ANALYSIS

The different analyses are based on our inventories and background information from Nelson Mandela Metropolitan Municipality.

The physical analyses are based on relevant parts of Kevin Lynch’s method to analyse the image of the city. The method is based on five elements in the city; nodes, paths, edges, districts and landmarks.

Interviews were made with people living in Bloemendal. These interviews give an indication of how the area is experienced by its inhabitants.

The SWOT analysis is a summary of aspects from the background, inventories and the analyses.

Finally we will present a few measurements that we consider important for the plan proposal.

Barriers and edges

Barriers can be both visual and physical boundaries that cut off one area from another. There are a lot of barriers to be found in Bloemendal, and the most obvious barrier is Chatty River Valley that divides the area into two parts, with KwaNnoxolo on one side and Booyser Park and Chatty on the other side.

The valley can not be built with housing because it gets flooded during rain periods. The valley is not very steep but wide, which makes it a large empty area in the other built areas around it. The valley’s main function is as a transportation area between KwaNnoxolo and Booyser Park. The main reason for people to move between the two areas is that there are a lot of services in Booyser Park that KwaNnoxolo lacks, like schools and a post office.

There are storm-water channels in KwaNnoxolo that limit the possibilities for people to move through the area. They are not large physical barriers, most of the time they are dry and possible to pass. But in people’s mind they are important barriers because they do not feel safe to pass them, especially during night. There are lots of bushes and low trees that during the night block the view.

The open space along the electrical wires between KwaNnoxolo and Bethelsdorp is a land reserve for a future road that will pass the area in a north-south direction; Mission Road. The open space is used mostly for transportation between KwaNnoxolo and Bethelsdorp. The space is also used for other activities like to play football and keep livestock. In some parts of the space informal settlements have been built. It is not a great barrier today, but when Mission Road has been built it will be so for people with errands in KwaNnoxolo or Bethelsdorp. It will be important to brake through this barrier to make it possible for pedestrians to cross easy and safe.

Standford road and MR448 pass along each side of Bloemendal in the northwest direction from the centre in Port Elizabeth. They are barriers today because the cars drive with high speed and there are no places where pedestrians can pass them safely. According to plans made by Nelson Mandela Metropolitan Municipality these roads will develop to be two important arterials, they will then be even larger barriers than they are today.

Chatty River Valley

Standford Road
Future and existing road system

The road net system planned by Nelson Mandela Metropolitan Municipality.
In the pilot study made by Nelson Mandela Metropolitan Municipality the road system is developed with consideration to the future railway. A railway in the area would be a large barrier because of the difficulties in creating safe crossings for both pedestrians and cars.

According to the drafts of the public transport plan the railway is probably not going to be built before 2020 which makes it necessary to have alternative ways of public transport until then. Bloemendal is presently best served by trunk-bus routes accordingly to Nelson Mandela Metropolitan Municipality.

The uncertain future of the railway makes it more interesting to look into how the road system and the public transportation in Bloemendal can be solved without a railway.

The future of William Slamert Drive
A road through Chatty River Valley is now under construction to connect the two parts of William Slamert Drive. This is a positive development for Bloemendal. The connection will make it easier for people to move between the two parts Booysen Park and KwaNoxolo. William Slamert Drive will continue into the new extension of Bloemendal according to the existing plans by Nelson Mandela Metropolitan Municipality. William Slamert Drive can be a spine through the area and along it there will be opportunities for different activities to be located.

Tracks and informal walkways
Pedestrians always seek to find the shortest way and therefore many informal tracks have been created. Shortcuts and tracks show where people move and which connections are most important to improve and develop for pedestrians and cyclists in Bloemendal.

Today many people, especially children, have to move between KwaNoxolo and Booysen Park for jobs, schools and other activities. Many tracks pass through Chatty River Valley. Many people move in the other direction to Bethelsdorp for shopping or schools. Tracks can be found in the open space along the power lines. Shortcuts are visual in the empty open spaces in the area. There are also many tracks through the storm water channels.
Nodes and paths

In Kevin Lynch’s method paths have a special meaning. Paths are roads by which people move along. The most important paths in the Kevin Lynch analysis are those which are used most frequently.

Nodes often appear in places where important paths cross each other. They become a natural place where business and other public activities can take place. The spots on the map are places where nodes can be developed.

Mpuko Street and Lingelihle Road are the most important paths within KwaNoxolo. Most of public life takes place in these streets. They are full of activity, cars and minibus taxis pass by, people walk and a lot of commerce is located here. Life around these streets is hectic and a bit chaotic. Cars, goats and children playing are a common view. There are no separate sidewalks for the pedestrians and cyclists in KwaNoxolo. People have made their own tracks on the side of the road and through open spaces when it is desirable to create shortcuts.

In Booysen Park shopping and public transport are located along Booysen Park Drive. Activities here are not as hectic as in KwaNoxolo. Sidewalks and roads for pedestrians and cyclists are well established. In Booysen Park people spend much time at the sports area and along Booysen Park Drive.

