

## **Policy Review for Zones 3, 4 and 5, Nairobi, Kenya**

### **1. Introduction**

Cities all over the world metamorphose. This metamorphosis is shaped by many forces which are economic, social, physical/spatial, cultural, political, environmental and institutional in nature. The changes bring about challenges and opportunities which require innovative planning interventions. Couch (1990) has noted that the exponential rate of urbanization due to an ever-growing population exerts very powerful forces to urban residential areas, making them undergo internal spatial restructuring in response to social and economic pressures. These socio-economic changes create demand for land and the physical fabric inevitably leading to increased requisition for the reorganization and the restructuring of the urban fabric. With the finite land use resource the scope of choice in urban areas will entail densification, infilling, intensification of land use or redevelopment particularly affecting derelict land or low-density and sub-optimally utilized residential areas.

Kenya has been urbanizing at 7-8 per cent which is faster than the whole of the Africa region. Over the period 1979-1999 the City of Nairobi experienced very high population growth rates ranging between 4.8 and 5.0 per cent. The City of Nairobi, like other cities in the developing world, is experiencing rapid transformation. The main challenges felt everyday are unplanned and uncoordinated urban growth, inadequate infrastructure, deterioration of the urban environment and increasing poverty. Nairobi City has not had a comprehensive plan since the Metropolitan Growth Strategy of 1973, which expired in the year 2000. Its expiry underscores the urgency of the preparation of the Strategic Structure Plan to guide the overall development of the city.

Currently many parts of Nairobi city are experiencing immense development pressure, which calls for a review of their development policies. The high population growth rate is particularly exerting pressure on the low-density residential neighbourhoods. In particular, Zones 3, 4 and 5 are prime high-income low-density residential neighbourhoods in the City of Nairobi which are experiencing undue development pressure, mainly as a result of the rising demand for housing, office and commercial developments. A review of the development policy for Zones 3, 4 and 5 needs to be undertaken whose aim will be to promote sustainable development, improved infrastructure and service delivery, and to conserve the areas' serene natural and built environment.

A team of planners, which was constituted for the re-planning exercise for zones 3, 4 and 5, was guided by principles of sustainable urban development and management for enhanced economic growth, conservation and a healthy urban environment. This is envisaged to create opportunities for new investments, job creation; to create additional housing while conserving prime neighbourhoods, improved infrastructure, and healthy environment. Improved infrastructure will be supported by an infrastructure development levy to create a fund managed by an independent board. Environmental conservation will entail protecting riparian reserves and conserving existing open spaces and recreational areas and promoting a green policy in the entire area. The policy review was based on a careful analysis of the development trends over the last fifteen years, in order to formulate a policy framework for zones 3, 4 and 5 for the next 10-15 years. The vision of Zones 3, 4 and 5 from the planning consultations undertaken in this exercise is Sustainable Urban Growth, Conservation and Improved Environment.

## 2. Development Profile: Zones 3, 4 and 5

### 2.1 Extent of Zones 3,4 and 5

Zones 3, 4 and 5 cover the following areas, namely:

**Zone 3-** Parklands, City Park Estate and Westlands (includes the Westlands CBD area and the Museum Hill area).

**Zone 4-** Lower Spring Valley, Riverside Drive, Kileleshwa, Kilimani, Thompson and Woodley/Ngong Road

**Zone 5-** Upper Spring Valley, Kyuna, Loresho and Lavington/Bernard Estate

The total area of the three zones is approximately 40,000 hectares.

Table 1.1 below shows the previous development policy guideline for zones 3, 4 and 5.

