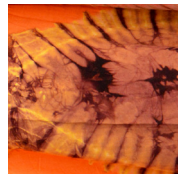


IBADAN

CITY MASTERPLAN

Final Masterplan - Executive Summary

July 2018



Contents

1	INTRODUCTION	6
2	STAKEHOLDER ENGAGEMENT	8
3	SPATIAL DEVELOPMENT STRATEGY	10
4	INDUSTRY	14
5	AGRICULTURE AND RURAL COMMUNITIES	15
6	OPEN SPACE AND RECREATION	15
7	SOCIAL INFRASTRUCTURE PROVISION	16
8	CULTURE, HERITAGE AND TOURISM	17
9	TRANSPORT NETWORK	18
10	DRAINAGE AND FLOOD PRONE AREAS	19
11	EMPLOYMENT	28
12	AGRICULTURE	28
13	INFRASTRUCTURE	29
14	INSTITUTIONAL AND LEGAL FRAMEWORK	34

Figures

Figure 1.1: Ibadan Masterplan Area	6
Figure 2.1: Stakeholders reading about the Masterplan.....	8
Figure 2.2: DUP Consultation - Hand painting	8
Figure 2.3: Stakeholder Engagement Timeline	8
Figure 2.4: Stakeholder Engagement Rock Painting.....	9
Figure 3.1: Spatial Development Strategy.....	10
Figure 3.2: Growth Centres Diagram.....	11
Figure 3.3: Urban Expansion Areas Diagram	11
Figure 3.4: Bere Square interventions.....	12
Figure 3.5: School of Heritage Preservation.....	13
Figure 3.6: Community Square Concept	13
Figure 3.7: Market Concept.....	13
Figure 3.8: Urban Observatory Concept.....	13
Figure 3.9: Floodable Sports Academy Concept.....	13
Figure 4.1: Industrial Land Use 2036	14
Figure 6.1: Agriculture and Open Space Strategy	15
Figure 8.1: Sites of cultural and historical interest.....	17
Figure 9.1: Road Network Concept.....	18
Figure 10.1: Flood Impact Mapping.....	20
Figure 10.2: Flood Prone Areas Planning Strategy	21
Figure 10.3: An example of channelisation which provides formal constraints to contain flood waters	22
Figure 10.4: An example of urban agriculture along the Kok Noi river, Chiangrai, Thailand	22
Figure 10.5: An example of a linear park designed with embankments that can flood (London, UK).....	23
Figure 10.6: Indicative 3D View of part of the Circular Road.....	24
Figure 10.7: New Roads and Roads for Upgrade	25
Figure 10.8: Mass Transit Network Concept	26
Figure 10.9: Main Pedestrian and Cyclist Network.....	27
Figure 13.1: Proposed Distribution of Telecommunication Exchanges	29
Figure 13.2: Proposed Primary and Secondary Substations Distribution.....	30
Figure 13.3: Proposed Tentative Locations of Municipal Solid Waste Management Facilities in Ibadan	31
Figure 13.4: Proposed Water Sources and Transmission Water System – Alternative 1.....	32
Figure 13.5: Proposed Sewage Primary System – Alternative 2.....	33
Figure 14.1: Ibadan Development Authority Organogram	34
Figure 14.2: Special Monitoring Unit Organogram	35

Tables

Table 7.1: Additional schools needed by 2036 at current levels of provision	16
Table 10.1: Proposed River Corridors and Setbacks.....	19
Table 11.1: Summary of Projected Change in Employment by Economic Activity: 2016-2036	28

Abbreviations

BRT	Bus Rapid Transport
CBO	Community Based Organisations
CDA	Community Development Associations
DC	Distribution Centre
DUP	Detailed Urban Plan
FTTH	Fibre-to-the-Home
FPA	Flood Prone Area
IDA	Ibadan Development Authority
IUFM	Ibadan Urban Flood Management
LGA	Local Government Authority
LRT	Light Rapid Transit
MDA	Ministries, Departments and Agencies
MRT	Mass Rapid Transit
NCC	Nigerian Communications Commission
NGO	Non Governmental Organisations
PIU	Project Implementation Unit
SMU	Specialist Monitoring Unit
SWM	Solid Waste Management
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

1 INTRODUCTION

Oyo State Government, represented by the Project Implementation Unit (PIU), commissioned Dar to prepare a masterplan for the city of Ibadan, which spans across 11 Local Government Areas (LGAs). The area covered by the masterplan is shown in Figure 1.1 below:

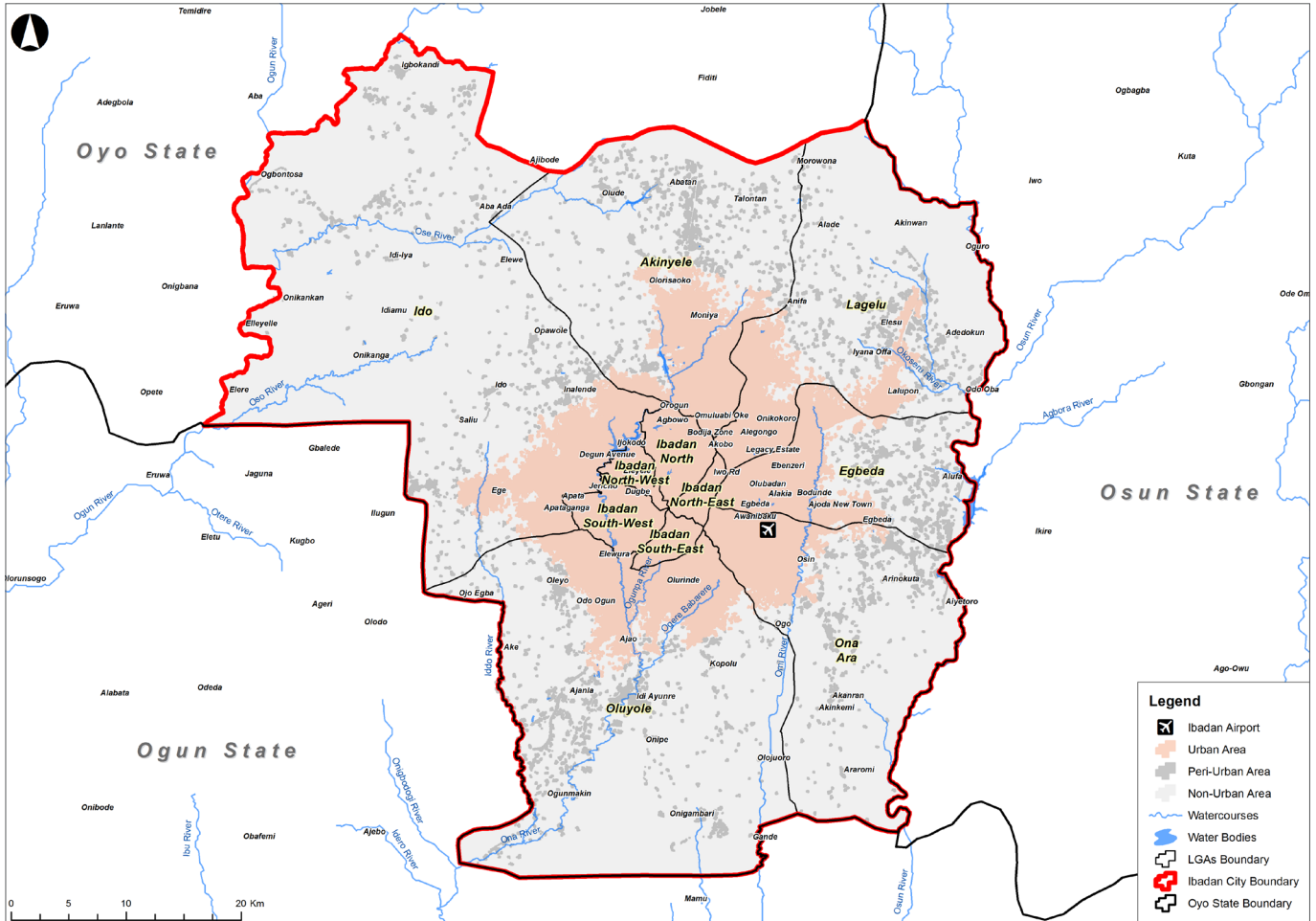


Figure 1.1: Ibadan Masterplan Area

1.1 THE NEED FOR A MASTERPLAN

For many years, Ibadan has been experiencing flooding with differing degrees of severity. On 26th August 2011, a rainfall downpour of 187.5mm occurred in about 5 hours, resulting in the overflow of the Eleyele reservoir, causing the death of more than 120 people and inflicting serious damage to property and infrastructure. Following these floods, The Executive Governor of Oyo State, his Excellency, Senator Ishaq Abiola Ajimobi, set up a task force on flood prevention and management.

The outcome was a report containing short, medium and long term recommendations to the state government, which included the proposal to prepare three masterplans for the city:

- Ibadan City Masterplan (this project);
- Solid Waste Masterplan; and
- Drainage Masterplan.

The Ibadan City Masterplan therefore sets in motion a process to address the needs of the city today and over the period to 2036. The strategies and proposals put forward are intended to benefit all residents and visitors in Ibadan. Sensitisation of the masterplan to the wider community is critical to its success. The wider understanding and acknowledgement of the strategy by the community in Ibadan will ultimately be the judge as to its successful implementation.

1.1.1 Masterplan Vision

“By 2036, Ibadan and its wider region will be a model sustainable and resilient city where development addresses the population’s needs, with thriving employment, providing a high quality of life for all.”

1.1.2 Masterplan Objectives



2 STAKEHOLDER ENGAGEMENT

A continuous and essential process of stakeholder engagement was conducted in parallel to the development of the Ibadan City Masterplan to help build a consensus for the strategy. It was also a means to gather support from a cross-sectoral range of stakeholders, while also complying with requirements of international bodies.

By way of holding a series of interviews, workshops, presentations and exhibitions during the process, valuable information and feedback was gained from those who live and work in Ibadan. The opportunity was given at all stages of the plan's development to share, debate and discuss the ideas that emerged while also providing wider updates on the masterplan's progress. Every comment made was noted down and considered during the development of the masterplan.



Figure 2.1: Stakeholders reading about the Masterplan



Figure 2.2: DUP Consultation - Hand painting



Figure 2.3: Stakeholder Engagement Timeline



Figure 2.4 Stakeholder Engagement Rock Painting

3 SPATIAL DEVELOPMENT STRATEGY

The Spatial Development Strategy (see Figure 3.1) sets out a vision for sustainable development and regeneration of the city by creating a compact, multi-centred, socially mixed, well-designed, connected and environmentally sustainable city. It is a strategic framework that guides change in Ibadan to 2036.

