



RE-IMAGINING **GABORONE MAIN MALL** PRECINCT URBAN DESIGN FRAMEWORK



SCHOOL OF ARCHITECTURE, **PLANNING AND GEOMATICS**
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Urban Design Framework

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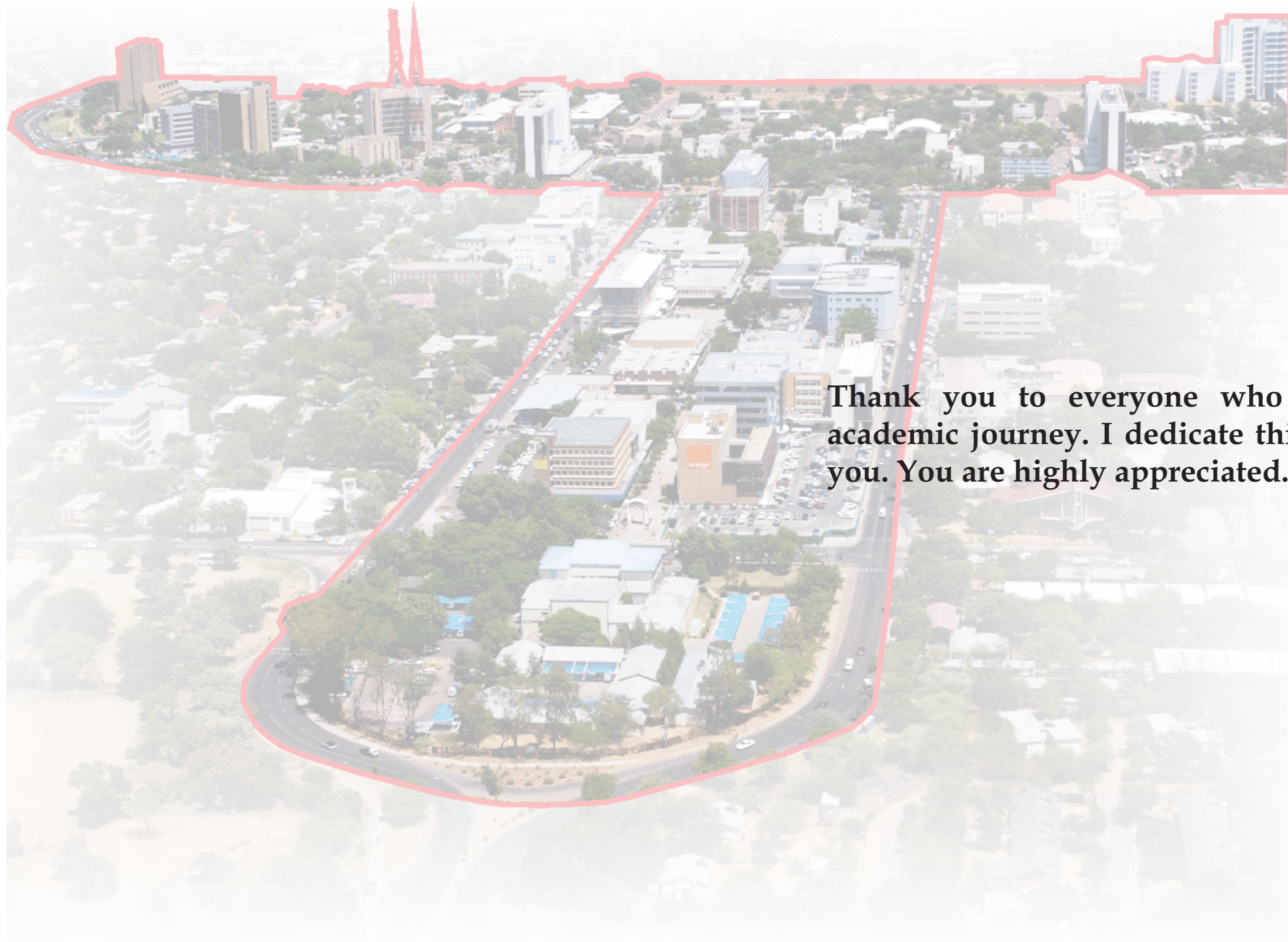
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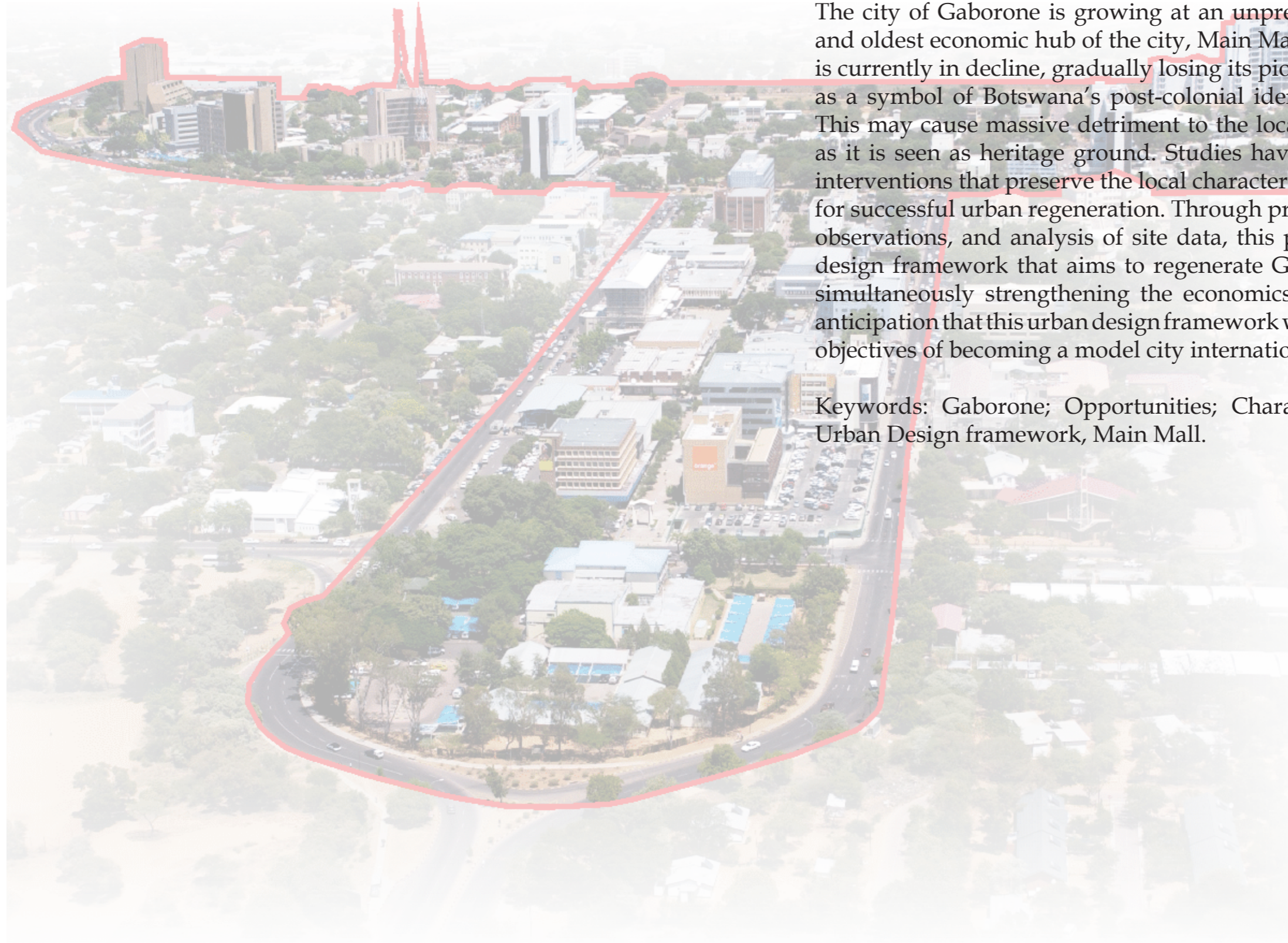
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Thank you to everyone who has supported my academic journey. I dedicate this research project to you. You are highly appreciated.

ABSTRACT



The city of Gaborone is growing at an unprecedented rate, the bustling and oldest economic hub of the city, Main Mall located in the capital core is currently in decline, gradually losing its pioneering role and reputation as a symbol of Botswana's post-colonial identity and economic engine. This may cause massive detriment to the local surrounding community, as it is seen as heritage ground. Studies have shown that urban design interventions that preserve the local character of urban space are essential for successful urban regeneration. Through precedent studies, interviews, observations, and analysis of site data, this project developed an urban design framework that aims to regenerate Gaborone's Main Mall while simultaneously strengthening the economics of the precinct. It is with anticipation that this urban design framework will contribute to Gaborone's objectives of becoming a model city internationally.

Keywords: Gaborone; Opportunities; Character; Urban Regeneration; Urban Design framework, Main Mall.

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1.1 INTRODUCTION

Growth and decline of cities and towns is inevitable due to external and internal pressures. In many cases, rapid urbanization and the migration of functions and activities away from traditional inner cities and into newly planned cities lead to the decline of inner city physical and socio-economic structures. The inner city defines a city's identity, growth, and image. To achieve long-term success, a city must identify its distinctive features and safeguard them, as well as integrate economic, social, and environmental assets especially of its inner cities (Roberts, 2016). As such, urban regeneration has the potential to reverse decline and manage growth in an urban area by leveraging physical and socio-economic structures.

With Gaborone's rapid growth (Worldbank, 2021), commercial centres and malls have sprouted in the city, providing residents with new entertainment and choices. However, there is little discernibility between the malls, due to their similar mass architectural character and commercial ambiance. As a result, Gaborone is known as a dull and lacklustre place, save for remnants of the old Main Mall. Over the years, the Main Mall precinct has experienced urban decay and has not been effectively managed for the city's competitive advantage.

In light of the above issues, this study focuses on the Gaborone Main Mall area. By virtue of its distinctive features, the Main Mall precinct offers an opportunity for spatial re-imaging. Therefore, this study seeks to determine what the future of Main Mall should be, how it fits in with the city's plans, and how it can be designed to create an urban design framework that focuses on increasing economic aspects within Gaborone's pioneering commercial precinct, through urban regeneration principles.

1.2 RESEARCH POSITION

Due to its enduring character and identity embodied in the city's heritage and past, Main Mall is indisputably an important asset in Gaborone. Despite the ubiquity of modern malls in Gaborone, it is still the preferred destination for many people. There has been little effort put into preserving the mall's identity, which could benefit both the city and the country. Previous attempts to transform the mall have threatened to change its character, making it more like other malls in Gaborone.

It is therefore my intention to see Main Mall with renewed hope; as a precinct of historical and cultural significance. As a professional and a person accustomed to Main Mall, I would also like to contribute to the profession of the built environment, and I hope that my research will help propel Gaborone to new heights.

1.3 PROBLEM STATEMENT

Cities and towns grow and decline owing to external and internal factors. Physical and economical structures within traditional core cities often decline due to rapid urbanization and migration of functions and activities into newly planned cities. Gaborone's "Main Mall" is the case in point. Despite its pioneering significance, Gaborone's Main Mall is deteriorating. Its unique identity, however, represents an untapped opportunity for urban regeneration in this city that is constantly changing.



Figure 1.1: An aerial image showing Gaborone Main Mall, Government enclave, Civic Centre and surroundings.
Source: Karin Duthie / Alamy Stock Photo (2021)

1.4 RESEARCH QUESTIONS & AIMS

1.4.1 Key Question

What should be the future of Main Mall and how does it fit in with the future of the city?

1.4.2 Subsidiary Questions

How relevant is Main Mall to Gaborone today?

How is urban regeneration applied within international best practice?

1.4.3 Aims

To gain an understanding of urban regeneration and its socio-economic effects on deteriorating inner cities.

To determine the current and future role of Main Mall in Gaborone City.

To develop urban design interventions and guidelines for regenerating Main Mall.

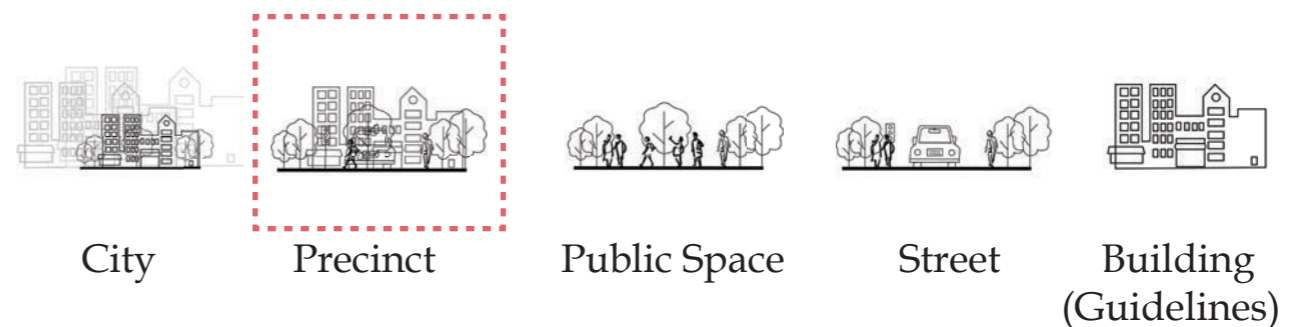


Figure 1.2: Considered Scales of Interventions with the Main Mall being at precinct scale
Source: Author (2021)



Figure 1.3: Manifesto Artefact depicting the idea of clutter that is Gaborone Main Mall.
Source: Author (2021)

2.1 INTRODUCTION

A systematic literature review approach will determine the evaluation of various urban models and their spatial form. This will be done by means of a desktop study. The data collection for this project involved structured questionnaires and observations as well as in-depth interviews with local institutions and individuals who visit and use the Main Mall regularly. This approach allowed the systematic synthesis of data collected from multiple sources.

A pragmatic approach to research employing mixed methods techniques that incorporates both qualitative and quantitative techniques was used for this study. Creswell (2009:3) cites Newman & Benz, 1998: "Qualitative and quantitative approaches should not be viewed as polar opposites or dichotomies; instead, they represent different ends of a continuum." Combining qualitative and quantitative approaches enriches understanding of a research problem. This is followed by a numerical approach which deliberate both geographical information systems and data regarding this design research document

As part of the desktop study, a systematic literature review will determine the evaluation of various urban models and their spatial form based on the research question. Various secondary sources of literature were consulted, including journal articles, books, dissertations, and case studies.

Through the literature review, a theoretical framework applicable to the study, as well as underlying principles, was identified. A critical assessment of its relevance and relationship to the study helped form the basis of the study proposition.

Furthermore, data on the study area was collected, analysed and interpreted in order to support the objectives and validate the proposition. The data collection for this study involved semi-structured questionnaires, non-participant observation and interviews with local institutions and individuals who frequent Main Mall on a regular basis. This approach allowed the systematic synthesis of data collected from multiple sources.

2.2 TECHNIQUES

Data collection was done in accordance with regulations, guidelines, and protocols in view of the COVID19 pandemic, as discussed below;

2.2.1 Interviews

Kvale (2003) considers interviews to be a more rigorous method of collecting data since they provide detailed descriptive information that can be analysed in depth. Participants, mainly technical experts were interviewed about their perceptions of Main Mall and how they envision it. To obtain as much information as possible from the expert, the interviewer asked questions and followed up with responses. Taking into account the risks associated with COVID19, most interviews were conducted by telephone, with a few conducted face-to-face.

2.2.3 Semi-structured questionnaires

Dedicated questionnaires with a list of open-ended questions pertaining to the research objective were designed and administered to the public (mall users, property owners), local government authorities (Gaborone City Council, Museums, Department of Town and Country Planning) and experts from the relevant fields (Urban designer/Planner, Architect, heritage expert). To minimise contact between respondents and observe COVID19 protocol, some questionnaires were emailed, while others were hand delivered.

2.1.4 Non-Participant Observation

a. According to Liu and Maitlis (2010), citing Spradley (1980), observation is a three-stage funnel that starts with descriptive observation, in which researchers conduct broad-scale observations to gain an overview of the setting, then moves on to focused observation, in which they begin to focus on a subset of the activities that most interest them, and finally to selected observation, in which they investigate relationships among the elements they have chosen as a focus.

b. In order to gain a deeper understanding of the mall's function, spatial elements, and public interaction with space, the researcher observed the

study area for a continuous length of one week without participating in study area activities. Various focus scales were selected and investigated further with time. Ground mapping, video recording, and photography were used to document the observations.

2.3 DATA ANALYSIS

The data collected was analysed, modelled, and visualized using a variety of tools, including Geographic Information Systems (GIS) software. The layers of data were overlaid using QGIS 3.20.3, Adobe Illustrator 2022, and Google Earth to identify trends and gaps. The objective of data analysis was primarily to inform and substantiate the study findings and design framework interventions.

2.4 LIMITATIONS

This research was not without risks and challenges. Aside from Covid19, financial and time constraints were also significant. This is primarily due to the geographic distance between the study area and Cape Town. In order to overcome this problem, the researcher collected as much data as possible while in Gaborone over the semester-end break. Additionally, the use of Information Communication Technology was beneficial. These activities were carried out only upon approval by the University ethics committee.

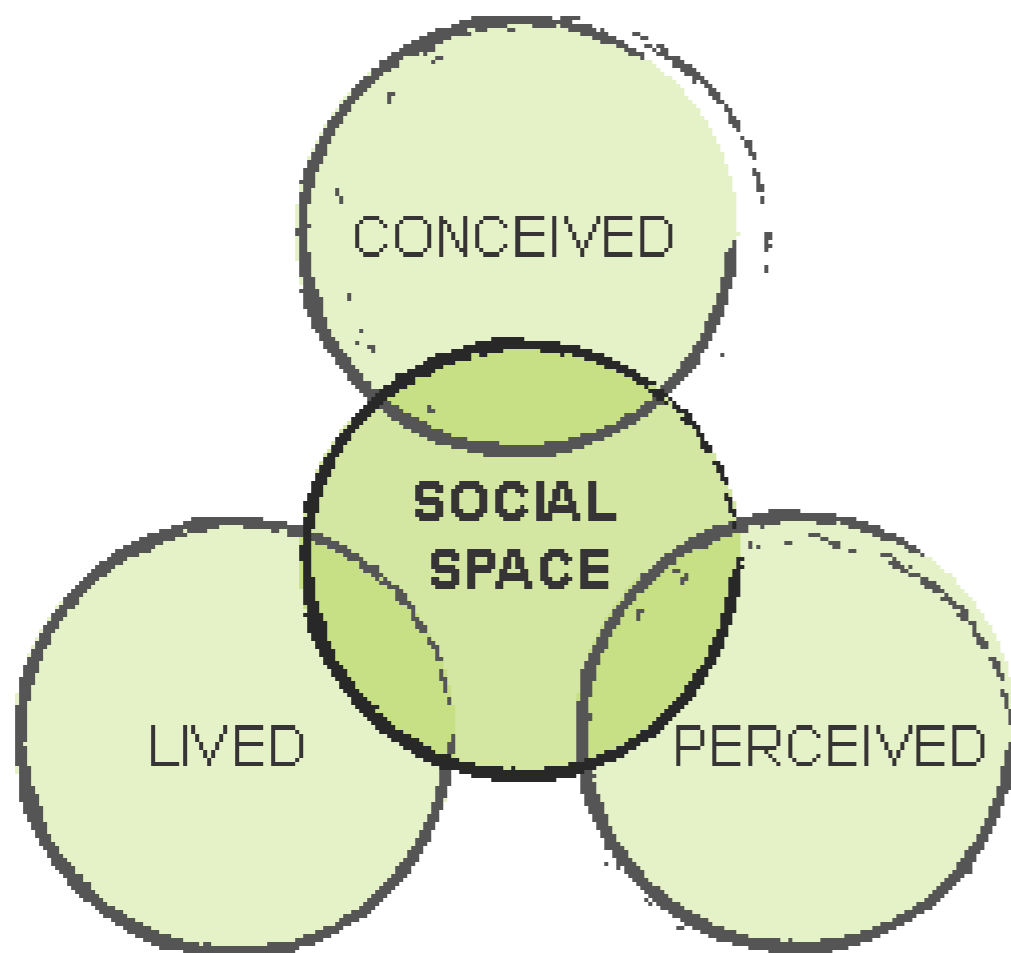


Figure 3.1: A diagram depicting Lefebvre's triad representation of space.

