consistency in craft and materials. It can be cast as panels, slabs, and beams, as well as complex shapes for structural or enclosure elements, or any other form in the building construction. The formwork in which pre-cast concrete is cast is usually made of high-quality steel, coated plastic, or wood, and can be used many times, yielding a more consistent and controlled concrete member. Since the formwork is not made on site or used only once, this reduces the unit cost of the concrete products. Time is also saved since there is no formwork to fabricate or remove from the site. Pre-cast units are usually cured with steam to create the ideal amount of moisture and heat for the concrete to cure quickly.

Detail of concrete bench

Figure. H.19.1

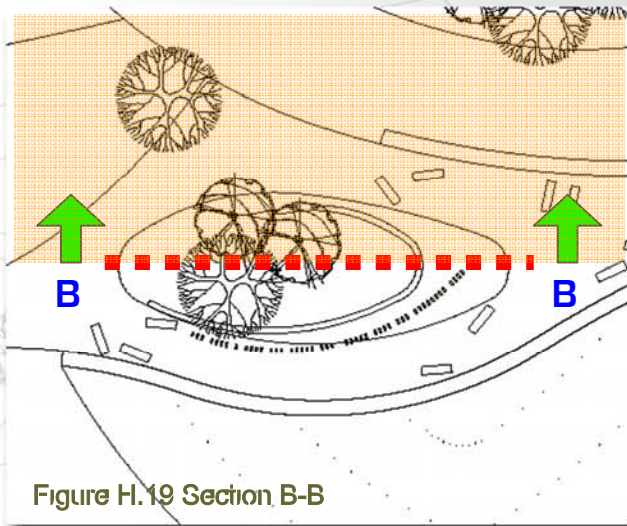
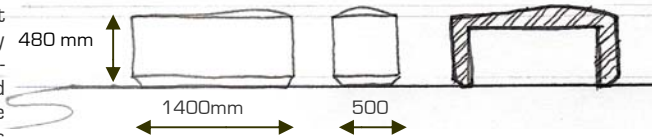
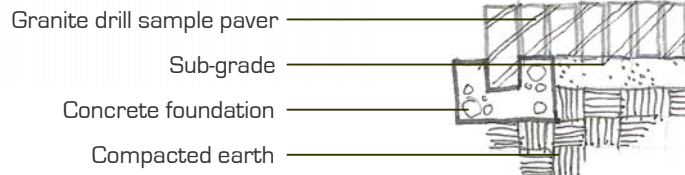
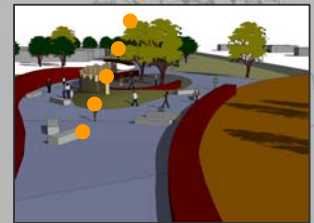
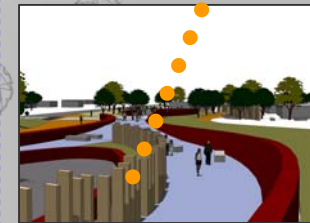
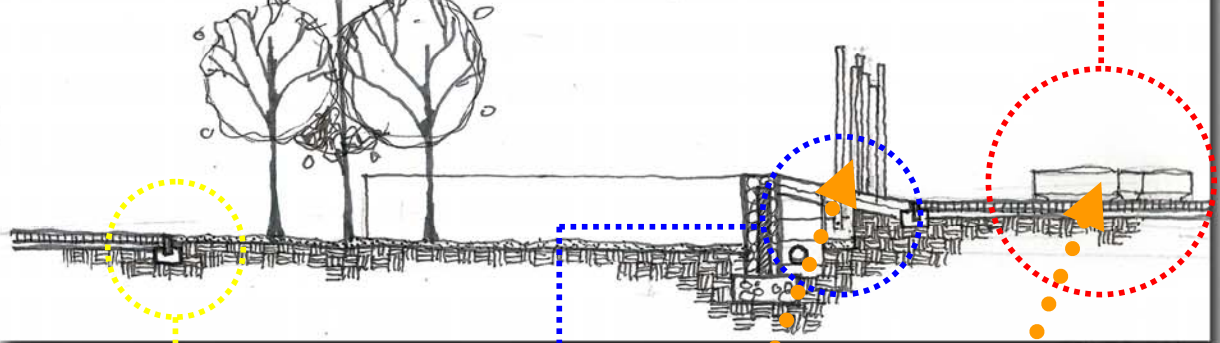


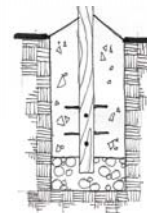
Figure H.19 Section B-B



Section B-B



Detail for Granite paver
Figure. H.19.2



Detail of Tanalith post foundation
[See Figure. H.17.2]

H.16 Construction details for trade space