**Table 1.1 Previous Development Policy for Zones 3, 4 and 5.**

Zone	Areas Covered	G.C. %	P.R. %	Type of Development Allowed	Min Area (Ha)	Remarks / Policy Issues		
3	<b>Parklands</b> <ul style="list-style-type: none"> <li>• Commercial</li> <li>• Residential</li> </ul>	50	100	Commercial / Residential (High-rise Flats)	0.05	Policy under Review		
		35	75					
	<b>City Park Estate/Upper Parklands</b>	35	75					
3	<b>Westlands</b> <ul style="list-style-type: none"> <li>• Westlands CBD</li> <li>• Westlands/Museum Hill</li> <li>• Block 1 Commercial</li> </ul>	80	200	Commercial/ Offices/ Residential (High-rise Flats) Four Storey max.	0.05	Policy Under Review		
	<ul style="list-style-type: none"> <li>• Block 2 &amp; 3 offices and High-rise residential.</li> </ul>	35	80					
	<ul style="list-style-type: none"> <li>• Block 4 offices</li> </ul>	80	200					
	<ul style="list-style-type: none"> <li>• Block 5 Commercial/Residential Hotels</li> </ul>							
4	Spring Valley	35 (s)	75 (s)	Residential (Apartments allowed on sewer only) - 4 storeys max.	0.05	Policy Under Review		
	Riverside Drive							
4	Kileleshwa	25 (u)	25 (u)					
	Kilimani							
4	Thompson							
	Woodley							
5	Upper Spring Valley	25	25	Low density Residential One Family House	0.2	Maisonettes allowed on sewer areas of Lavington.		
	Kyuna							
	Loresho							
5	Lavington/Bernard Estate	35	75					
	<ul style="list-style-type: none"> <li>• On Sewer (s)</li> </ul>						25	25
	<ul style="list-style-type: none"> <li>• Unsewered (u)</li> </ul>							

Source: City Council of Nairobi (2004), **A Guide of Nairobi City Development Ordinances & Zones**, Unpublished Report: Department of City Planning, City Council of Nairobi

### 2.2 Development Challenges in Zones 3, 4 and 5

The last policy intervention undertaken in 1987 in Zones 3, 4 and 5 anticipated a population target of 300,000 people. The construction industry yielded very low performance due to the economic slump in the 1990s. However, with sustained economic recovery and progressive growth in the beginning of the year 2000, the zones have experienced catapulted development more than ever before.

A rapid scan indicated that development had by far outpaced forward planning intervention measures. The developments have mainly been driven by the demand for housing, commercial and office developments. This has been met by a public outcry from the residents who have voiced various concerns. The residents in these zones have particularly

expressed the profound concern that the developments are being carried out without a commensurate upgrading of the existing level of infrastructure to support the housing, commercial and office developments. This is likely to have unprecedented negative social and environmental impacts. The problems identified can be classified into the following broad categories:-

### **2.2.1 Infrastructure Development**

The character of the developments indicates a demand-led instead of an infrastructure-led type of development. The implementation of plans for development of infrastructure has been inadequate and ineffective. The housing, commercial and office developments are now exerting undue pressure on the existing level of infrastructure. The sewerage lines require to be upgraded in order to adequately service the increased levels of sewage discharge due to rising levels of development. The problem manifests itself in the form of blocked sewerage pipes and overflowing liquid and solid waste. The zones equally experience reduced water supplies particularly during the peak periods. The developers adopt the coping strategy of sinking boreholes or allowing for underground reservoir tanks and booster pumps to raise the water to the roof storage tanks.

The developments equally generate high volumes of surface water run-off which particularly exerts pressure on the existing road network and the river line drainage way leaves. This has led to problems of flooding coupled by the wearing off of the road surfaces since the roads have not been widened and upgraded with commensurate increase in the widths of the storm water drainage channels. These roads, which are now receiving higher population numbers, need to be provided with pedestrian walkways, cyclists routes and to be developed with street lights.

Other infrastructure services that will demand attention are effective and efficient means of solid waste management and accessible facilities for fire fighting.

### **2.2.2 Transportation**

The increased numbers in the population are generating trips which are split into the modes of vehicular, pedestrian and cyclists' traffic. The properties whose land-use has been changed to multi-dwelling units, commercial and office developments do not have adequate parking at plot level. This has caused motorists to indiscriminately park on the road reserves, which inevitably leads to loss of green open spaces, traffic congestion and imminent road accidents. Property developers are equally not surrendering part of their plots to give way to road widening. The present carriageways are therefore not able to accommodate re-aligned storm water drainage channels and well-segregated non motorized transport routes in the form of pedestrian walkways and cycle tracks. The entry and exit points to these developments are equally not properly developed to allow for deceleration and acceleration lanes which exacerbate the problem of imminent accidents.

It should be equally noted that public transport infrastructural facilities have not been developed alongside the increased levels of traffic volumes. This leads to unprecedented levels of traffic congestion along the public transport routes and at terminal facilities such as bus stops. Other problems are related to ineffective maintenance and upgrading of these roads, which manifest itself in the form of potholed roads and inadequate road signage.