Source: Redrawn by Author (2021)

3.1 INTRODUCTION

This chapter examines the existing theories in order to provide a contextual conception and a justification for the project. To maintain a systematic presentation and keep the reader updated with the contents of this project, the researcher has divided the chapter into three themes.

The first theme examines the notion of space, including the social production surrounding it. Second, we will explore how urban regeneration can contribute to the creation of sustainable settlements and precincts. Further, it will explore how urban regeneration can be achieved as well as the important intersection with urban design interventions as well as urban regeneration criticism.

3.2 PRODUCTION OF SPACE

Several cities worldwide are experiencing exponential growth along with disruptions and tensions arising from people's engagement with these locations. The question of how policymakers, urban designers, architects, and other professionals engaged in the built environment will read and interpret these socio-spatial transformations to design or enact sustainable strategies that take into account the newly emerging ways of viewing and engaging space is of particular importance.

In light of the aforesaid, (Simone, 2004) proposes that "particular spaces relate to specific identities, purposes, lifestyles, and properties for them to be legible for specific people in particular places and times." Thus, it is important to recognize that space is a socially produced entity rather than a pre-existing container (Lefebvre, 1991)

According to Lefebvre's findings, urban spaces should be viewed through the lens of social interaction with their immediate environment. In his dialectical understanding, Lefebvre identified three dimensions of space

production (figure 11). The perceived space is shaped by all the space users' spatial practices resulting from their everyday intersection in complex economies; while conceived space is shaped by knowledge and ideologies. Along with space conceived by spatial practice and planning (intellectus), space is crafted by people's insignificant connection to a place. (Babere, 2015) defines this subjective dimension of space as living spaces or representational spaces, in which complex and layered symbolic meanings are encoded.

As part of his efforts to convey the importance of the critical interdependence of these dimensions of space, Kerr (1994) corroborates that according to Lefebvre, various contributions of space are made in diverse ways, depending on their qualities and attributes, social context and historical period. Therefore, it is valid to assert that as much as spaces shape the actions of those within them, they also shape those who use them.

Furthermore, it is important to note that redesigning spaces, including urban regeneration initiatives, must take into consideration the social production of spaces. To comprehend the configuration, operation, and design of spaces, one must consider the shared feelings of belonging and attachment held by people toward the places they live, as well as their capacity to foster collective identities. The term "space" should be interpreted beyond the conception of it as an environment. Spaces provide platforms on which culture and identity are formed, promoted, legitimized, and absorbed through activities and performances (Mwale, 2018). It is through such initiatives that users of space are assured of their rights to their city. The right to the city extends well beyond access to its resources. It is a collective right, not an individual one, as changing the city inevitably involves the exercise of collective power over urbanization processes.

3.3 URBAN REGENERATION

According to Roberts (2016; pg3), urban regeneration is a phenomenon that is well-known, yet poorly understood. Robert remarks that despite the fact that many cities have undertaken urban regeneration projects, there is no one universally prescribed method of urban regeneration. He explains the reason for this can be attributed to the fragmented information about urban regeneration that encompasses economic, social, and environmental factors, as well as its implementation, management, and evaluation.

Urban regeneration is defined as a comprehensive and integrated approach to developing an area that has undergone significant economic, physical, social, and environmental changes. The ability to identify and capitalize on the distinctive characteristics that distinguish a place from others (e.g., character and identity) is imperative for a place to remain prosperous and valuable Roberts (2016).

While other definitions define urban regeneration as an integrated, holistic, and comprehensive process that incorporates economics, equity, and the environment Similarly, Gibson & Kocabas (2001). While definitions differ other proposals, such as urban regeneration, which is the process of changing a place's character by considering the interests and positions of all the parties involved Turok (2004).

The terms 'change', 'physical', 'social', 'economic' and 'environment' have been denominated by these definitions. In essence, urban regeneration responds to opportunities and challenges arising from social, economic, physical, and environmental factors. The project, therefore, focuses on the idea that urban regeneration involves reclaiming underutilized social, economic, physical and environmental assets while redistributing opportunities to enhance urban development and quality of life. The process must take into account the specific challenges faced by the community to ensure long-term sustainability.

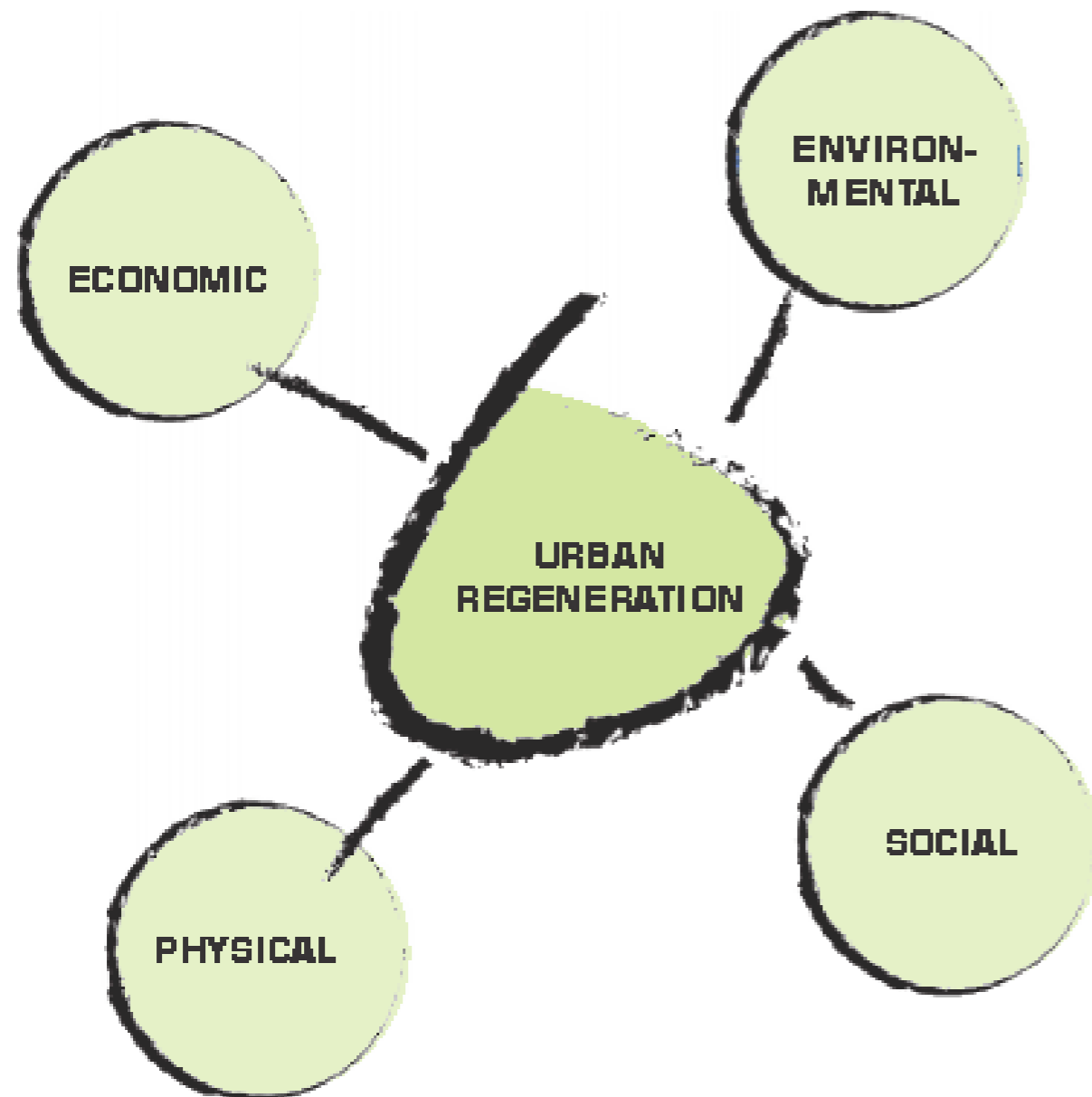


Figure 3.2: A diagram depicting the multi dimensions of Urban Regeneration
Source: Redrawn by Author (2021)

Approaches and Principles of Urban Regeneration Colantonio et al. (2009: 19-20)

3.3.1 Approaches to Urban Regeneration

- i. A property-led physical approach can be illustrated by a major retail or mixed-use development that generates a multiplier effect in the local economy. This approach emphasizes job creation over the social dimension of sustainable housing, and community participation is insufficient.
- ii. The business-driven approach focuses on solving urban challenges through business investment. This approach puts the private sector at the forefront and focuses on creating wealth by identifying and improving the advantages of inner-city areas rather than focusing on poverty and chronic disadvantages (Porter, 1995).
- iii. Urban form and design approach; this perspective emphasizes the relationship between sustainable development and urban form. It can be used to drive all other regeneration approaches.
- iv. Cultural industries approach; creative and cultural media industries are also viewed as vehicles for regeneration through the cultural industries approach
- v. Health and well-being approach; an approach that highlights the role spaces play in the health and well-being of communities .
- vi. Community-based, social economy approach: This approach involves involving local communities in decision making and developing networks of social capital. The approach is people-centred and place-focused, rather than concentrating on capital assets in property markets.

3.3.2 Urban form and design approach

In this project, the urban form and design regeneration approach will be explored in connection with how it can be used to drive other approaches. The following are some of the elements to consider with the approach;

i. Transportation Systems

Transportation systems refers to elements and their interactions that determine travel demand and transportation services (Cascetta, 2009). Transportation systems consist of modes of transportation, infrastructure, networks, and movement flows. For a system to work properly, all four elements must work. For example, increased vehicle interaction could affect road performance. Overloaded roads and poor transportation efficiency (flows and network performance) can impair a community's economic and social functions. Investing in sustainable transportation e.g. mass transit and pedestrian friendly modes could reduce infrastructure degradation and help to restore socioeconomic prospects of a particular area (Greene, 2004).

ii. Street Design

Among the qualities of effective street design, are distinctiveness, legibility, and memorability; well-placed visual cues that facilitate navigation and orientation; establishing visual boundaries and visibility so people can know what lies beyond the boundaries of a street or other public space; clarity; coherence around streets, sidewalks, and other public spaces by means of buildings, walls, trees, and other elements; human scale (Spokane 2019).

iii. Transportation infrastructure

Transportation infrastructure may differ according to areas, towns, cities or regions. While fixed transportation infrastructure includes canals, airways, trains, highways, and pedestrian walkways among others (Desmet, 2015). (de Oña, 2018) asserts that transit investments influence the specialization and growth of towns. In light of the unsustainable strain on transportation infrastructures, it is logical to encourage the use of public transportation, while reducing the use of private vehicles.

iv. Activity corridors

Activity corridors are linear areas of land that connect major activity nodes,

span urban or interurban areas, contain a high concentration of people and mixed land uses (Anderson S & Burnett, 1998). Activity corridors are viewed as a redevelopment option for dispersed, car-centric cities and a catalyst for stimulating economic development, according to Anderson and Burnett.

v. Activity nodes

According to (Lynch, 1960) nodes are central points in a city from where observers can enter and exit; these can be intersections, points of pause, crossings, or convergent paths, or transitions between structures. Lynch states that some concentration nodes represent the epitome and focus of a district, over which their influence radiates and for which they serve as a symbol. Development of new nodes without regard to the existing nodes causes them to lose significance and become abandoned, resulting in aging infrastructure, increased criminal activity, and a lower quality of life (Roberts, 1999).

vi. Economic factors

In addition to the environmental, physical, and social components, the economic component is crucial to the success of any urban intervention program. For instance, most developing countries benefit greatly from informal urban economic activities. Inconsiderate intervention programs can trigger the displacement of informal enterprises, which can have devastating consequences for those who depend on them. Without these enterprises, communities will be deprived of goods and services. Urban interventions should be evaluated and addressed in terms of their economic impact (retrieved from (world-bank, urban-regeneration, 2021).

vii. Access and Permeability

The permeability of a space contributes to its effectiveness and provides its users with efficiency and comfort. Public spaces with permeability have a higher physical, functional, and perceptual value. In general, people prefer spaces that are permeable as they contribute to their socialization

and economic opportunities (Yavuz, 2014).

viii. Optimising land use

Land use optimization is critical for sustainable land use planning because it helps inform land use decisions. To achieve optimal land use, spatial planning must be linked to comprehensive plans (strategic planning), which involve the public and take spatial, environmental, economic, and social variables into account (Weiwei Zheng, 2019).

ix. Sustainable Design

The effectiveness of regeneration programs is contingent upon the built environment's design quality being considered throughout the planning phase. The deliberate design of high-quality buildings and public spaces is critical not only to raising the level of living and working in regeneration zones, but also to generating economic value for the regeneration site (World-Bank, Developing Design Standards, 2021).

x. Environmental Responsibility

Sustainability policies for regeneration are increasingly influenced by environmental concerns. According to (Roberts, 1999), the physical appearance and environmental quality of cities and neighbourhoods are highly potent symbols of their prosperity and of the quality of life and confidence of their enterprises and citizens.

xi. Vitalize Public Space

Along with promoting quality of life through comfortable environs and rich public life, public space contributes significantly to an urban environment's image enhancement. Urban public space is comprised of streets, squares, parks, and green spaces. Creating and revitalizing public spaces that are people-centric - such as neighbourhood parks, community markets, and downtown squares - can transform local communities (Rutherford, 2014). Preservation of open space is an essential part of urban regeneration, as it facilitates social interaction and community development and preserves

the environment. Therefore, through open spaces, urban designers should develop creative and innovative schemes that reflect the town's true identity while attracting residents and tourists.

3.3.2 Principles of Urban regeneration

The principles of urban regeneration are different, but illustrate the same concept, Carter and Roberts (2000: 18-19), identifies the following principles as hallmarks of urban regeneration, among others;

- i. An urban area's condition should be carefully analysed;
- ii. Adapt the physical fabric, the social structures, the economic base, as well as the environmental condition of an urban area at the same time;
- iii. Organize and develop a comprehensive, integrated approach that addresses problems in a balanced, orderly, and positive manner in order to achieve simultaneous adaptation.
- iv. Developing a strategy and programs for achieving sustainable development; Ensure consensus through the involvement of all stakeholders with a legitimate interest in the regeneration of an urban area.

3.3.3 Criticism against Urban Regeneration

Urban regeneration schemes in most metropolitan areas are now viewed as instruments of gentrification, social division, and social alienation as they are based on neoliberal urbanism (Said et al., 2013).

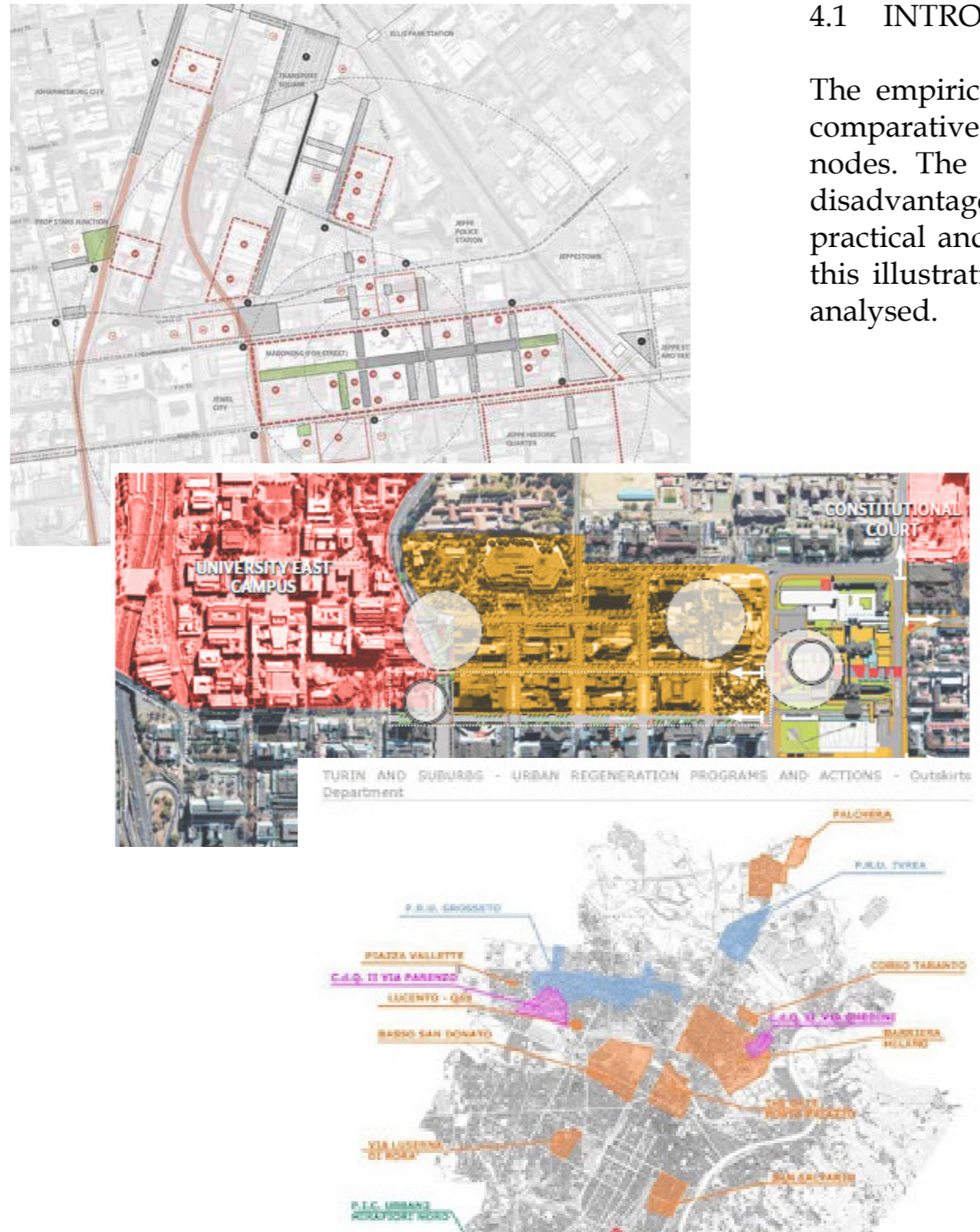
For example, Puebla's historic Core project in Rio San Francisco (Mexico) illustrates this point. As part of its efforts to prevent further decay, Puebla's municipality decided to transform the city's core. The project resulted in modern building blocks that ignored the site's character and significance to its residents. It has been criticized for promoting new economic methods to the detriment of the indigenous community and favouring real estate development (Flores de León, Babere, and Swai, 2020; 63). In this regard,

it is worth noting that over-emphasizing the revitalization of the physical fabric might result in destroying the social fabric. Therefore, sustainable urban regeneration requires equitable access to physical, environmental, economic, and social factors.

While focusing on urban regeneration schemes through Elseragy, Elnokaly and Abul-Ela (2018) argue that just as buildings represent the urban realm in its physical form, their social structure also creates a legacy that should be as closely examined as possible. Therefore, social issues should also take centre stage in the process of revitalizing any urban area, which can only be achieved if the community is at the core of the regeneration effort.

3.4 CONCLUSION

The process of urban regeneration is more evolutionary than idealistic. For this reason, urban regeneration must encompass all aspects equally, including physical, environmental, economic, and social factors. A successful urban regeneration program also calls for an urban design framework that aligns with the local character of the area. Lastly, all stakeholders and the affected communities must be involved in the regeneration process for it to be successful.



4.1 INTRODUCTION

The empirical approach towards this research project will illustrate a comparative analysis towards other national and international activity nodes. The comparative approach will illustrate the advantages and disadvantages of each mall in order to approach the study area with practical and theoretical recommendations towards its design. Through this illustration both the design and the theoretical application will be analysed.

Figure 4.1 :A collage representation of the studied Case Study Urban Design Frameworks
Source: Author (2021)

4.2 MABONENG CULTURAL PRECINCT JOHANNESBURG, SOUTH AFRICA

Maboneng Precinct is located near the Jeppe train station, Rea Vaya BRT routes and other transport hubs, including the Gautrain at Park Station (daily connections via MABO'go shuttle).

It began in 2009 with the regeneration of one derelict old warehouse building, into what has become Johannesburg's creative hub – Arts on Main. And today, Maboneng is one of the leading urban renewal movements in the city.

The Maboneng Precinct Urban Design Framework (UDF) provides tools to enable spatial growth; parking strategy, public spaces, special projects. It was created to integrate residential living with businesses activities and also created a connection to other urban neighborhoods nearby (Kategorri, 2021).