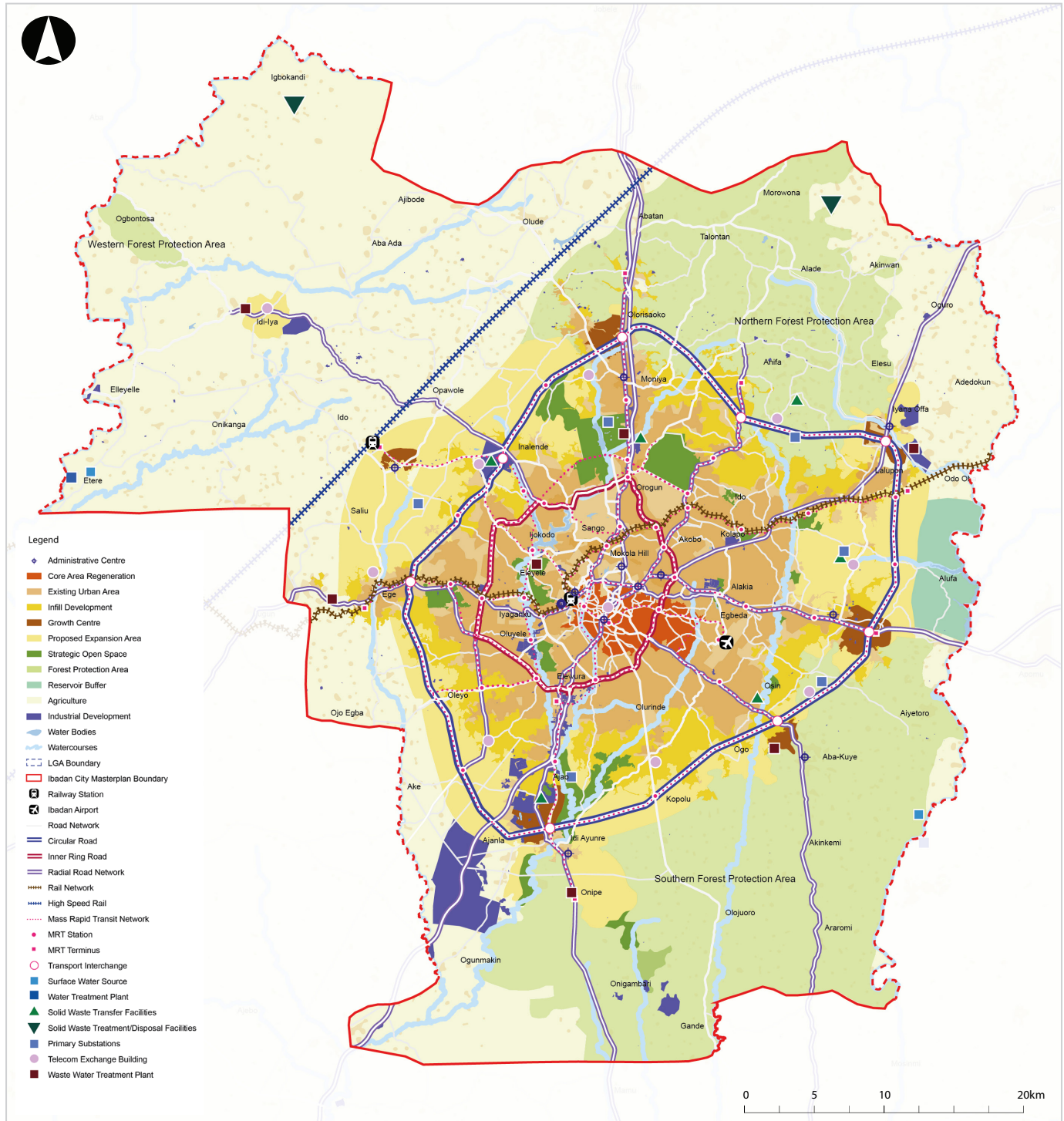


Figure 3.1: Spatial Development Strategy

3.1 NEW DEVELOPMENT AREAS

Owing to a rapidly growing population, it is important to plan for new development areas with the intention to achieve a compact spatial structure to manage and limit the outward growth of the city. Developer interest will be geared towards these development opportunities and subsequently reduce ad-hoc and unplanned development.

The new development areas comprise of three categories, which are shown on Figure 3.1: Growth Centres, Urban Expansion Areas and Infill Areas.

3.1.1 Growth Centres

The masterplan distributes economic development of the city by creating “Growth Centres,” a strategy which seeks to disperse investment more widely across the city. Six Growth Centres are proposed in the outer LGAs of the city, positioned close to LGA administrative centres.

The Growth Centres are each located on or near the Circular Road, making them highly accessible. A Rapid Mass Transit system will link the Growth Centres with the centre of Ibadan. This will provide easy access to the Growth Centres and reduce reliance on private cars, thereby reducing congestion and pollution. Greater accessibility forms a key catalyst to unlocking new development opportunities and developer interest.

The masterplan proposes an increased commercial offer with an even distribution of commercial land use across the city, with a particular focus on a higher concentration of commercial activities within the six new Growth Centres. The masterplan proposes the development of a new commercial centre within each of the Growth Centres, with additional smaller and local commercial centres spread across the proposed Urban Expansion Areas.

The six new Growth Centres provide an ideal location to support mixed use development. These will be developed as high density centres which will benefit from a greater level of accessibility and can therefore support higher intensity land uses and population density.

3.1.2 Urban Expansion Areas

The majority of new development to 2036 will take place in the Urban Expansion Areas, within which a mix of uses is promoted in order to provide liveable and functional urban areas. The masterplan limits the loss of agricultural and forest land by promoting the development of residential areas at medium density. Local commercial centres will support residential communities and provide local access to markets, retail and services. Urban Expansion Areas are served by a well-defined road network, with access to the Circular Road and public transport. Physical and social infrastructure will be developed in tandem with residential development.

3.1.3 Infill Areas

The built form on the periphery of Ibadan is generally of low density and developed in a piecemeal manner. The principle of infill development is to provide a structure to these areas, through transport, physical and social infrastructure provision, and make use of vacant land for development. A strategy for infill areas seeks to reinforce the strength and value of existing communities by providing better local infrastructure and integrating key components of the new development areas.

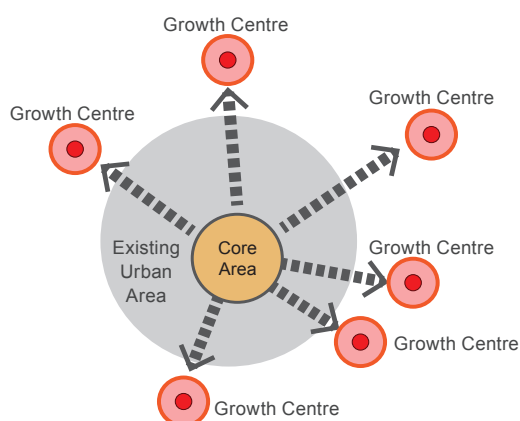


Figure 3.2: Growth Centres Diagram

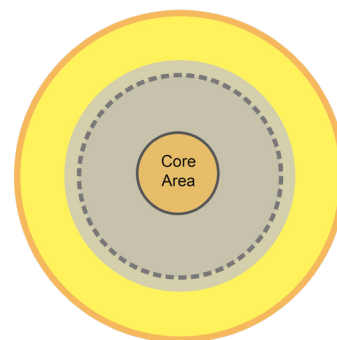


Figure 3.3: Urban Expansion Areas Diagram

3.2 REGENERATION OF THE CORE AREA AND DUGBE

The masterplan proposes to make structural adjustments within the Core Area and Dugbe and take initiatives to provide a renewed and enhanced urban built environment. Within the Detailed Urban Plan for the Core Area, a series of model projects is proposed for implementation across different parts of the area. These can act as showcase approaches and each one should be seen as a project for quick implementation. Following a review of the lessons learnt, the strategy for development can then be used for another part of the Core Area. Details of one of the key projects is set-out below.

The vision of the Bere Square project is to provide an intervention for each of the 5 inner LGAs. These interventions will be catalysts for further regeneration and have positive effects throughout the whole city. Figure 3.5 to Figure 3.9 provide an indication of what could be achieved.

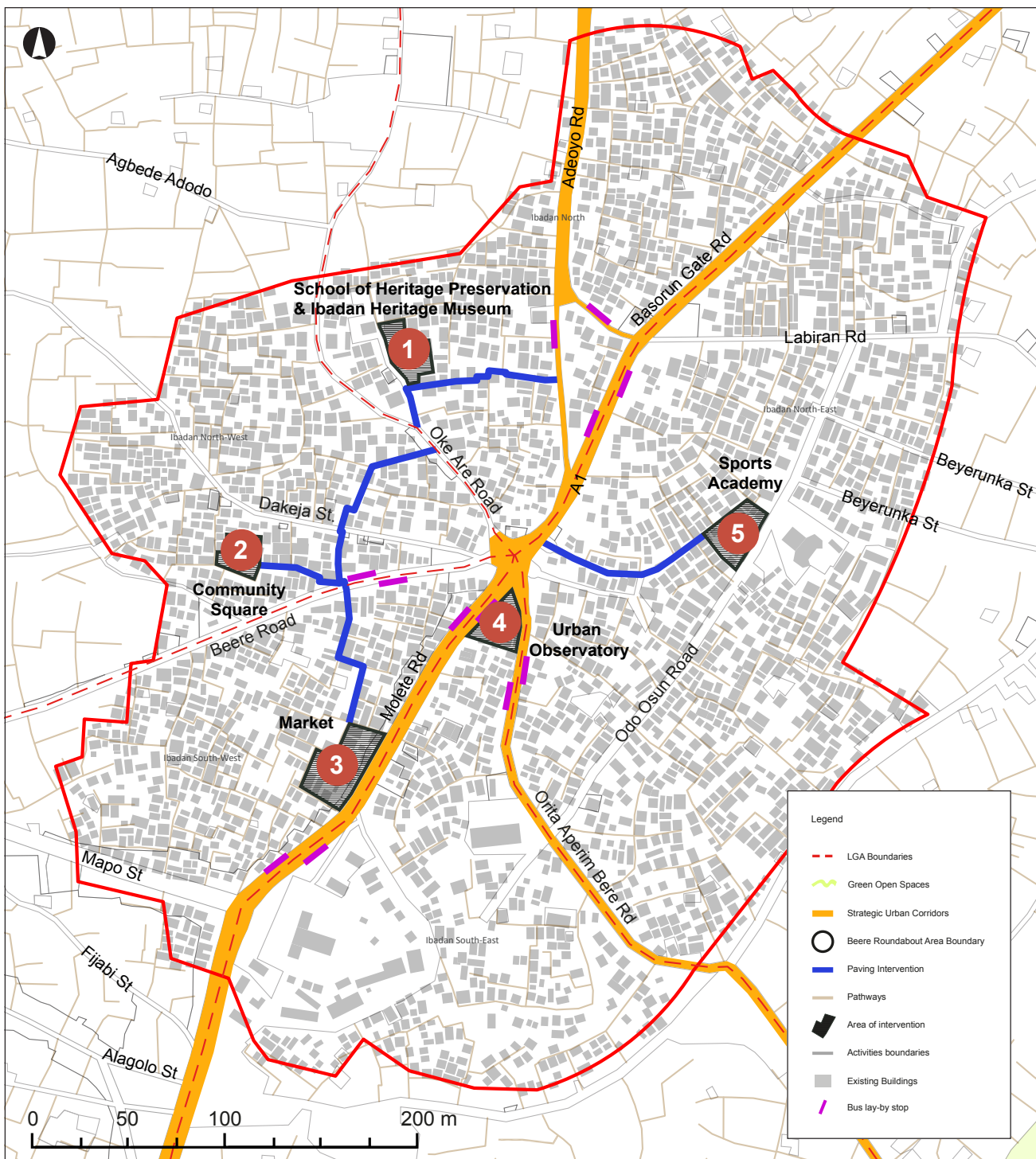


Figure 3.4: Bere Square interventions

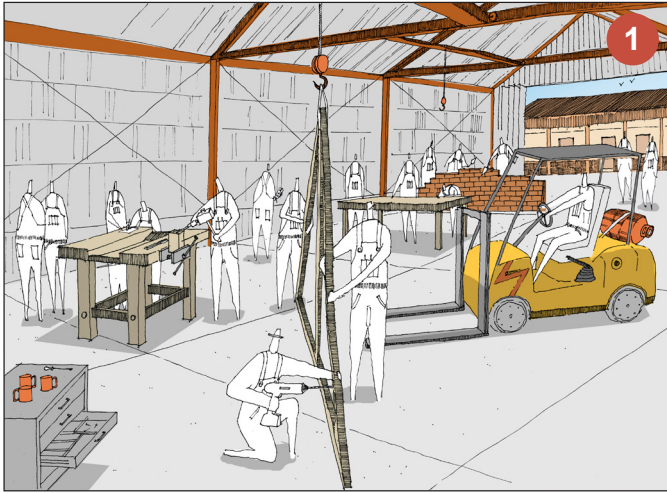


Figure 3.5: School of Heritage Preservation



Figure 3.8: Urban Observatory Concept



Figure 3.6: Community Square Concept



Figure 3.9: Floodable Sports Academy Concept



Figure 3.7: Market Concept

4 INDUSTRY

The State Government has designated additional sites for major industrial development in the city. The masterplan seeks to build on these assets by encouraging further growth around the existing industrial sites. New industrial sites are strategically located close to the principal and primary road network ensuring excellent transport connectivity and accessibility.

Four new industrial areas are proposed across Ibadan. Each of these will be developed according to different strengths, which includes the following:

- Idi-Iya - based on agri-businesses, including agricultural processing;
- Inalende - based on agri-businesses, including agricultural processing;
- Ajanla - heavy industry, including manufacturing; and
- Iyana Offa/ Lalupon - warehousing and storage.