### **2.2.3 Housing Developments**

A rapid assessment of the three zones indicates that about 20 per cent of the people have embraced the force of redevelopment and desire to have plots changing use from single family to multi dwellings units. However a substantial 80 per cent of the residents would prefer to have the status quo prevail. It would be useful to evaluate from the field survey the categories of people who are for and those against the redevelopment.

There is a need to evaluate the overall carrying capacity of the area. There is need therefore to undertake a census of the people in the three zones. This will enable us to determine the size of population that can be accommodated, the aggregate number of housing units in the entire three zones, the total number of households, parking spaces and ground and plot coverage at plot level. This will be correlated with the current infrastructure and the community facilities.

There is need too to apply theories of land use planning in order to understand the rationale for redevelopment and conservation and preservation.

#### **2.2.4 Community Facilities and Social Infrastructure Services**

The increased population in Zones 3, 4 & 5 accommodated in the housing, commercial and office developments has not been adequately provided with a commensurate increase in the community facilities and services. These include recreation facilities (such as public open spaces, playgrounds and sports facilities), education and health facilities, social and community halls, religious facilities, homes for special needs, police stations, post offices, administration facilities and cemeteries. The inadequacy of these facilities has led to unplanned and spontaneous change of use of other properties to accommodate these deserving community facilities and services.

#### **2.2.5 Juxtaposition of Incongruous Developments**

The increased population in these previously-pure residential neighbourhoods has equally attracted heavy commercial developments such as the Yaya Centre along Argwings Kodhek Road and Nakumatt Ngong Road and at The Junction and Uchumi Supermarkets along Ngong Road, among others. This retail-oriented development magnetically attracts and generates huge traffic volumes along the main arterial routes leading to traffic congestion. This problem is equally replicated in Westlands and Highridge shopping centres due to the location of The Sarit Centre, Uchumi Hyper, Nakumatt Ukay, Nakumatt Highridge and Diamond Plaza among others.

There is insatiate demand for these types of commercial developments, office-use developments and several other bars, restaurants and residential hotels, which have sprawled beyond the areas initially designated as commercial zones. There is great resistance by developers to conform to previously-zoned commercial zones. This is particularly experienced on the main arterial routes such as Ngong Road and Waiyaki Way. This has seen the change of use of previous housing units and properties to commercial developments, to bars, restaurants and residential hotels, to offices and others to multiple uses. This has resulted in a character of mixed -use development outside the zoned commercial centers. The misinterpretation of the planning guidelines as a result of precedence already set by previous developers has resulted in incongruous developments juxtaposed to each other.

The problem manifests itself in the form of inadequate parking at plot level; vehicular and pedestrian traffic congestion along the road reserves; blockage of gates to individual housing developments; noise and air pollution; anti -social habits such as insecurity, crime and prostitution. Interference of privacy has equally been exemplified by denser high rise residential, commercial and office developments overlooking lower density low rise housing developments.

#### **2.2.6 Land Values**

Various developments in zones 3, 4 and 5 have experienced either a sharp rise or a drop in their land and property values. The rise in land values is partly attributed to the off-loading of public land - previously owned by the government, the City Council of Nairobi and other parastatals such as the Kenya Railways Corporation and Telkom - to private developers. The current value of 0.5 acres is 20-25 million. This has compelled developers to seek for

over-maximization of development beyond the permissible ground and plot coverage, which propels the land values even higher. There is need to harmonize the permissible ground and plot coverage against the total number of housing units per acre or hectare.

The drop in property values is partly attributed to private developers who have constructed more than the required number of housing units by exceeding the permissible plot and ground coverage for the zones. Previously the policy guidelines had allowed for 8 units per 0.5 acres (160 persons per hectare) but now developers are allowed to erect up to 16 units per 0.5 acres. This translates to about 64 people per 0.5 acres (320 persons per hectare). This implies that development control guidelines have not adhered to and respected previous planning policy guidelines for the zones. The phenomenon of excess coverage is propelled by the developers need to recoup their investments particularly due to the stringent lending requirements from mortgage and financial institutions. It is equally quite clear that plot and ground coverage guidelines have not responded to economic dynamics such as the rate of returns on investments, prevailing interest rates, repayment periods, monthly installments, etc.

