

Chapter 5: Framework

“In general we say that man ‘builds’ his world. The first mode of building consists in concretizing [sic.] the natural forces.”

(Norberg-Schulz, 1979: 51)

This chapter deals with a strategy on dealing with the ‘given’ context of the Maputo Baixa, discussed in Chapter Three. It is intended to propose guidelines to design by identifying appropriate responses to the context at an urban level.



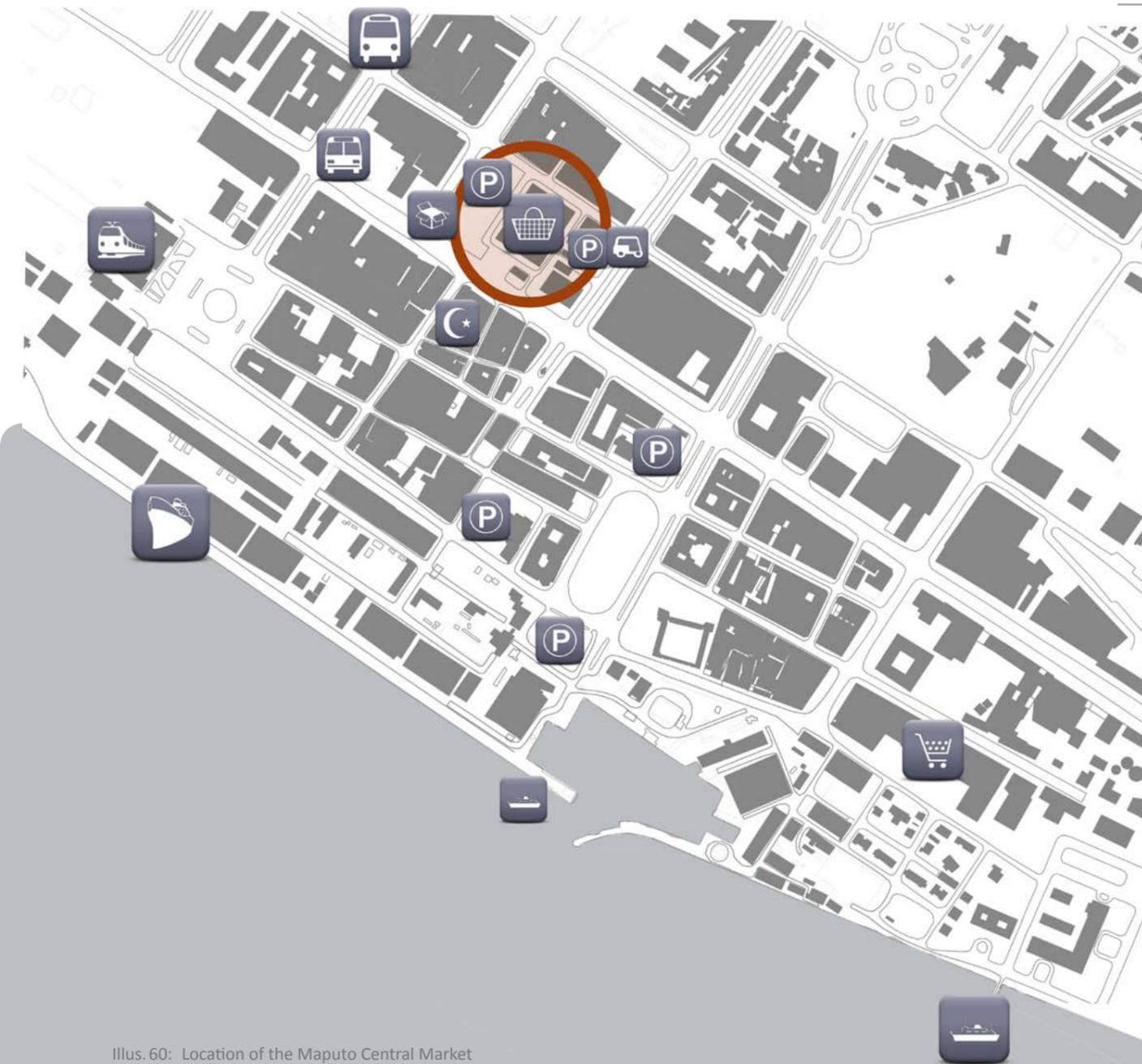
Illus. 59: Baixa Location

Selected Site

The selected site is the site of the existing central municipal market and municipal parking lots to the east and west of the *Mercado Central de Maputo*. The spirit of enterprise present in the area is a major factor that has driven physical development since the first traders settled in the immediate area. It is hoped that support of individual enterprise on this site will promote individual economic activity and social development in the area, while continuing the spirit of enterprise that forms such an important part of the heritage and character of the area.

The location of the *Mercado Central de Maputo* is shown in the adjacent image.

Illus. 58: South facing windows, Baixa, Maputo (C Deacon)

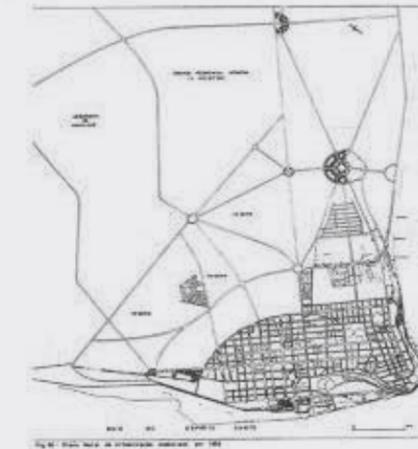


Illus. 60: Location of the Maputo Central Market

Existing Effects on the Site

Frameworks

There are three existing Municipal frameworks for the City of Maputo; the 2008 revision based on previous versions will be used as the large scale basis into which a smaller scale framework for the Maputo Baixa will fit.