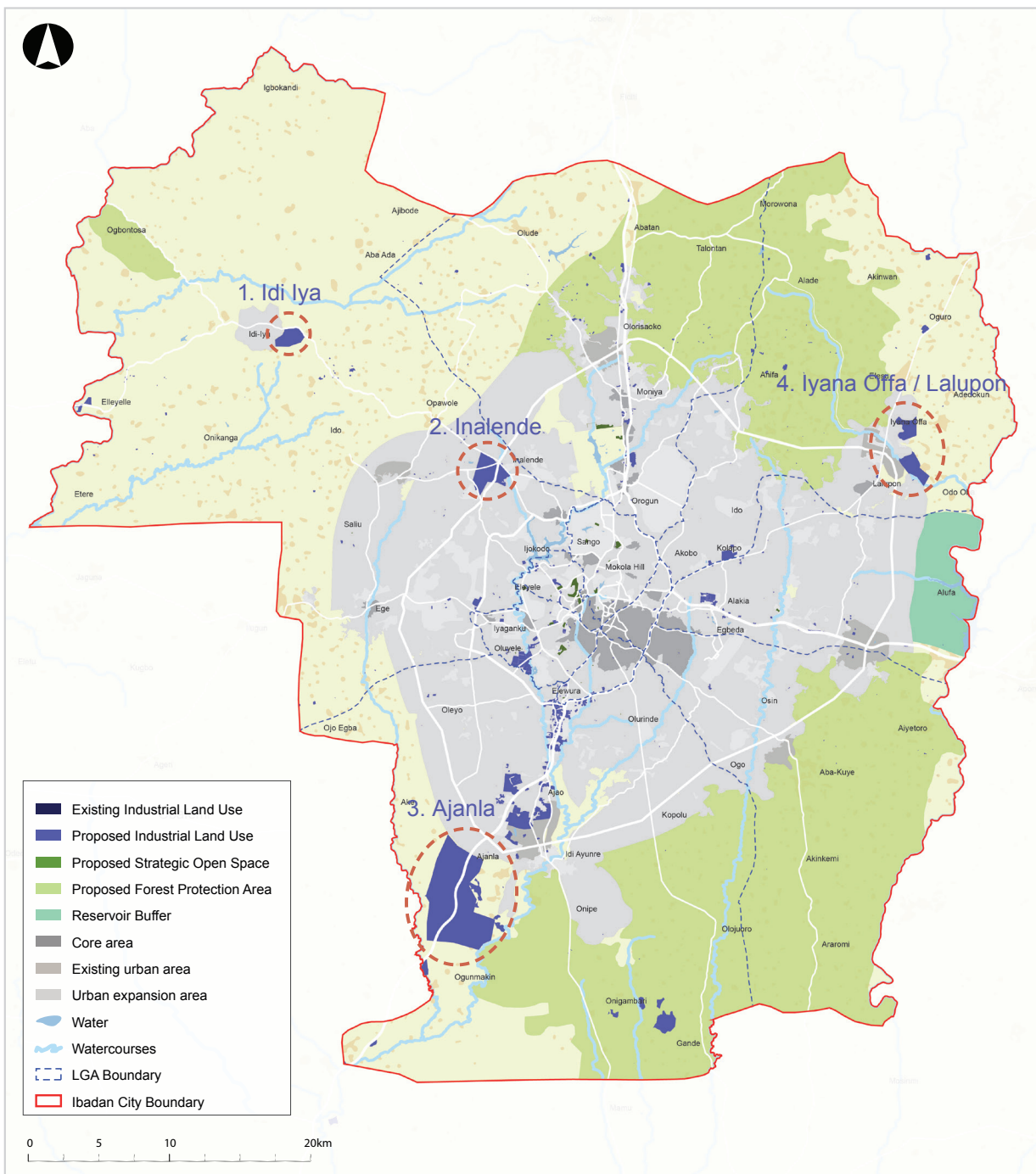


Figure 4.1: Industrial Land Use 2036

5 AGRICULTURE AND RURAL COMMUNITIES

The masterplan seeks to protect agricultural land, particularly in the north-western parts of the city. All land identified for agriculture should be preserved for agricultural use. The upgrade to the local road network will provide better accessibility for farmers and rural communities to markets and services in the central urban areas of Ibadan. Agriculture is also targeted for expansion along the river corridors (including in urban areas) where soil is the most fertile.

6 OPEN SPACE AND RECREATION

6.1 STRATEGIC OPEN SPACE

These spaces will contain sports pitches, playgrounds, recreation, natural open space, urban agriculture or other facilities. The facilities that lie within areas identified as Strategic Open Space will be designed so as to withstand and accommodate water during flooding episodes.

6.2 FOREST PROTECTION AREA

In order to preserve the forest assets, the masterplan identifies three Forest Protection Areas, within which no development is permitted. The Northern Forest Protection Area has a critical role to play as it lies uphill of the urban areas of Ibadan. Limiting development in this area will support the management of water and reduce potential downhill polluting impacts. Tree felling is not permitted in Forest Protection Areas, unless supported by a management strategy that replaces the felled tree.

6.3 RECREATION

The masterplan proposes an equitable distribution of open spaces within the Core Area, new Growth Centres, urban expansion and infill areas. The open spaces will include parks, gardens, recreation and sports facilities. These will enable and promote social interaction for children, youth and adults.

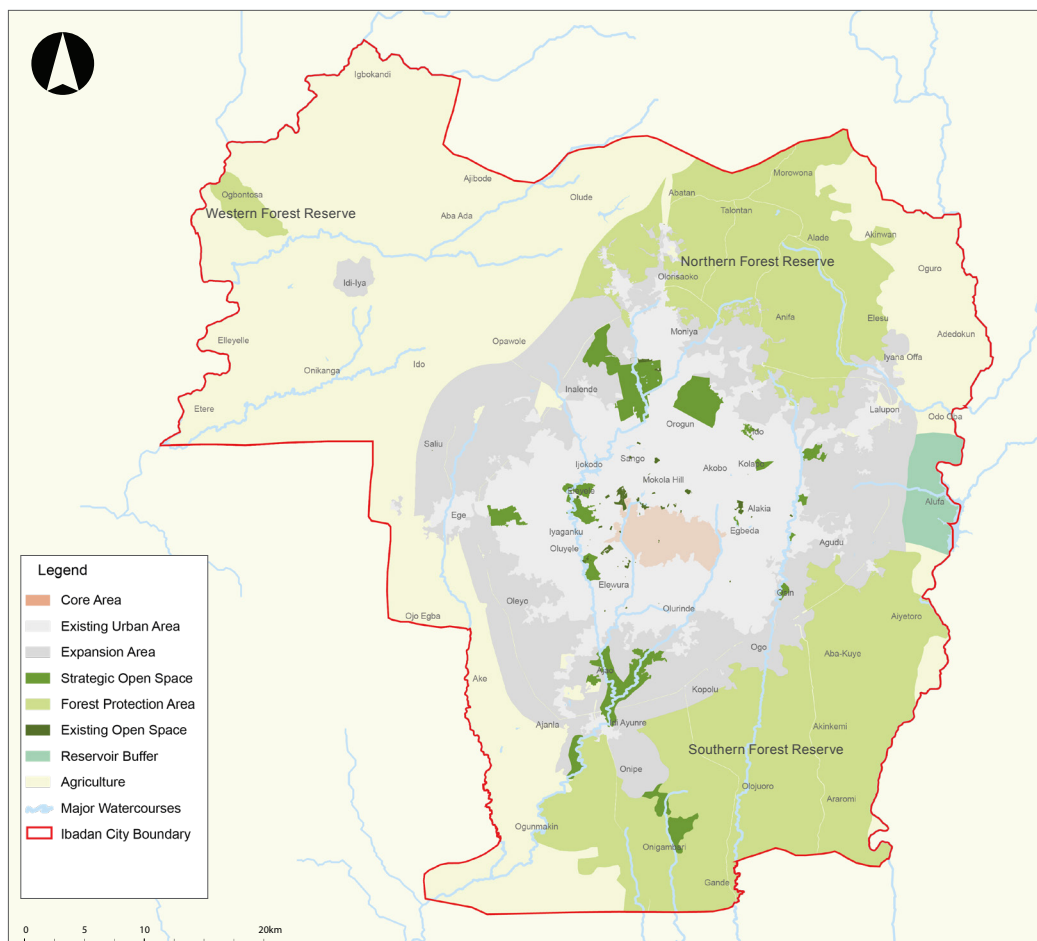


Figure 6.1: Agriculture and Open Space Strategy

7 SOCIAL INFRASTRUCTURE PROVISION

7.1 EDUCATION

Within Ibadan, there are 2,350 primary schools and 547 secondary schools. The existing ratios of schools to population have been used to calculate the number of additional schools that will be required across Ibadan by 2036, as follows:

Table 7.1: Additional schools needed by 2036 at current levels of provision

PRIMARY SCHOOLS (1:3,000 PEOPLE)	SECONDARY SCHOOLS (1:10,000 PEOPLE)
1,421	584

Distributing schools to within walking distance of residential areas allows access to education for those without cars and lessens the burden on public transport, while promoting health and reducing polluting vehicle emissions. Maximum walking distance from residential areas for primary schools and secondary schools should be 400m (5 minutes walking) and 800m (10 minutes walking), respectively.

7.2 HEALTH

There are currently 517 primary health facilities within Ibadan, of which about half are privately operated. The existing ratio of facilities to population (1:15,000) has been used to calculate that 237 additional facilities will be required by 2036. In residential areas, it is envisioned that residents will be within 400m of a primary healthcare facility.

In terms of secondary health facilities, 15 hospitals exist in Ibadan, including general hospitals, special hospitals, and others. It is envisioned that all of the population will have reasonable access to a hospital, and therefore seven additional hospitals are proposed within the Growth Centres which are highly accessible by a range of transport modes.

7.3 POLICE AND FIRE STATIONS

There are currently 7 fire stations in Ibadan: two within the core area, with the others in outer LGAs. There are currently 23 police stations, mostly located in the inner LGAs with a good provision in Ibadan North.

In order to identify deficiencies and future need, a service catchment is used. 2.4km takes approximately 10 minutes to drive in a busy urban environment, which is considered to be a good response time. In order to cover the whole city and expansion areas, it is estimated that Ibadan will require 67 additional fire stations and 55 additional police stations by 2036. It is proposed that these are prioritised in Growth Centres, where emergency vehicles can benefit from proximity to the circular road and upgraded radial routes.

8 CULTURE, HERITAGE AND TOURISM

Ibadan contains many buildings of historic and cultural value, which includes traditional Nigerian structures, colonial-era architecture and modernist buildings built in the mid-20th century. The purpose of designating particular buildings and areas as heritage assets is to acknowledge their contribution to the urban environment and culture of the city.

Heritage buildings or sites which retain substantial amounts of their original structure should be protected from demolition and significant alteration. In order for buildings to be maintained, it is paramount that they are kept in use. Therefore, heritage buildings can sometimes be modernised or be adapted to a new use while still retaining their original significance.

The buildings and sites identified on Figure 8.1 below provide a starting point for a comprehensive list of Ibadan’s built heritage. It should be added to over time as more buildings are identified and local expertise grows. The locations and descriptions of protected heritage buildings and sites should be publicly available and used by local authorities for planning and development management. The owners/users of heritage buildings should be made aware of the formal protection and their role in the conservation process.