The dropping property values of existing developments can be attributed to housing and/or commercial developments whose aesthetic values in terms of urban design are not in tandem with the physical form and urban landscape characteristics of this high income and low density area.

### **2.2.7 Environmental Impact Assessment**

It is quite clear from the foregoing that the existing trend of developments is leading to adverse negative impacts on the zone, to other neighbouring areas and to the entire city. It is incumbent upon the City Council of Nairobi and/or the National Environmental Management Authority (NEMA) to undertake a comprehensive environmental impact assessment of all the developments in zones 3, 4 and 5. This will appraise the impacts of these developments on the zone itself, to other parts of the city and to the entire City of Nairobi in general.

NEMA currently requires individual developers to prepare Environmental Impact Assessment (EIA) reports for their developments. However a comprehensive EIA report for the entire zones 3, 4 and 5 is necessary as a reference and advisory document more particularly with a complete and detailed environmental management plan for the whole area.

### **2.2.8 Development Control**

Although Zones 3, 4 and 5 have been protected from the perverse unplanned that has characterized the eastern side of the city, it has come under exceeding pressure in recent years and increasing experiencing unplanned development and incompatible uses. An examination of the current development profile reveals existence of the following: -

- i) Developments that have maintained the status quo.
- ii) Developments that have been approved and implemented in compliance to the existing land development policy for their specific zones.
- iii) Developments that have been approved by the City Council of Nairobi but have been implemented contrary to the approved planning briefs and approved drawings of the building developments
- iv) Developments that have equally been approved and implemented but in non-compliance and contrary to the existing land development policy for their specific zones.
- v) Developments that have not been approved but are already implemented.

The above scenario points at weaknesses and loopholes in the implementation and enforcement of the land development policies by the Nairobi City Council. There is need to strengthen development control and build partnership with stakeholders in matters of planning and development in shaping the future of the three zones. Recently, there is increased development pressure as a result of the improvement in the economy in addition to

remittances from abroad and a high investor confidence due to change of government in Kenya.

### **3. Methodology**

#### **3.1 Organization**

In order to conduct a broad based and inclusive policy review the City Council of Nairobi from the onset chose to ensure the exercise is participatory and adhered to the prevailing legal framework. Consultations with relevant stakeholders and coordination with relevant planning agencies was critical. The lead planning agency, Nairobi City Council entered into collaboration with University of Nairobi, the School of the Built Environment, particularly, the Department of Urban and Regional Planning, Department of Physical Planning (Ministry of Lands and Housing) and the Nairobi Water Company. A joint taskforce from the above institutions spearheaded the exercise.

Various consultations and focus group discussions were held with the joint task force and stakeholders from the three zones that included the residents, residents' associations, developers, institutions and professional consultants. This was to introduce the policy review exercise and to get the general feeling, responses and reactions from the stakeholders in the three zones. A feedback consultative meeting was equally held in order to disseminate the preliminary findings to all the stakeholders.

The review exercise went through the planning stages of Preparatory Stage: Reconnaissance, Collecting background information, Defining the planning area, Preparation of the planning brief, Identification and Sensitization of stakeholders; Data Collection, Data analysis and Synthesis; and Plan formulation.

#### **3.2 Objectives of the Policy Review**

The objectives of the planning team were multi-dimensional. Firstly they were to examine the population by undertaking a social and economic profile and analysis. This was to be done by assessing and identifying the key emerging issues of the population growth trends over the last 15 years; assess the population size and densities, the population composition (age, sex, income and education) and to get qualitative data from the developers, landlords, tenants, newcomers and the various institutions.

The second objective was to examine the development profile of the three zones by assessing and identifying the critical emerging issues of the character and trends of developments before and after the policy review. The team was to equally examine whether there was disconnect between the development control policies and development control practices in Zones 3, 4 & 5. This was to be done by assessing the capacity and the qualifications of the City Planning department to enforce development control guidelines; whether there were loopholes, corruption, political interference and any legal challenges arising therefrom.

The third objective was to examine the impact of the current developments on the existing infrastructure and services by taking stock of the existing infrastructure and services and relating it with the population in order to identify under supply or over supply. This would enable the team to project the future scenario of the population and in turn determine the demand for infrastructure and services

The fourth objective was to examine the social and environmental impacts of current developments in Zones 3, 4 & 5. This was to be undertaken through an overall environmental impact assessment by identifying critical issues with regards to open spaces, Riparian reserves; Traffic flow and characteristics; Sanitation; Water pollution; and Surface water run-off among others. Social issues to be identified included Privacy, Overcrowding, Incongruous development, Anti-social activities, Security and crime.

