



Fig 5-1





Fig 5-2 Sketch illustrating how gardens can become a communal intermediate space between housing.

## 5. FORMULATING THE PROJECT

### 5.1 THE SYNTHESIS: Housing + Green space.

*"Building more robust intersections between the two (public life and public space) becomes a priority."* (Bremner, 2006. p.9).

As people move away from rural areas into an urban, often consumerist setting, they lose the connection with nature, and forget the importance of maintaining environmental services such as water resources. However, people are in fact dependent on the natural environment to meet all their needs, and therefore the interactions between people and the environment cannot be separated. Changes in values and beliefs have also contributed to environmental change in South Africa, often negatively.

According to a statement on the Housing Generator Project website ([www.housinggenerator.com](http://www.housinggenerator.com)), it is very important to view the housing problem within a wider perspective and to realise that housing projects cannot be reduced to just delivering homes. It is essential to recognize the important role of open space in and around the home, and to reflect on the relations that arise between these homes. People can use this open space creatively to generate income. So housing means that one accords these areas, which may vary from the space in front of the house to the centre of the neighbourhood or city, an appropriate place in the open sky. Furthermore, it is important to recognize that people move to the city mainly do so to look for work. The home and the land where people live can play an important role in the generation of income.

In this project, therefore, the park constitutes a key element, but its integration with the housing development bordering it is vital. The proposed resolution should provide a synthesis between the housing and all elements of the public realm. The vision for the park is to provide intimacy and familiarity, in contrast to the urban vastness. It invites interaction and use, and bonds the park to the housing. The park, as the primary green element, is visually and spatially linked to the housing courtyards and streets. It is the collective space (a common property with restricted access) that can successfully take urban living beyond the private realm and ensure that it is used and cared after.

A sense of community can be developed through a community activity such as gardening. It can be used to break down the isolation and sense of powerlessness in inhabitants of low-income suburbs - creating a sense of neighbourliness among residents. Until that happens, there is no community, but, rather, separate people who happen to live in the same place. This is all the more reason for promoting stewardship by giving people the responsibility of maintaining their own public park, thus allowing them to become a proprietor of the park.



Fig 5-3 South Elevation

## 5.1 THE SYNTHESIS: Housing + Green Space

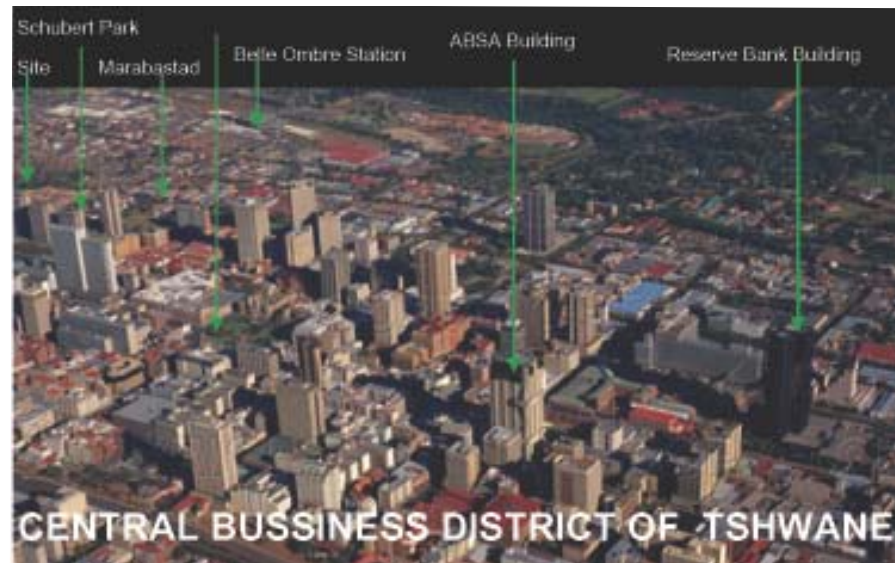
**5.2 CLIENT:**

City of Tshwane in association with Thubelisha Homes.