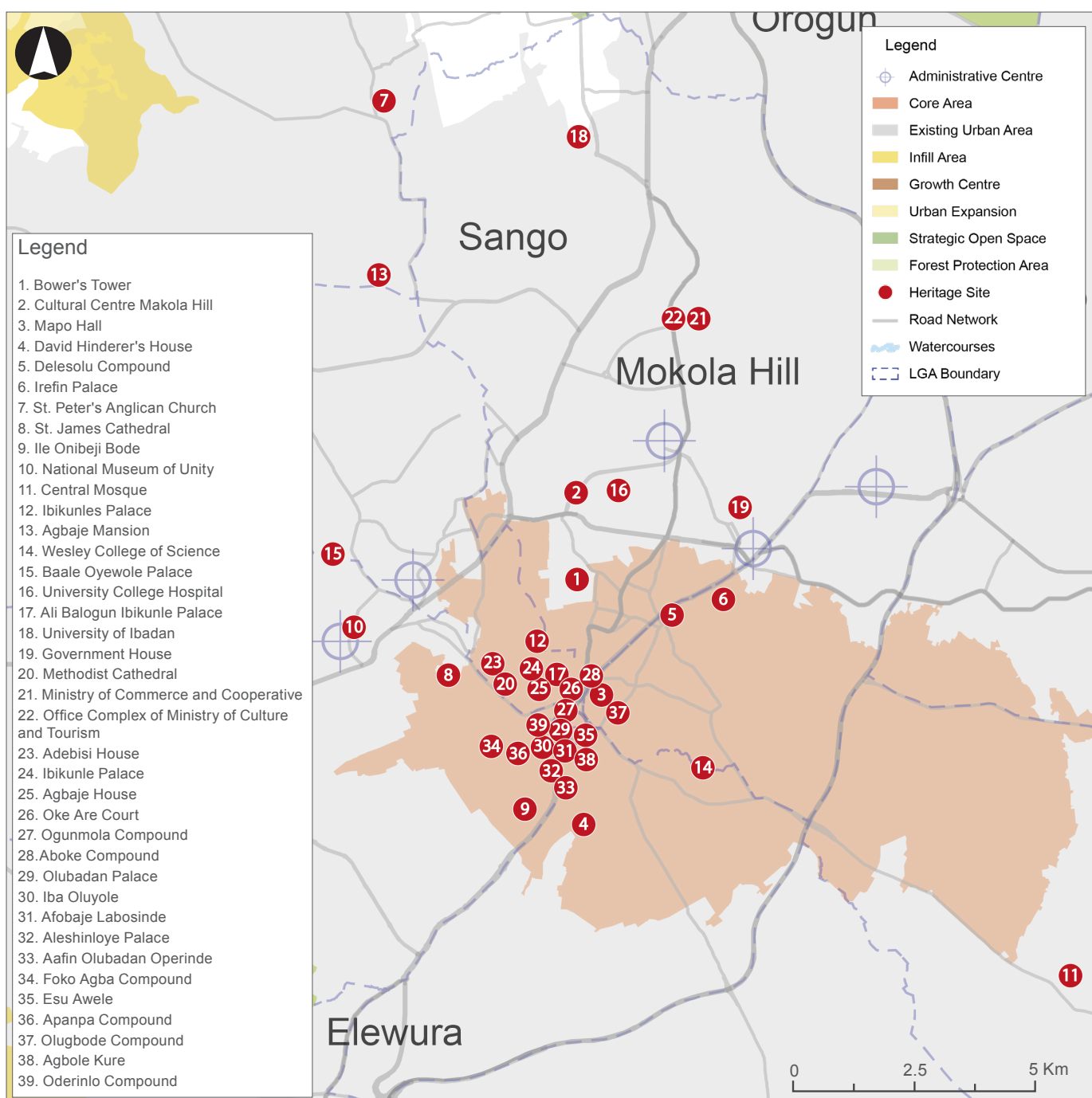


Figure 8.1: Sites of cultural and historical interest

9 TRANSPORT NETWORK

The masterplan identifies a hierarchy of roads, which ensures that every route (existing and proposed) has a distinct role to perform in local traffic management, and in doing so, reduce congestion while improving connectivity. With this ethos in mind, the masterplan promotes the implementation of the Circular Road and an Inner Ring Road that will act as connecting loops while a series of spokes radiate from the city centre linking all parts of Ibadan together.

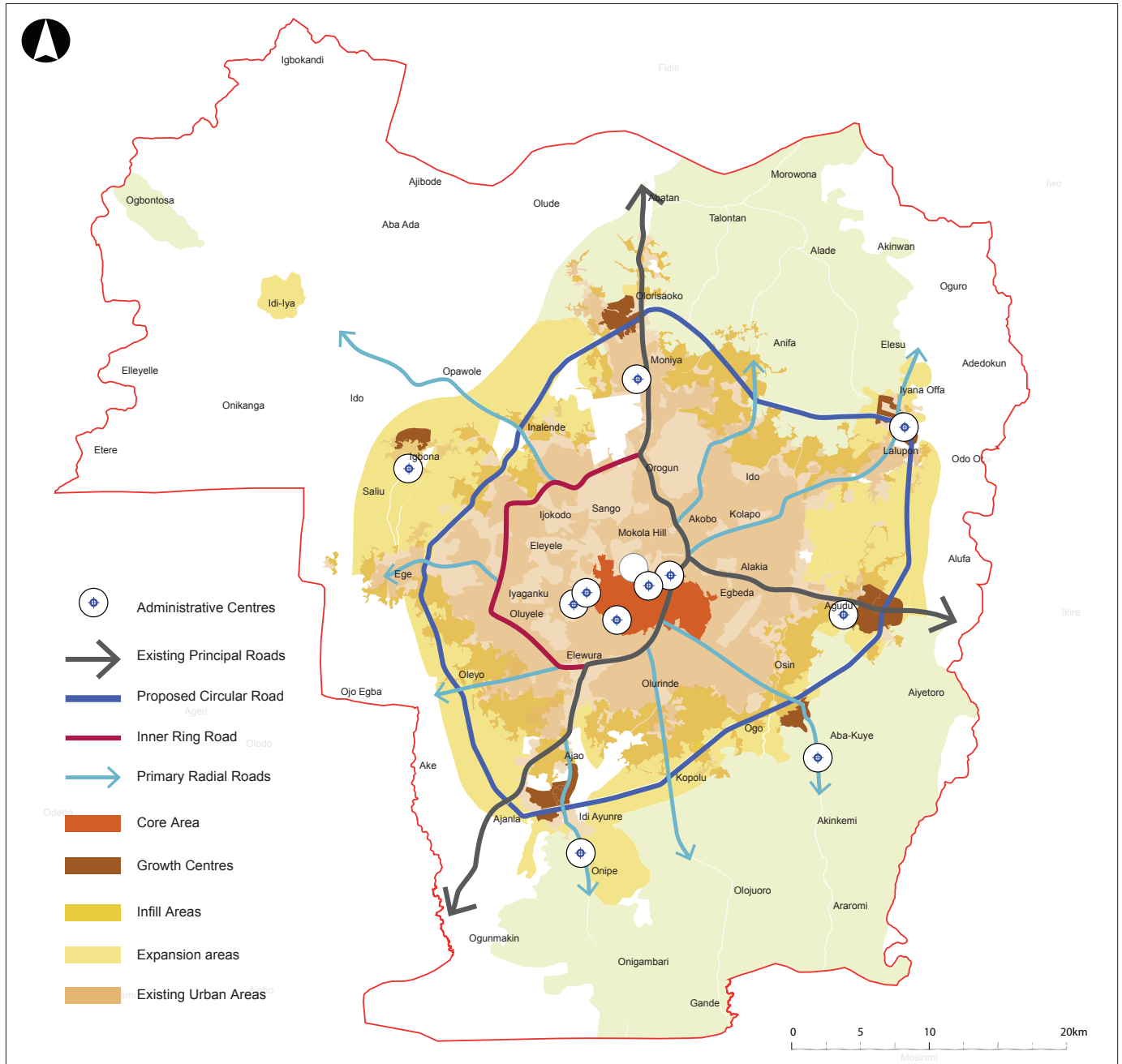


Figure 9.1: Road Network Concept

10 DRAINAGE AND FLOOD PRONE AREAS

10.1 FLOOD RISK ZONES

Flood corridors can be defined as the land adjacent to a river or stream that experiences floods during periods of high discharge. The flood corridor includes high, medium and low flood risk areas, as follows:

High Flood Risk Area: The area immediately adjacent to the stream channel in which there is maximum potential for flooding that can cause danger to personal safety and/or loss or damage to property. The probability of flood occurrence for these areas is once a year.

Medium Flood Risk Area: The area where the flood recurrence interval is in a period of 1 in 10 years.

Low Flood Risk Area: The area is defined by the flood recurrence interval of 1 in 100 years.

On the basis of the above risk zones, flood corridors are defined by allocating right of ways to the rivers and streams, as set-out in Table 10.1 below. The right of way is a reserved no-build area running along the length of the drainage stream. The term “Flood Corridors” presents the total width of the river’s estimated water spread, while the term “Setback” presents the estimated water spread distance measured from the river’s estimated ‘centre line.’

Table 10.1: Proposed River Corridors and Setbacks

DRAINAGE CATEGORY AND CATCHMENT AREA COVERAGE	PROPOSED RIVER CORRIDOR WIDTH (METRES)	SETBACK FROM RIVER'S CENTERLINE (METRES)	EXAMPLES OF RIVERS
Major River (50km ²)	120 to 200	60 to 100	Ona, Omi, Iddo
Minor River (25km ²)	100	50	Alapata, Alaro, Ogunpa, Kudeti, Ogbere
Major Branch (5km ²)	80	40	Upper Alaro, Lower Kudeti, Lower Olojuoro, Middle and Upper Ogunpa, Upper Ogbere, Foworogun, Orogun
Minor Branch (2km ²)	60	30	Upper Kudeti, Middle Olojuoro, Lower Labelabe
Major Stream (0.5km ²)	40	20	Gege, Yemetu, Upper Olojuoro, Upper Labelabe, Lower Iye, Lower Aremo, Eleta, Oba, Lower Alawo
Minor Stream (0.1km ²)	20	10	Elegun, Olokun, Upper Alawo, Upper Aremo, Upper Iye

10.2 FLOOD IMPACT ANALYSIS

Flood impact mapping was conducted by counting the number of properties located within the flood prone areas. These maps help analyse the impact that each water source will generate on the built environment. Based on the analysis, the flood prone areas have been categorised into high, medium and low impact areas, as follows:

High Impact Area: The area is designated as high impact in cases where the building count is greater than 15 within the 100 year flood plain.

Medium Impact Area: The area is designated as medium impact where the number of building structures under impact lies between 5 and 15 within the 100 year flood plain.

Low Impact Area: The area designated as low impact is the least affected with less than 5 building structures under impact within the 100 year floodplain.

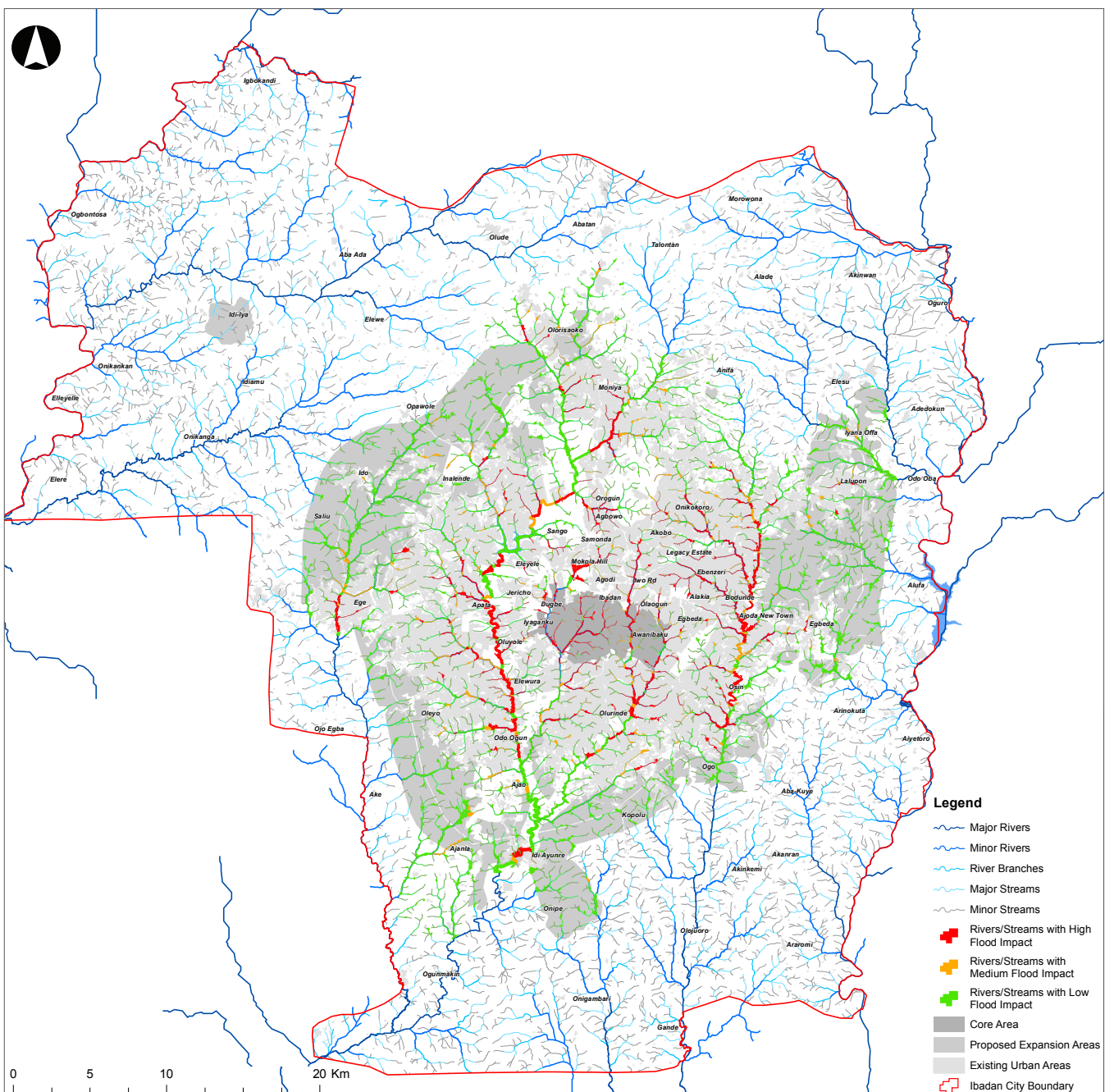


Figure 10.1: Flood Impact Mapping

10.3 PLANNING STRATEGY

The Detailed Urban Plan on Flood Prone Areas includes a planning strategy to guide the use of land within these areas. The main objectives of the strategy are to:

- Avoid inappropriate development in areas at risk of flooding;
- Ensure measures to mitigate residual risks to existing building structures in the flood prone areas;
- Secure and promote the natural role of flood plains as a form of flood defence and an important environmental and social resource; and
- Shift from hard engineering practices that endeavour to control water, to a multi-functional approach that strives to restore a river's ecology.