There are several goals in Booysen Park for people who live in KwaNoxolo and therefore there are frequent movements between the two areas. This will make William Slamert Drive an important path when it is completed and nodes can be developed along the extension.
**ANALYSIS**

**Orientation**

Kevin Lynch (1960) argues that clarity or legibility in the city makes it easy to understand. Landmarks are important means when to orientate oneself in an area. There are also other important aspects to the orientation and understanding of a city, identity is one of them. It is important that an area has a character of its own.

**Road net system**

The road system has already been discussed but here it will be discussed from a pedestrian perspective. In the existing parts of Bloemendal the road system is based on grid structure, while in Booysen Park the road system is based on cul-de-sac streets. Cul-de-sac streets let the pedestrians pass through if space is provided between the sites, but cars have to turn back. The grid structure is generally easy to overview but can allow high speed on the streets. From a pedestrian perspective a combination of the two would be best, an easy orientated road system but with cars driving slowly.

In KwaNoxolo the topography is relatively flat and there are not many things like trees, hills etc to orientate oneself after. Even if the road system is a grid structure it is not easy to find the way. Many houses in KwaNoxolo looked alike when they were new in the 1990’s but after a decade some of them have changed. Some have the original bricks and the yards are undeveloped. Other house-owners have made changes with colour or other wall materials, some have built additional parts to the house and the yards have turned into dazzling gardens. These houses function as landmarks in the area because they help creating an identity for a block or sub-area.

One important landmark in KwaNoxolo is the sport centre. It is visible from a far distance and a major goal for many of the young people in the area. Another is the red and white Mobile Telephone Network (MTN) mast that is visible from the whole area. It stands right next to the primary school in KwaNoxolo.

In Booysen Park the many churches contributes to the area’s identity. Right next to the centre in Booysen Park there is a power station that is visible from far away. The houses in Booysen Park are more individual by design compared to KwaNoxolo, this makes it more easily to orientate oneself in Booysen Park.

In Chatty the roads are of grid structure like in KwaNoxolo and the houses, even if they all are of the same type, have different colours, which give some variation. The area is newly developed which makes many of the sites and houses to look the same even if they have different colours.

**Landmarks and identity**

Landmarks are constructions that are visible from a long distance. To be able to orientate oneself easily it is important that an area has an identity. If the area or sub-area has buildings or other attributes that distinguish it from areas in the surroundings it is easier to find the way. The clarity or legibility of an area is important for the feeling of safety. If it is difficult to find the way, it is easy to get lost and feel unsafe.

In Booysen Park the many churches contributes to the area’s identity. Right next to the centre in Booysen Park there is a power station that is visible from far away. The houses in Booysen Park are more individual by design compared to KwaNoxolo, this makes it more easily to orientate oneself in Booysen Park.

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Housing

Types of houses
Bloemendal is situated in the middle of the development corridor between Uitenhage and Port Elizabeth. This means that this area is interesting for new development of both dwellings and other functions. Nelson Mandela Metropolitan Municipality proposes clusters of development around Bloemendal. Today the area mostly consists of low-density housing. To develop the area with high-density housing we will need to make use of another type of houses than there are today. It can be an unbalance if high-rise multi-family houses are built next to the existing single-family houses. The new development needs to be adjusted to the existing.

Informal settlements
Informal settlements are a common view in Bloemendal; open spaces that are relatively flat are used for these so called shacks. It is important that this type of living conditions is improved. It is one of the major goals within Nelson Mandela Metropolitan Municipality to supply every family with acceptable housing conditions; sanitation, electricity and water. The backlog of housing makes it difficult to remove these informal settlements. The goal is that they should not be needed at all, but until every family has a proper home they will stay where they are.
ANALYSIS

Public places and safety

Private and public space
In Bloemendal there are few semi-private or semi-public spaces, it is mostly either the private home and yard or the public street. Social meetings take place at home or at local taverns. The environments in the area do not encourage spontaneous meetings and public life. Public life can benefit from several levels of public space. Jan Gehl’s model of public space suggests two more levels, semi-private and semi-public.

Undeveloped public places
There are a lot of places in Bloemendal that are set aside as public places but not developed. In reality they are not used as public places instead they are used for dumping garbage. These places are not very pleasant for recreational purposes. We make a distinction between undeveloped public places and developed public place. A developed public place is an arranged area that can be used by people in different ways, often recreational. By undeveloped public places we mean spots in the built environment that is not developed for any clear purpose. If they are used for various purposes they could raise the quality of the area.

Some of the empty sites are planned for schools. In KwaNoxolo there are four large empty school sites. There is a need for schools in the area. The school sites are large to be able to have sport facilities in direct connection to the school building. If the planned schools could share sport facilities or if the sport facilities could be located in Chatty River Valley, it would be possible to use some of the space planned for schools to increase the densification in KwaNoxolo.