The fifth objective was to examine returns to investment for property developments in zones 3, 4 & 5 and set out principles of urban development and also assess development costs and fee determination for infrastructure and services delivery and rating.

Last but not least the planning team was to synthesize the findings and in turn make recommendations necessary for the formulation of the zonal development guide plans for Zones 3, 4 & 5.

#### **4. Findings and Tentative Recommendations**

It was found out that the zones present varied opportunities such as their endowments of the well-drained red volcanic soils, leafy vegetation cover and is traversed by many rivers besides having a varied topography with valleys, ridges, wetlands and ideal panoramic sceneries. However densification of development has led to challenges such as the loss of vegetation cover, encroachment on riparian reserves, the altering, interference and pollution of river courses and increased surface run-off. The planning team recommended that a comprehensive environmental management plan be formulated which will be geared towards addressing the conservation of the flora and the fauna by promoting greening and city beautification programmes and the need to enforce building development control regulations. There will equally be a need to strengthen policies and the legal framework for the protection of parks and open spaces, riparian reserves, forests, road reserves, railway reserves, power line way leaves and sewer way leaves.

It was found out that the zones' high value properties are inhabited by predominantly high income group with pockets of middle and low income groups. The zones have attracted middle income groups whose economic status had improved. This was found out to result to social disharmony due to disparities in income and reduced social interaction as result of erecting barriers such as gates to homes. However the rapid population increase had been marked by over-densification and the emergence of spot commercial centres outside the designated zones. The population which is projected to increase even further should ensure that they uphold the high values of the neighbourhood characteristics. In addition there ought to be adequate participation of residents and their neighbourhood associations in the planning, development and management of the residential neighbourhoods. The neighbourhood associations should be strengthened and efforts should be made to involve them in governance. The residents should equally be provided with information on planning and development matters.

It was equally found out that the zones are well planned and have strived to adhere to zoning guidelines and building by-laws up till recently. They have earlier demonstrated the ability to preserve their low and medium density character and in turn have attracted capital for property development. This has realized the increased supply of housing for middle and upper income groups. The emergence of new commercial nodes equally presents opportunities for the growth of sub-centres which are envisaged to relieve pressure on the main Central Business District. There are equally areas such as Woodley, which are ripe for redevelopment.

In spite of these opportunities, the zones are experiencing challenges ranging from over-densification of building developments which are not adequately supported by infrastructure and services. The emergence of ribbon developments along primary and secondary streets is leading to proliferation of business centres and informal economic activities beyond areas designated as commercial zones. The incompatibility of mixed-use developments within homogenous residential neighbourhoods results to loss of privacy. The increased over-densification occurring was found out to be flouting the zoning policy and building development control regulations with impunity. This has led to urban environmental

degradation characterized by loss of vegetation cover, open spaces, increased surface water run-off and the encroachment on riparian reserves.

The planning team recommended that Zones 3, 4 and 5 should be developed as healthy neighbourhoods which are the building blocks of healthy cities. This should be scaled down to sub-zones. The zones should be neighbourhoods that give residents a sense of place and belonging with specific values. The zones should be defined by convenient walking distance for accessing the needs of a daily life such as convenient stores, community facilities and other social amenities. Typical neighbourhoods should have a range of parks from small green lots to village greens and green belts. The neighbourhoods should be conveniently planned to be accessible to all residents and to major activity areas by different modes of travel- Motorized, walking and by bicycle. There should be increased car parking requirements from 1.5 to 2 or 3 for higher socio-economic groups. The planning team equally proposed that punitive measures and radically stiff penalties should be enforced to developers, City Council of Nairobi officials and professionals for flouting building control regulations and zoning guidelines and especially those who build contrary to approved or no approval at all. The plans' approval process should equally be speeded up to improve on private investor confidence. Adequate publicity, information and existing policy guidelines should be given to areas and plots whose user is proposed to be changed or extended. The review of policy for the zones should be a continuous process which reflects the dynamic social, cultural, economic and political forces of urban development.