Illus. 61: 1954 Urban Framework for Maputo



Illus. 62: 1969 Urban Framework for Maputo



Illus. 63: 2008 Urban Framework for Maputo

1954 Framework

This framework developed by the colonial Portuguese, focuses on the formal 'cement city', with many policies focusing on consolidating the regime's image.

Aimed predominantly at the location and phasing of residential and industrial areas, the framework laid down a grid of major roadways through the city.

It proposes high densities at the centre of city, with well connected outlying nodes .

1969 Framework

This is the most comprehensive Urban framework, it is thorough and detailed. It provides guidelines for the development of an extended city, without being overly rigid.

2008 Framework

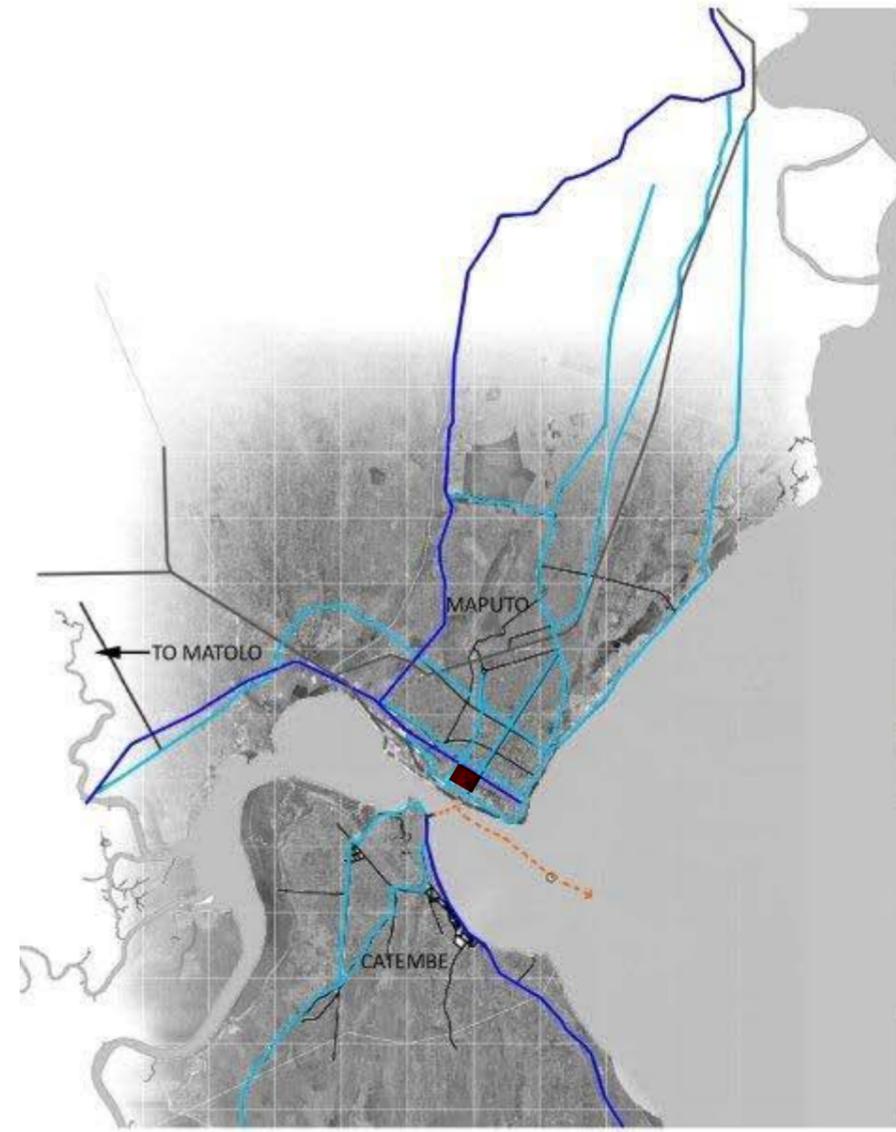
The PEUMM (*Plano Estrutura Urbana de Municipio de Maputo*) is guided by the fundamental laws of the country. It aims to ensure that the basic urban rights of the citizen are met, including:

- Access the city
- Safe transit and urban mobility
- Infrastructure and service provision.
- Access education, health, sport, information, leisure, cultural, and safety facilities
- Participation
- Access to urban land, decent housing, and sanitation

This is the Urban Framework that is in use currently.

Mapping of Existing Urban Phenomena

The following pages outline urban phenomena not outlined in Chapter Three that have an influence on the site (images from group framework).



Illus. 64: Map showing transport networks around the Maputo Bay (Baixa Framework Group)



Illus. 65: Map showing transport networks in the Centre of Maputo City (Baixa Framework Group)

■ Major Road Network
■ Secondary Road Network
■ Tertiary Road Network
■ Rail Network
--- Water Ferries

Transport Networks

The images show the proposed site in relation to the transport network. Significantly:

- The Major provincial road network (Ave. 24 July) connected to the site by Secondary and tertiary roads
- The termination of many of these major roads (particularly North-South roads) in the Baixa.