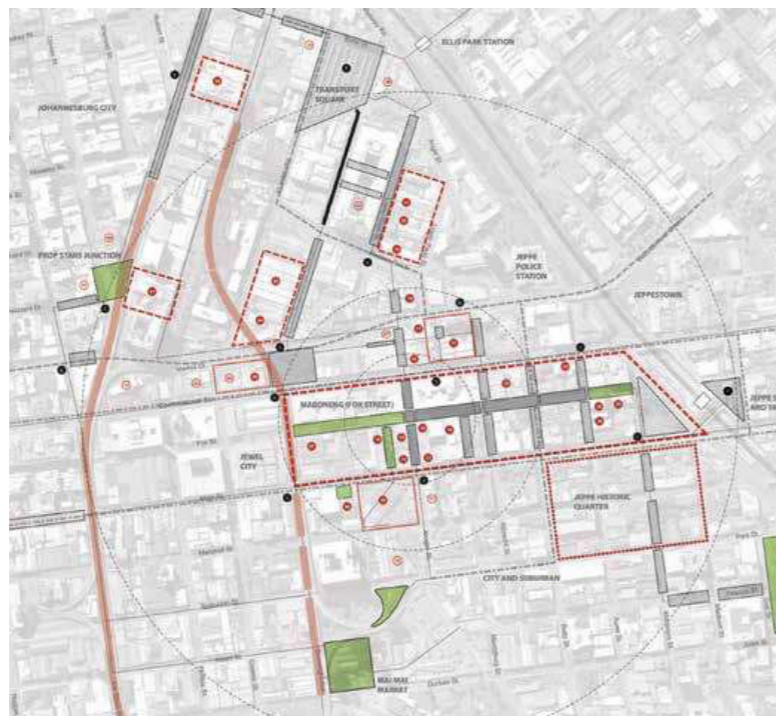


Figure 4.2 :Maboneng Precinct Urban Design Framework (UDF)
Source: Propertuity (2013)

Take home Design ideas



Figure 4.3: Flexible shared spaces; Pop-up Park to make up for lively spaces.
Source: Propertuity (2013)



Figure 4.4: The buildings overlook an existing canal, creating an active public space with a variety of activities.
Source: Propertuity (2013)

4.3 BRAAMFONTEIN REGENERATION PROJECT JOHANNESBURG, SOUTH AFRICA

Braamfontein, is located north of the city of Johannesburg, in South Africa.

Rescripting Public Spaces

The Braamfontein Regeneration Project sought to reclaim lost space and enhance the use and enjoyment of public places. Numerous projects were conceived with the aim of enhancing, regenerating, and consolidating development, while strengthening and encouraging investment opportunities.

There were three major interventions. A continuous regeneration of Braamfontein and the activation of the Cultural Arc. Allow the university to reconnect with the city by removing its security barriers. Lastly, establish an Metrolink Customer Service Center.

The integrated design includes office, residential (student live-work), and lifestyle spaces. Art galleries, rooftop patios, and cafes contribute to Braamfontein's sophisticated feel. The marketplace in an open space is designed offer a wide range of goods made by local artisans and also host variety of events (Albonica, 2021).

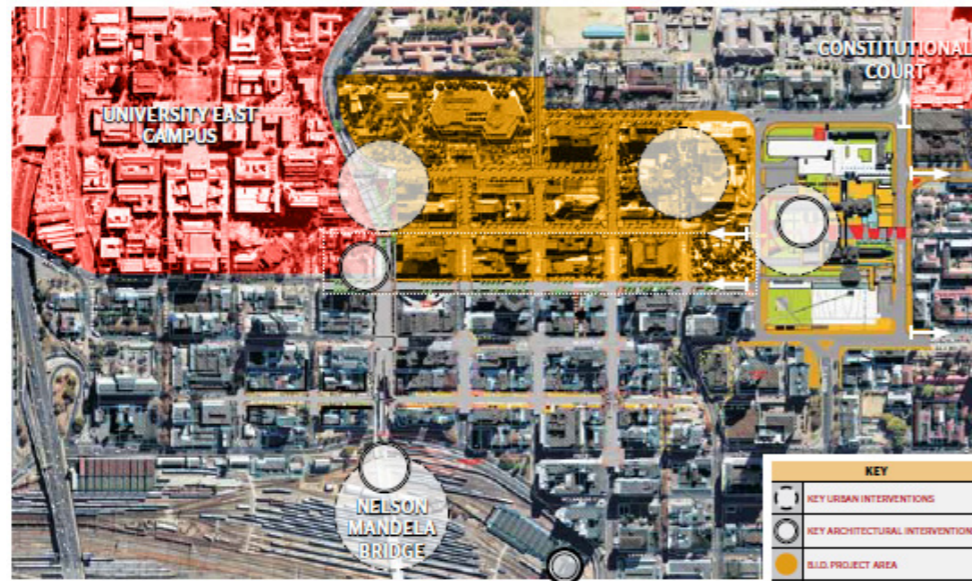


Figure 4.5: Braamfontein intervention areas
Source: Albonica (2021)

Take home Design ideas



Figure 4.6: Public art placed along strategic points on the street and public spaces to reinforce place identity/memory while improving aesthetics.
Source: Albonica (2021)



Figure 4.7: The creation of active spaces with outdoor restaurants and sitting areas.
Source: Albonica (2021)



Figure 4.8: Turin Urban Regeneration Action Areas
Source: Mercoledì (2015)

Take home Design ideas



Figure 4.9: Graffiti wall painting in Artom street as placemaking strategy.
Source: Mercoledì (2015)

4.4 THE GATE PORTA PALAZZO PROJECT TURIN, ITALY

Porta Palazzo is situated in Turin, one of the major metropolises in Northern Italy. Known as Western Europe's largest open-air market, it serves as a central economic, social, and cultural hub for Italians and immigrants living around Turin

Prior to urban regeneration, the area was a decaying inner city neighbourhood with an informal economy and inadequate social services (Colantonio & Dixon, 2011).

The Gate project aimed to improve and strengthen the precincts' economic fabric. Key strategies of the project included innovative solutions that involved refurbishing buildings (renovating the market area and homes in the surrounding area), business incubator, information technology, social inclusion, environmental protection (upgrading squares and park areas), linkability (re-organizing public transport, parking and through traffic). The project is regarded as an example of good practice in urban regeneration (Palazzo & Ilda, 2000).



Figure 4.10: Market stalls integrated at different spaces like streets and squares.
Source: Mercoledì (2015)

5.1 LOCATION OF STUDY AREA

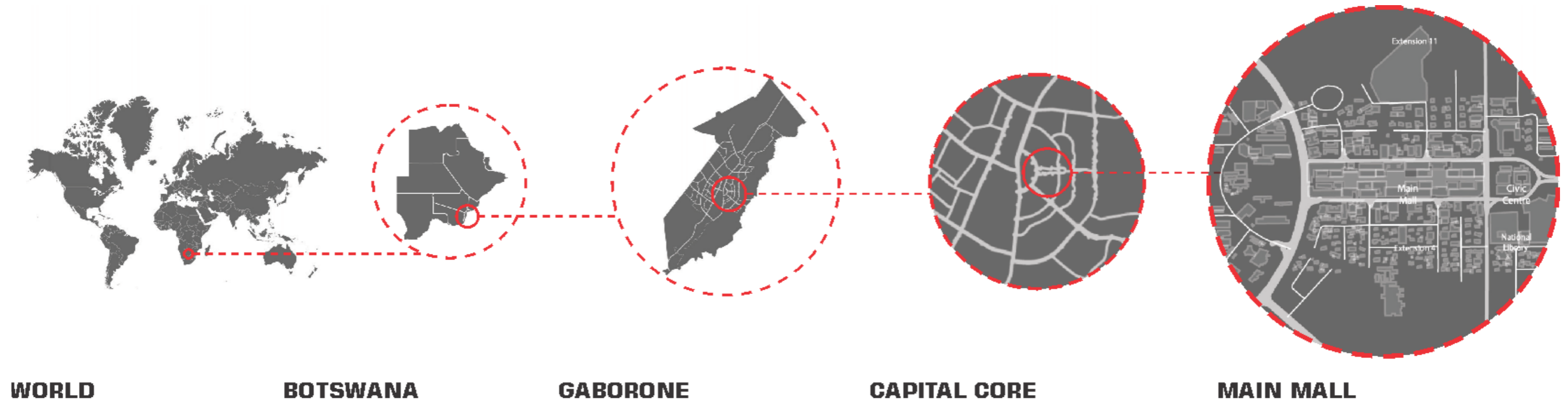


Figure 5.1: Main Mall is situated at the heart of Gaborone, Botswana.
Source: Author (2021)

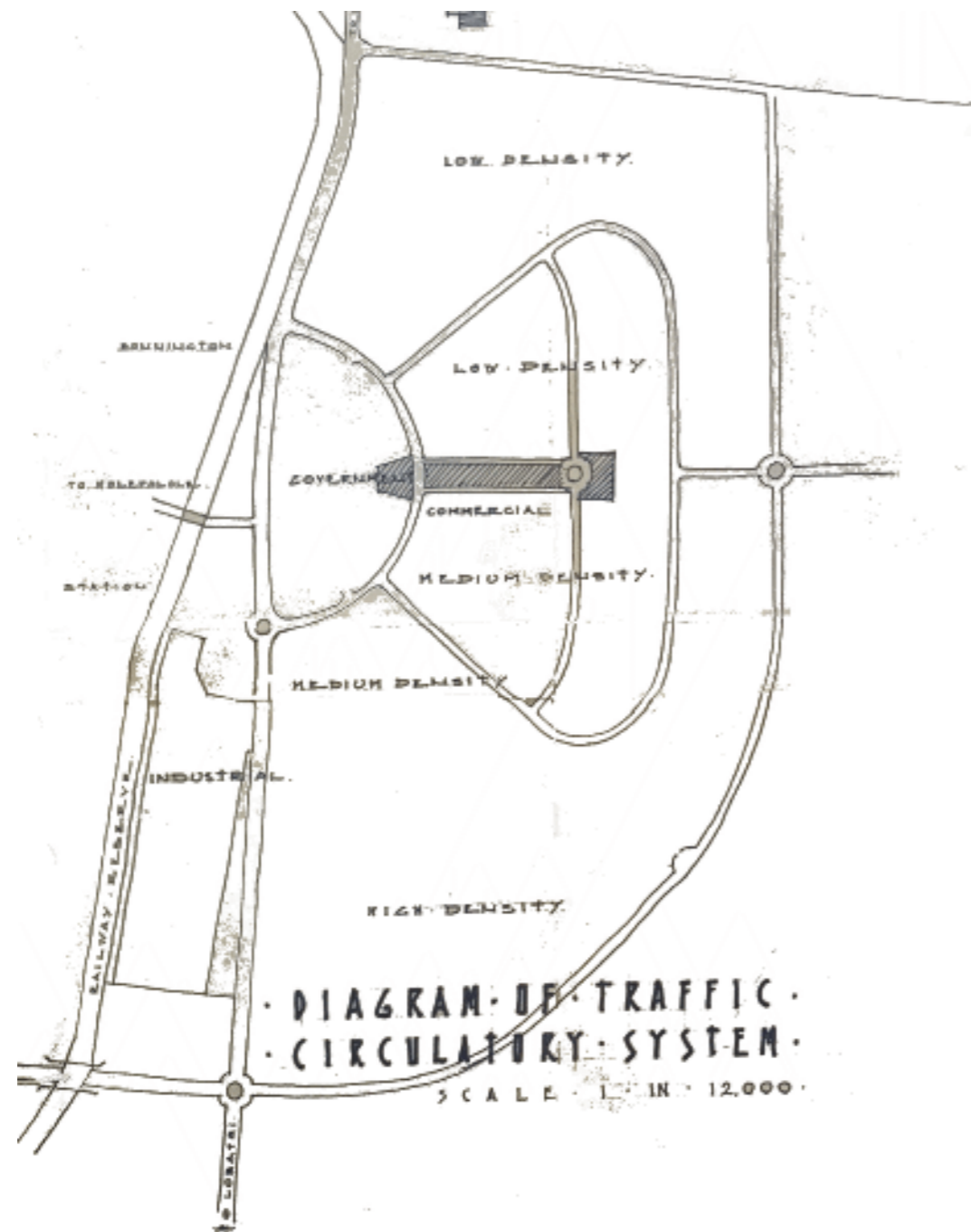


Figure 5.2: In the original masterplan for Gaborone, Main mall was the focal point.
Source: Botswana National Archives (2021)

5.2 BACKGROUND INFORMATION

Botswana's capital, Gaborone, lies in the South-East part of the country. It is about 15km away from the closest border with South Africa, Tlokweng Border Gate, and about 400km away from Francistown (the second capital of Botswana). The earliest Gaborone settlement dates back to the 1880s when it was part of a Batlokwa tribe settlement, and it is named after Kgosi Gaborone, the Batlokwa chief.

Gaborone became the capital of Botswana in 1965, taking over Bechuanaland Protectorate Administrative Centre Mafikeng in South Africa. The first Gaborone Masterplan was commissioned in 1963; construction of the new Capital commenced in 1964, just in time for the first Independence Celebrations of 1966 (Grant, 1995). Gaborone was envisioned as a postcolonial identity for Botswana, representing a unified nation (Mwale, 2017). Mwale argues that Gaborone's capital core (Main Mall precinct) provides an opportunity to explore identity debates. According to Grant (2010), Gaborone's heritage identity is attributed to the capital core, including the Parliament Building, Civic Center, and Main Mall.

According to Mwale, the history, culture, and everyday life of Gaborone's inner core make up its value as the heart of the country. Gaborone Development Plan (1997-2021) envisions the core precinct as a symbol of Botswana and its people. The precinct is thus positioned as of strategic and symbolic importance, a space where the government can make significant investments to create a distinctive image for the Capital. Thus, the government can realise the vision of making Gaborone a model city nationally and internationally.

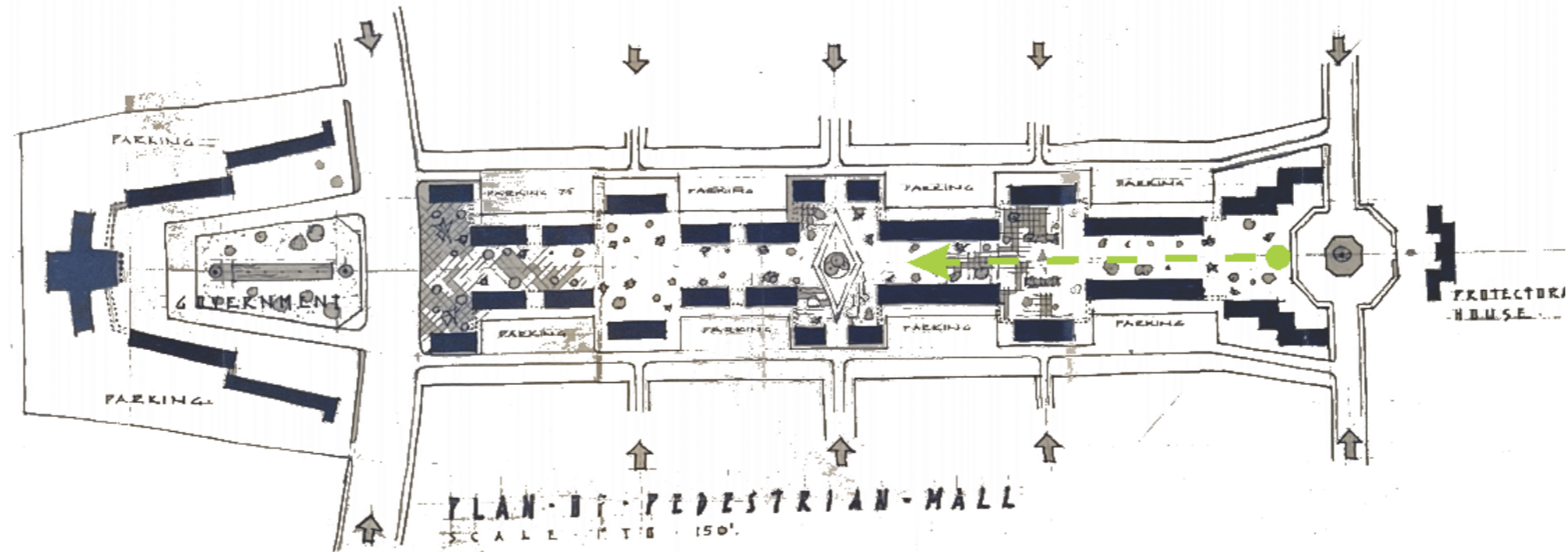


Figure 5.3: An original urban design framework of Main Mall precinct shows little variation to the existing. The traffic roundabout by the Civic Centre was never implemented as shown on the map.
 Source: Botswana National Archives (2021)

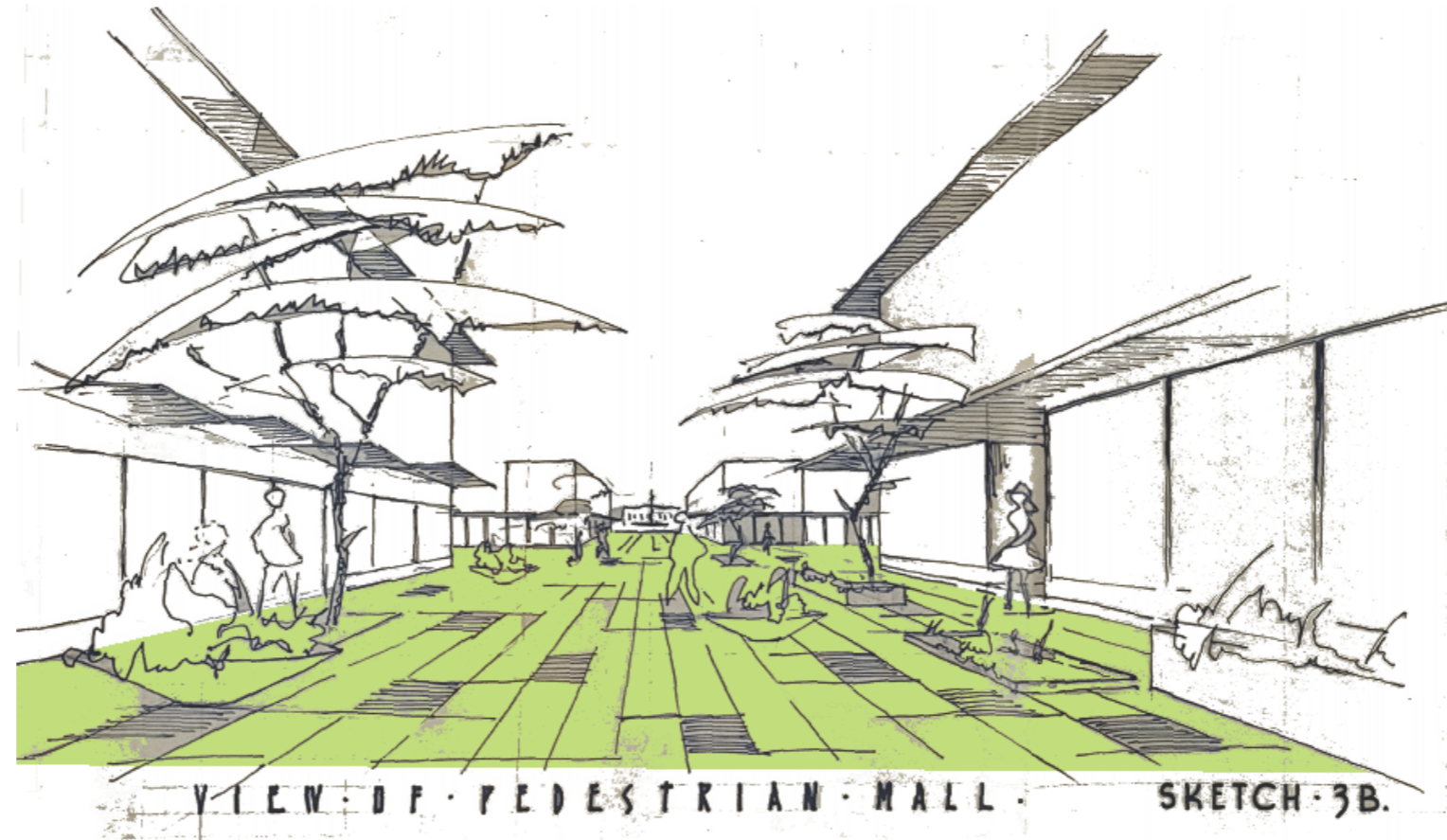


Figure 5.4: The Main Mall pedestrian spine and the public squares were designed to be open, organised with immaculate landscaping.
 Source: Botswana National Archives (2021)