Other specific proposals with regards to commercial developments emerged with the need to identify key commercial areas and nodal developments that will support and serve specific residential neighbourhoods. A specific hierarchy of nodal developments needs to be nurtured. There needs to be specific locations for corner shops and informal economic activities which should be adequately planned for in order to offer the lowest order goods. It should be noted that commercial developments should be restricted to designated commercial zones or else re-plan for the rezoning of areas where pressure is insurmountable. Such commercial nodes were noted as ABC Place, Lower and Upper Spring Valley, Valley Arcade, Adams Arcade, Yaya Centre, Hurlingham, Lavington, Kileleshwa – Kasuku and Highridge Shopping Centres. The main satellite CBDs such as Kilimani and Westlands will be planned to provide higher order goods with commensurate support from other urban fabric to support them. The changes of user should not be approved outside the zoned commercial area.

It should equally be noted that ribbon developments in the form of commercial and office developments or informal economic activities should be prohibited along the primary and secondary streets. However existing city beautification programmes on highways such as Waiyaki Way, Chiromo Road and Ngong' Road should be supported including the need to enforce compliance to requirements for exit and entry, slip roads, service lanes and road surrenders for developments along these main urban corridors

With regards to the informal settlements in the neighbourhood it is recommended that we foster the linkage between formal residential neighbourhoods and informal settlements through the development of markets such as Toi Market, to develop non-motorized transport routes with informal economic activities alongside them and to develop mass public transport facilities for low income people.

The transportation and infrastructure services were found out to be relatively well provided in terms of roads, sewer, water, electricity and street lighting. However it was noted that the road bearing capacity had been exceeded in most areas. There was poor design of Junctions, inadequate provision of bus stages, inadequate parking, inadequate provision of non motorized transport infrastructure, the capacity for current levels of sewer and water had been exceeded leading to pressure during peak periods and sewer blockages and



overflows. It was equally noted that developers were incurring unprecedented costs by drilling boreholes, developing private sewer extensions and purchasing booster pumps to raise water levels.

In order to support the development of transportation and infrastructure services it is proposed that there be a ring-fenced infrastructure development fund contributed by all developers and that there be a development levy charged on improved site value to enable the City Council of Nairobi improve on service delivery.

In order for the transportation problems to be mitigated it is incumbent upon the local authority to implement the Nairobi Transport Master Plan, to develop the missing links and link roads and to develop the proposed by-pass.

With regards to the community facilities, it was noted that the zones are well provided with community facilities – schools, police stations, administration and health facilities – and that large parcels of land are still reserved for public utilities. However the main challenges are with the low enrolment of schools and use of public facilities, the social disharmony in use of facilities by outsiders and the encroachment of the open spaces by building developments. It is proposed that there being the introduction of multi-purpose use of public facilities and the upgrading of public institutions for optimal use to attract local community.

Although there is an already-existing legal and institutional framework and the presence of residents' associations and interest groups there are loopholes which have been noted in the enforcement of the building development control guidelines and the zonal requirements. There is a disconnect between development control policies and implementation. This has led to misinterpretation and flouting of the existing development policies with impunity. It was found out that there had been lack of uniformity and harmony in the approval and the implementation of planning policies. In addition there was inadequate participation and awareness by the public and an ineffective method of publicity of planning information. The planning team recommends for the review of the existing policies and regulations in order to reflect the changing trends. There was equally a need to institutionalize the participation of the public and to create awareness and sensitization of the urban residents, developers, professionals and local authority officials. The City Council of Nairobi equally needs to enforce all the legal requirements, standardise the publication procedures and harmonise the policies and regulations and processes. In addition there needs to be continuous research and the establishment of communication channels within and between council and community.

Zones 3, 4 and 5 development trends have resulted in both a rise in land values and a drop in property values. As a planned development area coupled by its prime location it has immensely attracted local and external funding for building developments. However it was found out that there is a denial of betterment tax towards the local authority by the high value properties. From the field survey it was found out that the private developers and residents are willing to contribute towards the development of the infrastructure and the payment of a development tax. This will be achieved through a ring-fenced Infrastructure Development Fund. The source of the funds will be multi-pronged by way of scaling up the central government transfers to the City Council of Nairobi in the form of local authority transfer fund or special exchequer transferws for the city; through development funds or through soft loans and grants from donors. The City Council of Nairobi may equally consider charging improved site value property rating. The infrastructure cost apportionment will be based on frontage and the plot area. The fund will be managed by a partnership between the City Council of Nairobi and private sector property owners and investors

