SEHAB, Municipality of São Paulo in collaboration with the 4th International Architecture Biennale Rotterdam

planning document TESTSITE PARAISOPOLIS



PARAISOPOLIS TESTSITE

The 'Paraisopolis Testsite' for urban interventions is a project by the Municipality of São Paulo in collaboration with the 4th International Rotterdam Biennale committed to implement best practice projects and a new overall urban scheme for Paraisopolis, with its 60.000 inhabitants one of the largest complexes of informal settlements in São Paulo.

The Municipality of São Paulo started an upgrading program in 2005 that provides infrastructure, public services and housing for a sustainable development of the area. The new phase of this program foresees exemplary project implementations by international renowned architecture offices that are aiming to introduce new strategies for the informal city.

CHALLENGES

Adequate shelter means more than a roof over one's head. It also means adequate privacy; adequate space; physical accessibility; adequate security; security of tenure; structural stability and durability; adequate lighting, heating and ventilation; adequate basic infrastructure, such as water supply, sanitation and waste management facilities; suitable environmental quality and health related factors; and adequate and accessible location with regard to work and basic facilities: all of which should be available at affordable cost. (UN-Habitat, 2003)

In addition to the agenda that has been set by the UN Habitat report the project implementations for Paraisopolis are also seeking to find new ways of how urbanity can be defined. The exemplary aspect of the urban interventions should be seen as testing that fosters the transformation of informal settlements into a new type of inclusive and sustainable urban reality that is based on the commitment for a participatory, civil society. The redevelopment of infrastructure such as water and waste management, sewage systems, fixation of unstable ground, green space and transportation facilities will represent the framework where new developments are based upon.

Regarding the high amount of slum areas that have to be upgraded, cost-efficient and socially responsible methods have to be elaborated. In order to accommodate inhabitants of low income groups, the construction methods should comply with cost reduction by developing building types of exemplary architectural quality.

Privatization and the maximization of built substance has led to a situation where the notion of public space as an area for common interests and social services does not exist. The creation of public areas with education, sports and health facilities and the maintenance of these areas will represent one of the major challenges for a sustainable long-term development of the site.

MISSION STATEMENT

The goal for the project implementations is to find solutions for the precarious site conditions by developing new construction methods and architectural schemes that will foster an ecologically and socially sustainable development of the area. Against the eviction of unregulated areas the projects should deal with the spatial and programmatic qualities of the site and guarantee the exchange between existing and new social networks. The 'Testsite Paraisopolis' is engaging in the formation of a civil society and can be considered as an investigation into a new type of urbanity. This new way of considering urbanity is aiming to introduce new housing models and the creation of public spaces that combine the logic of the existing fabric with innovative ideas that create potentials for a future reality of urban coexistence.

As the new interventions are building up on existing schemes and projects that are already in progress, the coordination between different teams is essential.

The schedule for the Paraisopolis projects shows, that each implementation has its own timeframe, but in order to establish an integral system the projects have to comply to general guidelines.

These guidelines will be divided into three phases (see schedule):

- The preparation phase comprises the identification of the different locations for the projects, the extent and the program as well as the objectives for the interventions.
- In the first phase the concepts for the projects and the overall urban scheme should be entirely developed.
- In the second phase, the framework proposed by the urban scheme the urban scheme will enable the projects to be adjusted according to the overall strategy. This will allow the determination of the construction documents.
- In the third phase, the projects will be implemented

1. PHASE (CONCEPT DESIGN)

In the first phase, the parameters for the project concepts should be set. As this process has already started in some cases, the coordination between the Municipality, the concept of the urban scheme and the individual projects have to be made according to the general guidelines, as they were set in the planning document.

The outcome of this phase will be communicated and discussed during the workshop that will be held in São Paulo in the beginning of June.

The fees for this concept phase should be defined individually in communication with the SEHAB.

2.PHASE (CONSTRUCTION DOCS)

The goal of the second phase is the production of the master plan and the construction documents.

In the case of non-Brazilian offices, the construction documents have to be developed in collaboration with Brazilian offices, that will be responsible for the execution of the project. These offices have to be allocated at the beginning of the second phase and the fees have to be determined in coordination with the SEHAB.

3. PHASE (IMPLEMENTATION)

The third phase will be about the initiation and monitoring of the realization of the implementations.

