MONTE CHRISTO DEVELOPMENT PLAN

2017 (IN PROGRESS)

Location Monte Christo, Windhoek, Namibia

Client Nuvella (Pty) Ltd.

Stage

PRELIMINARY STUDY: Town Planning Scheme OP1 FORMALIZATION: Macro-Town Planning Scheme

Area 3811 ha

Estimated Population 185 000

Number of Housing Units 50 000 Namibia is a country full of particularities in Southern Africa. The challenges presented by this project became a pleasure to AIV2's town and urban designers, for the possibility of participating in another global development project within the framework of the projection of a New City, where the client intended not only the development of an appealing new urban zone but also for it to become a reference in Namibia for its careful integration of African roots in communion with the theories developed during the 19th century in the thought of the ideal city.

The goal was to develop a new urban region, next to the capital of Namibia (Windhoek), integrating the Metropolitan Region of Windhoek, maintaining a close relationship between the two cities.

This plan started with the Harambee Valley urban development project, promoted by the developers of Ongos and Monte Christo areas and the City of Windhoek, realising the need to join efforts, consolidate the different developers plans, regarding the provision of bulk services to the area and integration with the current city of Windhoek master plans. The project was considered of national interest to the government of the Republic of Namibia.

The programmatic structure incorporates significant functional areas for the definition of the concept and structure of general occupation, such as: Location and structuring of a Central Business District; Location of poles for Industry and Small Enterprises which can function as Building Centre for Start-ups and international enterprises connected with sustainable workforce for the beginning of the development of the city; treatment of the River Lane in connection with Down Town and the creation of a Fundamental Ecological Structure through Green Circles integrating different Zones, Land uses and Densities forming Circle Parks.





The Monte Christo Development Plan covers 3811 ha, of which 2400 ha are developable land, situated in the north-western region of Windhoek, approximately 20 km from the city centre. Currently the main access is the Monte Christo Road with new access roads being planned to link with the main road, B1.

The Model of Territorial Occupation for all of Monte Christo is being developed to incorporate approximately 50 000 housing units.

The concept behind the Monte Christo Development Plan incorporates a Traditional African Design known as Fractal Villages (Fractal Pattern) whereby houses are grouped together around a centre that generates the sustainability of the whole in addition to the concept of the Garden City (Eco City), where the two concepts are merged with the intrinsic characteristics of the territory, possibility of growth, mobility and the modern needs.

In the programmatic objectives, seven of these Fractal Villages (with approximately 1000 housing units each) are grouped together to form a cluster (Fractal Village Grouped, integrating approximately 7000 housing units) serviced by a Fractal Subcentre with educational, safety, medical facilities, and other.

The centres of the Fractal Villages and the aggregation centre, Fractal Subcentre,

are located in order to comply with the norms of the neighbourhood. To program 50 000 housing units, about 7 Fractal Village Grouped will be developed. These clusters have an identity and create an harmonious living environment. All clusters will be joined by a green belt known as Circle Park, offering the inhabitants a safe environment for outdoor recreational activities.

In percentages of Land Occupation, the plan integrates:

- 59 % for Residential, predominantly residential areas with complementary uses to the housing function, Fractal Villages Lower Density, approximately 37 300 housing units;
- 7 % for Business, integrating the areas of Central Business District (CBD) and the Down Town and Residential zones with Middle/High Density. This zone is organized as Fractal Village Grouped and it is the heart of the city;
- 6 % for Fundamental Ecological Structures, integrating the areas of the Green Rings, which surround the Fractal Village Grouped zone and the heart of the city, these rings also integrate the framing of the structural ways; the Complementary Green Corridors, delimited along the water lines, they connect the Fundamental

MACRO ZONING LAND OCCUPATION



TOWN PLANNING SCHEME OF OPERATING UNIT 1

Ecology Structure (Green Rings) with the urban ecology structure that will exist within the Fractal Villages;

- 18 % for Special Land use, integrating the areas of the Special Equipment's and Complexes (large areas that are more difficult to occupy and which will associated the implementation of reference equipment) and areas with greater restrictions and that constitute reserve areas for the salvage of environmental values in presence such as River Lane and The Game Reserve of the left river side;
- 4 % for Industrial Land use, integrating the areas of Building Centre and Industry and Small Enterprise, regarding expansion or replication of the model, the location of industrial and logistics zones in the territorial limits is a good option because it facilitates their expansion and accessibility;
- 6 % for main roads and other Reserved Areas.

The Fractal Concept implicit in African villages was integrated into the various levels of development of the project, because it is expandable, repeatable, easy to Group, and easily adaptable to the territory.

This project also intends to demonstrate the capacity to organize the territory in order to be adaptable.

This concept was implemented in the structure of the circulation network, namely through the increase of the reserved lanes to the circulation areas, promised to adapt to the needs/requirements of travel/modes, growth and evolution of the societies.

The scope of the project was Project Management, development of the specialties of Urbanism and Town Planning, Landscaping, Integrated System of Mobility and Transport, Micro Accessibility System (supported by local engineering and town planner teams).

The project developed in two major stages:

- Macro-Town Planning Scheme, in which a model of territorial occupation was developed that organises and structures the occupation, orienting development of the Town Planning Scheme for Operating Units (OP) to be approved by the authorities;
- Town Planning Scheme for the first Zone of 15 000 housing units to be developed in two OPs to be approved by the authorities. The development of this stage, for each OP includes the development of the Concept Design (CON); Preliminary Study (PRE) and Detail Design (DTE) implementating the Urban Design.