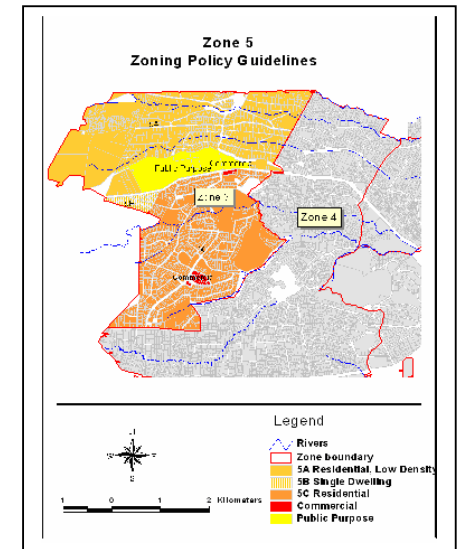
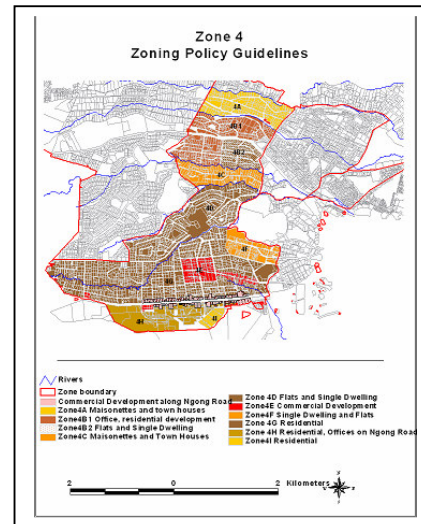
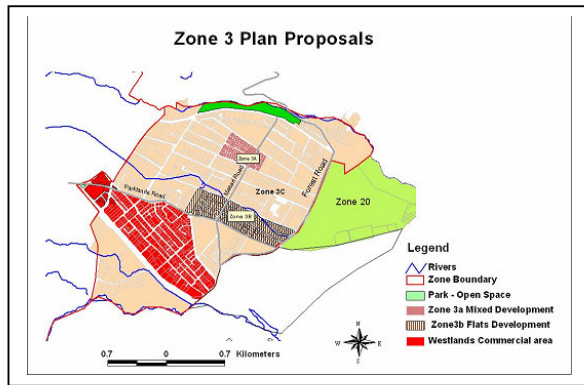
From the foregoing deliberations it is equally quite clear that specific guidelines need to be formulated for each of the three zones differently. Each zone equally needs to have sub-zonal plans with specific land-use plans, sub-zonal guidelines and requirements as follows: -

**Table 1.2: Proposed Policy Framework for Zones 3, 4 and 5 – City of Nairobi**

Zone	Sub Zone	Area covered	G.C. %	P.R. %	Min Area (Ha)	Type of Development	Remarks/ Policy issues
3	3A	Parklands Highridge Center	50	2.0	0.2	Mixed Use-commercial and residential	Mixed development, Roads widening and harmonisation of road widths
	3B	1 <sup>st</sup> Parklands Avenue, Parklands Road and Shivachi Road	35	1.0	0.2	Flat development	Maximum four floors
	3C	Remaining Part of Parklands	35	1.5	0.2	Flat development	Maximum two flows
	3D	Deep Sea,	-	-	16.8	Open Space/ Recreational	Area to be reclaimed from informal to public open space
4	4A	Upper Parklands,  Mathari River, Canalized stream,	35	0.75	0.1 (S)	No flats. Maisonettes and Town houses allowed on minimum 0.05ha per household	No development of flats and apartments
			25	0.25	0.2 (US)*		
			20	0.20	0.25 (US)**		
	4B1	Waiyaki way, Nairobi river, Mvuli road	35	1.5	0.1	Office and residential development	Mixed use development: residential and office allowed
	4B2	Mvuli road, Nairobi river, Mahiga Mairu, canalized stream, Ring road, Lower Kabete road, Karuna road	35	1.0	0.2  0.05	Flats  Single dwelling maisonettes or town houses on 0.05 ha	
	4B3	Waiyaki way corridor				Office development	Conform to existing policy guidelines Maximum 4 floors
	4C	Riverside Nairobi river, Kirichwa Ndogo, Ring road Kileleshwa, and boundary of zone 4 & zone 5	35	0.75	0.4  0.05	No Flats  Single dwelling maisonettes or town houses on 0.05 ha	Conform to existing policy guidelines
4D	Kileleshwa area: Kirichwa Ndogo, Kirichwa Kubwa, Muthangari road	35	1.0	0.4  0.05	Flats Single dwelling maisonettes or town houses on 0.05 ha	Regularize the existing flats; allow 10% for greenery; expand Kasuku Centre (to cover area within Migori Road, Laikipia Road and the Ring Road)	
4E	Yaya centre-Lenana Road, Wood Avenue, Chania road, and Chaka road	35	1.5		Commercial development	Harmonize the width of Argwings Kodhek road from Hurlingham to Ole Odume road to 24 metres and others within the commercial area to minimum 15 metres	