The IABR will follow and document this process and exhibit the realized projects and/or the implementations in progress.

As already mentioned, this phasing will not be exactly the same for each project, but it represents a guideline that allows to structure the Paraisopolis project as a whole and to coordinate the teams at specific moments.

PUBLICATION/COPYRIGHTS

With the participation, the offices involved will agree on providing material for the publication of the concepts and the realized work for the 4th International Architecture Biennale Rotterdam and beyond.

The Municipality of São Paulo and the sub-curators of the IABR, Rainer Hehl and Jörg Stollmann, will have the non-exclusive copyrights for further publication in form of exhibitions and other media.

	MARCH	APRIL	МАҮ	JUNE	JULY	AUGUST	SEPTEMBER	
SEHAB			COORDINATION	WORKSHOP				
IABR		END OF PREPARATION	COORDINATION MEETING COORDINATION MEETING TION	EXHIBITION CATALOGUE	E EXHIBITION DOCUMENTS HAND-IN DOCUMENTS	EXHIBITION PRODUCTION		IABR
URBAN SCHEME Ruben Otero Ciro Pirondi	CONCEPT			DOCUMENTS	IMPLEMENTATION			
GROTINHO Suzel Maciel Marcos Boldarini	IMPLEMENTATION							
ANTÔNICO MMBB	CONCEPT		DOCUMENTS		IMPLEMENTATION TO BE DETERMINED	ÉŪ		
GROTÃO U-TT	CONCEPT		DOCUMENTS		IMPLEMENTATION			
PRIMETRAL AREA ELEMENTAL		CONCEPT		DOCUMENTS		IMPLEMENTATION		
JARDIM COLOMBO Christian Kerez		CONCEPT		DOCUMENTS		IMPLEMENTATION TO BE DETERMINED	INED	

schedule

Ruben Otero/Ciro Pirondi/Analia Amorim São Paulo

AREA

Paraisopolis Jardim Colombo Porto Seguro

PROGRAM

infrastructure mobility housing/commerce public equipment

STATUS

concept design started

PLANNING

Overall concept due for 1st of June urban scheme and additional material that illustrates the plan for the new implementations due for the end of July (for the IABR exhibition)

REMARKS

The urban scheme should be developed for a long-term perspective of the area. The complete urbanization might need up to 20 years and unforeseen changes cannot be included in a master plan document. The urban scheme should therefore have enough flexibility to be adapted to new conditions.

Besides the overall framework on a longtime bases, a short-term strategy (for the next 6 months) and a middle-term strategy (for the next 2 years) should be developed.

DESCRIPTION

The Paraisopolis overall area is representing an urban organism that has its own reality and that is connected to the urban fabric of the surrounding in many complex ways. On the one hand the precarious site conditions stand in strong contrast to the closed condominium towers of the immediate neighborhoods. The separation between these two realities are symptomatic for the segregated class conditions and deep gaps between rich and poor segments of the Brazilian society - a situation that Teresa Caldeira is giving the title in her book on São Paulo 'The City of Walls'. The image shot from the luxurious towers with private swimming pools on each terrace overlooking the favela of Paraisopolis became enigmatic for this conflict all over the world.

On the other hand the two sides are complementary as they are highly dependent from each other. Most of the inhabitants are working as legal or illegal employees in the rich districts of the surrounding. Besides the precarious site conditions of the risk areas, Paraisopolis offers a lot of qualities in addition to the good location and the proximity to the workplaces:

The dense fabric of the place can be considered as a sustainable solution against the waste of land and resources (590 inhabitants/hectar against the average of 69 inh/ hect. in São Paulo). The morphology of the built mass together with diverse topographic conditions offer spatial configurations of interesting volumes and potentials for public use.

The prospect of being close to one of the most important soccer stadiums in Brazil, (that will attract a lot of attention for the World Cup tournament in 2014) adds to the fact that Paraisopolis will witness major transformations of the area in the close future, particularly concerning public transportation. The development of the favela into a new type of urban reality that will differ from the present conditions can therefore be taken for granted.

OBJECTIVES

The urban scheme developed by Ruben Otero, Ciro Pirondi and Analia Amorin will provide a framework dealing with 4 major issues: infrastructure, mobility, housing/commerce and public equipment.