5.3 HISTORICAL DEVELOPMENT TIMELINE

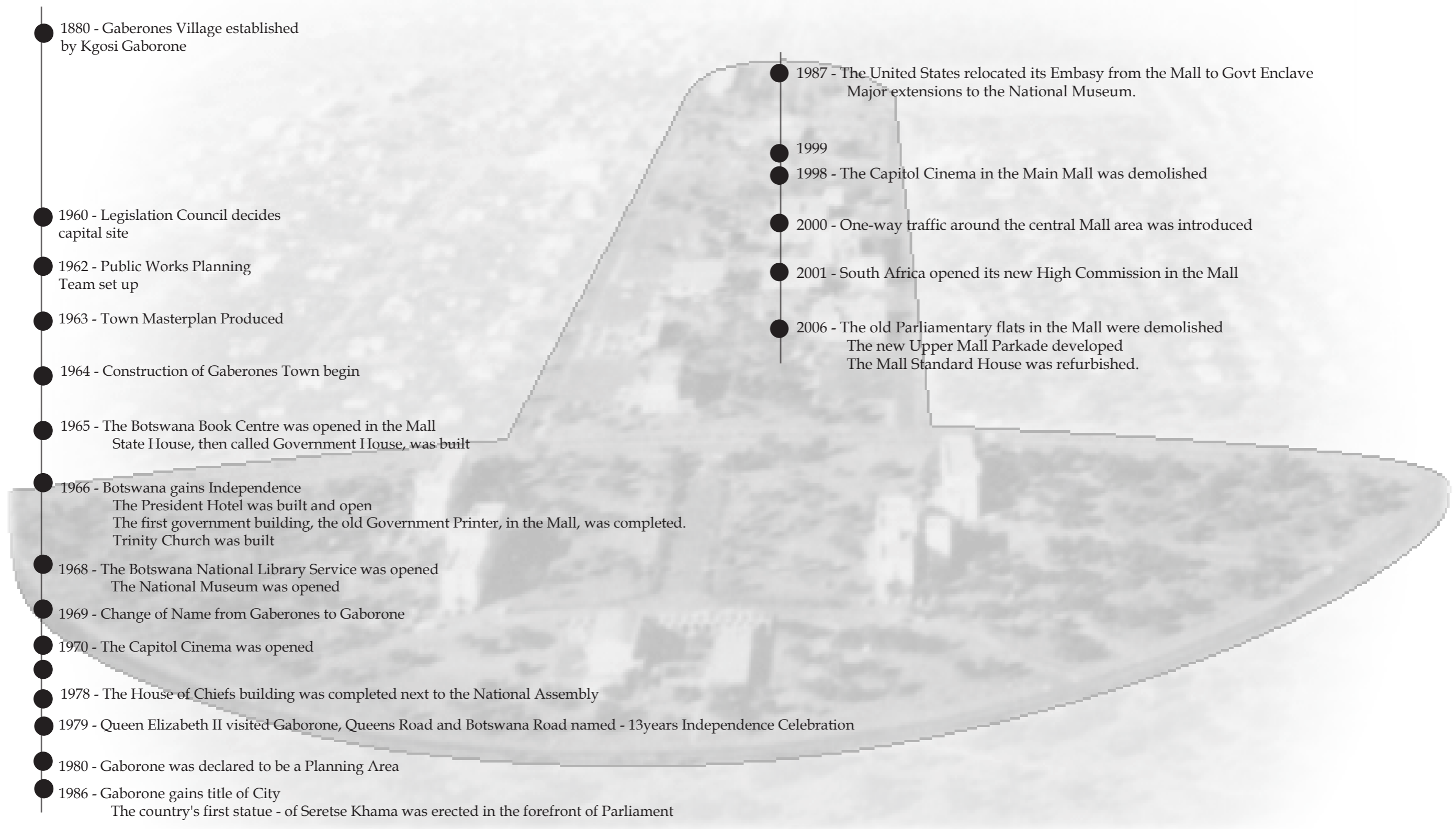


Figure 5.5: A Chronology of Gaborone Main Mall Development
Information source: Grant (2006)

5.4 SPATIAL EVOLUTION

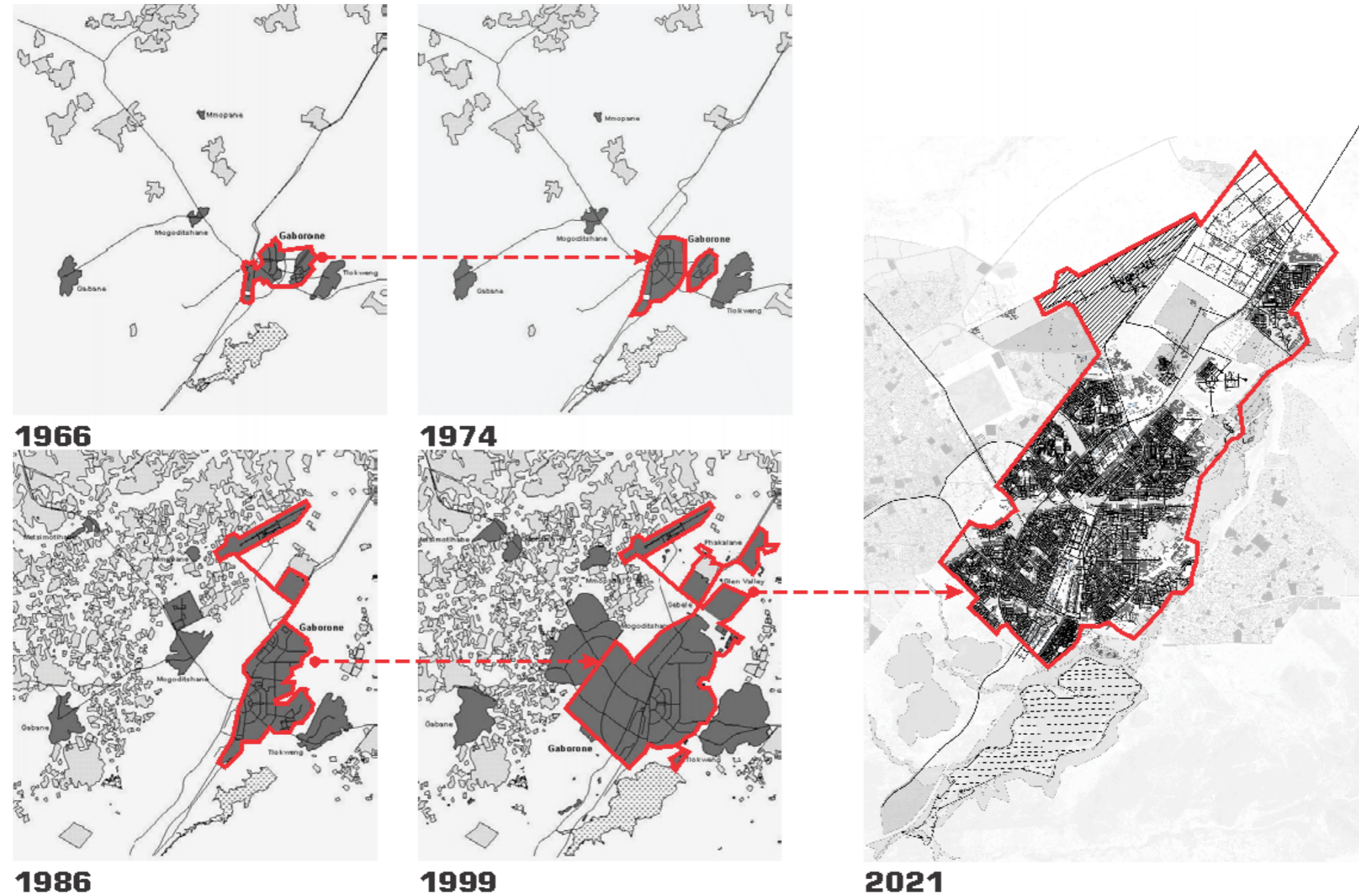


Figure 5.6: Gaborone's spatial transformation since 1966 depicted on a series of maps. The city was originally planned for 20000 inhabitants only. Gaborone has grown and sprawled beyond expectations over the years, exceeding the intended 20000 limit within 10 years, placing strain on infrastructure and facilities.

Source: Chalashika & Cavric (2004); GDP (1997-2021)

6.1 INTRODUCTION

Gaborone was created purposely to promote national identity and provide a tangible symbol of national pride for the nation, as well as a place for the administration of a modern economy by the country's political elite. It presented an opportunity to envision a new capital city where architecture and planning would contribute to creating a national identity and nuanced values of a diverse society (Mwale, 2017).

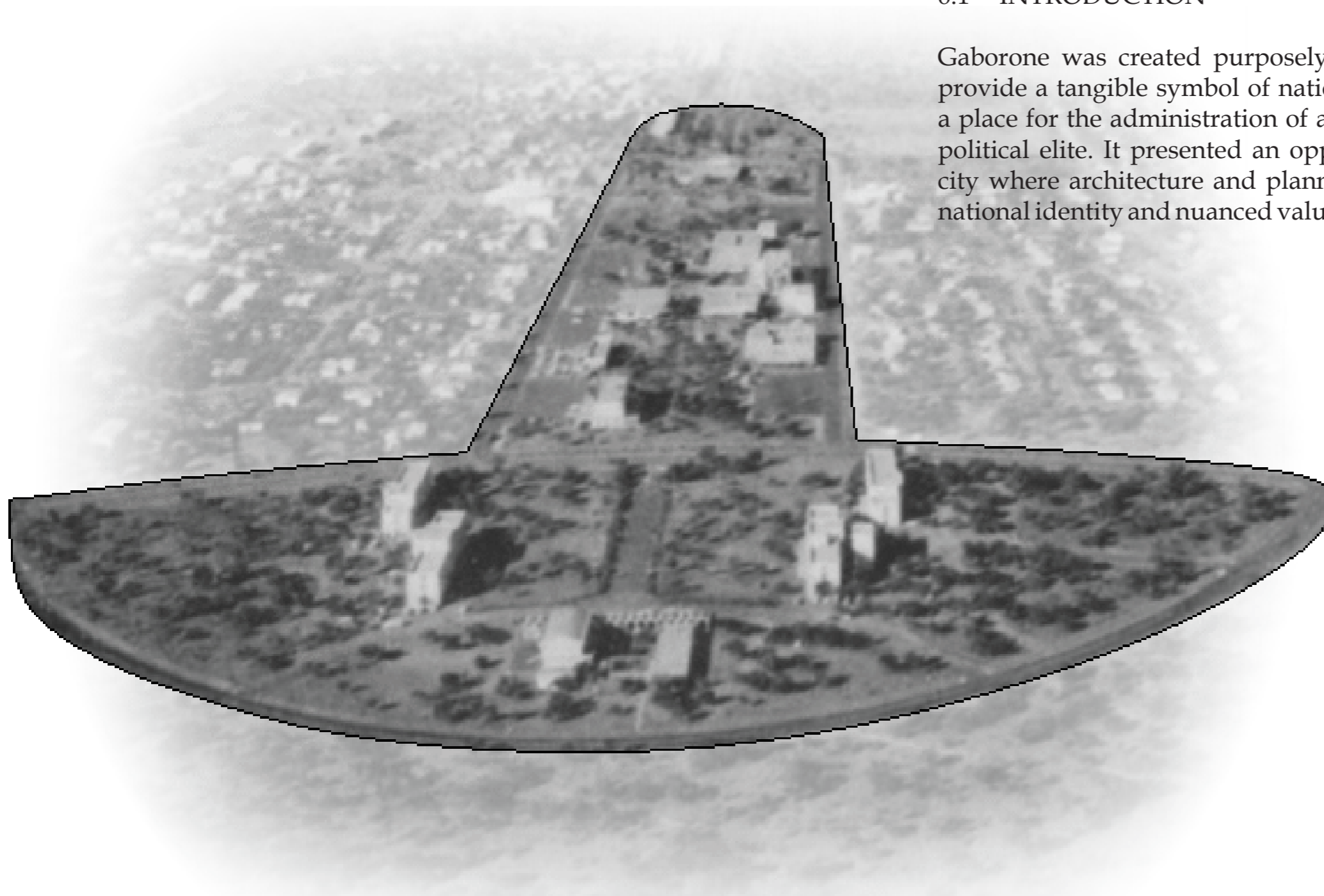


Figure 6.1: An old aerial photograph showing Gaborone City centre in 1966.
Source: Kutlwano Magazine online

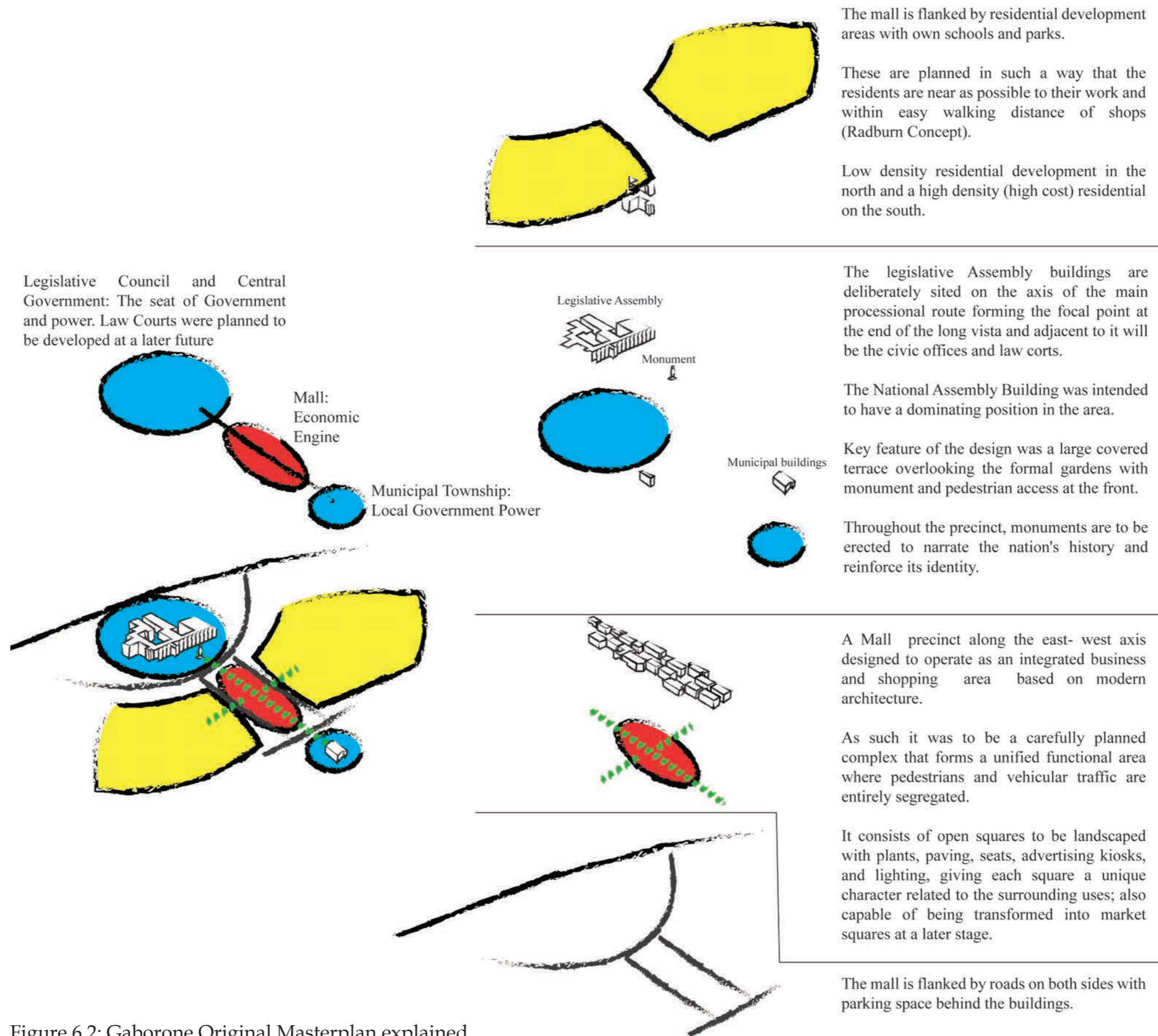


Figure 6.2: Gaborone Original Masterplan explained
Source: Author (2021)

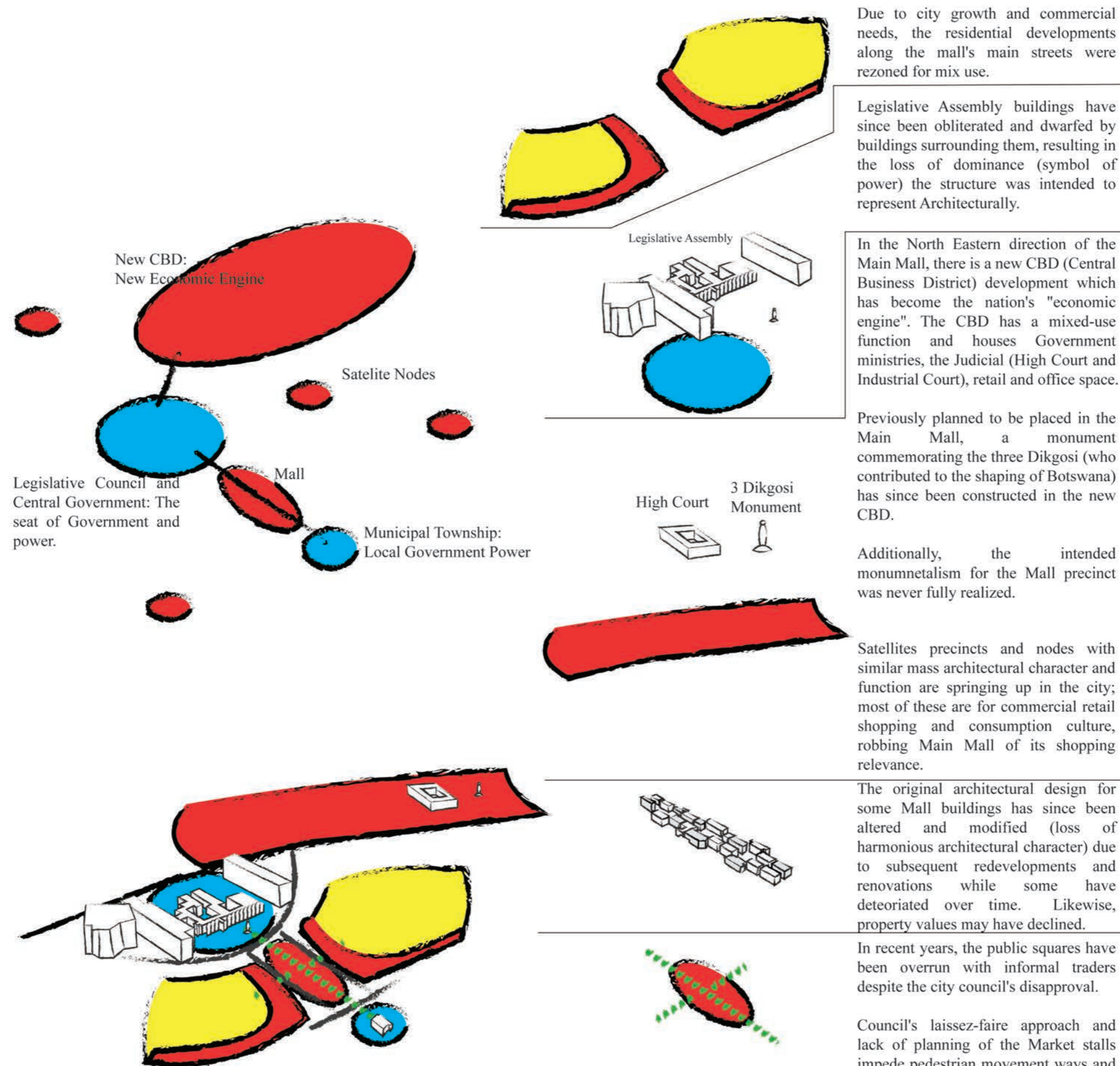


Figure 6.3: Changes to the Original Masterplan

Source: Author (2021)

Due to city growth and commercial needs, the residential developments along the mall's main streets were rezoned for mix use.