**5.3 FUNDING**

The project will be funded and supported by one or more of the following institutions and initiatives:

- Gauteng Department of housing
- Thubelisha Homes
- The Agrarian Research Development Program (ARDP)
- The City of Tshwane Metropolitan Municipality  
(Environmental resource management)
- The Greater Pretoria Metropolitan Council  
(In charge of the Environmental Resource Plan)
- The Food Gardens Foundation (FGF)  
(Training and support in Food Gardening)

**5.3.1 GAUTENG DEPARTMENT OF HOUSING - INSTITUTIONAL SUBSIDY**

The Institutional Subsidy is available to qualifying institutions to enable them to create affordable housing stock for persons who are entitled to housing subsidies. This housing subsidy mechanism provides R34 049, 00 to qualifying beneficiaries, whose monthly income may not exceed R3 500. The subsidy is paid to selected institutions to provide subsidised housing on deed of sale, rental or rent-to-buy options, on condition that the beneficiaries may not be compelled to pay the full purchase price and must take transfer within the first four years of receipt of the subsidy.

Institutions must also invest capital from their own resources in the projects. ([www.housing.gpg.gov.za](http://www.housing.gpg.gov.za))

**5.3.2 THUBELISHA HOMES**

Thubelisha is a dynamic and rapidly expanding housing support institution of the National Department of Housing. Thubelisha is a Section 21 company supplying housing stock that is financed by subsidies provided by the Provincial Housing Departments. Its mission is to provide specialized interventions that positively impact on the development of integrated sustainable human settlements and accelerate affordable housing delivery. ([www.thubelisha.co.za](http://www.thubelisha.co.za))



### 5.3.3 AGRARIAN RESEARCH DEVELOPMENT PROGRAMME

The Agrarian Research Development Programme (ARDP) is aimed at developing postgraduate agricultural students and agricultural departments in new paradigms of agricultural research. With funding from the Agrarian Research Development Programme, a group of students will establish the urban agriculture park on the site and study the relevance of urban agriculture. Accommodation and facilities are initially provided for the research. At a later stage, when the students have completed their work, these facilities can then be taken over by the community.

The ARDP is a collaborative research programme that will address some of the basic issues underlying agrarian development and land reform in South Africa. ARDP is jointly sponsored by the Netherlands Government (the major funding organization for covering running costs, research costs, salaries, etc), the NRF (Bursaries), six South African Universities, the Agricultural Research Council, the National Department of Agriculture and Land Affairs, and Provincial Departments of Agriculture. The latter four organizations contribute in kind (office space, equipment, salaries, and communications).

The ARDP initiates and facilitates the development of a research approach which combines social science perspectives with insights from agro-technical disciplines and determines how such a body of knowledge can be used in the development of policies and research processes through the use of universities, Research Councils, Government Departments, NGOs, communities and international contacts.



