Bus stop Njoli - housing, parks and public space

Detailed proposal by Johanna Wulff
My proposal emphasizes on housing delivery and on creating parks and public space. In line with the overall structure, my goal has been to add denser housing areas and to add park space for recreation which KwaZakhele lacks today. The aim has also been to create public places at key spots where the residents of KwaZakhele can meet.

Housing has been built on vacant land, unused school sites, on wide road reserves and on land used by informal settlers. To enhance the streetscape I have placed three storey blocks along the main streets of Njoli and Mavuso and along the feeder street Meke. This will also shield off the semi-detached houses, courtyards and parks from the traffic on these streets. In this section I will illustrate how different parts of my area can look like.
**Housing**

**Two storey houses**
In my proposal I have used semi-detached houses in two stories, in the size of 46 m$^2$. A few of the houses are row-houses, but with the same arrangement. The houses have their own plots which can vary in size of in-between 70 to 90 m$^2$. This is much smaller than the plot sizes seen in Kwazakhele today. The proposal includes about 340 units of semi-detached houses and 70 units of row-houses. 

**Housing cluster with two storey houses**
The housing clusters contain 20 to 40 units. The houses are located close to the street and have most of their plot behind the house, where the residents can grow vegetables, flowers and hang their laundry. Between the plots there is a semi-private space which the surrounding residents can use. This space is about 10 to 15 meters wide. Here the neighbours can meet, children play and so on. Part of the space in-between is for parking lots, but if not used it can also be used for play, such as football and skating. These court yards constitute the semi-private space, today lacking in Kwazakhele.

Within the housing clusters there are parking spaces at some strategic points close to the houses or when entering the area. Some of the plots are wide enough for parking on. The car ownership is low in Kwazakhele today, but when people become more affluent, car ownership will increase. It is therefore difficult to predict future parking demands. I have planned for 0.4 parking lots per unit.

**Urban agriculture**
As already established, the schoolyards in Kwazakhele are big and most of them are often not used. I propose to take a part of the schoolyard on Meke Street to create housing and urban agriculture. The schools and nearby neighbours can here create a community garden. The function can be to grow vegetables for the school to use and in educational purposes. The intention is also that the residents in the area can use the garden to grow things that they then can sell in the market and through that generate an income.
Three storey houses
The three storey walk-up offer a variety of flat sizes. Most flats are 45 m², but in order to create more alternatives, the flats have a size in-between 30 to 55 m². Depending on the size every house contains in-between 10 and 12 flats. I have given each house their own private plot, as people prefer that. Even if the plot is small, the neighbours can garden and organize the plot. Next to the nodes at the market square and the piazza the residents have a court yard but no private plot. The main entrances of all the houses are facing the street. The three storey walk-ups creates a streetscale that has been missing in Kwazakhele. The proposal contains about 500 flats.
Along Njoli Street, which has an active street life, small shops or other small businesses will be located on the ground floor. The entrances to the staircases are placed along the street, but the residents can also enter the house from the plot. The residents can park alongside Njoli Street, Meke Street and on some of the new residential streets. In-between the block there are small court yards for the residents to use. Another type of paving and small trees signals to the pedestrian that you now leave the busy street life and enter a residential area.

Density
Planning the area, I wanted to create housing with higher density than exists in the area today. The Sustainable Communities Planning Guide suggests housing developments with a density of 70-100 housing units/ha.
In order to compare current density with my proposal I have estimated the density on one part of the project area and two different housing areas that exist today. My area had a density of 89 units/ha, while both the area with metro-houses and houses in the hostel area had much lower density.

Map 33. Density in new residential area
**Public space**

To meet the need of places developed for public use, I have suggested three new public places.

The Lillian Ngoyi Sport Centre

A small piazza in the corner of Njoli and Meke Street.

Market square at Mavuso bus stop

My goal has been to strengthen the node at the new bus stop in the corner of Njoli Street and Mavuso Road. To develop the area I suggest to relocate a small church and a crèche and to take away the nowadays unused gas station. This creates a market place in connection to the bus stop for the Khulani Corridor. Here will be an important node, since a lot of people will be getting on and off the bus here. The square continues north as a wide pedestrian lane through Mavuso Park, creating an important pedestrian path.

The market has small lockable kiosks that people can rent. According to the NMMM Economic Department, this is the wish of the hawkers trading in the area. The booths are supplied with running water and electricity to improve the working conditions for the vendors.

On the square a nine meters high blue clock tower is put up. This creates a landmark which the area lacks. Planted trees, sitting furniture and lighting on the square create a pleasant public space.

On the south side of Njoli Square I have added a row of houses on the wide road reserve; new business closest to Njoli Street and then two storey row houses.