Legislative Assembly buildings have since been obliterated and dwarfed by buildings surrounding them, resulting in the loss of dominance (symbol of power) the structure was intended to represent Architecturally.

In the North Eastern direction of the Main Mall, there is a new CBD (Central Business District) development which has become the nation's "economic engine". The CBD has a mixed-use function and houses Government ministries, the Judicial (High Court and Industrial Court), retail and office space.

Previously planned to be placed in the Main Mall, a monument commemorating the three Dikgosi (who contributed to the shaping of Botswana) has since been constructed in the new CBD.

Additionally, the intended monumnetalism for the Mall precinct was never fully realized.

Satellites precincts and nodes with similar mass architectural character and function are springing up in the city; most of these are for commercial retail shopping and consumption culture, robbing Main Mall of its shopping relevance.

The original architectural design for some Mall buildings has since been altered and modified (loss of harmonious architectural character) due to subsequent redevelopments and renovations while some have deteriorated over time. Likewise, property values may have declined.

In recent years, the public squares have been overrun with informal traders despite the city council's disapproval.

Council's laissez-faire approach and lack of planning of the Market stalls impede pedestrian movement ways and intended mall aesthetics.

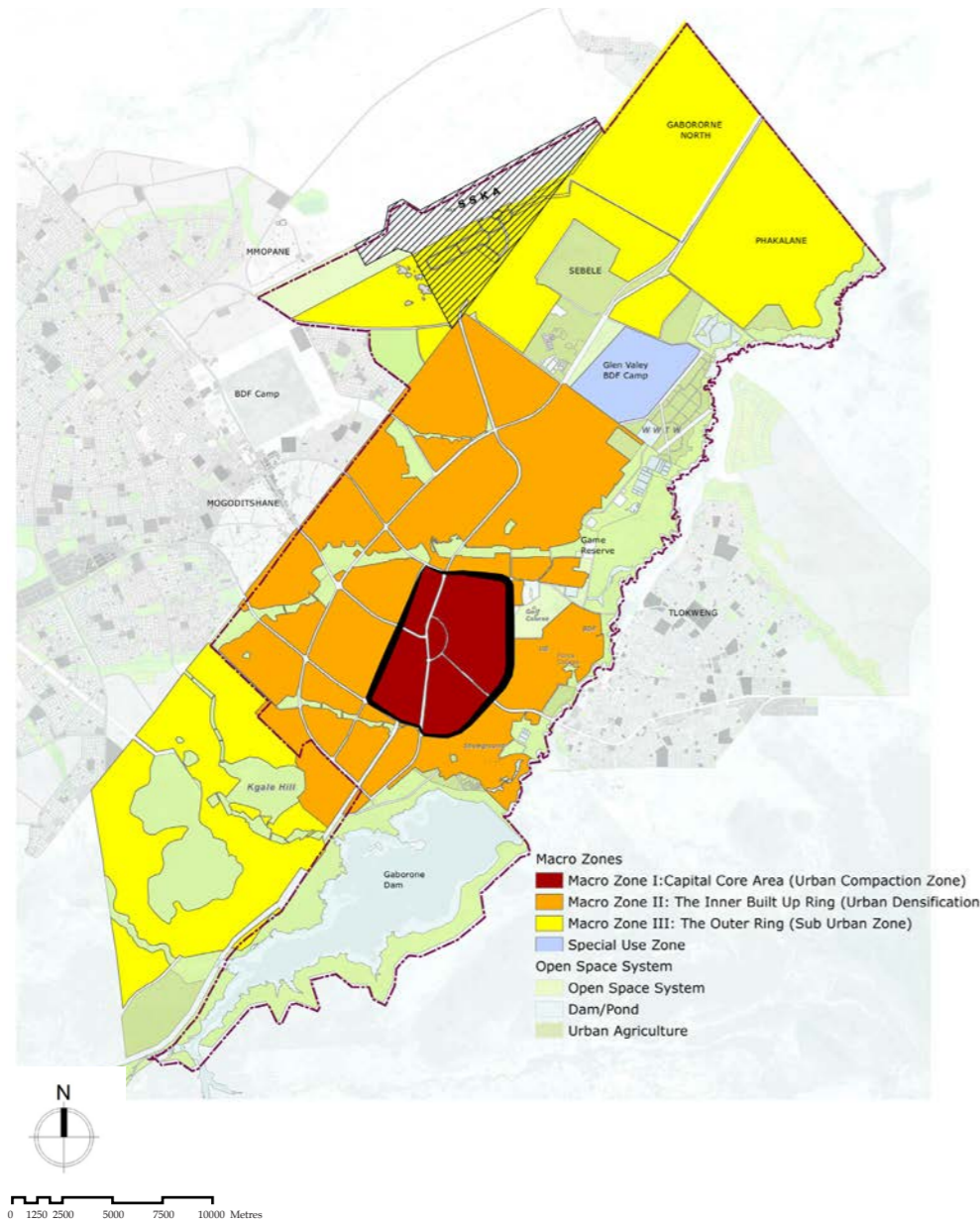


Figure 6.4: City Macro Zones

The city of Gaborone is divided into intensification zones. Focus area is located in Macro Zone I - Capital Core (Urban Compaction Zone). The density of land use should be highest in this zone.

Source: GCDP 2021 (redrawn by Author)

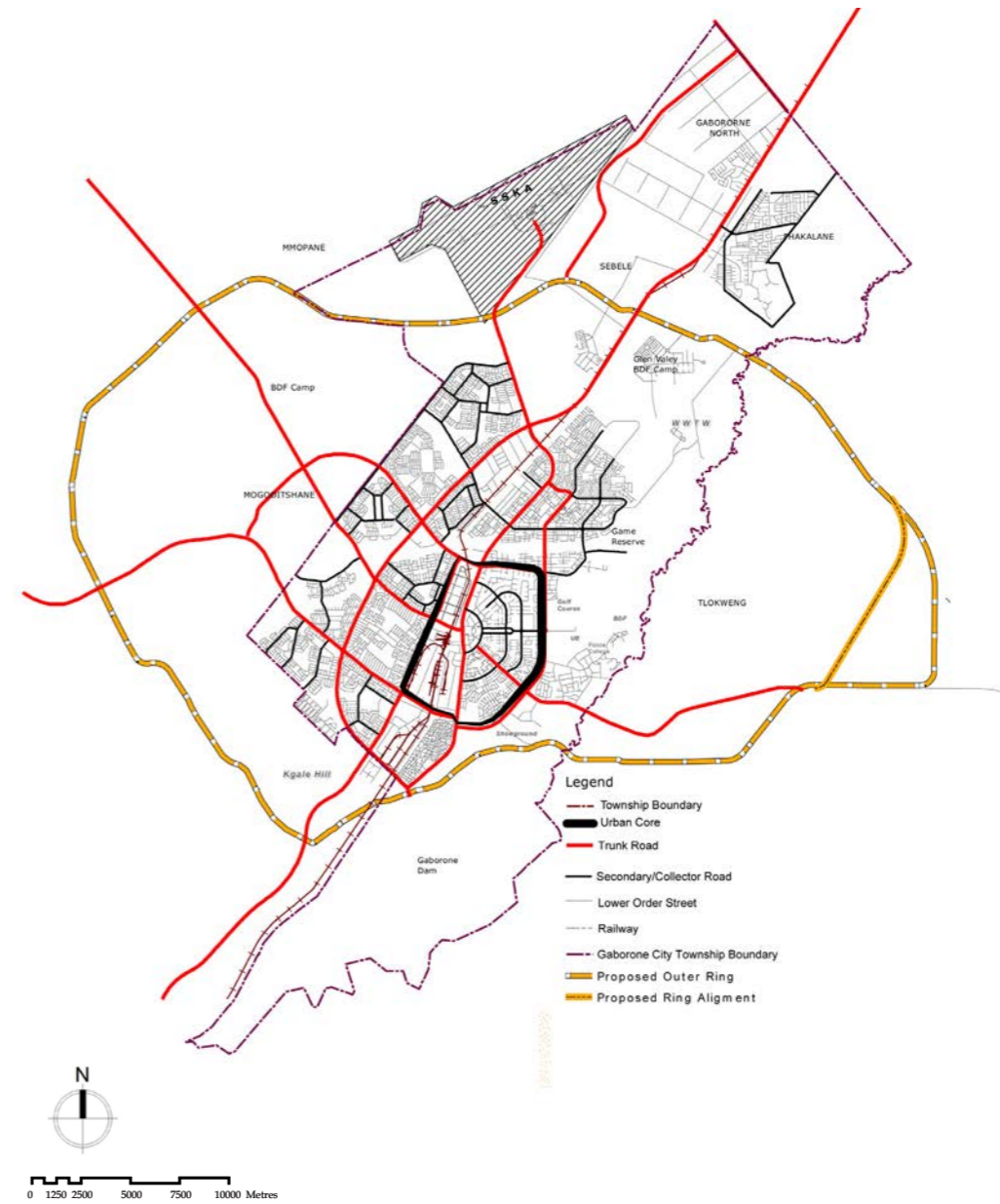


Figure 6.5: City Mobility Networks

Located in the city centre, the focus area is well connected to the rest of the city. Lack of integration of pedestrians leads to a mainly vehicle-dominated roadway system. Moreover, traffic congestion has led to increased transportation costs and travel times, especially in the core of the city.

Source: GCDP 2021 (redrawn by Author)

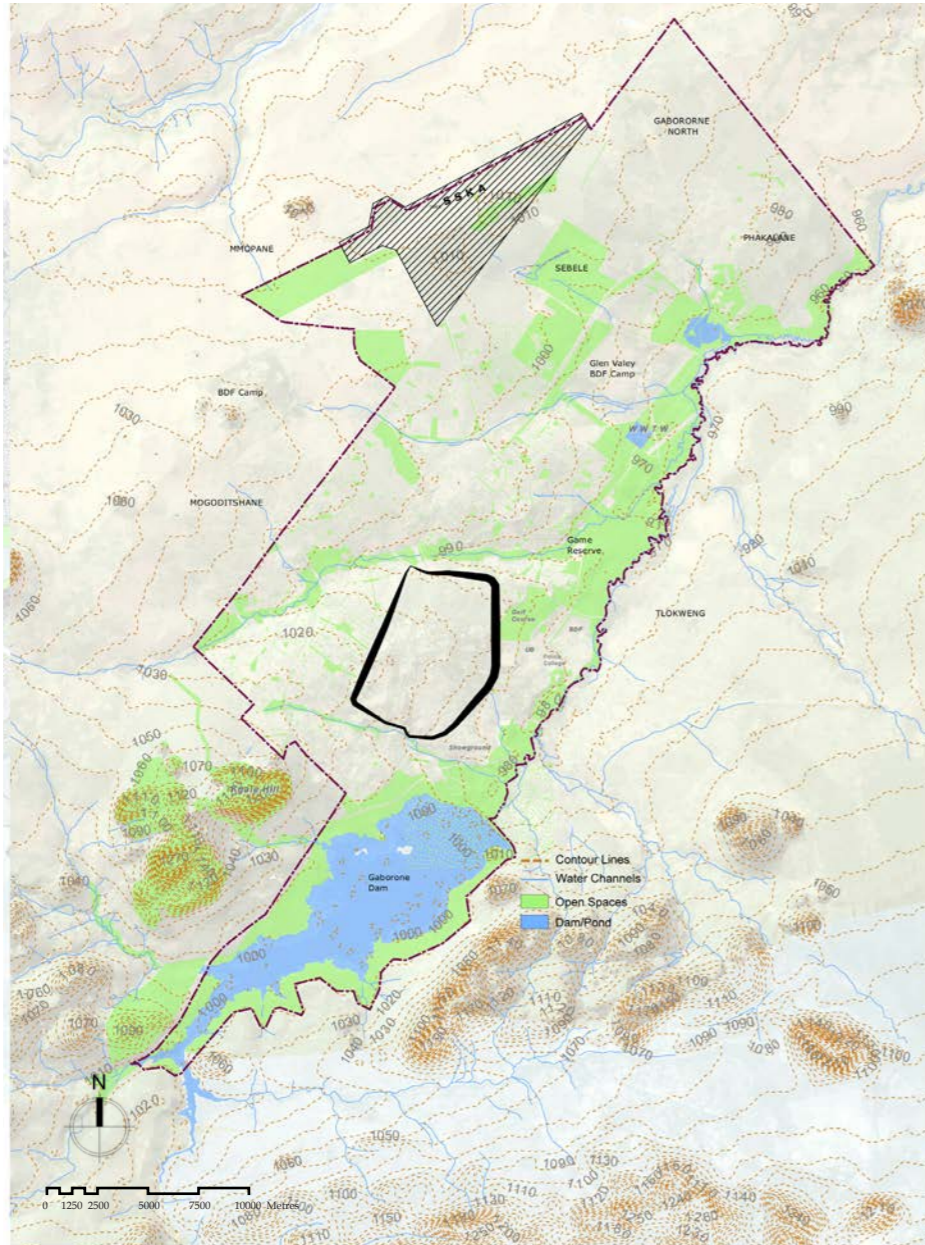


Figure 6.6: City Natural Environment

Gaborone sits at an altitude of 1010 meters. The terrain is flat with gentle slopes. The city is traversed by a few rivers that are poorly maintained. The city has not utilized its natural resources and urban sprawl has had a profound impact on the environment. It is important to integrate natural spaces within the Urban Core despite few environmental limits.

Map Source: GCDP 2021 (redrawn by Author)

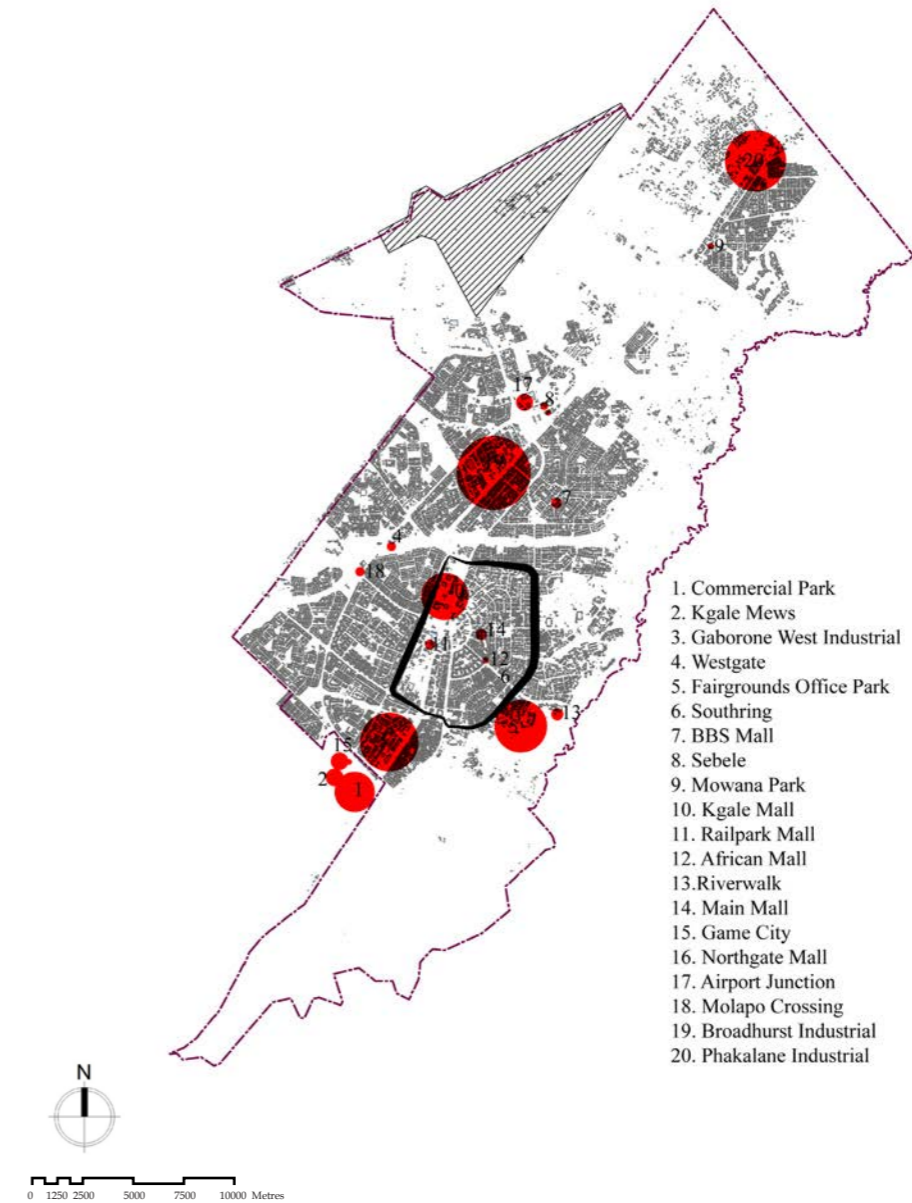


Figure 6.7: City Activity Centres

On this map, Main Mall has become spatially absorbed and almost insignificant. Main Mall was once the centre of economic activity in the city, but as new areas developed, it became less of a destination and more of a thoroughfare.

Source: NSP (2018) (redrawn by Author)

7.1 INTRODUCTION

The urban core is the most central part of Gaborone and where Main Mall is. It is the origin of the city and most government offices and institutions are located there. It is supposed to be the most dense and active part of Gaborone, but challenges such as decay/blight exist here as well. There are also possible opportunities the city can leverage in order to reverse decay. This chapter investigates and identifies the areas that are lacking and those that can be intervened at the Urban Core.



Figure 7.1: A collage depiction of what Gaborone Main Mall is about.
Source: Author (2021)

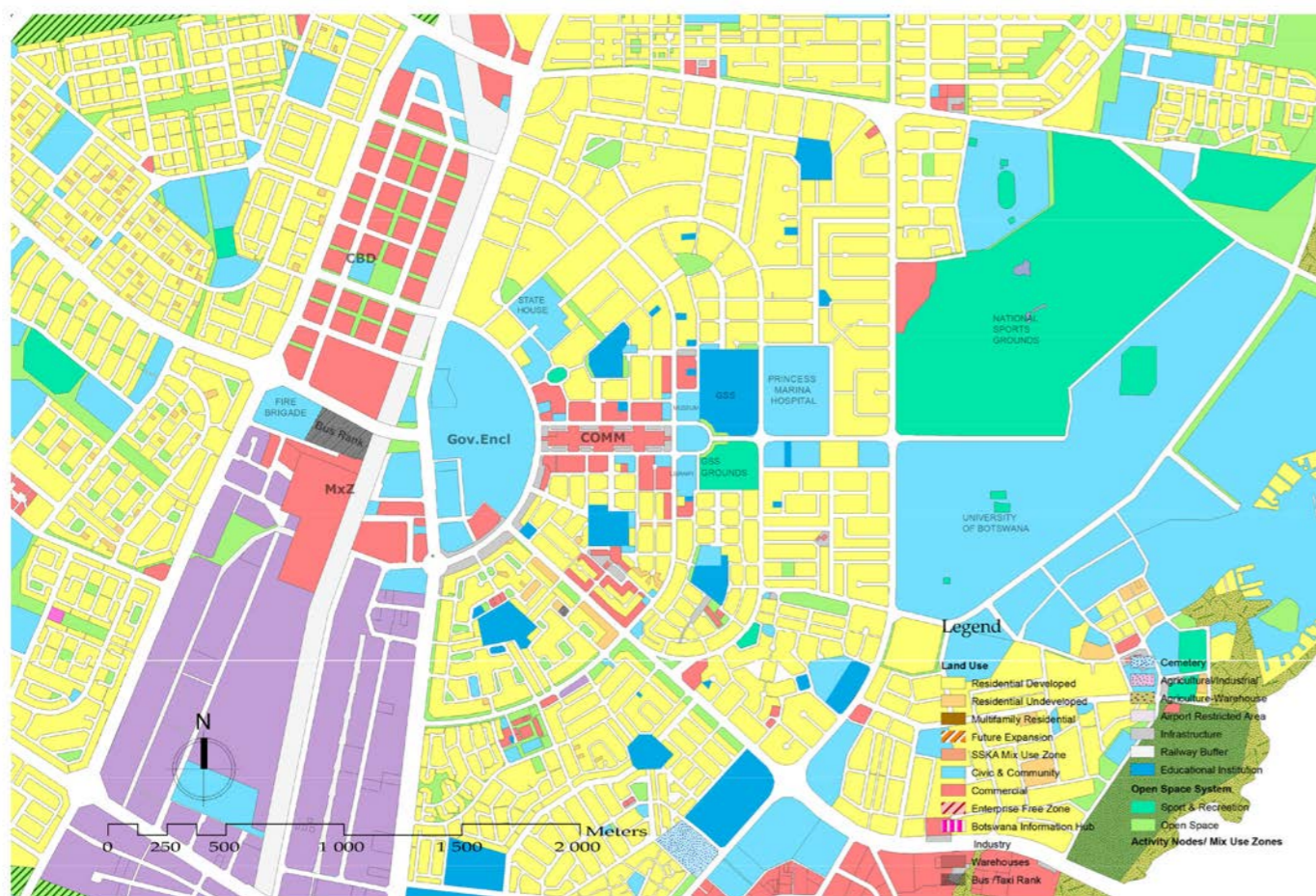


Figure 7.2: Urban Core Land Use

The primary land use within the urban core consists of residential activities separated from other uses. A consequence of the separation of activities in the urban core is that activity centres such as the Main Mall do not have a vibrant night-life.