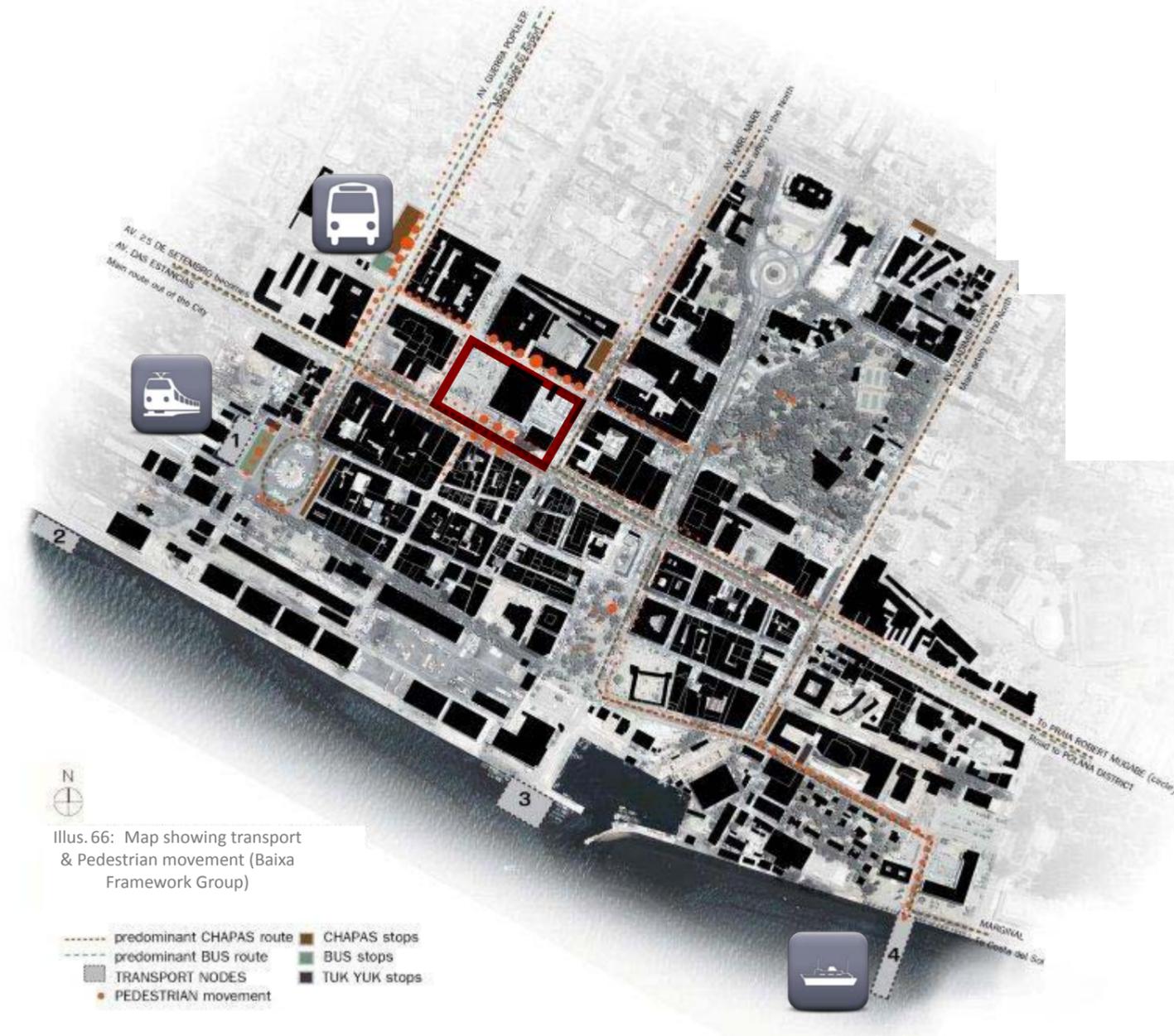
Transport and Pedestrian Movement

Density of passing pedestrian trade is essential to informal vending.

The 'North Baixa' around the market is well served by *chappa* minibus taxis and Tuk-tuks. Pedestrian densities seem to be highest immediately around and between transport nodes.

The Baixa serves as the public transport centre of Maputo. Often commuters need to travel to the Baixa in order to change routes to get to their destinations. This makes the area ideal as a market centre, where commuters are able to make quick convenient daily purchases of goods in small quantities. The appropriateness of the large fresh produce sector in the Maputo Central Market also becomes clear.

Architecturally these high volumes of pedestrian movement should be harnessed or allowed for.



Greenscapes of Maputo

The greenery that is found in the Maputo City Centre can be roughly categorised into three groups:

- Natural Vegetation (light green)
 - Located predominantly on the steep escarpment which runs along the coastline, then penetrates the city
 - Important to the prevention of erosion, and as a green belt in the city
 - The natural ingress of water into the soil helps prevent flooding in the Baixa
- Park or Garden (dark green)
 - Many well designed, well used, and safe parks are found throughout the city
- Reclaiming wild vegetation
 - Many vacant sites, have a layer of green growth made possible by the tropical climate and consequent fast growth of plants.