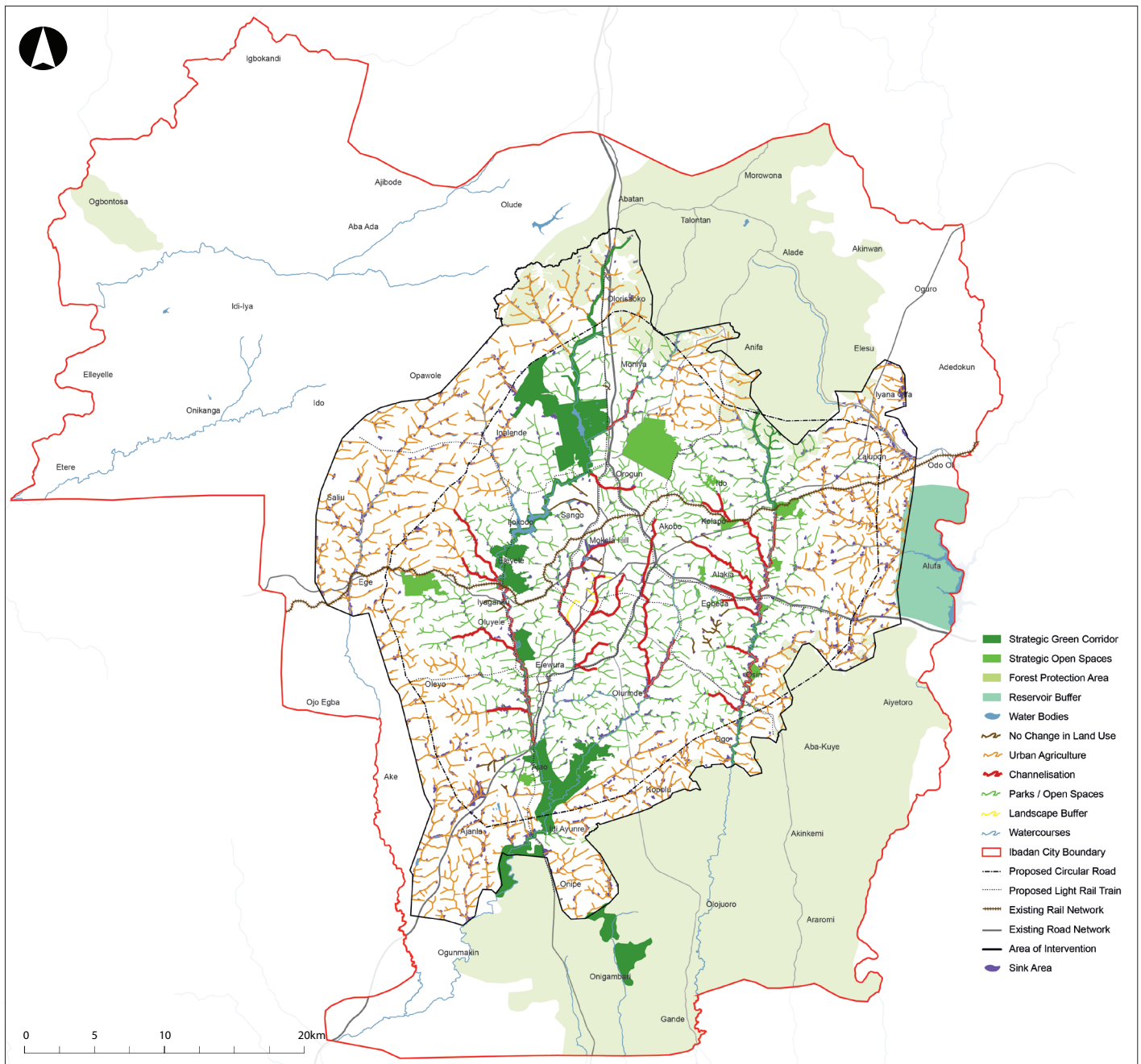


Figure 10.2: Flood Prone Areas Planning Strategy

The planning strategy defines the location and type of intervention for the flood prone areas and proposes measures that should be adopted for flood prevention and mitigation. A sample of key measures proposed is set-out as follows.

10.3.1 Channelisation

Channelisation of the river can be achieved in many ways. The river can be deepened and/or widened to increase the capacity of the channel. The channel can also be realigned to artificially increase the long profile gradient so that there is an increase in velocity and flood waters can be removed more quickly. Furthermore, the channel can be lined with concrete for a smoother surface over which the water can flow.



Figure 10.3: An example of channelisation which provides formal constraints to contain flood waters

10.3.2 Urban Agriculture

Urban agriculture contributes to flood disaster risk reduction by reducing runoff and keeping flood plains free from construction. It also helps to reduce urban poverty and food insecurity. Urban and peri-urban agriculture is an important activity in Ibadan, providing a significant source of nutrient-rich foods to the city, and a source of livelihoods for farmers and those involved along the value chain.



Figure 10.4: An example of urban agriculture along the Kok Noi river, Chiangrai, Thailand

10.3.3 Strategic Green Corridors And Open Spaces

Recognising the vital role of floodplains and using them as a sustainable method for flood alleviation will help to tackle the increasing threat of flooding. The Detailed Urban Plan proposes Strategic Green Corridors along certain floodplains. They have the capacity to store water and connect existing open spaces with footpaths and cycleways and provide new strategic connections to the forest reserves in the north and south.

The Detailed Urban Plan also proposes a number of Strategic Open Spaces. These are for land uses and green infrastructure that is 'water compatible,' and therefore suitable to be located in the floodplain. These include amenity open space, nature conservation and biodiversity, outdoor sports and recreation, and essential infrastructure.



Figure 10.5: An example of a linear park designed with embankments that can flood (London, UK)

10.4 CIRCULAR ROAD

The Circular Road is intended as a 110km-long expressway that surrounds Ibadan's main urban areas. This new road will significantly help ease congestion in Ibadan and improve overall connectivity. It will help free up vehicular traffic in the congested urban area.

A predominant feature of the masterplan is to establish six new growth centres. The Circular Road plays a key role in ensuring the successful development of these centres by connecting them directly to each other, surrounding residential areas, the principal roads and the main urban core of Ibadan.

The character of the Circular Road, as a busy movement corridor, has an effect on the urban areas surrounding it. To ensure that the Circular Road does not act as a barrier that severs communities, and that air and noise pollution issues that could affect nearby residents are addressed, the Masterplan includes a Detailed Urban Plan for the Circular Road that includes development guidelines to create a desirable place to work and live.



- ① Circular Road.
- ② Development along the road crossing the Circular Road is tallest (9-11 storeys).
- ③ Development is set back from the river and flood corridor. The flood corridor can be used for recreation, urban agriculture or forest.
- ④ Mixed use area with buildings between 4-6 storeys.
- ⑤ Predominantly residential area with 2 storey buildings in standard high density plots.
- ⑥ Circular Road is raised over river to allow flow of water.
- ⑦ Proposed hospital.

Figure 10.6: Indicative 3D View of part of the Circular Road

10.7 PUBLIC TRANSPORT

In order to reduce the reliance on the use of private vehicles, the masterplan promotes the development of an integrated public transport system.

Mass Rapid Transit (MRT) is a passenger transportation system designed to move large numbers of people, usually local in scope, which is available to any person who pays a prescribed fare. An MRT tends to operate on specific fixed tracks or with separated and exclusive use of potential common track, according to established schedules along designated routes or lines with specific stops.

The MRT system proposal has been designed to tie in with Ibadan’s existing public transportation system, the forecast in population growth and the growing demands on efficient transportation in the current economy, as well as the existing infrastructure. A previous study was produced for the Oyo State Government and serves as a base for the proposed system, which is shown in Figure 10.8 below. It is recommended that a number of different forms of MRT are implemented throughout the city. A more diverse offer creates opportunities in financing, as well as flexibility in the future. The proposed MRT system could include the following forms of transport: Bus Rapid Transit, Light Rail Transit and Commuter Rail.

The proposed system aims to utilise the upgraded road network’s alignment where available to connect the urban core, the 11 LGAs and the surrounding urban areas. By incorporating the public transport system with the road network, further expansion will be feasible in the future.

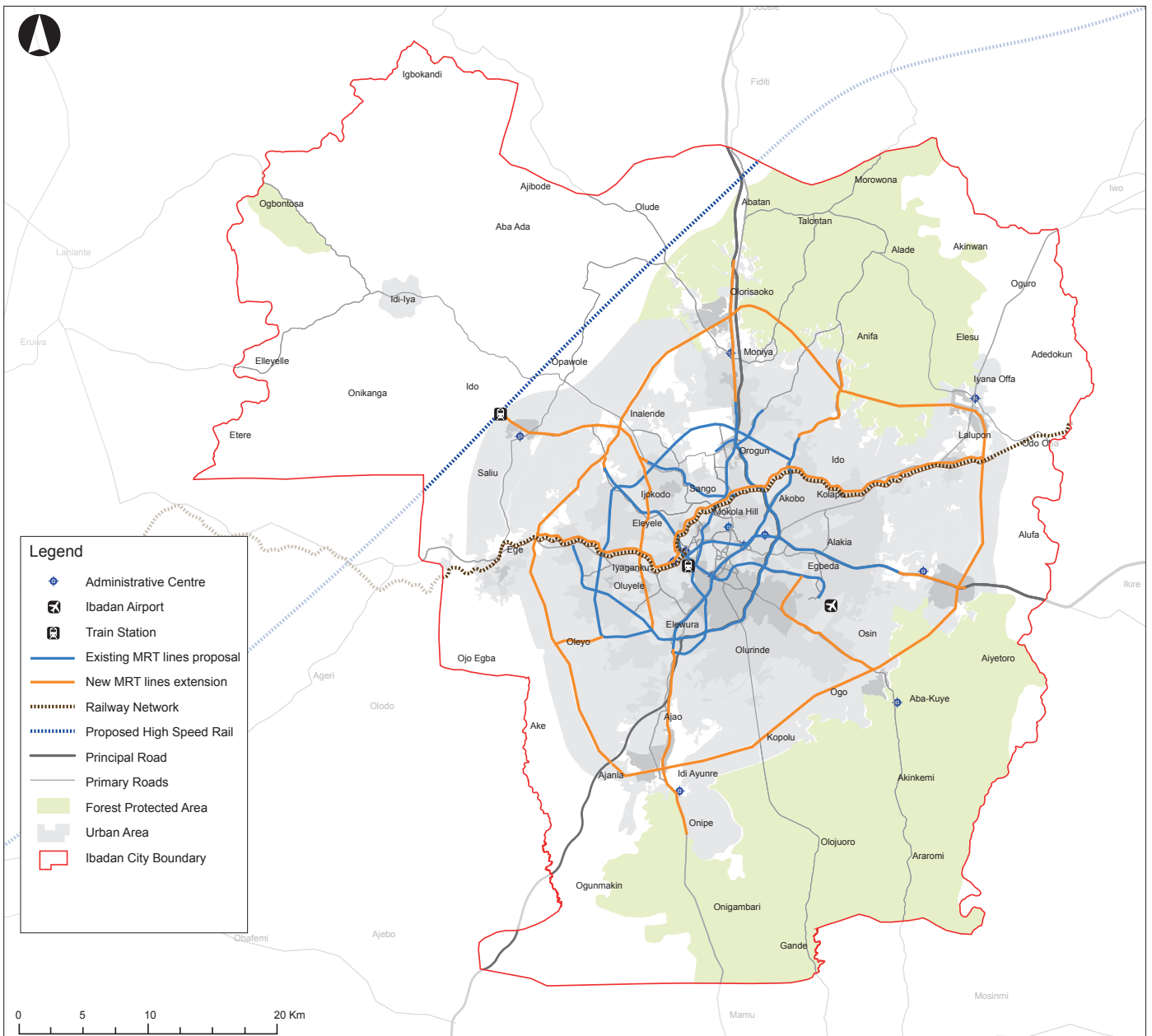


Figure 10.8: Mass Transit Network Concept

10.8 NON-MOTORISED TRANSPORT

In order to promote a sustainable ethos for the city, it is important to encourage non-motorised forms of transport, such as walking and cycling. A large emphasis must be put on making the environment comfortable for walking. Pavements need to be wide where possible, free of clutter, and safe from passing vehicles. Non-motorised transport has numerous benefits which include reducing congestion on the road network, reducing air pollutants and emissions, and general improvements to public health.