Source: GCDP 2021 (Redrawn by author)



Figure 7.3: Urban Core Grain

The Gaborone Planning Area Development Plan has identified the Urban Core area as an Urban Compaction Zone. As shown above, the grain is mostly fine to medium in size, which represents a low density. Several single-family residential developments are located within the focus area. Despite the low-density character of the focus area, further intensification is possible.

Source: Author (2021)

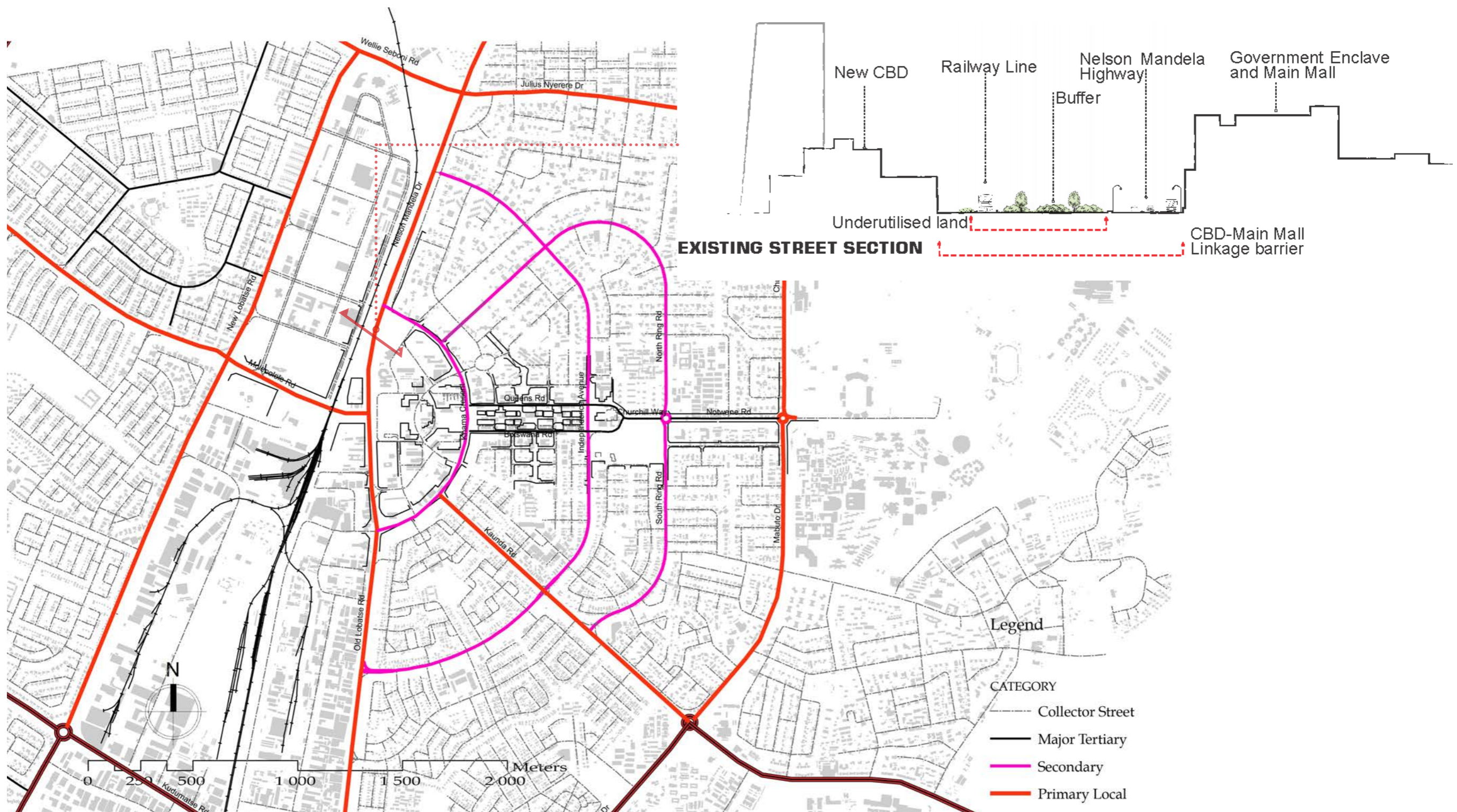


Figure 7.4: Urban Core Mobility Networks

The urban core is characterized by a major road (Nelson Mandela Road) west of the Main Mall, along with a rail line that serves freight and passenger trains. Highway and railway line restricts pedestrians movement between the west and east ends of the urban core, and especially between the new Central Business District and Main Mall.

Map Source: Author

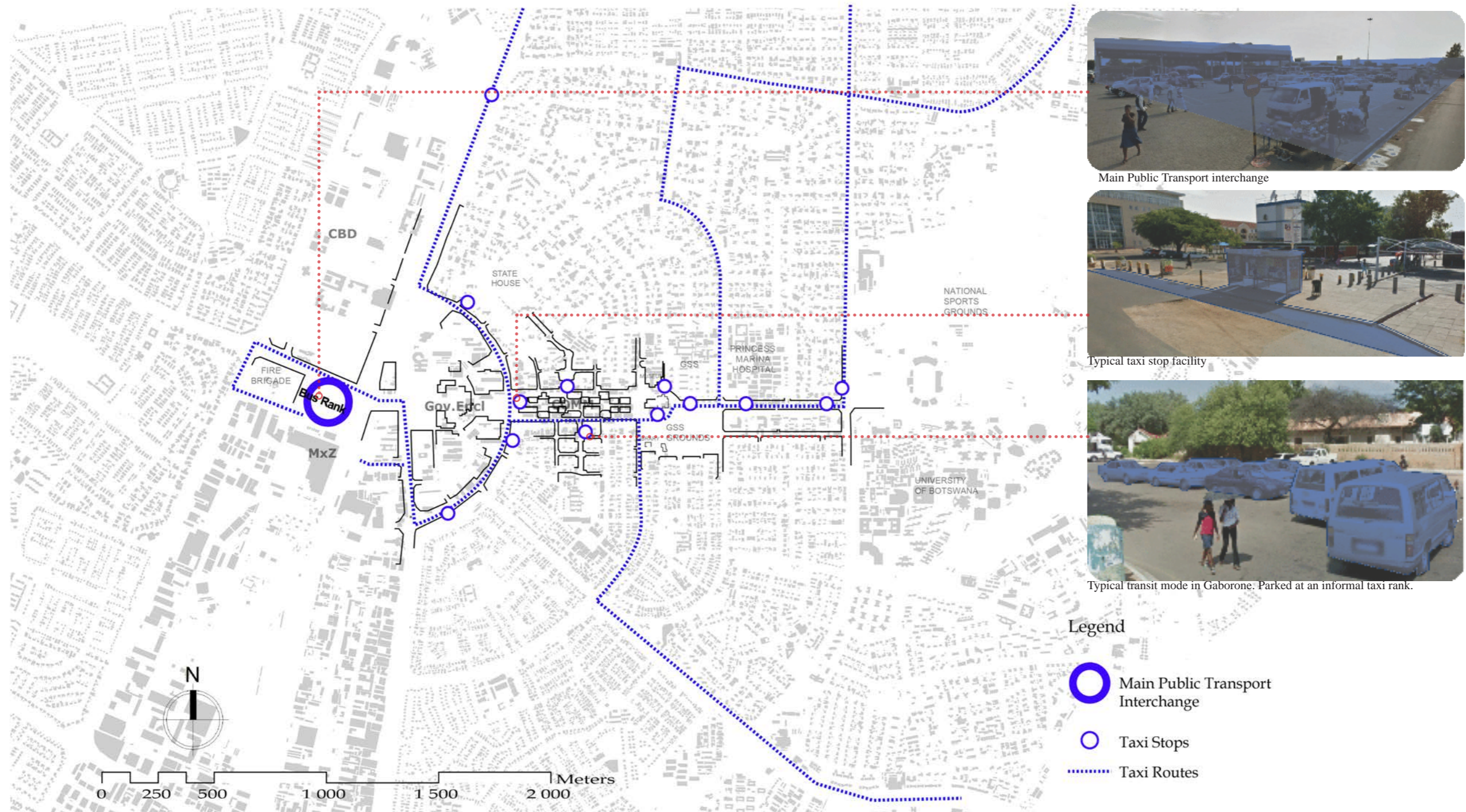


Figure 7.5: Urban Core Public Transportation System

The urban core is well serviced in terms of public transportation system. The majority of taxis pass through the Main Mall area before they head to the public transportation interchange. Due to the unreliability of taxis, most people prefer to use their private vehicles instead, contributing to traffic congestion in the city.

Source: Author (2021)

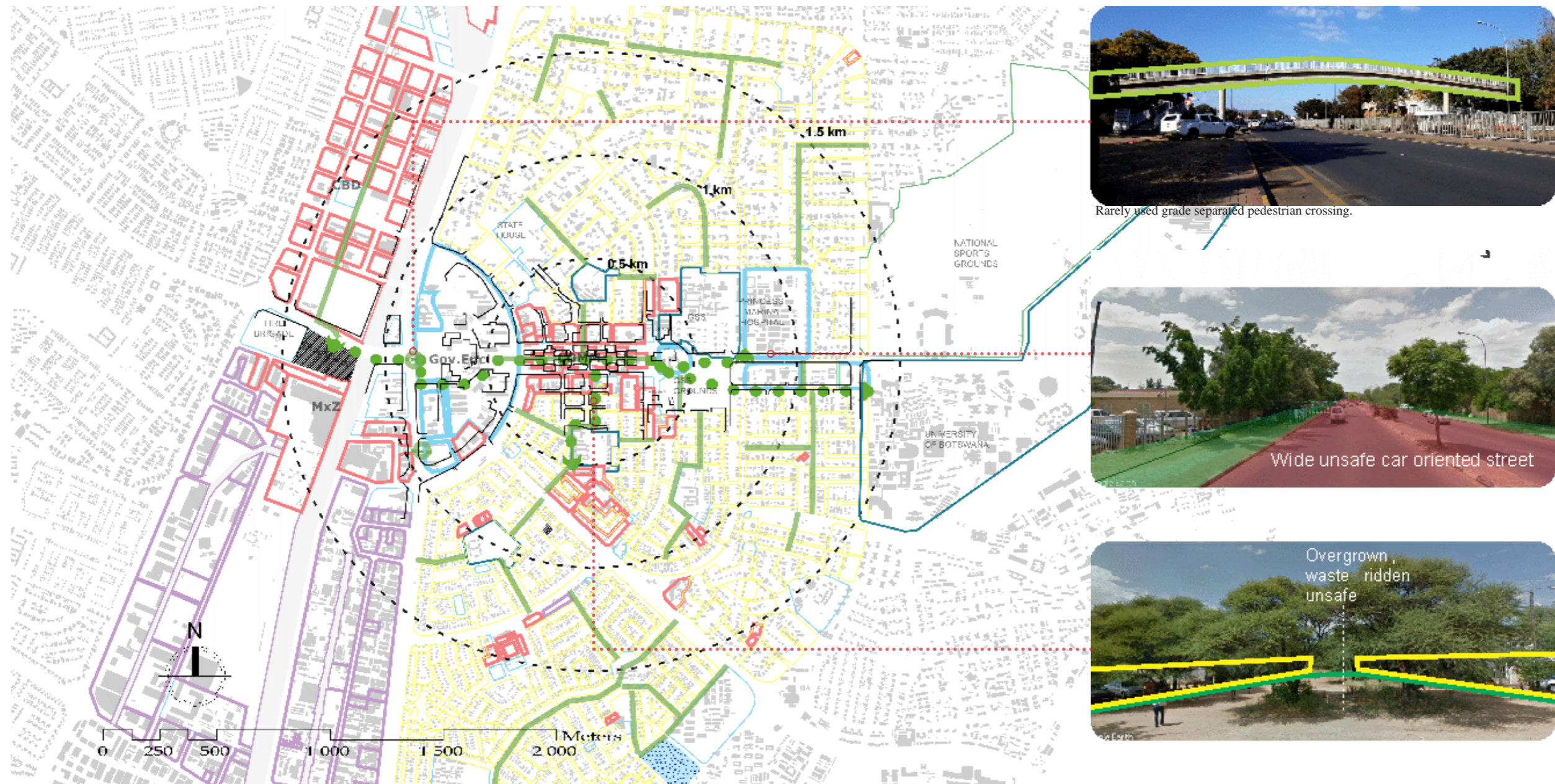


Figure 7.6: Urban Core Walkability

The map above shows the walkability radius. All major activity centres are within walking distance. Within the Urban Core, foot traffic is most frequented along the East-West axis, since most activity centres are linearly located along the Main Mall. Thus, the area offers an opportunity for pedestrian facility development and mix use intensification to make it more convenient for pedestrians.

Source: Author (2021)

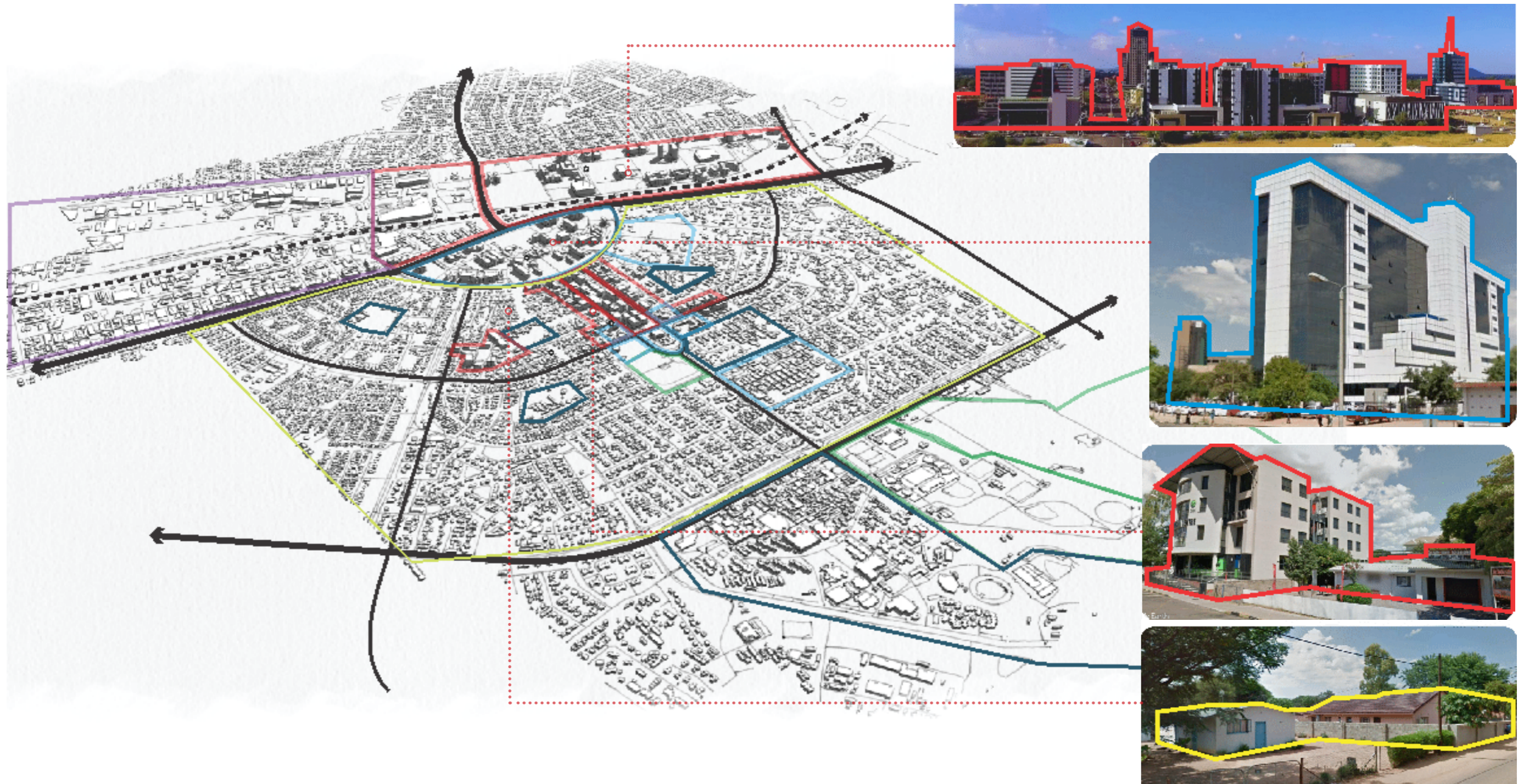


Figure 7.7: Urban Core Building Massing

Generally, the entire development of the urban core is low density. Building structures are mostly single storey, and there are underutilized parcels of land. This would provide an opportunity for vertical intensification by introducing more high-rise multi-use structures to curb sprawl in the city.