Greenery is important to the urban character of Maputo. The tropical climate also means that the shade offered by trees in parks and on the streets, is well used



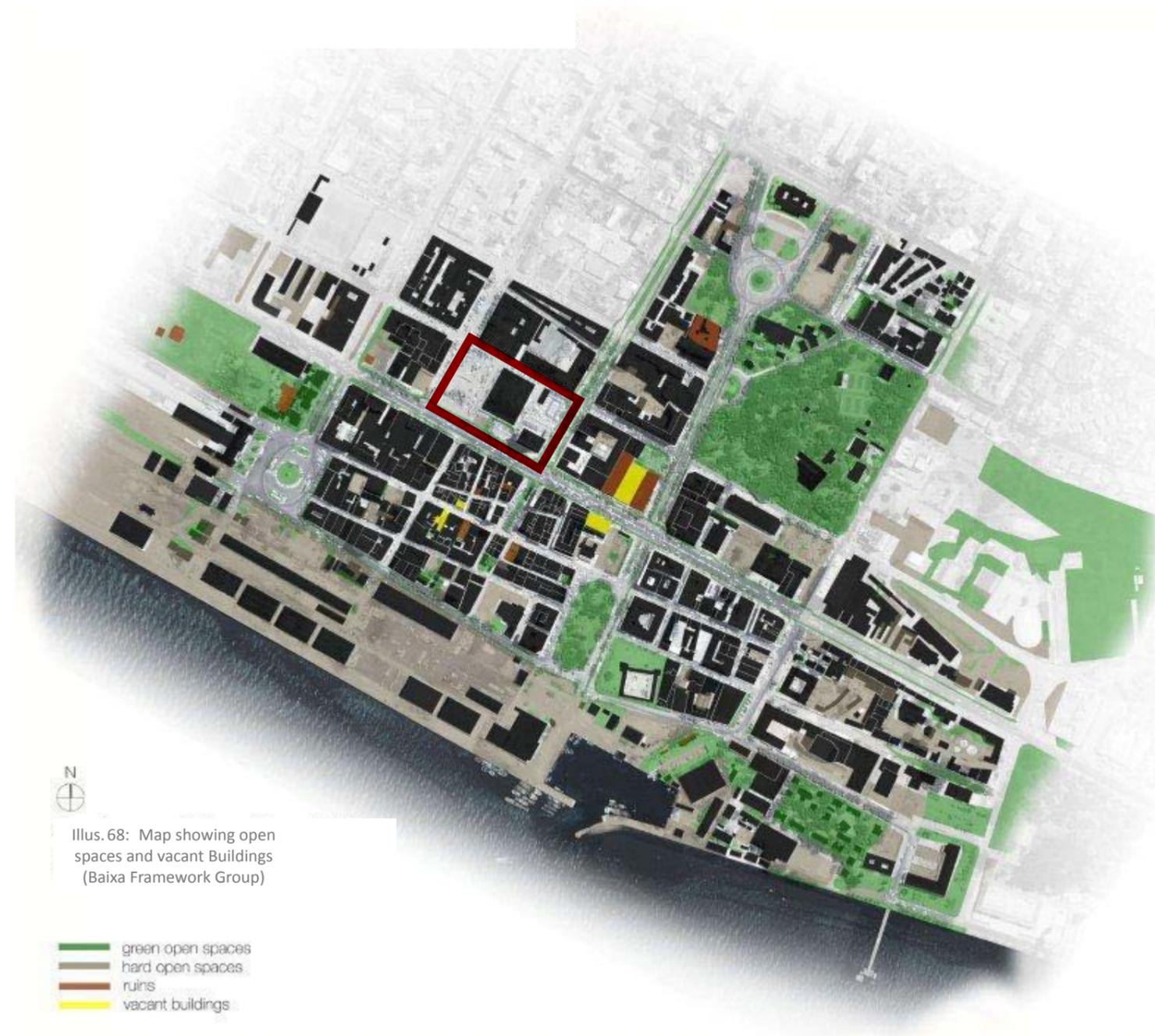
Open Spaces, Ruins, and Vacant Buildings

There is a large proportion of green space within the Baixa. Links between these should perhaps be strengthened into a consistent network of green space.

Vacant sites form an inconsistency in the urban fabric. These are often used as informal housing or areas for waste disposal. They provide an opportunity for reprogramming that would strengthen the existing urban character.

The high demand for parking is highlighted by the use of a large proportion of these open spaces as parking lots.

A large section of open land on the waters edge is open. This is part of the old Port, now predominantly relocated to Mathola. This forms a barrier that isolates the historically water related Baixa from the waters edge. It provides an opportunity for sensitive waterside development that would act as an extension of the Baixa, reconnecting it to the waters edge.



Illus. 68: Map showing open spaces and vacant Buildings (Baixa Framework Group)

green open spaces
hard open spaces
ruins
vacant buildings

Proposed Contextual Framework

The following pages outline essential elements of the proposed framework.

Harnessing the Generative Force

Historically the generative force of the Baixa has been the business related to the industrial port at the Baixa. This port has however, been moved to Mathola where modern industrial bulk handling facilities are available. This has not prevented the continued vibrance of the area as the Central Business District of Maputo, and an important point where bulk consignments are broken up for retail.

The Baixa is the centre of the city, many people move to and from the Baixa as they commute to and from work, with many transport routes terminating at or close to the Baixa. Many commuters change transport modes in the Baixa, between the available trains, *chappas*, tuk-tuks, ferries, taxis, etc. This is a major generative force in the Baixa, and the points where these various transport routes terminate as well as the character of the links between these nodes becomes important.