The 4 themes should be applied to all of the 3 areas (Paraisopolis, Jardim Colombo and Porto Seguro) and connections between these 3 areas should be established. The general 'masterplan' should guarantee the integration of the 3 areas into the region through the provision of infrastructural elements (such as water way, bike lanes, public transportation, etc.) and public equipments that help to bring different communities and social classes together

INFRASTRUCTURE

Infrastructure equipment such as water management, electricity supply, sanitation and sewage systems have already been partially provided in same places through the planning effort of the first stage of the project. These installations have to be continued and adapted to the planning strategies of the new urban schemes. The adaptation work will require the coordination of the general guidelines of the master plan with the agenda of the individual projects. Besides the technical aspects of the infrastructure equipment the planning has to guarantee a new treatment of the common areas and public spaces in order to enable the integration of ecologically sustainable systems.

Program:

- water management:system for black, grey and white water/cleaning system (centralized, de-centralized) separate sewage system
- rain water collection/system against flooding of the area

- systems for energy production (water/solar energy) waste management, including systems for waste separation and recycling
- adequate public lighting (visibility and safety by night)

MOBILITY

The urban scheme should guarantee the accessibility of the area by pedestrians, bicycles and public transportation systems. Particular attention should focus on facilitating the access for areas with steep slopes and if necessary transportation facilities (escalators, lifts, etc.) should be provided Suitable solutions for the circulation by car and parking systems should be organized through an overall system.

The infrastructural network should be connected and supported by public equipments such as bus stops and recreation areas that allow to build up awareness for the public spaces.

Program:

- walk ways, roads and side walks for pedestrians and cyclists (bicicletario)
- access for cars, new traffic system
- access for garbage removal, ambulance and public transportation
- special lifts/elevators for particular connections on steep slopes
- bus stops and terminals
- connective elements for the areas beyond the perimetral road
- running path through the area for the 'Paraisopolis Marathon'

HOUSING/COMMERCE

Besides the establishment of new low-cost housing typologies in order to guarantee affordable costs for low-income groups, the investigation should also provide solutions for the reorganization and relocation of the dwellings that have to be removed.

Based on the structures and experiences of the Municipality in participatory methods, these planning efforts have to be coordinated according to the needs and possibilities of the existing situation.

A new program for the distribution of public and private functions for the area should also allow future developments concerning population growth and/or structural changes of the inhabitants.

Against the common Brazilian model of implementing 5-story or 9-story housing blocks on the ground cleared from existing buildings, the program for the new housing units should be in dialogue with the existing substance.

The arrangement should enable spatially defined common outside areas and allow 'informal logics' to be integrated into the new structure.

The new typologies should invest in exemplary models dealing with the reduction of costs through innovative construction methods or housing communities and strategies that allow a flexible use of the space according to changing constellations bet-ween public and private programs.

Program:

- relocation of the housing and the commerce units that had to be removed
- densification due to vegetative growth
- promotion of new commercial activity

PUBLIC EQUIPMENT

Even though the existing urban fabric of the area already offers the possibility of public spaces, these spaces have to be defined and programmed in a way that will clearly define them as public. The equipment of these areas should provide social services, education and sports facilities as well as recreational areas, green spaces and adequate public lighting.

The safety of the public spaces will rely on the maintenance and social control of these areas.

Program:

- kindergardens (approx. 4000), daycare centers
- internet centers (telecentros)
- gyms/music school
- swimming pools
- community centers
- public plazas (combined with other programs
- park areas
- playgrounds, sun decks
- trees for the streets
- urban agriculture

The program for each section represents a rough outline and has to be extended/ adapted in coordination with the SEHAB.

Suzel Marcia Maciel/Marcos Boldarini/ Carlos Dias, São Paulo

AREA

Grotinho

PROGRAM

public park, stairs, playgrounds commerce, service (related to the schools) housing

STATUS

under construction

PLANNING

design adjustment due for 1st of June construction finished for the end of July complementing documents for the end of July (for the IABR exhibition)

DESCRIPTION

The Grotinho area is defined by the entrance for Paraisopolis from the Southwest. The proximity of public services such as a CEU and a school for technical apprenticeship will turn the site in a lively public area that have to provide service, recreation facilities and security for the inhabitants.

The project is divided into two areas: First, the sloped area that should be secured against landslides and equipped with recreation and green spaces.

On the other side, a new 'public edge' will provide services, commerce and housing for the operators of the commercial spaces and shops.