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Fig. 99 Market square with new landmark

Fig. 100 Mavuso bus stop with market booths and mixed use houses
Map 35. Mavuso bus stop

Fig. 101 Existing businesses
The piazza

In the corner of Njoli Street and Meke Street I have created a small piazza. On two sides there are three storey houses with ground floor shops. The houses have bright colours. A circle in the piazza is elevated, which creates a seating arrangement. Another type of stone can be used on the pavement to create a feeling of a square. In the shade of some trees this creates a nice little meeting place.
The Lillian Ngoyi Sport Centre

The Lillian Ngoyi Sport Centre is an important part of the social environment in Kwazakhele. Due to the many streets crossing the area and to the unused wide road reserve at Mavuso Road, there is just huge open space outside the Sport Centre today. My aim has been to make a square with a diverse use, depending on the requirement. By redirecting traffic, I have created a square with small kiosks and an open space for different functions such as markets and events connected to the Sport Centre’s activities. The square contains trees for shade and seating arrangements for the residents of Kwazakhele to use.

The sport field northeast of the Sport Centre has been extended and I propose a field for playing football, and also tennis and basket ball courts. Each court is fenced as well as the whole sports field so that when playing, balls will not end up in other courts or in the street. Adding lighting, the residents can use the centres outdoor facilities in the evenings as well. Inside the fence there is also parking for bicycles, which is safer than leaving the bicycle on the street. The parking lot for the Sport Centre has been moved to the west side of the centre and hold parking for about 50 cars. For sections of the streets see pages 90-91.


Mavuso Park

On either side of Mavuso Road there are storm water ponds. It is estimated that the capacity of the storm water ponds will manage a 50 year flooding according to Storm Water Engineers\(^{20}\). The ponds have one small annual flooding; therefore they can be used as a recreational area the rest of the year. I propose some houses in the northern part of the pond and in the road reserve of Mavuso Road. Most of the park is not suitable for building on, but these parts have the highest altitude and can therefore avoid flooding. My goal with the park has been to create areas for play and sports activities, places where people can meet and just areas that are peaceful where you can sit in the shade of a tree and relax.

\(^{20}\) Interview with Lourens Streicher, Storm Water Engineer at FST consultant firm, 2006-12-14.

Map 38. Mavuso Park
On the west side of the park I have enhanced the current lower area to make a slope. This lower part can function as a stage during the dry period and be used for theatre, sports and other performances. The slopes are made out of grass and the middle circle has a floor of concrete. When the ponds are flooding, this part will be filled up first while the rest of the park will be usable for most of the year.

Braii is a popular part of the South African culture. The park has some spots where residents can meet and braii. Trees are planted in the park in order to create shade.

South of the school I have chosen to keep the park open and flat in order for the park to be used as an extension of the school yard. Here an 86 by 100 meter football field is located.

To enhance security in the parks I have added some housing in the northern part of the park, next to Meke Street and along the road reserve on Mavuso Road. This way I hope that the natural surveillance will create a sense of security, especially around the play grounds and along Mavuso Road.

Along Mavuso Road and the walkways in the park, street lighting will create a well lit environment for the inhabitants to use after dark. The large number of people passing by the park or in its very connection, together with the attractions of the Sport Centre and the Mavuso Bus stop and market will create a feeling of safety.

I propose to dig down the power lines that today run along Mavuso Road when the road is upgraded.

The people living in shacks here today will be given a house in the area under the subsidy scheme.

There are two play grounds located in the park. These are placed in the highest parts of the pond area to avoid being ruined and unusable by water.

Here are some examples of items in the play ground:
I propose an upgrading of Njoli Street in line with the suggested plan for the Khulani Corridor. There will be two bus lanes in the middle of the street and one car lane in each direction. This way the buses can run with less interference from cars. There is also an avenue with parking, trees and lights added. In my proposal I have added bicycle lanes running on either side of the street. Pedestrian lanes are wide because many people walk to get around in the area.

Meke Street is also proposed to be upgraded with pedestrian lanes on both sides and parking and bicycle lane on each side. Lighting is provided for both pedestrians and drivers.

I have used small residential streets within the housing areas. These streets are 4 meter wide and are mainly to be used for pedestrians and the need of the occasional car transport to and from the houses.

Mavuso Road has pedestrian lanes on both sides and a bicycle lane in the east side. The road has a parking lane with trees on both sides in the south part only on the east side in the north. I also propose upgrading the street with lighting.
Fig. 106 Section A Njoli Street

Fig. 107 Section B Meke Street

Fig. 108 Section C Residential street

Fig. 109 Section D Mavuso Road

Fig. 110 Section E Mblini Street