It is therefore proposed that a two-fold catalytic regenerative strategy for the Baixa is pursued. Firstly dealing with the nodes; evaluating, optimising, and revitalising them within the Baixa, including the transport-, recreational-, and retail- nodes. Secondly evaluating the links between these and optimising them to enable spontaneous growth within the Baixa due to accessibility. The Baixa is Ideally placed for this since it is traversed by links between the transport nodes in a 'transport triangle', other nodes also create various links between each other.

It is proposed that, as an important economic node, the Maputo Central Market be included in this catalytic urban renewal strategy an important economic node.

The following images visually summarise the proposed regenerative framework.

Transport Nodes

Kevin Lynch states that Nodes are created through intense use, occurring where there is a concentration of activity. There are three major points proposed within the Baixa where various means of transport have created such nodes.

1. Chappas (Mini-bus Taxis)

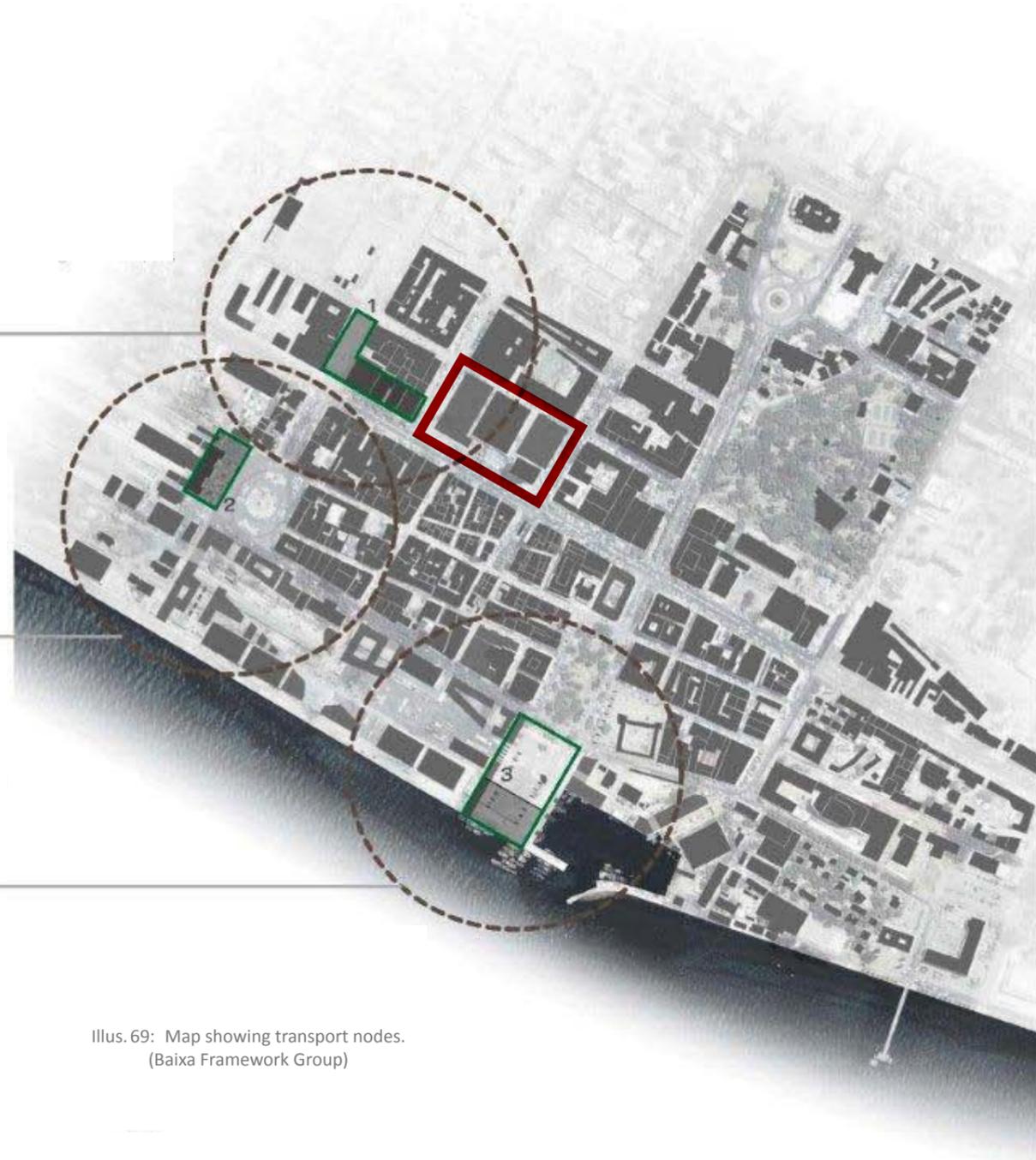
These largely informal shared taxis, are a significant part of the public transport system. The Baixa is the terminus, and interchange point for many of the *chappa* routes.