Arthur Munyua Mwaura, Policy Review for Zones 3, 4 and 5, Nairobi, Kenya  
42<sup>nd</sup> ISoCaRP Congress 2006

Zone	Sub Zone	Area covered	G.C. %	P.R. %	Min Area (Ha)	Type of Development	Remarks/ Policy issues
4 Cont.	4F	Denis Pritt road, Lenana road, Rose Avenue, and Ralph Bunche road	35	0.75	0.05 0.4	Single dwelling maisonettes or town houses on 0.05 ha Flats	No Flat development  Maximum 4 floors for flats on at least 0.4ha
	4G	Kirichwa Kubwa river, Gitanga road, Naivasha road, Ngong road, Valley road, Lenana road, and Rose avenue	35	1.0	0.2	Residential Flats	Flat development; Widening of Lenana road to 18 metres
	4H	Woodley Area - Ngong road, Impala club, Kibera station, Moi Girls School, Kabarnet road, and Mbagathi Way, and Golf Course edge	35	1.5	0.2	Maisonettes and town houses  Mixed use: Residential and office development along Ngong road corridor	Densification of Woodley estate by the City Council;  Shopping complexes (Nakumatt, Uchumi, e.t.c) to develop service lanes and bus stops on both sides of the road
	4I	Kabarnet Gardens – Kabarnet road, Golf Course edge,	35	0.75	0.2	Residential	Maintain existing character
5	5A	Upper Spring Valley, Loresho Estate	25	0.25	0.2	Residential	No development of flats and apartments Retain existing character  Upgrade Loresho estate commercial node at junction of Loresho Ridge and Kaptagat road Provide for Kibagare Park as a public open space  Offices, bars and restaurants not permitted outside the designated commercial node
	5B	Muthangari, Kianda, Bernard Estate, and Lavington	35	0.75	0.1 (S) 0.2 (US)	Residential single dwelling	No development of flats and apartments  Offices, bars and restaurants and residential hotels not permitted outside the designated commercial node  Expansion of Lavington Green shopping centre as a designated commercial node  Widen Gitanga road to 18 metres throughout
	5C	Kianda triangle- Manyani road, Waiyaki way, and Hinga road	35	1.0	0.2	Residential	Allow flat development maximum four floors



Source: Planning Team - Policy review for zones 3,4 and 5, Nairobi, Kenya

### Selected References

1. **City Council of Nairobi (2004)**, *A Guide of Nairobi City Development Ordinances & Zones*, Unpublished Report: Department of City Planning, City Council of Nairobi
2. **Couch, Chris R. (1990)**, *Urban Renewal: Theory and Practice*, London: Macmillan Education Limited
3. **Kenya, Republic of (1996a)**, *Physical Planning Act, 1996*, Nairobi: Government Printer
4. **Kenya, Republic of (1994)**, *1989 Population and Housing Census, Volume 1, Population Distribution by Administrative Areas and Urban Centres*, Nairobi: Central Bureau of Statistics/Ministry of Finance and Planning.
5. **Kenya, Republic of (2001)**, *1999 Population and Housing Census, Volume 1, Population Distribution by Administrative Areas and Urban Centres*, Nairobi Central Bureau of Statistics/Ministry of Finance and Planning
6. **Nairobi Urban Study Group (1973)**, *Nairobi Metropolitan Growth Strategy Volume I-Main Report*, Nairobi: Typography Ltd.