- Besides the above mentioned creation of public spaces, the arrangement of the new buildings and park areas should enhance social control and visibility and a clearly defined public area.
- Both sides should be seen as one project and the fluid connection of the two sides should be reinforced by common surface treatments and programmatic combinations (as for example the cinema projection)
- The spatial configuration should frame the entrance area and create a strong public transition to the more private areas of the housing units
- For the park area vegetation should be implemented where the water channel (from the first design) was supposed to be placed
- In order to create a visual relationship between the 'public stage' of the street front with commercial activities and the park, that represents the space for the 'spectators', public seating should be provided (in pockets of the green space or in combination with the staircase)
- The limits between public and private areas should be clearly defined with architectural elements (as it is the case in street squares in the European context like, for example, in Barcelona)
- The provision of adequate public lighting should guarantee the visibility and safety of the area by night

MMBB Arquitetos Associados Fernando de Mello Franco, Marta Moreira, Milton Braga

AREA

Antonico river

PROGRAM

water management system public/green space public equipment extension/adaptation of the existing housing units

STATUS

concept design started

PLANNING

concept design due for 1st of June construction documents as soon as the removals have been affected implementation: to be determined complementing documents for the end of July (for the IABR exhibition)

DESCRIPTION

The area around the Antonico River is the 'main valley' of Paraisopolis that contains natural water combined with the used water from the surrounding households. Water pollution, precarious housing conditions and risk areas for temporal flooding represent the major challenges for the river area. The neighboring commercial spaces create in most parts of the area a lively backdrop for public activities such as street vendors and spaces for social encounters.

- The river can be seen as a connecting element to the surrounding circulation system that allows an open connection to the neighboring areas for pedestrians and cyclists. The treatment of the sides of the river should guarantee this connection by providing adequate circulation surfaces combined with public programs and equipment such as green spaces, vegetation benches, sun decks, etc.
- The reorganization of the canalization and sewage system should allow a separation between used and clean water. The visibility of and accessibility to clean water will contribute to an enhanced awareness and valorization of the water as a basic resource and aesthetic element.
- The differentiation of the public spaces should organize the distinction between public and private and allow diverse activities to take place such as commuting, recreation and social interactions.
- The edge between the public circulation system and the private spaces should form an interface between the public outside and the private inside spaces. Accessibility for service, cleaning equipment and emergency vehicles should be guaranteed.
- The introduction of public programs such as 'street squares', green spaces, play areas for children and elderly people should connect the public areas to specific activities in order to enhance public control, safety and civic consciousness.
- The provision of adequate public lighting should guarantee the visibility and safety of the area by night.
- The amount of demolitions of existing housing and the relocation of the units should be coordinated with the feasibilities of the relocation programs from the SEHAB.
- The extension and the adjustment of the edge of the public areas should create a 'public face' composed by the variety of the individual private units.

Urban Think Tank Alfredo Brillembourg, Hubert Klumper Caracas/NYC

AREA

Grotão

PROGRAM

public park environmental community center sports facilities public equipment

STATUS

concept design/construction documents

PLANNING

concept design adaptation due for 1st of June

complementing construction documents for the end of July (for the IABR exhibition) implementation starting in July/August

DESCRIPTION

The Grotão area is one of the steepest sites of Paraisopolis. It is located in a central position and connected with one single road to the overall circulation system. The demolition of the housing units that where situated in risk areas has led to an open surface in the middle of the dense fabric. The opening of the site to the south allows the access for the general traffic and smaller construction vehicles and enables the development of the site. In order to protect the sloped areas against landslides and further erosion, a retention wall has to be introduced. A few natural springs are providing the site with water and transforming it into a green area with an increasing amount of vegetation.

- Due to additional removals of housing units the orientation of the site towards the open space and the connecting road has changed. The system of stairs and green surfaces have to be reorganized in order create a strong spatial and visual connection to the bottom of the site, where public sports facilities should be placed.
- The identification of the natural springs would enable the establishment of a water management system that can be introduced in order to enhance the quality of the public space and to help to irrigate the vegetation of the park.
- For the green areas of the slope, innovative techniques should be introduced for the fixation of the ground.
- Some green areas should provide the possibility of 'urban farming'. New experimental techniques should introduce alternative ways for self-sustaining ecologic systems.
- The implementation of lifts, outside escalators or other transportation systems could facilitate the rise of the hill for pedestrians (and cyclists).
- The implementation for the site should combine nature and program into a laboratory that enables new way of dealing with nature and public space.
- The provision of adequate public lighting should guarantee the visibility and safety of the area by night.