2. Train

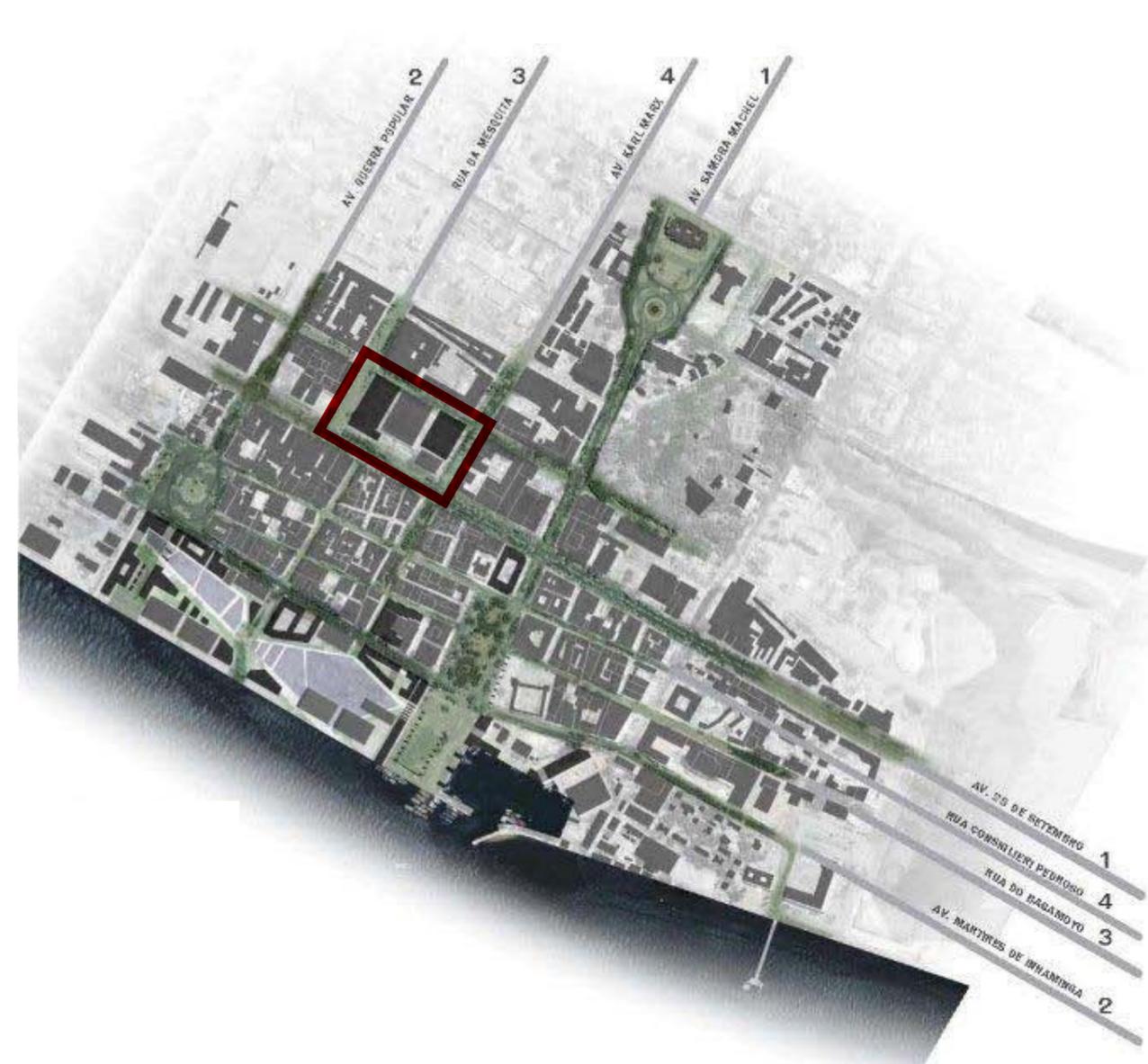
Operating on a fairly informal basis the train is a major means of entry into the Baixa, and current Maputo Municipality plans include an extension and upgrade to this system

3. Ferry

This forms a very important link to Catembe (the south side of the Maputo Bay) and nearby islands and villages. Proposed as a redevelopment of the historic location this node integrates both land and water transport.



Illus. 69: Map showing transport nodes.
(Baixa Framework Group)



Illus. 70: Map showing links and street hierarchy.
(Baixa Framework Group)

Links

The links between the predominant transport nodes, as well as other nodes and places of importance should also be considered.

Christian Norberg-Schulz states that "... places are designated by nouns..." but that the spaces or links between them as "...a system of relations..." are denoted by prepositions such as 'along', and 'between' (Genus Loci: Towards a New Phenomenology in Architecture: p16).

The links 'between' nodes are therefore worthy of formal consideration as designed spaces. The viewing of the Baixa as a system of inter-related spaces allows for design which enhances the operational ease, functionality, beauty, and experience of the Baixa.

The consideration of these links as a development opportunity allows for strategic low key intervention that could trigger localised urban regeneration.

The adjacent map ranks the major links in order of hierarchy, this allows for the effective prioritization of spatial design.

Framework Summarised

Linkage

The use of linkages aims to establish connections between elements, nodes, and places. At a framework level it is proposed that it is not only individual nodes that should be considered, but also the spatial relationship or linkage between them, as well as the termination of these linkages. By overlaying the hierarchy of these links with the existing fabric, it is possible to establish the most important places. The location of the Maputo Central market on important linkages, therefore shows its urban importance.

Place

The individual's relationship with the context should be considered, particularly through the consideration of open spaces as significant public places. This is particularly relevant in tropical Maputo, where the climate allows for significant formal and informal use of open space. The Maputo Central Market is one such open space.