The presence of river and flood corridors in Ibadan has allowed for a strategy which aims to utilise these as routes of travel for cyclists and pedestrians, connecting key nodes on a local level and creating safe areas for these modes of transport. These are shown in Figure 10.9 below.

In addition, the masterplan proposes that all new and upgraded roads shall incorporate sufficient space for pedestrians and cyclists, and that street design at the local level shall also provide space for safe movement on foot and by bicycle.

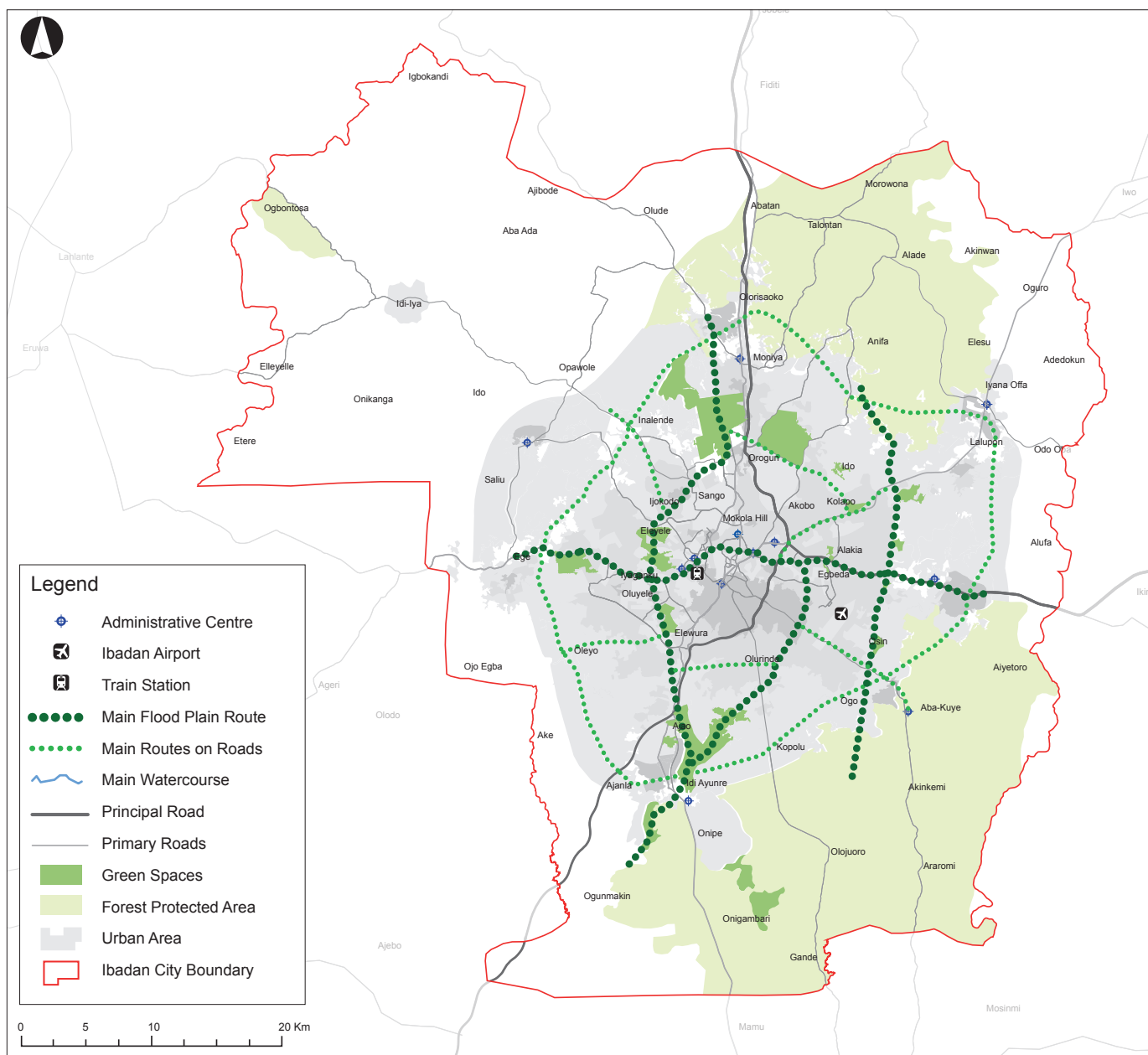


Figure 10.9: Main Pedestrian and Cyclist Network

11 EMPLOYMENT

Implementation of the Masterplan will lead to employment growth and sectoral change (see Table 11.11 below). Projections show that the retail and hotels/food sector will exhibit a large increase, alongside manufacturing. Other significant rises in absolute employment levels are expected in transport and telecoms activities, finance and business services and other (general) service sector activities. All sectors record an increase in overall employment over the Masterplan period.

Table 11.1: Summary of Projected Change in Employment by Economic Activity: 2016-2036

LAND USE SECTOR	EMPLOYMENT CLASSIFICATION	+/- 2016-2036	% SHARE
Commercial	Wholesale, Retail; Restaurants & Hotels, Communications, Financing, Insurance, Real Estate & Business Services, Other Services	1,294,670	55.5%
Social	Education and Human Health	151,628	6.5%
Institutional	Public Administration & Defence	6,998	0.3%
Industrial	Mining & Quarrying, Manufacturing, Construction, Energy & Utilities, Transport and Storage	879,442	37.7%
TOTAL		2,332,738	100.0%

Employment land growth is largely expected to occur within the existing urban area and infill areas, with these accounting for over 60% of the projected increase. The infill areas are spread across a variety of inner areas, but also push into the outer expansion area in some cases. Generally, employment land use will become more intensive in the inner area where many existing commercial and industrial activity is currently located. The central core has far less capacity due to limited scope for redevelopment and intensification.

Industrial employment growth will also be concentrated in the south and west of Ibadan in both inner and expansion areas. The south of the city is therefore expected to strengthen its industrial role in parallel with commitments to improve Federal and State road links in and around Ibadan. The north west of the city will also see relatively important industrial growth due to existing and designated sites and also as this is served by the strategic road network north of the city to Oyo.

12 AGRICULTURE

Agriculture remains an important activity in terms of traditional rural farmers, larger commercial farm operators and also urban and peri-urban agriculture, which are all key sources of local and regional income, in addition to meeting the food and nutritional needs of the urban population.

Given Ibadan's industrial capacity and agricultural potential, there is considerable opportunity to transform the city into an agro-industrial zone for Nigeria if resources are well tapped. It is believed that agriculture, albeit growing relatively slower compared to other sectors, will continue to play a very important economic role and could be enhanced as an economic generator with improved integration with the wider economy. The masterplan envisages that employment in the agriculture sector will increase at an average annual growth of around 1% p.a., reaching approximately 587,600 by 2036.

13 INFRASTRUCTURE

13.1 TELECOMMUNICATION

The vision of the Masterplan is to have a converged telecommunication network to provide every residential property, hotel, office, retail shop, facility, etc, with narrowband and broadband triple play services (voice, TV and internet connection). Ibadan will thus be served by a Fibre-To-The-Home (FTTH) network supplied from the NCC or other authorised service provider. This FTTH network will be connected to Nigeria’s national network.

A separate and independent Non-Telecom extra low voltage network infrastructure will be used carry the data traffic of the security systems to a centralised monitoring and control centre whose location will be specified at a later stage by authorised parties.

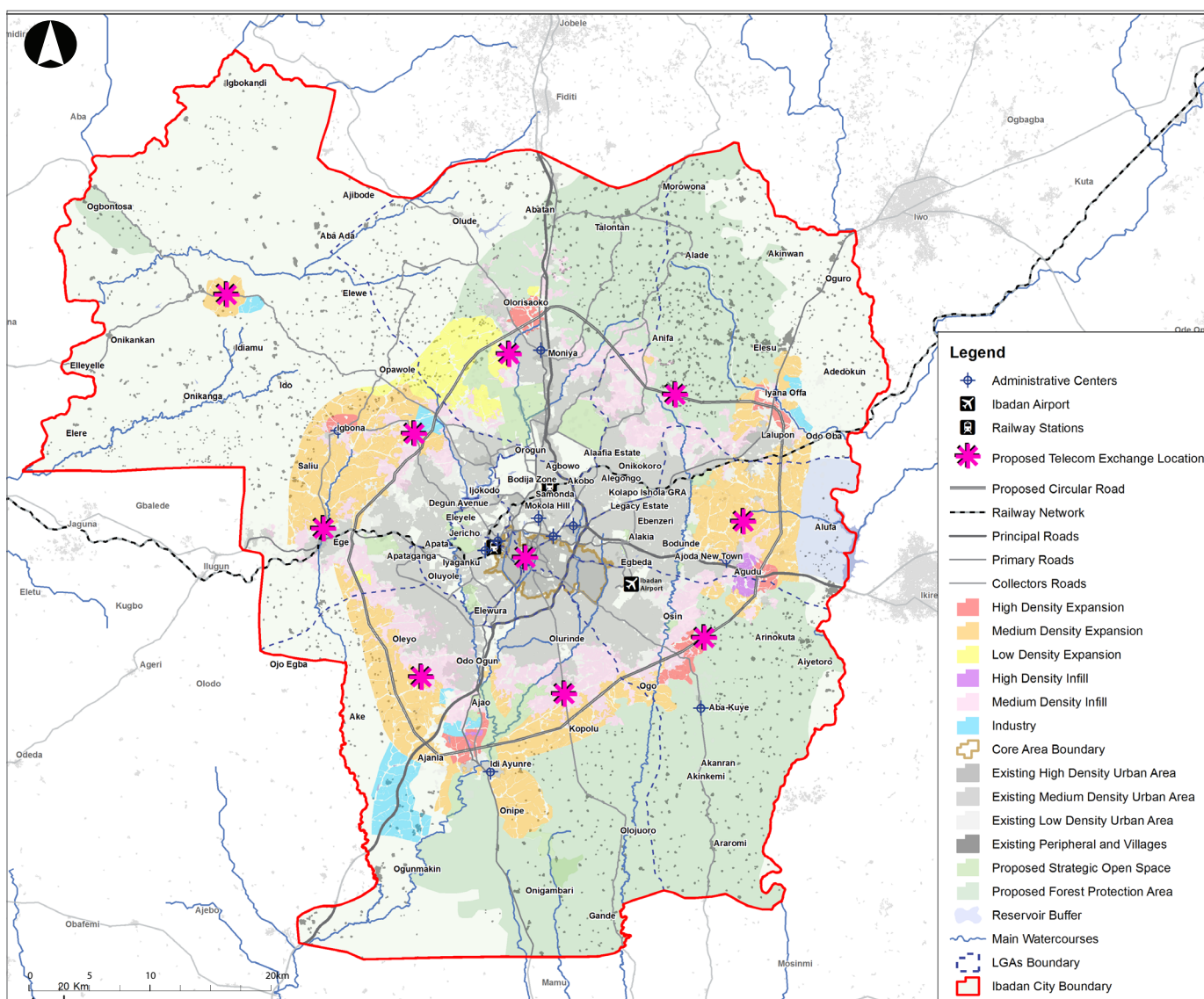


Figure 13.1: Proposed Distribution of Telecommunication Exchanges

13.2 POWER SUPPLY AND GENERATION

The Masterplan proposes a conceptual layout of the required primary substations for the new expansion areas with a High Voltage network required to feed Ibadan with the relevant transformer ratings and voltage levels. This is based on an estimate of the power demand required to serve the city's population. A layout for the existing areas of Ibadan can be provided in due course when more information has been made available regarding the existing network.