Alejandro Aravena, Elemental Santiago, Chile

AREA

Perimetral area punctual implementations

PROGRAM

prototypes for 3 story and 5 story housing units (one apartment unit 50sqm) in case of punctual implementations 3 story units with the possibility for commercial use on the ground floor

STATUS

concept design started

PLANNING

concept design due for 1st of June construction documents and material studies starting from June complementing documents for the end of July (for the IABR exhibition) implementation starting in August

DESCRIPTION

The area beyond the 'Perimetral Avenue' offers available ground for the relocation of removed housing units in addition to the units that will be built on the vacant sites on the lower side of the avenue. The specific character of the 'perimetral area' is marked by its topographic particularities (such as the slightly sloped surface and the view overlooking Paraisopolis) and the proximity to the neighboring green area and a school complex that will be established in the next school semester.

The housing units for the available site can be considered as an extension of the program for relocations that were conceived by the Municipality in the previous phase of the Paraisopolis project. Besides the idea that the new buildings should be connected to these projects the site can be considered 'generic' in the sense that it represents a common condition referring to similar situations in the Brazilian urban context.

Two additional sites inside the Paraisopolis complex still have to be allocated for the implementation of the same type of housing units.

- The goal for the development of the two housing types is to provide affordable solutions for low-income groups. The application of new building technologies should be based on the possibilities of the local construction industries.
- The prototypes should represent a viable alternative to the existing standard housing types and should adapt more to the needs of the mentioned user groups (lowincome, relocated inhabitants,...)
- In addition to the development of new solutions for the interior layouts, the arrangement of the units should create defined outside spaces where diverse social activities can take place.
- The insertion of singular prototypes into the existing urban fabric as well as the formation of new housing complexes should be considered as an integral part of the existing substance, relating programs and connecting the units to the overall system of public equipments and open spaces.
- The construction technology should allow the reproduction of the units in similar contexts in an efficient and sustainable way (the use of prefabricated construction elements should be considered)
- The arrangement of the units should allow natural ventilation and fluid connections between outside and inside spaces.
- The interior of the units should allow different types of layouts and finishes that can be realized by the users on the bases of assisted self-help practice.

Christian Kerez Zürich

AREA

Jardim Colombo

PROGRAM

water management system commerce housing public equipment

STATUS

concept design

PLANNING

concept design due for 1st of June construction documents as soon as the removals have been affected implementation: to be determined complementing documents for the end of July (for the IABR exhibition)

DESCRIPTION

The Jardim Colombo area can be considered as an organism with its own specific particularities. Similar to the Antonico River area, the bottom of the valley represents a risk area due to the polluted water passing through the site. Commercial and housing units form the constructions above the river and have to be relocated for the cleaning of the riverbed.

The community organization has a strong presence and the social links are stronger than in the main Paraisopolis area. This is also explaining the fact that the general situation can be seen as more consolidated. The particular topographic conditions have a strong impact on the morphology and the accessibility of the site.

- The reorganization of the canalization and sewage system should allow a separation between used and clean water. The visibility and accessibility of the clean water will contribute to an enhanced awareness and valorization of the water as a basic resource and aesthetic element. Some parts of the river should therefore be kept open (see plan).
- The differentiation of the public spaces should organize the distinction between public and private and allow diverse activities to take place such as commerce, recreation and social interactions.
- The construction for the new commercial and housing units should be adapted to the geographic conditions and create a visible and organizing element in the center of the site.
- Accessibility for service, cleaning equipment and emergency vehicles should be guaranteed.
- The introduction of public programs such as 'street squares', green spaces, play areas for children and elderly people should connect the public areas to specific activities in order to enhance public control, safety and civic consciousness.
- The provision of adequate public lighting should guarantee the visibility and safety of the area by night.
- The amount of demolitions of existing housing and the relocation of the units should be coordinated with the feasibilities of the relocation programs from the SEHAB.
- The new construction should create a framework for a flexible adaptation of private and public functions.
- The project should represent an alternative to existing strategies for relocations and experiment new methods and techniques for architectural solutions that correspond to the needs of the inhabitants.