Source: Author (2021)

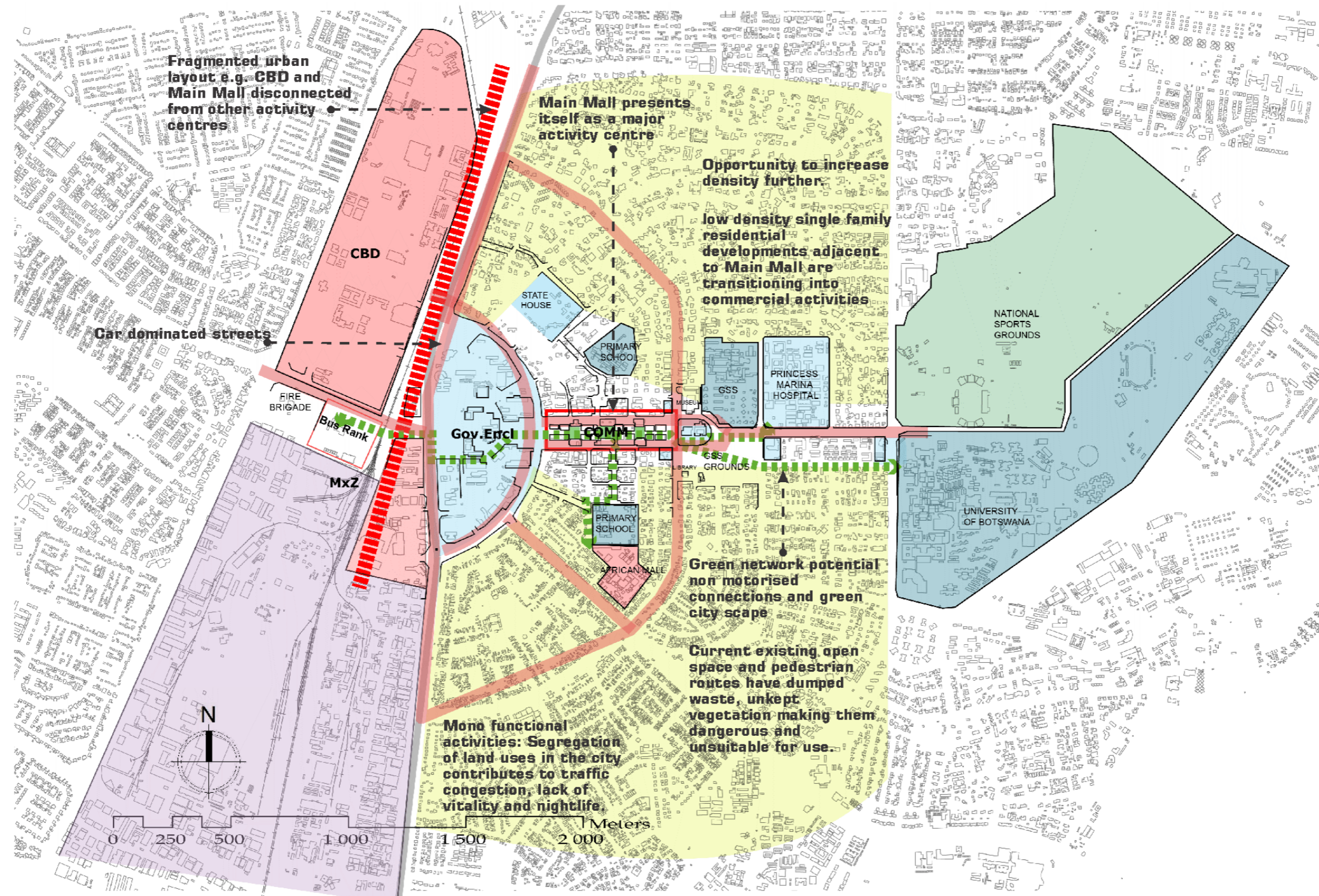


Figure 7.8: Urban Core Opportunities and Constraints
 Source: Author (2021)



Figure 8.1: Urban Core Design Informants
Source: Author (2021)

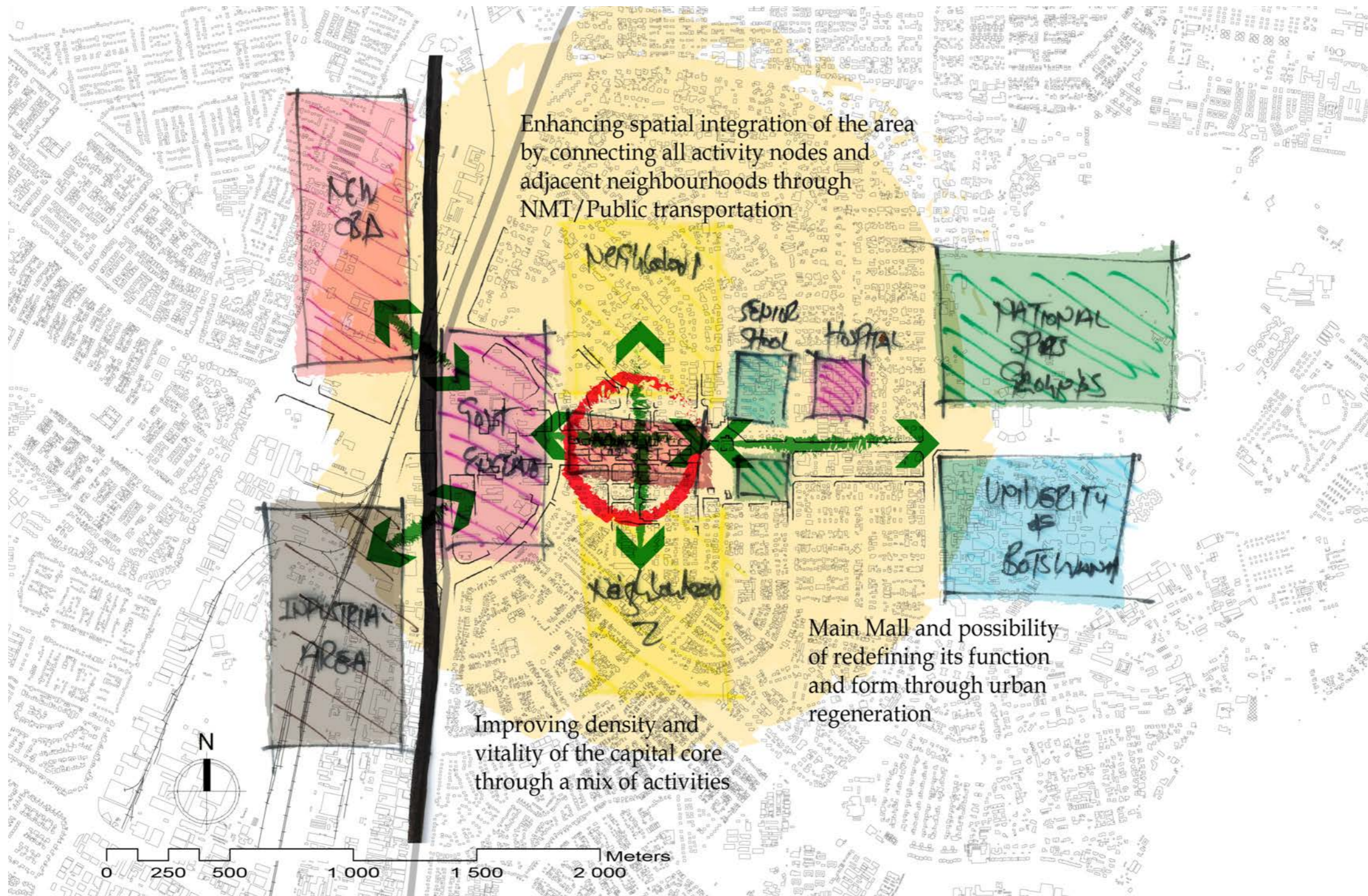


Figure 8.2: Conceptualization at Urban Core
 Source: Author (2021)

8.1 UNPACKING DESIGN PRINCIPLES AND STRATEGIES AT URBAN CORE

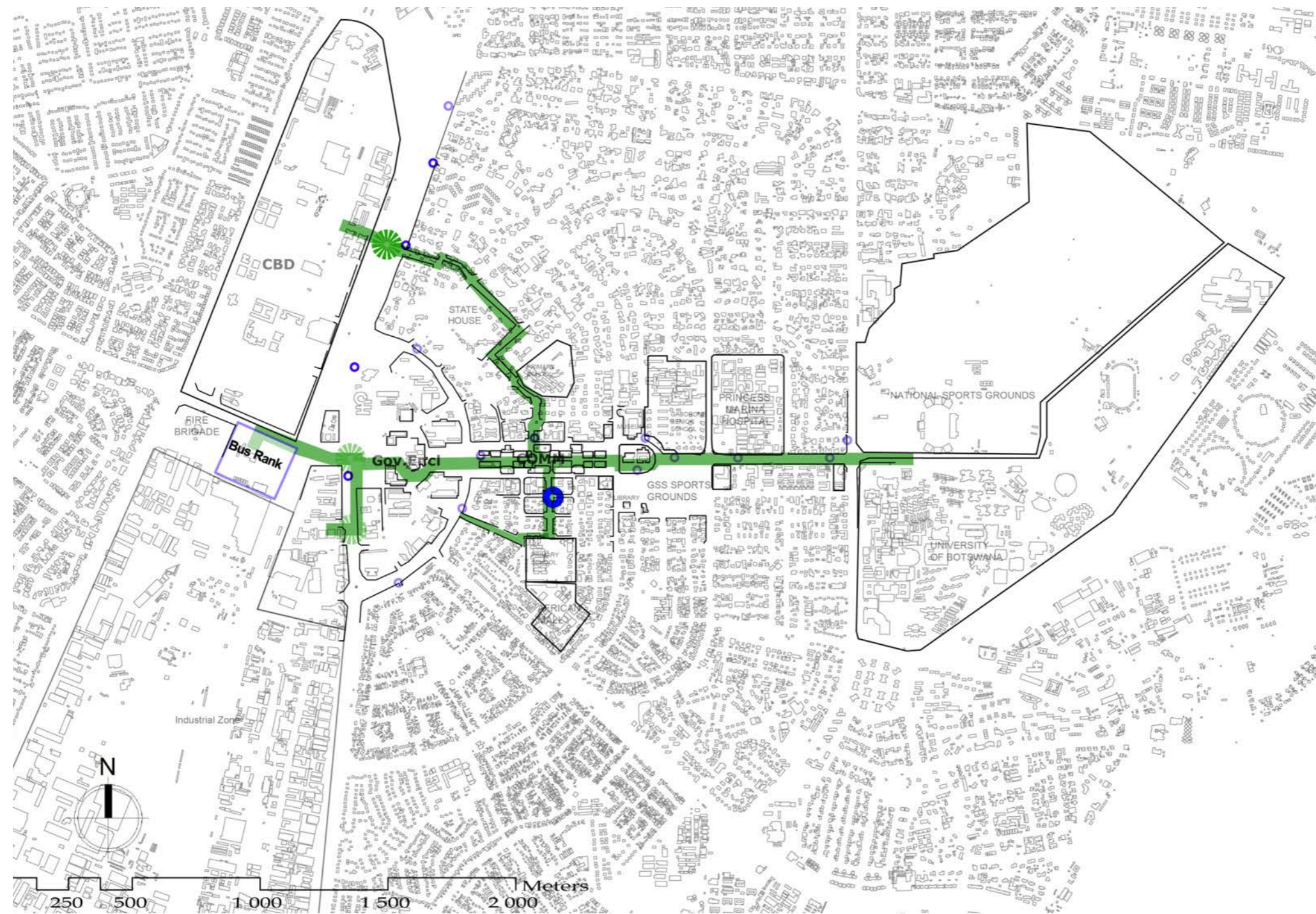


Figure 8.3: Enhance Connections and Accessibility

Transportation networks such as roads and paths determine how well people can access their destinations. By making local trips more convenient and enjoyable on foot makes it easy for pedestrians to reach key destinations and discourages car dependency. Strategies to be employed;

- Develop a network of Non Motorised Routes - multi use/active linear park
 - recreational facilities; overlooking buildings; landscaping; pedestrian/cycle ways; lighting and outdoor furniture.
- Narrow roadway Safe pedestrian crossings
- Mini Public transit Facility (formalise existing one)
- Increase public transit stops

Source: Author (2021)



Figure 8.4: Enhance Integration and Sense of Place

Through urban regeneration of an area, reclaimed social, economic, physical, and environmental assets are repurposed into opportunities to enhance urban development and quality of life. Strategies to be employed;

- Improve coherence and legibility of the street (repair fragmented urban fabric)
 - Improve building conditions/façades and street edge/frontage; human scaled
 - Develop Streets as multi use/shared spaces (places of celebration and interaction)
 - Pedestrian/ public transport oriented developments
 - Preserve and enhance existing landmarks.
 - Move the railway to subsurface and transform Nelson Mandela Highway into a Transit corridor/ Multi-way boulevard
 - Upgrade GSS sports grounds into multi-purpose/shared facility

Map Source: Author



Figure 8.5: Improve Urban Vitality

By increasing density and mix-use development, activating public spaces and ensuring public facilities will be within walking distance of residents, enhancing viability of public services. Strategies to be employed;

- Increase density
 - Reclaim railway line surface land for high density developments
 - Redevelop identified underutilised land
 - Introduce Mixed Use developments (live-work-play)
 - ground floor commercial spaces; higher levels residential developments
 - Student Housing
- Encourage small and informal enterprise activities within public spaces

Map Source: Author

8.2 URBAN REGENERATION FRAMEWORK AT URBAN CORE

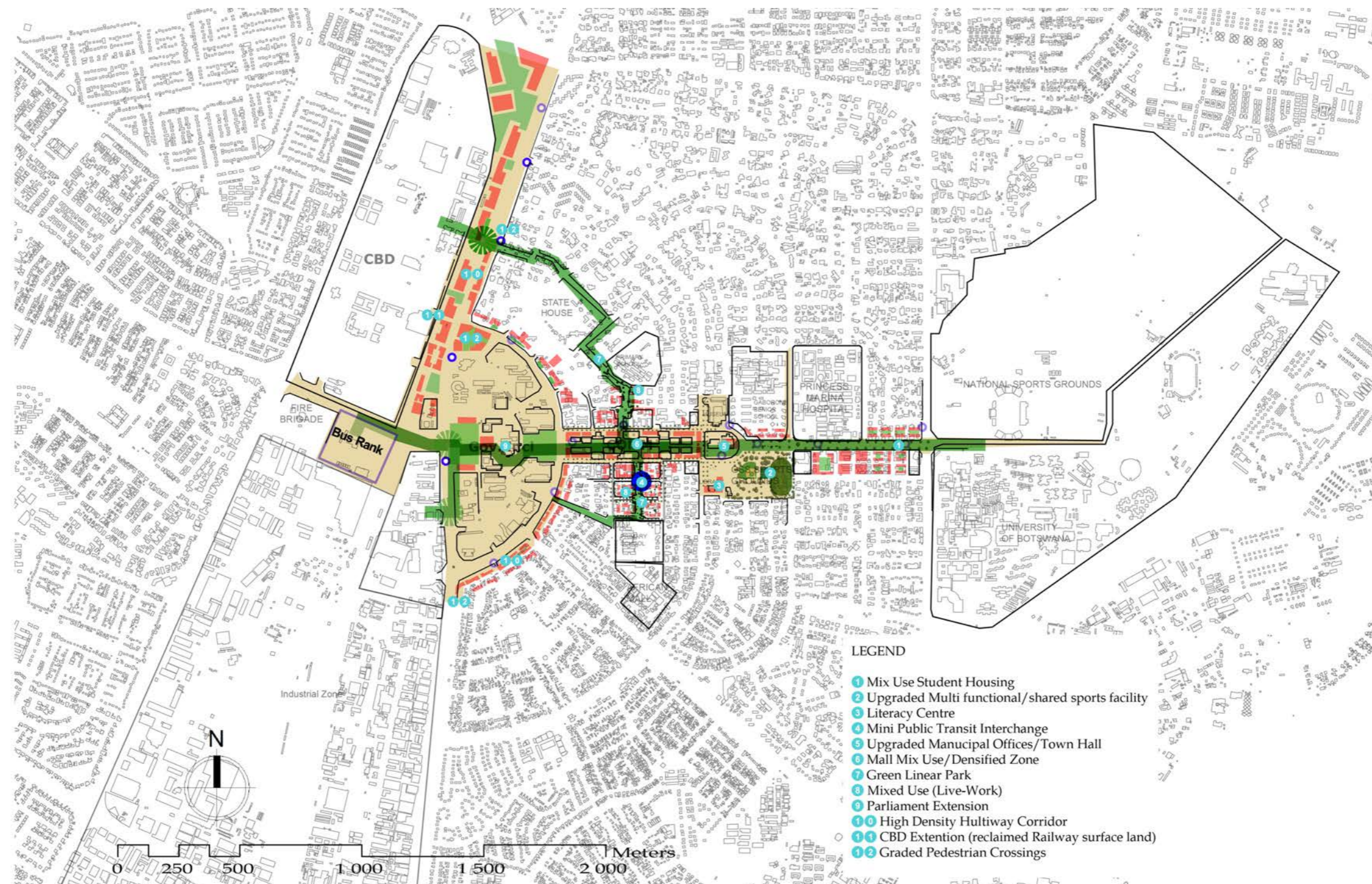


Figure 8.6 : A composite Urban Core Regeneration Framework showing proposed projects.

Source: Author (2021)

8.3 FOCUS AREA

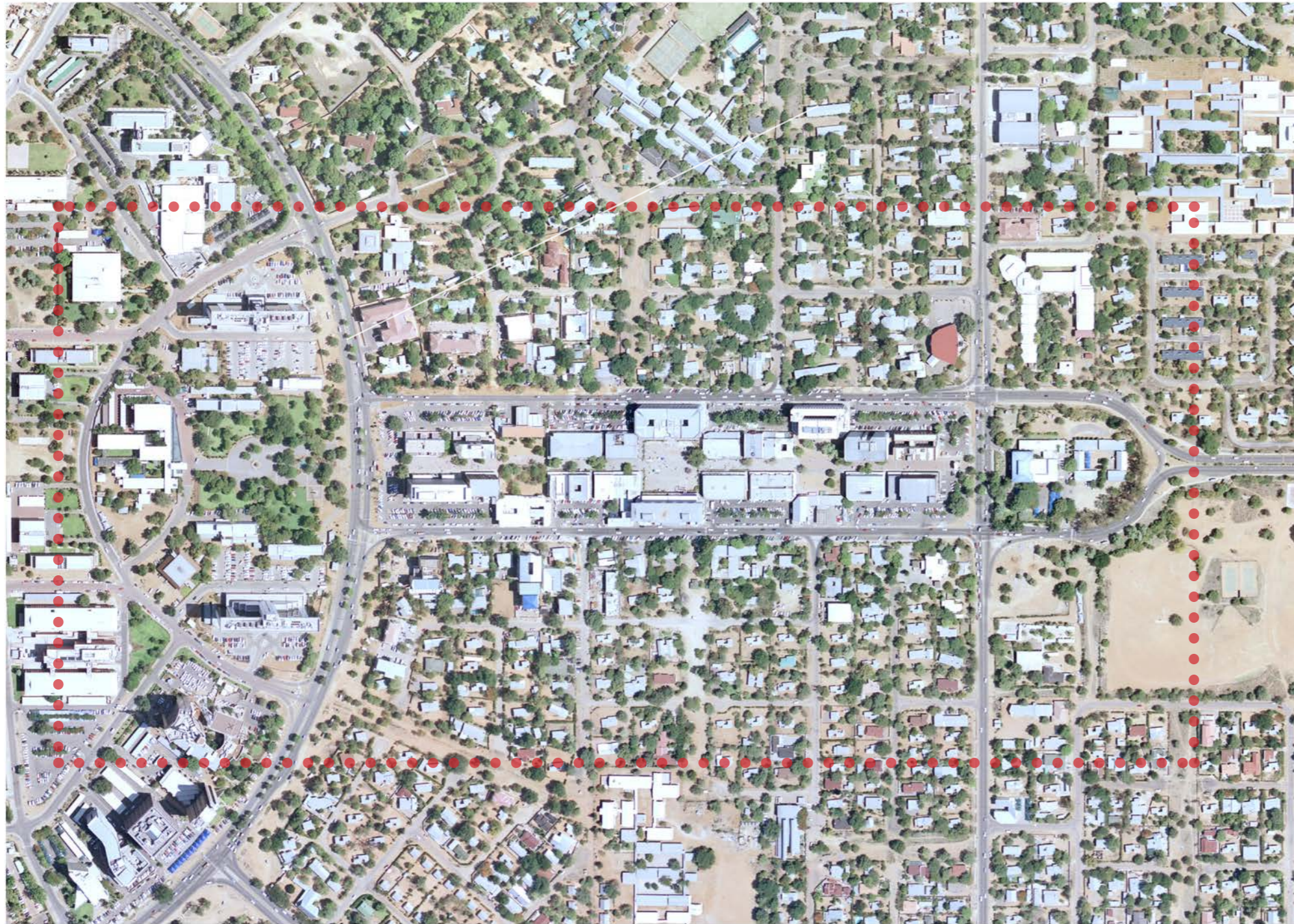


Figure 8.7: Regeneration Focus Area - Main Mall
Source: GCDP (2021)