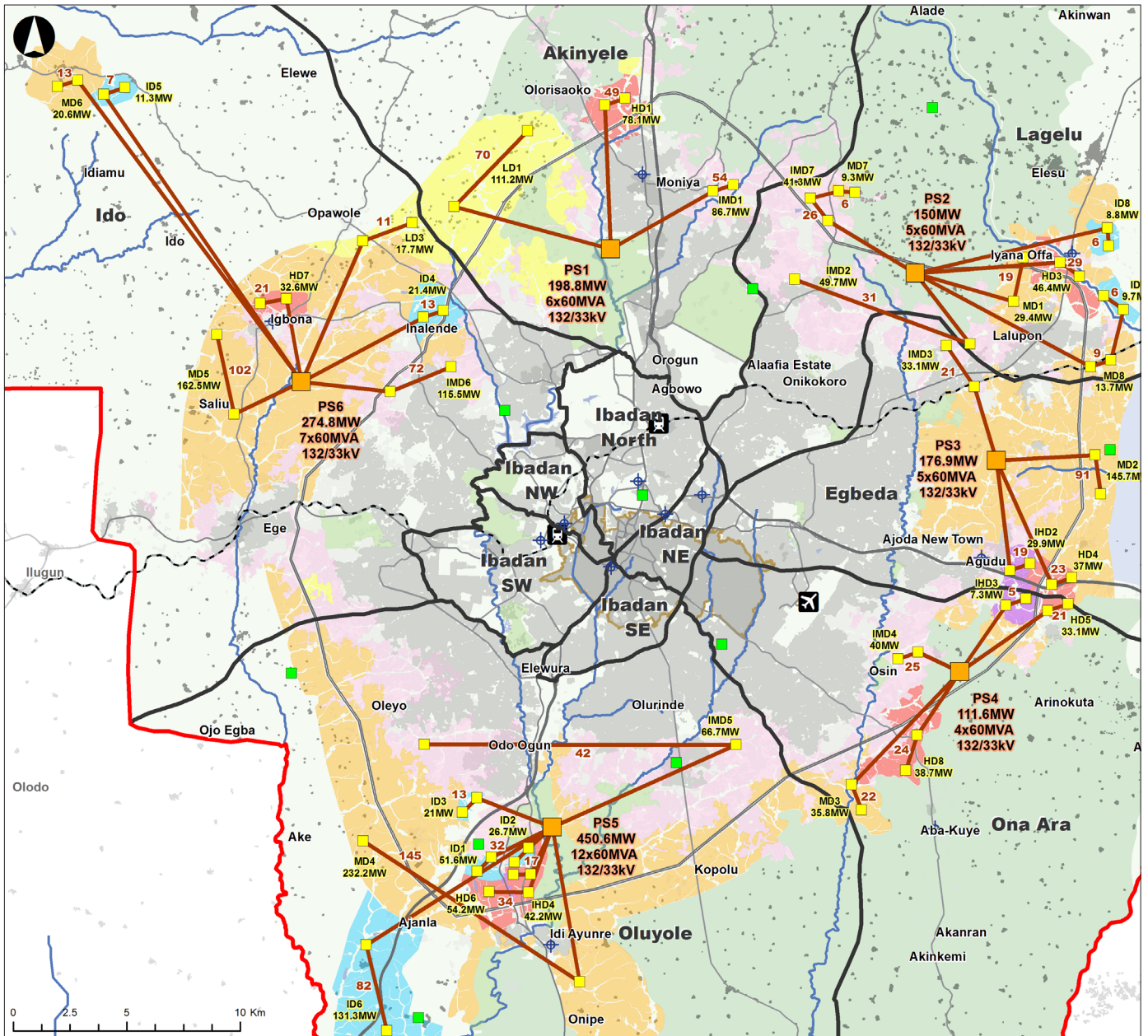


Figure 13.2: Proposed Primary and Secondary Substations Distribution

13.3 SOLID WASTE MANAGEMENT

The process of implementing a Solid Waste Management plan for Ibadan should be based on adopting waste minimisation by practicing the 3 Rs (i.e. Reduction, Re-use, and Recycling).

A city-wide scheme has been formulated that revolves around options for solid waste storage, collection/transfer and ultimate treatment/disposal components. In addition, the Masterplan contains a longer-term option whereby Waste to Energy could eventually be implemented to make further beneficial use of waste and decrease the quantities going to landfill.

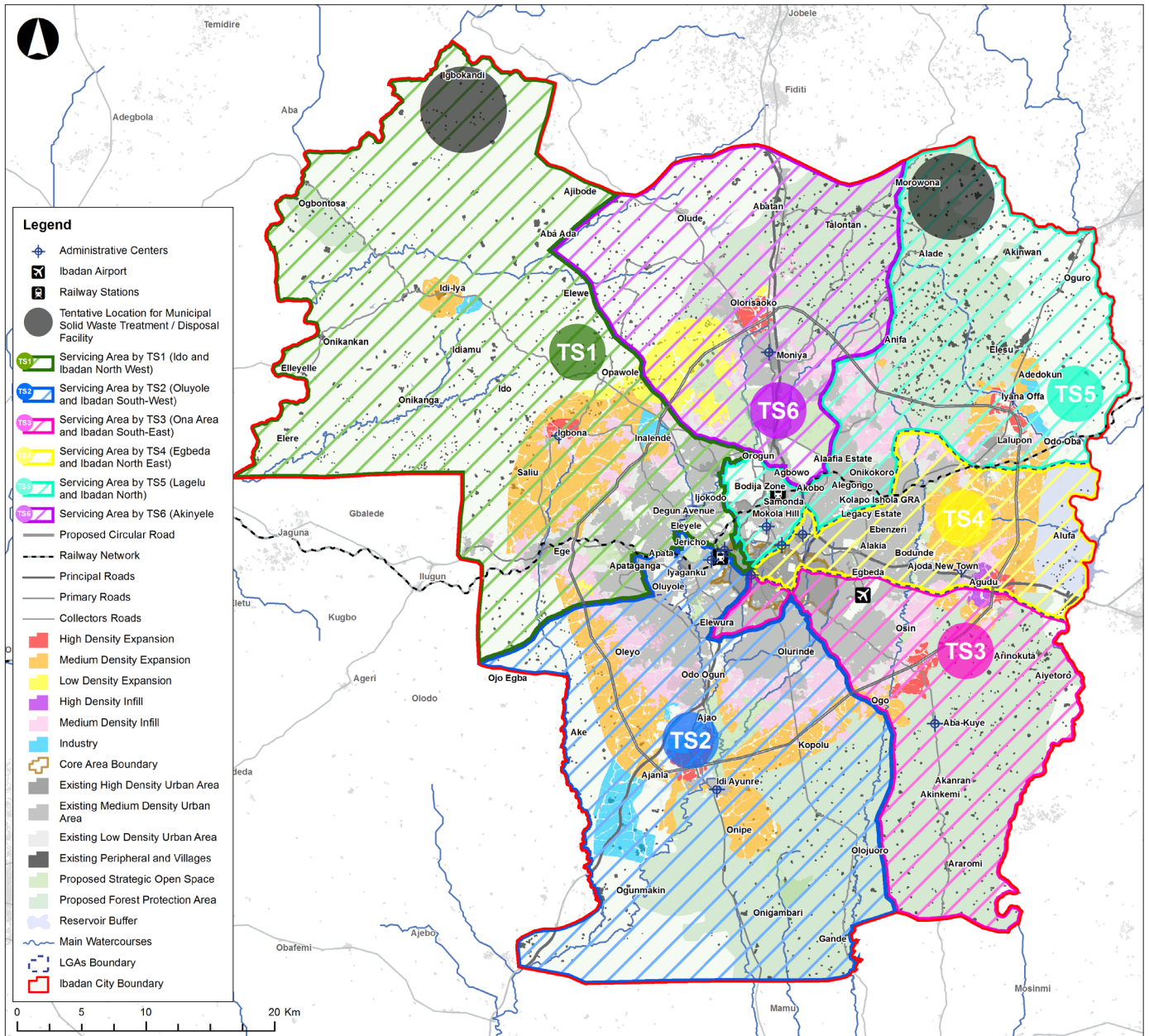


Figure 13.3: Proposed Tentative Locations of Municipal Solid Waste Management Facilities in Ibadan

13.4 WATER SUPPLY

Two proposed dams, namely Odedele and Abeta, for water supply use, were identified and studied in order to estimate the storage volumes and safe yields of their reservoirs. Odedele Dam will be constructed on the River Osun and Abeta Dam will be constructed on the River Ogun, along with associated Water Treatment Plans (WTPs). Since the deficit cannot be covered solely by either one of the proposed dams even with all three existing WTPs (Asejire, Eleyele, Osegere) producing at-design capacities, the two proposed surface water sources should be used in order to fulfil the city's water demand up to the year 2036.

Two alternative transmission systems were considered in the Masterplan, with Alternative 1 (centralised system) being preferred (see Figure 13.4). This requires an additional WTP to serve Water Zone 1, since no connection is allowed to the transmission line supplying the Central DC#1 (Distribution Centre) from Abeta WTP. Further studies should be undertaken in order to determine the exact location of the additional surface water source and its WTP.

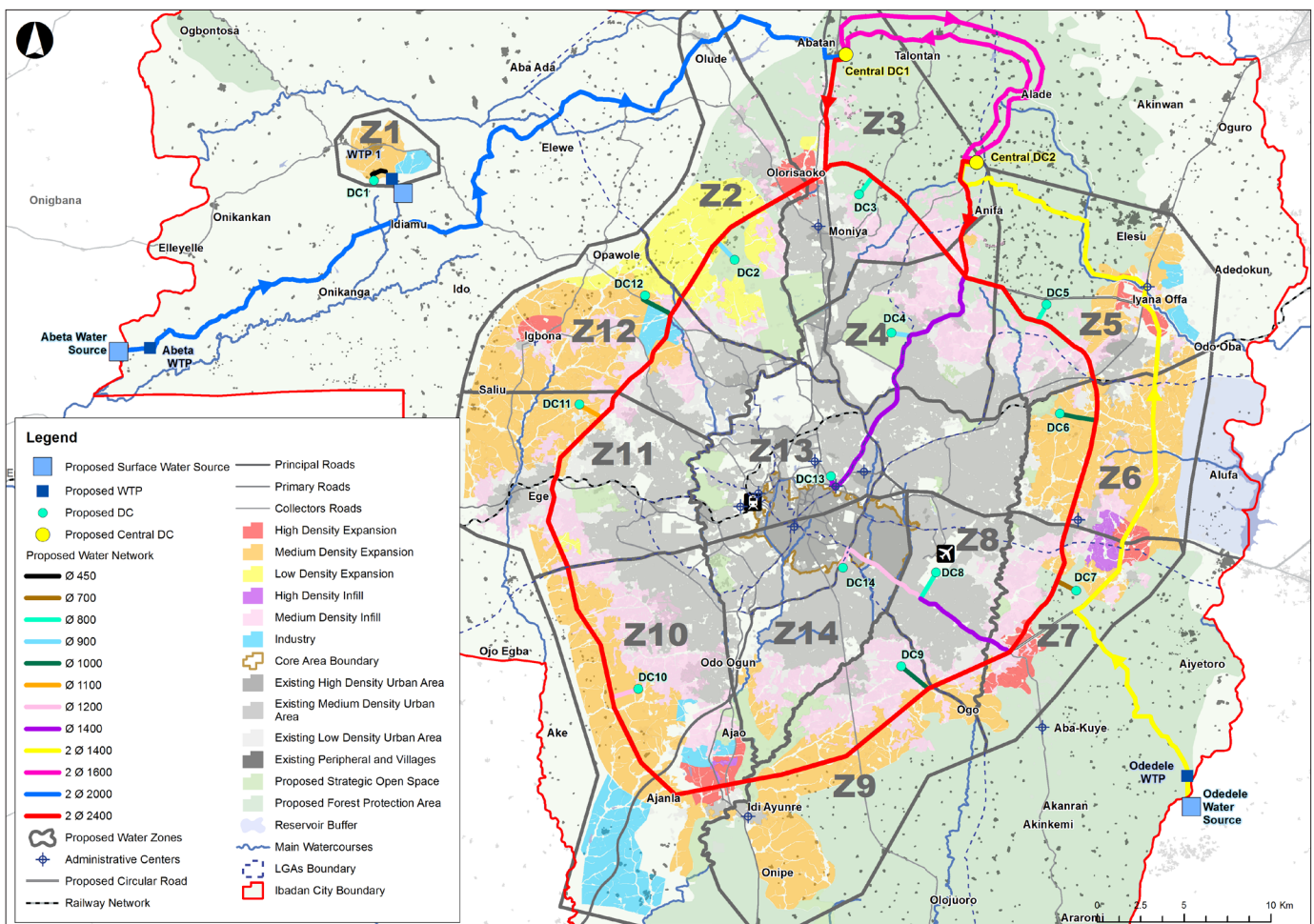


Figure 13.4: Proposed Water Sources and Transmission Water System – Alternative 1

13.5 WASTE WATER MANAGEMENT

Wastewater treatment plants (WWTPs) are to be provided in low level open spaces and green areas. This is needed in order to:

- Reduce the number of pump stations needed for pumping the collected raw sewage into the WWTP;
- Keep the WWTP as far away as possible from residential areas; and
- Facilitate the use of treated sewage effluent for irrigation.

In addition, WWTP locations are to be selected at the lowest and most centralised point of the served area.

Several pumping stations will be needed to convey the collected raw sewage to the WWTP, in order to cross the valleys. The depth of sewers is limited to 8-10 metres where open excavation can be implemented.

Two alternative systems have been considered in the Masterplan, with Alternative 2 being preferred due to its lower cost and greater flexibility in the phasing of construction (see Figure 13.5).