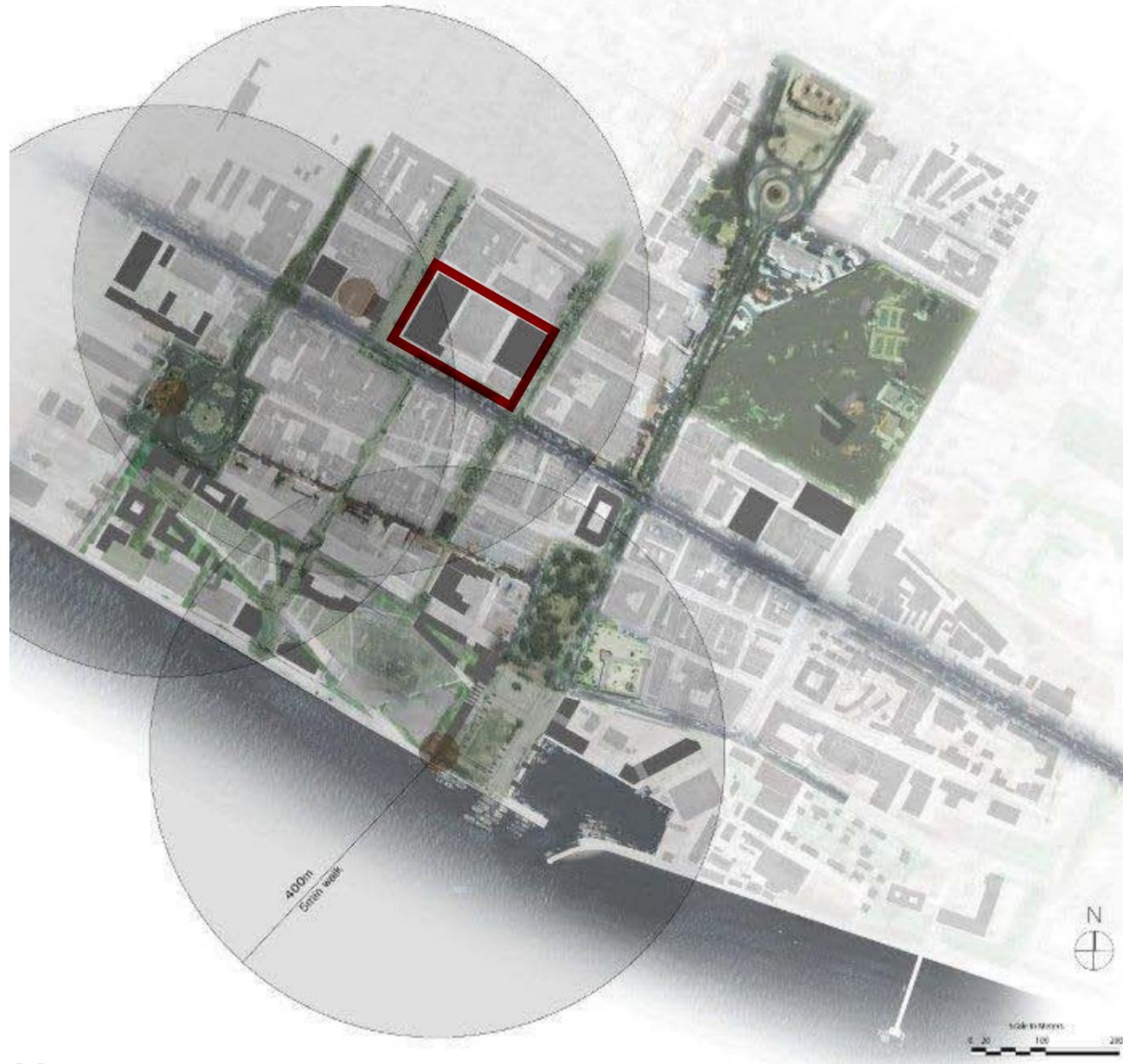
Proposed Informal Economy Strategy

The importance of an official strategy regarding the 'informal economy' is shown by the success of the Warwick Junction revitalisation projects, since different unrelated institutions and role-players were able to co-operate according to a predefined strategy on which they all agreed and which considered the interests, goals, and responsibility of all parties involved.

It should be mentioned that people within the formal market, although they agreed that vendors outside the formal market should be regulated, did not support their removal, sighting that this would deprive these people of a livelihood. Many established shops were found to co-operate with entrepreneurs in the informal economy as a way to reach customers.

The strategy should promote micro-enterprise as a positive contributor to the heritage and vitality of the Baixa, as well as a significant attractive force to the Baixa. This is proposed through:

- The provision of demarcated vending sites on street pavements, for which vendors pay a minimal rent. This allows:
 - Formal and legal recognition of traders
 - Inclusion of traders into the existing formal market administration structure
 - Formal discourse between authorities on health, security, pavement congestion, and other issues.
 - Increased business stability for vendors and formal retail (incremental growth of more permanent fixed structures as stability increases).
 - Increased revenues generated to cover increase market administration costs
 - as a part of the formal market vendors on official sites are the responsibility of the existing Market Police responsible for that specific market, they can then be held accountable by vendors associations.
 - The width of pavements and the infrastructure with which they are provided changes.
- Encouragement and recognition of traders associations
 - As a channel of multidirectional communication (provision of meeting spaces)
 - As a means of self regulation, and crime prevention
- The maintenance of the existing police force (provision of facilities)



Illus. 71: Formal street stalls, Ave. Guerra Popular (J Casson)

Vehicular Strategy



Illus. 72: Vehicles in competition with vendors (J Casson)

There has been a 66% increase in the number of cars using Maputo's roads since 2005. This coupled with the historic absence of laws requiring on-site parking, and a tradition of not providing on-site parking even in multilevel buildings means that the pavements and open spaces of Maputo are often clogged with cars. This has the following implications:

- Pavements are often blocked by parked cars, forcing pedestrians to walk dangerously in the street
- Street vendors have to compete with cars for pavement space, in order to make a living

Multi-storey parkades are proposed at strategic points near entrances to the Baixa, and near transport nodes. These could be provided by the municipality as a way to deal with the parking congestion, and can be used as revenue generating assets. As a further measure, new buildings should be required to include a certain amount of on-site parking.