Fig 5-4



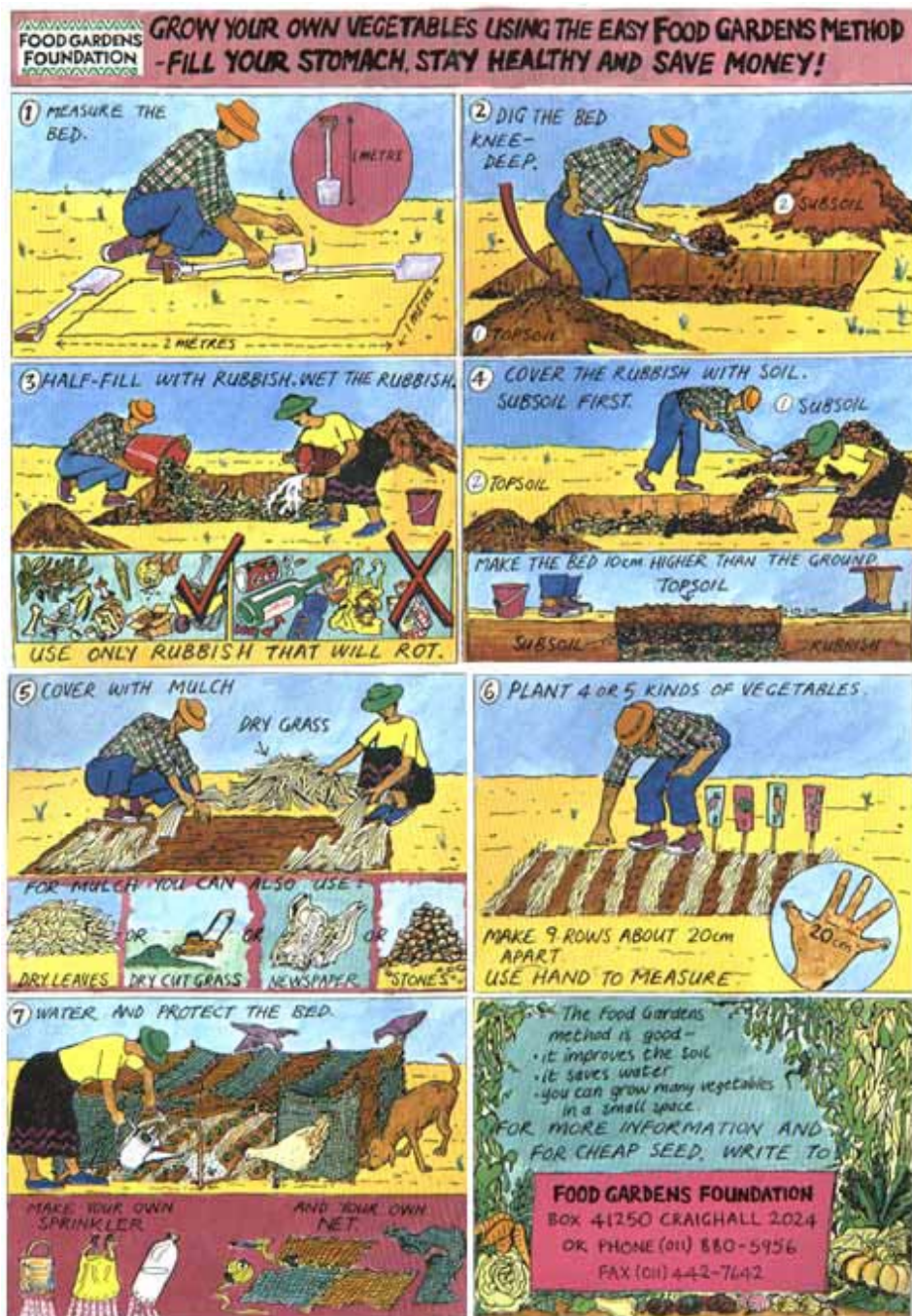
Fig 5-5



Fig 5-8



Fig 5-7



The soil is coming alive. The hungry are eating. The unemployed are earning. The disabled are working. The children are smiling. The methods are simple and easy to understand. Little water is needed. All the compost comes from the rubbish heap. There is fresh food on the table. There is the satisfaction of creating. There is the expectation of abundance, earning money, improved health. Requests for training are pouring in. The bigger the success of Food Gardens, the further the word is spread, the more funds are needed. One day will come the biggest success of all. Everyone will have enough to eat. You'd like to be part of that success - wouldn't you?

Fig 5-8 An information leaflet handed out by the food garden foundation to encourage people to start their own food gardens.

### 5.3.3 THE FOOD GARDENS FOUNDATION

The Food Gardens Foundation (FGF) is a Non-Government Organisation and an Association Not-For-Gain registered under Section 21 of the Companies Act.

The Food Gardens Foundation was established in 1977 under the name of Food Gardens Unlimited, as a socio-economic project to teach people to help themselves by growing essential food according to sustainable organic principles. Its vision is the empowerment of people to overcome malnutrition, famine and hunger. FGF achieves community development and social upliftment by teaching people small-scale low-cost organic food gardening. FGF has developed a system, which dynamically responds to the changing needs and status of the community. The basic system is based on sound agricultural principles that have been tried and tested over the past 25 years. FGF makes available training manuals and material to support the training of individuals and communities in Food Gardening and possesses the infrastructure and contacts to source and supply seed and other support for Food Gardeners.

FGF's motto is: "Maximum nutrition in minimum space with limited water and resources", and the broad aims are:

- to improve the physical, mental and social well-being of the communities in which it works;
- to help communities to develop sustainable Food Gardening projects by ensuring that they have sufficient knowledge, experience and support;
- to create in the individuals an awareness of their potential; and
- to create an awareness of environmental issues and demonstrate the options for conservation.



Fig 5-9 Lady selling flowers

## 5.4 PHASING OF PROJECT

### 5.4.1. PHASING OF DEVELOPMENT

Not all the housing components need to be completed at the same time.

The project deadlines can be spread over a number of stages:

- Phase 1: Establish the framework for the development.  
The northwest corner of the housing development and the ARDP research facility.
- Phase 2: Landscaping of agricultural fields.  
This is implemented by the ARDP students with the help of local residents.  
Skills transfer workshops are offered to develop local skills in order to equip residents to complete the infill level of the units.  
Food Garden Foundation workshops teach people to help themselves by growing essential food according to sustainable organic principles.
- Phase 3: The southeast corner of the site to be developed with more mixed-use facilities.  
Residents complete own infill in residential units and make [?] additions to the first part of the housing scheme.
- Phase 4: Residents take control of the maintenance and benefits of the agricultural park.
- Phase 5: ARDP facilities to be remodelled into an organic market and nursery.