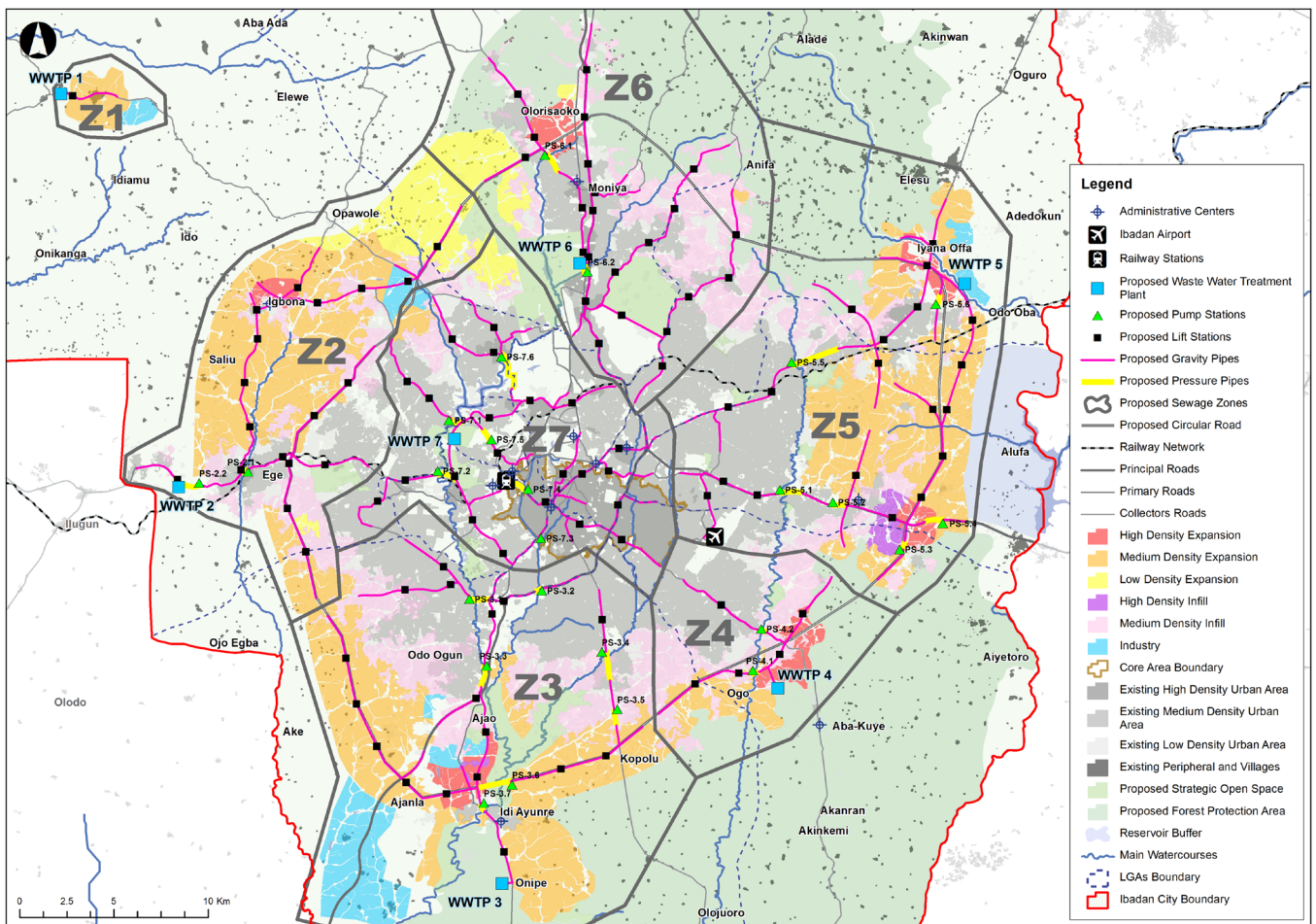


Figure 13.5: Proposed Sewage Primary System – Alternative 2

14 INSTITUTIONAL AND LEGAL FRAMEWORK

The task of coordinating, facilitating and encouraging the implementation of the Masterplan requires a cross sectoral approach. At present, there is a gap in terms of how this can be achieved from an institutional perspective. Three potential options have been considered in the Masterplan and are summarised below.

14.1 OPTION A: CAPACITY BUILDING

This option requires the least structural realignment. The Ministries Departments and Agencies (MDAs) retain their responsibilities within the planning area. The major cost element will be in the equipping and training of staff. However, it will also require the passing of a new law that sets out the structure and responsibilities of the physical planning agency (in this case the Bureau of Physical Planning and Development Control).

Key areas where institutional strengthening is required include:

- Development of a Land Use Management and Information System, with the training required to operate the system;
- Develop the abilities of all MDAs to prepare multi-year rolling programmes and budgets and to monitor progress; and
- Develop the skills of the urban planners, including the preparation of development plans.

14.2 OPTION B: CREATION OF IBADAN DEVELOPMENT AUTHORITY

This option proposes a dedicated institution that has the status and power to oversee the development of the city. Its remit would be the total Ibadan City Masterplan area, covering the 11 LGAs. The Authority would be answerable to the Governor directly, but would have a Board with the commissioners of the key Ministries.

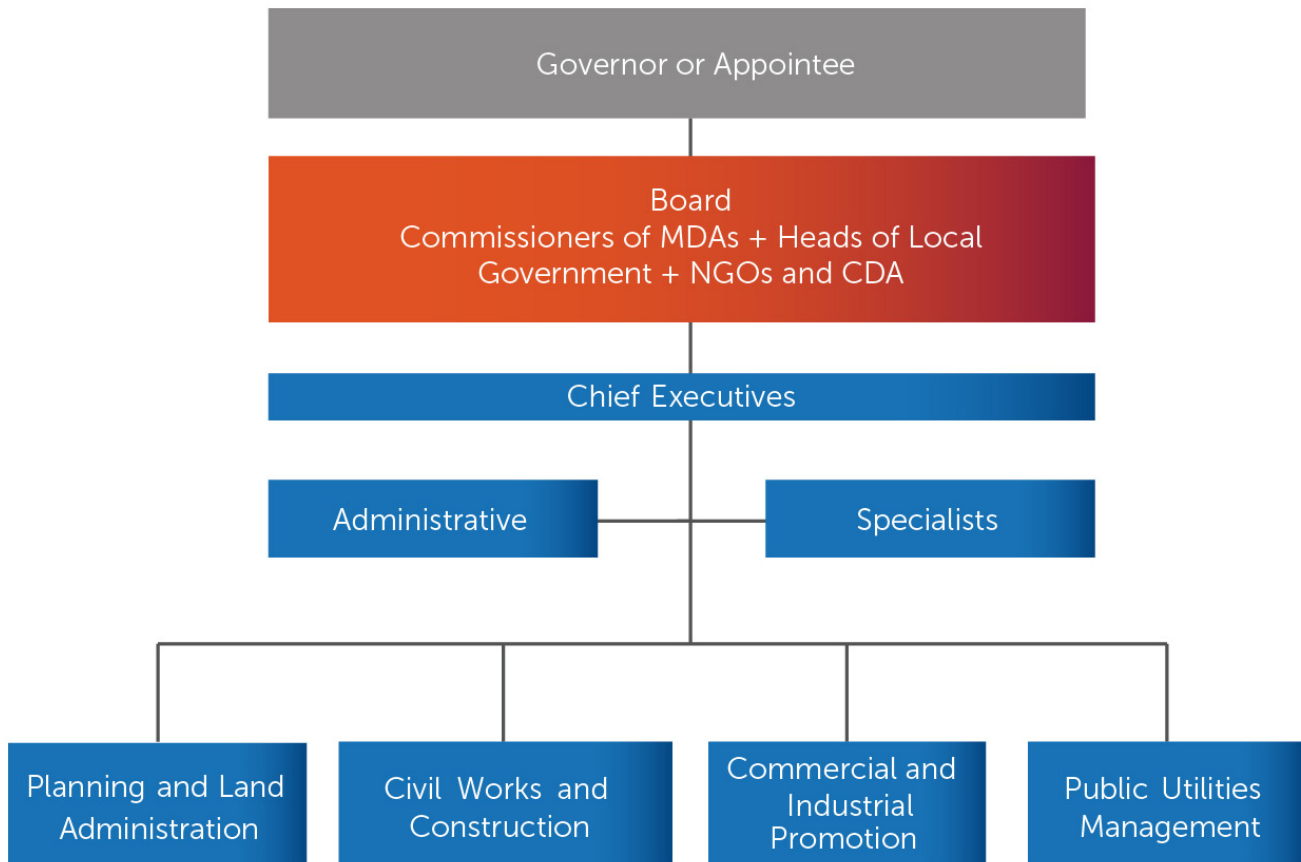


Figure 14.1: Ibadan Development Authority Organogram

14.3 OPTION C: SPECIAL MONITORING AND COORDINATING UNIT

The third option considers the need for a specialist unit to ensure programmes for new development are focused on ensuring an adequate budget allocation is made by each of the line agencies to complete the annual programme. There is a need to monitor the realisation of the plans. This would be through the establishment of a Specialist Monitoring Unit (SMU).

The Unit would be within the Office of the Governor and be headed by the Chief Executive who would have the rank of a Director General.

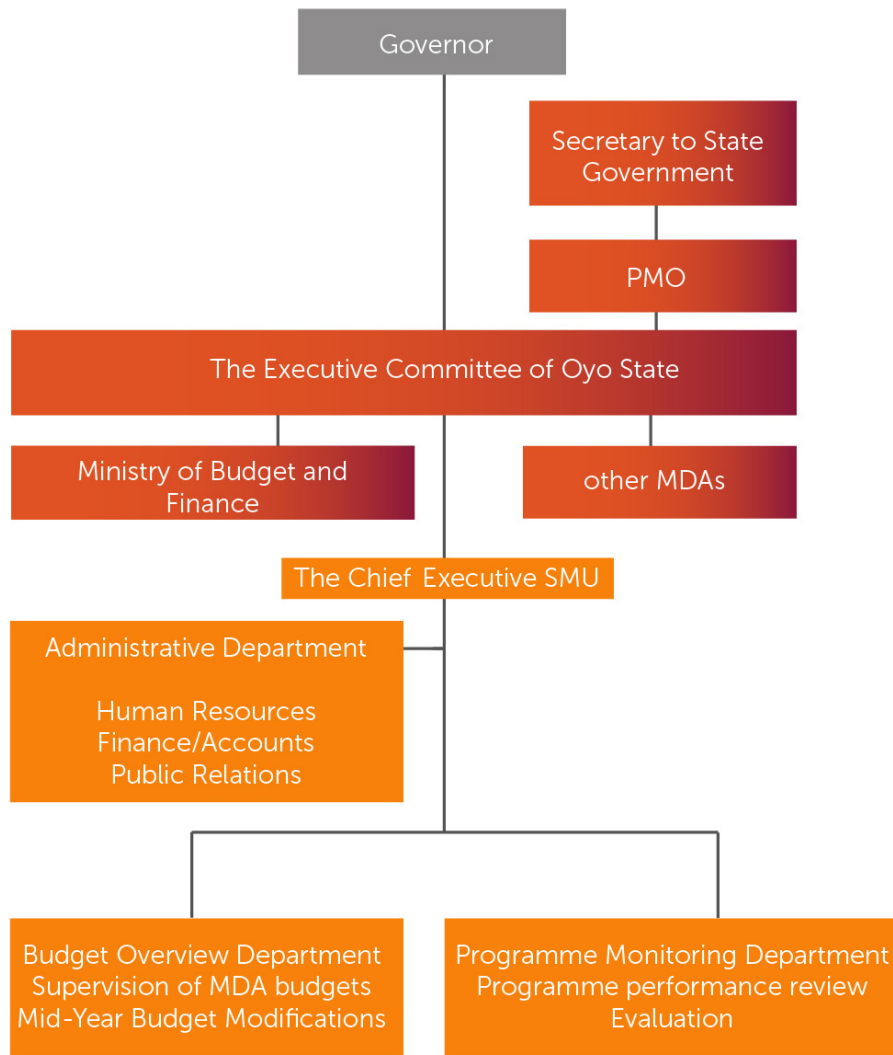


Figure 14.2: Special Monitoring Unit Organogram

14.4 APPRAISAL OF THE OPTIONS

Three options are offered. However, they are not totally separate. Option A is required whatever the decision taken by Oyo State Government. Option B, with the establishment of the IDA, also requires a Monitoring Unit. However, the Monitoring Unit of the IDA would focus on the performance of the IDA, which is an all-inclusive agency, covering all aspects of Ibadan’s future development. The proposed SMU (Option C) oversees the work of the existing MDAs with regards to the realisation of the proposed programme identified in the Masterplan.

In discussions with various parties within the State Government, all options received some support and faced some opposition. It is considered that all could work given sufficient political support.

The decision, therefore, lies with the Government of Oyo State, so that it can be formally adopted as the way forward.