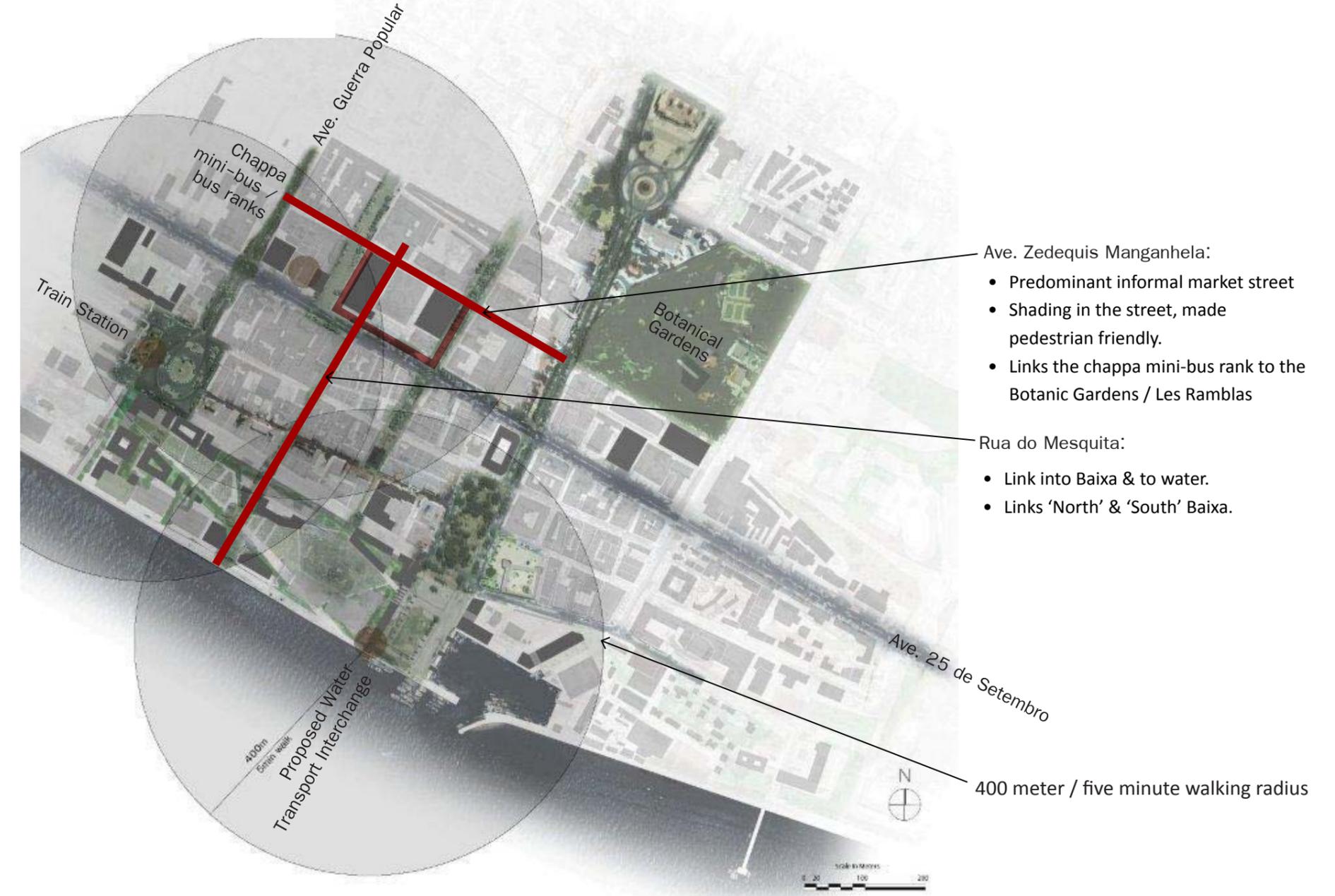
In this way, the pedestrian nature and heritage of the Baixa, particularly the 'Old Baixa' would be allowed to continue. It is further proposed that vehicular traffic and parking be limited on some of the smaller streets in these areas such as Rua do Bagomoyo and Avenida Zedequias Manganhela, in favour of pedestrian spaces.



Illus. 73: Vehicular congestion Ave Zedequias Manganhela (J Casson)

Specific Site Recommendations

The following image highlights the important proposals relating directly to the Maputo Central Market.



- Ave. Zedequias Manganhela:
- Predominant informal market street
 - Shading in the street, made pedestrian friendly.
 - Links the chappa mini-bus rank to the Botanic Gardens / Les Ramblas

- Rua do Mesquita:
- Link into Baixa & to water.
 - Links 'North' & 'South' Baixa.

400 meter / five minute walking radius