### 5.4.2 PHASING OPEN BUILDINGS

A central idea in Open Building is to respond to the various needs of individual users by means of the phasing of the design, decision-making, and implementation processes. Some decisions are postponed until the stage at which future users can be identified and involved in the planning. In order to provide prospective occupants with the opportunity to influence their dwelling, the elements selected by the resident must be easy to change. Thus adaptability is not merely a means of modifying the dwelling during use; it is first and foremost a strategy for enabling the fulfilment of individual wishes without compromising the rights of the succeeding occupants.

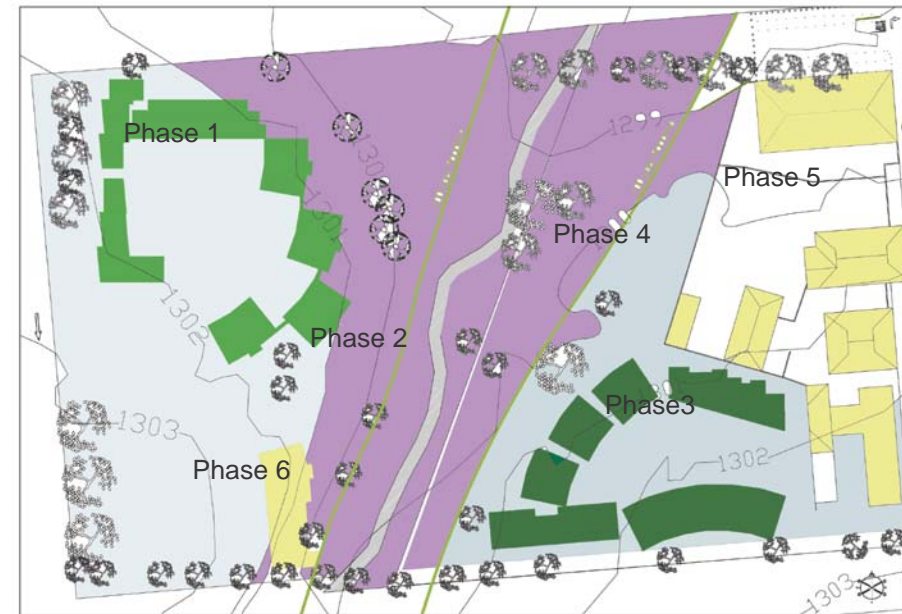


Fig 5-10 Plan: Phasing of the project

5.5 PROJECT PERFORMANCE GUIDELINES

Environmental sustainability  
 Social sustainability  
 Economic sustainability

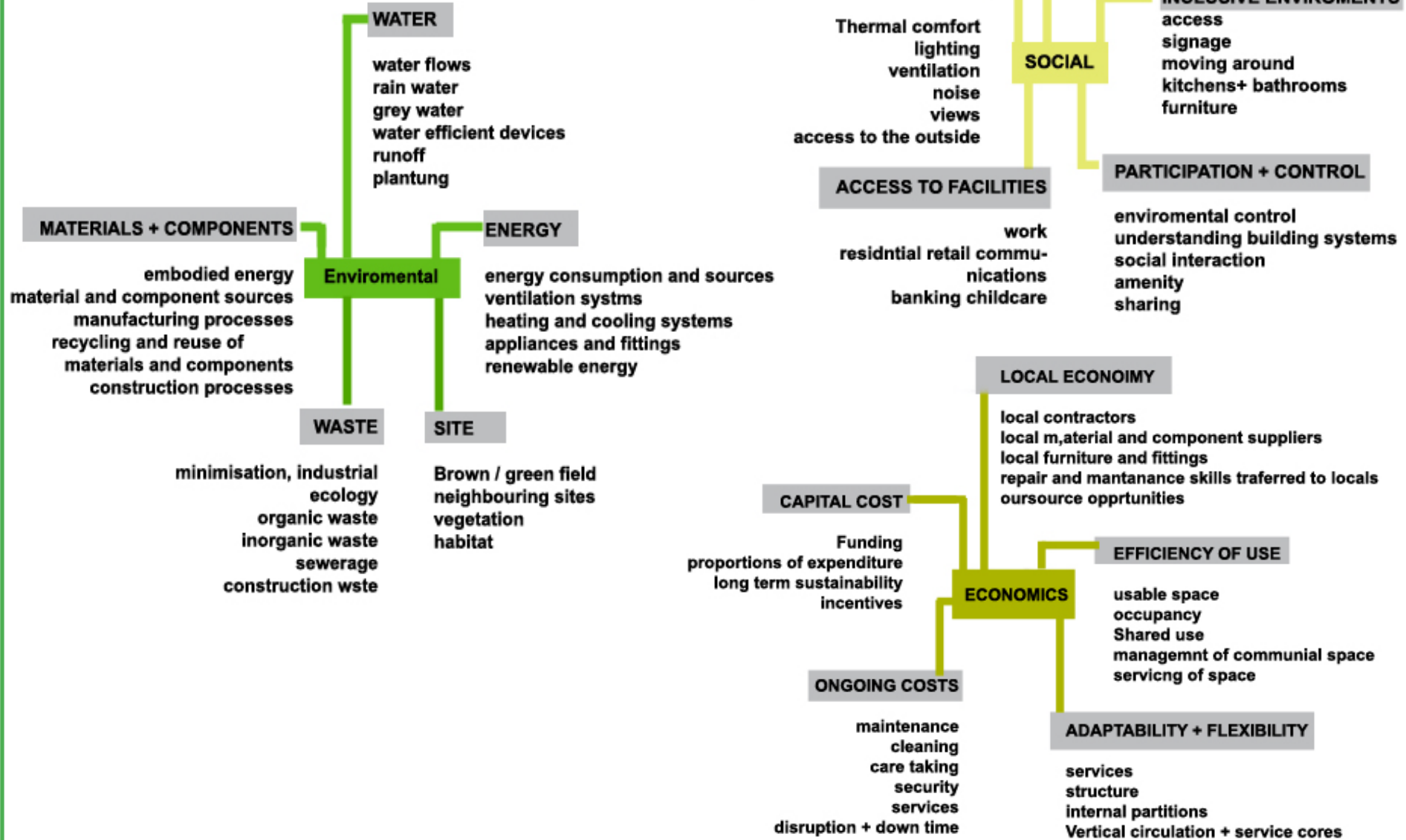




Fig 5-11

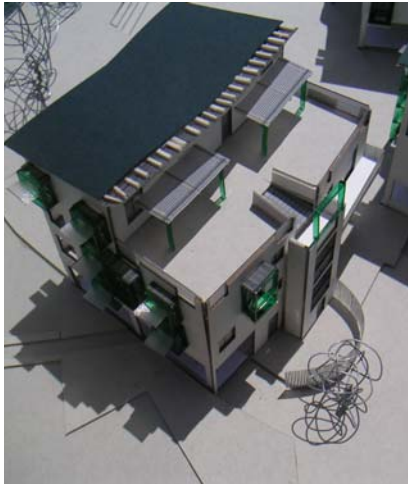


Fig 5-12

## 5.6 ACCOMODATION SCHEDULE:

SIZE OF TOTAL SITE: 25 037m<sup>2</sup>

NO OF HOUSING UNITS: 26

AVARAGE UNIT SIZE: 30 m<sup>2</sup>

m<sup>2</sup> PER PERSON: 15 m<sup>2</sup>

### 5.6.1 DENSITY.

High-density housing is envisaged, defined as above 60 units per hectare in the “Pretoria Structure Plan, 1993” A high density housing development normally covers 80% of the site and allows for 20% landscape. Because this site is zoned for open green space, and the main purpose of the architecture is to enhance the park, it appeared best to keep the density lower. When excluding the area designated to become the public park, the relationship between actual built area and number of units show that the development is in fact much denser.

### 5.6.2 RENTAL

The social scheme takes up 40% of the development and will be managed by a rental agency. The units will be made available to people with an income between R2000 and R7000 per month.

### 5.6.3 OWNERSHIP

60% will be sold as sectional title at market value.

### 5.6.4 PARKING:

According with the planning regulations, each unit will have its own designated parking bay. It can be argued that the parking is still excessive, especially or a development with a subsidized component. The proximity of public amenity’s and access to public transport should reduce the need for parking.

HOUSING: A GREEN PROPRIETOR IN MARABASTAD  
JOZANNE SPIES MARCH(PROF) UNIVERSITY OF PRETORIA



Fig 5-13 Nort East Elevation

## DESIGN CHALLENGE AND RESPONSES

The challenges in designing the project include:

- Balancing the relationship between the built project and the green park space
- Creating a sense of place
- Forming thresholds between private, semi private, and public space
- Creating adaptable and versatile living units
- Creating spaces for communal use and social interaction
- Creating a safe environment
- Giving the residents the opportunity to gain socially and economically from the park
- Encouraging the residents to become proprietors



Fig 5-14 North elevation and view through to the courtyard