Peoples experience of safety in Bloemendal
Below we will present the opinions of a selection of people living in Bloemendal that we interviewed during one of our visits there. Afterwards we will discuss these opinions and how they can be relevant in our work.

38 year old man living in KwaNoxolo and 47 year old woman living in KwaNoxolo.
Both of them are unemployed but do some work for the ward committee. They mention that the floodlights are not providing enough light and only lit up around the houses and not in undeveloped parts of the area. They are afraid to go out when it is dark, not just for their own security but also because the house could get broken in to.

They think that the police do not patrol the area often enough, but there is a group of volunteers living in Bloemendal that patrol the area but not very often and regularly.

The woman says that she is afraid to go to the store even during daytime because people are getting robbed. She says she can not bring any valuables outside at all.

15 year old boy living in KwaNoxolo and 17 year old girl living in KwaNoxolo
Both of them go to high school in Kwadesi on the other side of MR448. The school is far away, it takes about an hour one way. They feel that they have to go in groups to be safe. Other children can steal their books and shoes.

In their free time after school they mostly meet their friends. They mostly meet at home not outside. Sometimes when, there is an arranged dance, they go out.

When we ask if there is a difference between being a boy or a girl when it comes to safety; they say that it is the same.

36 year old woman living in Booysen Park
We meet her in the community centre in Booysen Park. She is there with her twin girls. She lives in Booysen Park together with her mother. Regarding safety in Bloemendal she tells us that most of the time she does not feel unsafe but also that she avoids to go outside at night after dark. She talks a lot of the area lacking shopping facilities like a Pick and Pay-store.

30 year old woman living in Jacksonwill (KwaNoxolo)
She talks a lot of how Chatty River Valley is scary to walk across alone. She also mentions the storm water channel that goes through KwaNoxolo as one of the places in the area that is unsafe. She is most afraid of being robbed or abused. She points out that there is a lack of streetlights in the valley, and too few in the built up areas.

61 year old man living in Booysen Park
He lives in Booysen Park with his son and the son’s family. He thinks that the area generally is a good area but it can sometimes feel unsafe. He, like most of the other persons we have interviewed, takes for granted that it is unsafe to go outside after dark. When he says the area is good he means that it is good during daytime. He thinks there are too many unarranged public spaces in the area.
41 year old woman living in Frenchwill (KwaNoxolo)
She has a higher education at university level but she can not find a job anyway. She is a housewife at the moment and looking for work. She points out things in the area that are not good, such as playgrounds, high rate of criminality, unemployment, long ways to school and no shopping facilities. She says that she is not a scared woman, but she does not go out in the area after dark like most people in Bloemendal.

Comments
The interviews indicate for us, although they are few, that the poor lighting in the area are a reason for people to not feel safe. This make them stay inside when it is dark outside. They also mention fear of being assaulted and robbed. Fear has to be dealt with on many levels. Our contribution can be to improve the physical environment to make the area safer. The interviews have given us a number of places in the area that are experienced unsafe by the inhabitants.

SWOT-analysis
The SWOT analysis is a way of sorting information about a specific subject. This is a summary of the analyses above.

The letters stands for Strengths, Weaknesses, Opportunities and Threats. Strengths is what is good about the area today, weaknesses is what is bad about the area today. Opportunities are what possibilities the area holds in planning for the future. Threats are things that can jeopardise positive development of the area in the future.

Strengths
• The topography gives the area character
• Most households have water and sanitary facilities
• The Gorge Botha sport centre often holds tournaments and this attracts people to the area.

Weaknesses
• There are large open spaces that are not used.
• The Bloemendal is scattered over a large piece of land
• The Chatty River Valley flood line makes it impossible to build housing in a central part of the area.
• People do not feel safe in the area.

Opportunities
• Bloemendal is situated in a development corridor between Port Elizabeth and Uitenhage. This is an opportunity for the area to grow to be self supporting with work places and services for the inhabitants.
• There are places for public use that can be improved.
• William Slamert Drive provides an opportunity when it is extended through Chatty River Valley. The opportunity is that it will help to integrate KwaNoxolo and Booysen Park.
• The centre in Booysen Park, when extended, will attract people to the area and also provide work opportunities. The service will be better in the area.
• The plans in Nelson Mandela Metropolitan Municipality is to develop the public transport, this is an opportunity for Bloemendal to be more integrated in the city.

Threats
• If measurements are not taken to prevent urban sprawl the area will not be sustainable
• Lack of founding can stop the development of Bloemendal.

Measurements
From the analysis we have come up with subjects that we consider important that the plan proposal is based on.
• Densification is necessary for the area to be sustainable.
• The development of public places is essential to increase the quality in the area and to make the area safer.
• The planned and existing road net system needs to be improved.
• The poor connection between different parts of Bloemendal needs to be improved. Breaking through barriers can do this.
• To improve services in Bloemendal some nodes will be developed.