8.4 UNDERSTANDING MAIN MALL PRECINCT

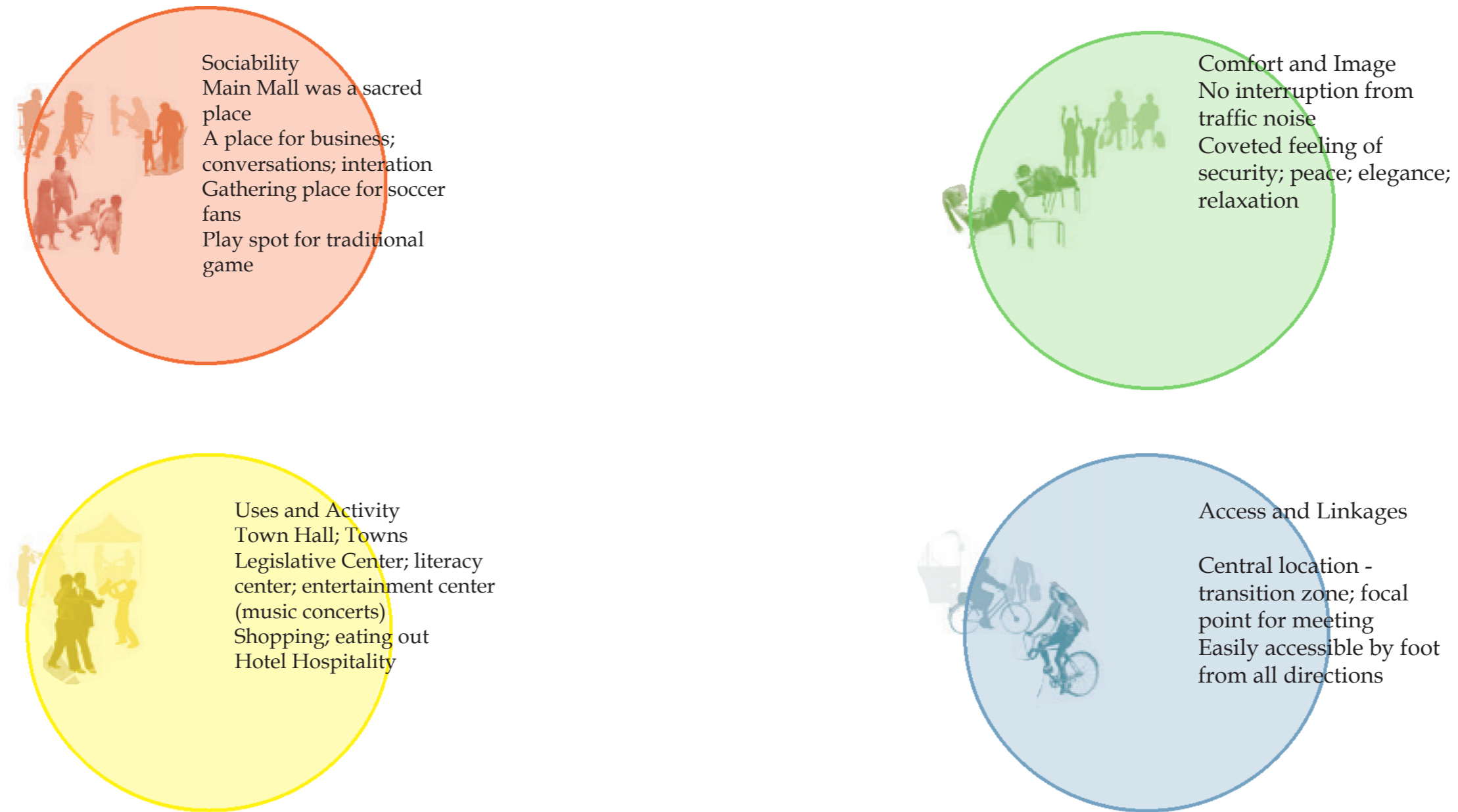
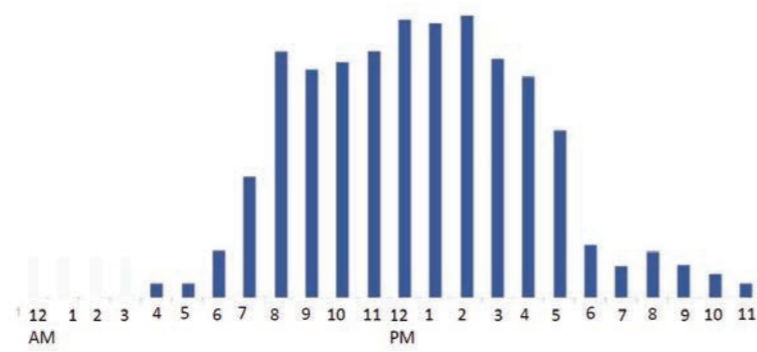


Figure 8.8: Memory of Place

Based on respondents' memories of the Main Mall, here are some elements that made it what it was in the past. In the past Main Mall possessed all four qualities considered essential to a great place by the Project for Public Spaces - sociable, variety, comfort and image, accessibility, and well connected. Therefore, the design intervention of this project shall strive to resurrect some of the elements and make the precinct great again.

Source: Author (2021)



A bar chart showing Main Mall traffic volumes at different time of the day.
Source: Moikabi (2016)

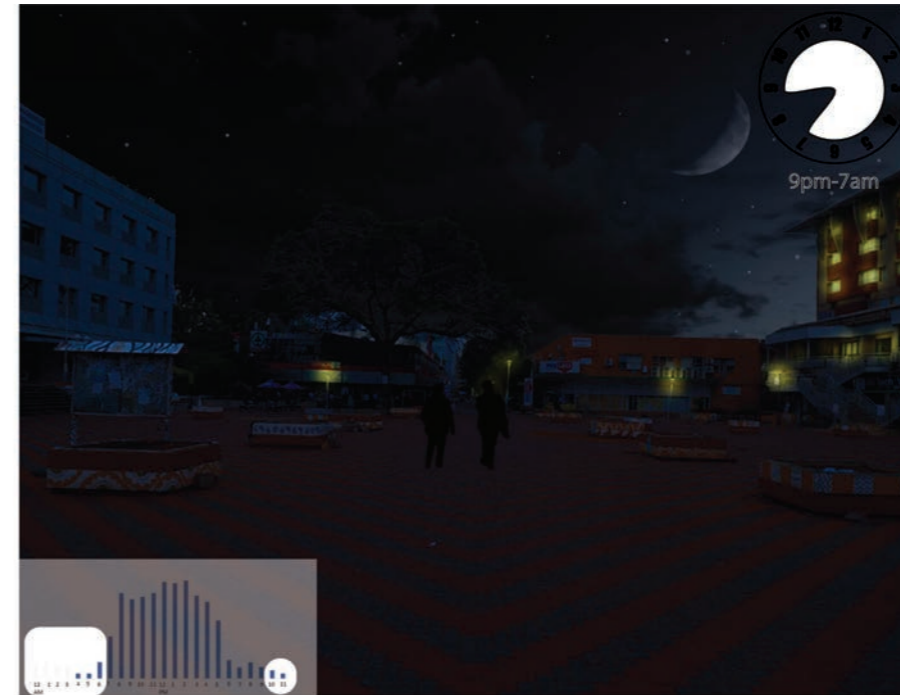
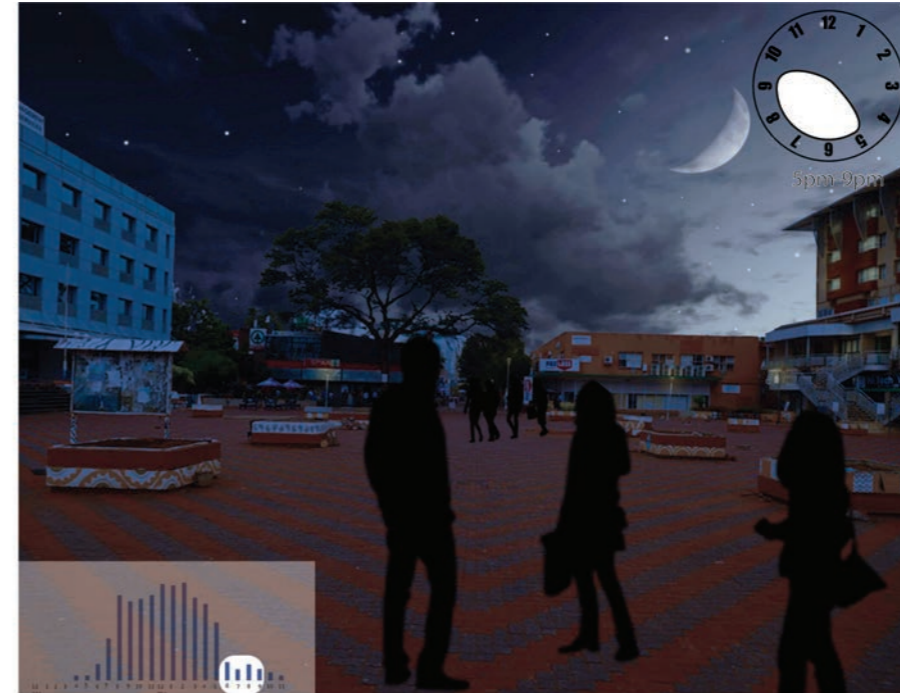


Figure 8.9: Mall Pedestrian traffic Volumes throughout the day
The level of activity at Main Mall at different times of the day. During the day, the Main Mall is usually crowded, but the activity and pedestrian traffic slows down towards the evening and quickly ceases at night. There is a need for activation beyond the day to sustain vitality throughout.
Source: Author (2021)

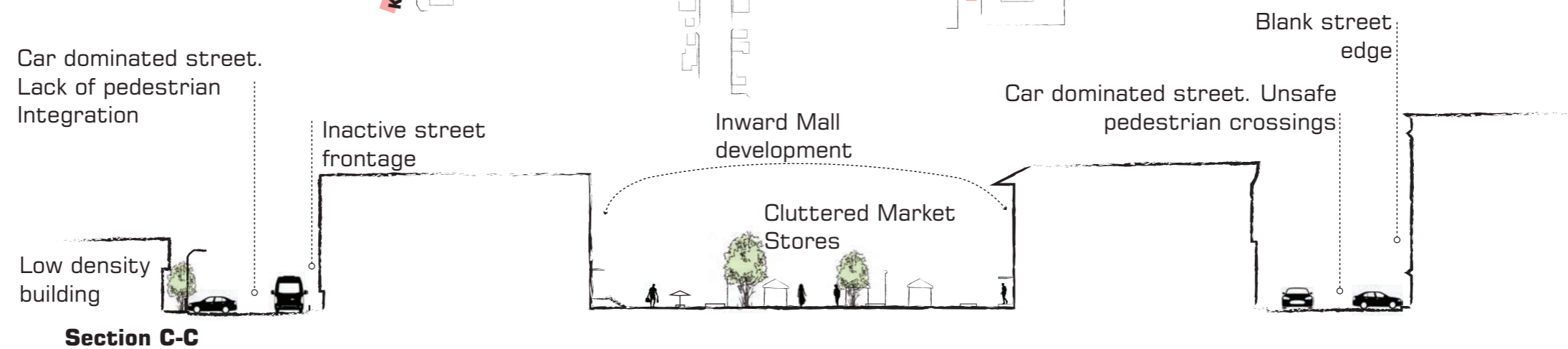
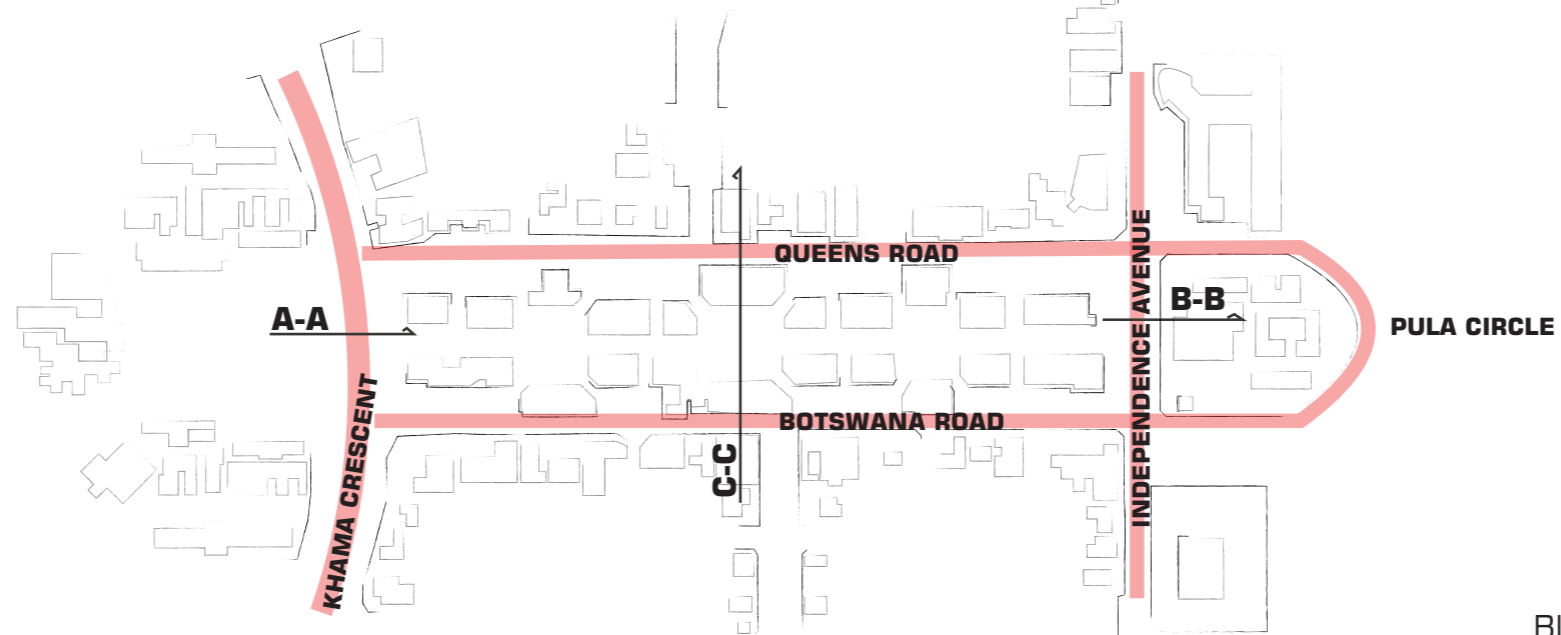
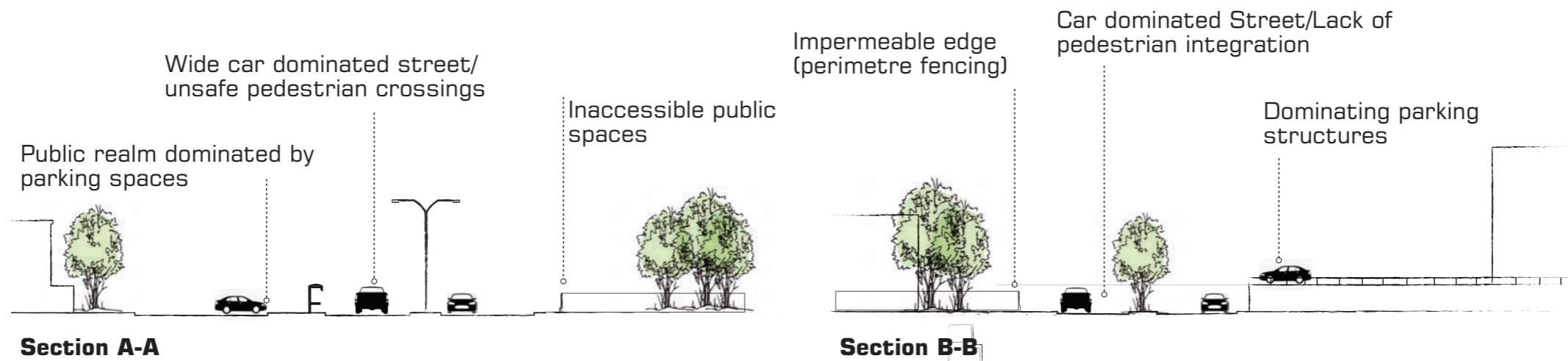


Figure 8.10: Existing Street Conditions
Source: Author (2021)

STREET EDGES

An unattractive frontage with no street furniture

Dark unattractive alleys

Public properties bounded by perimeter fencing

Blank frontage (hard edge)

Perimeter fencing with long setback

PARKING

Parking spaces along pedestrian corridors obstruct pedestrian movement

Unattractive parking structures contribute to unattractive street edges

The mall area is predominantly occupied by parking, which could be used for mixed-use development

Street angle parking takes up a lot of space that could be used by pedestrians

LANDMARKS

National Assembly Building

Civic Centre

UNDERUTILISED LAND

BUILDING CONDITIONS

PUBLIC SPACES

Public access to Heroes Square is restricted, preventing the public from celebrating or traversing it.

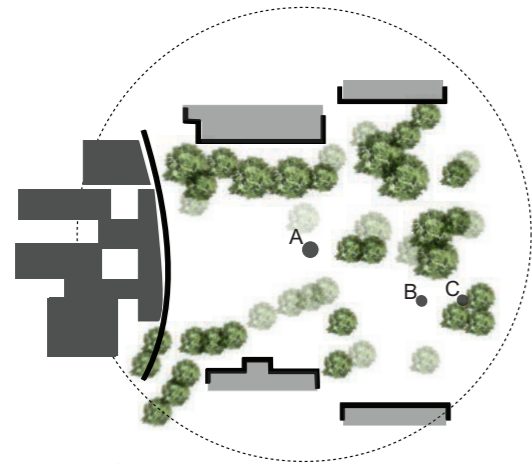
The alleyways leading to the squares appear abandoned, inactive due to poor building interface

Buildings fronting squares are unsightly and do not engage pedestrians.

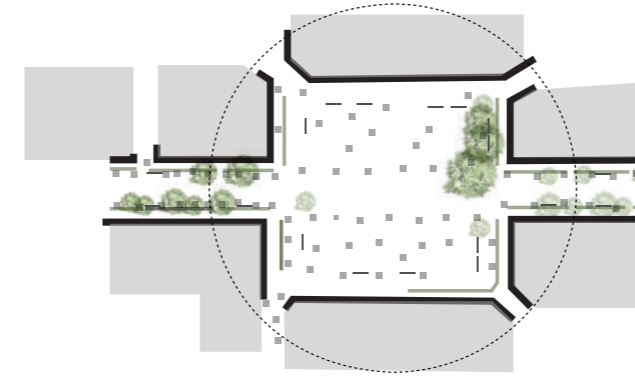
The clutter of market stalls often hampers pedestrian movement through the mall.

Pavement on the ground is entirely concrete, contributing to heat island and poor drainage. Also, the pavement is worn and damaged.

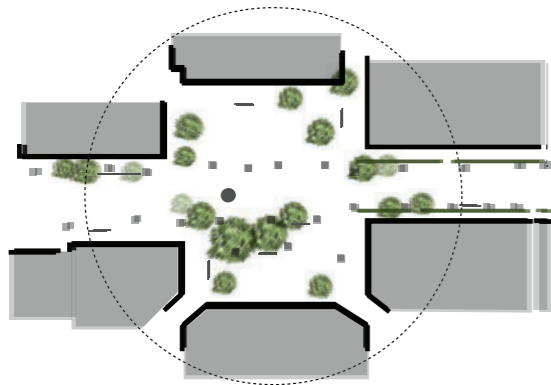
Figure 8.11: Main Mall conditions
Source: Author (2021)



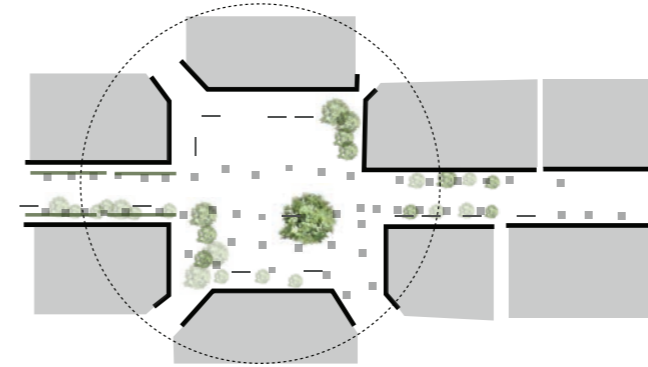
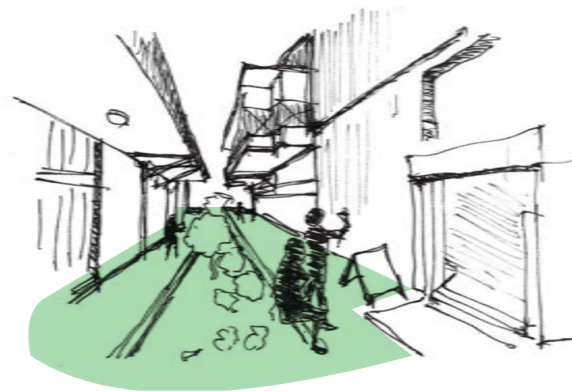
1. Hero Square
Monumental and Garden Space



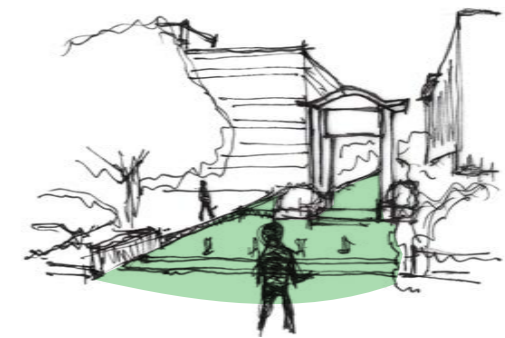
3. Main Square
Cultural and most active space



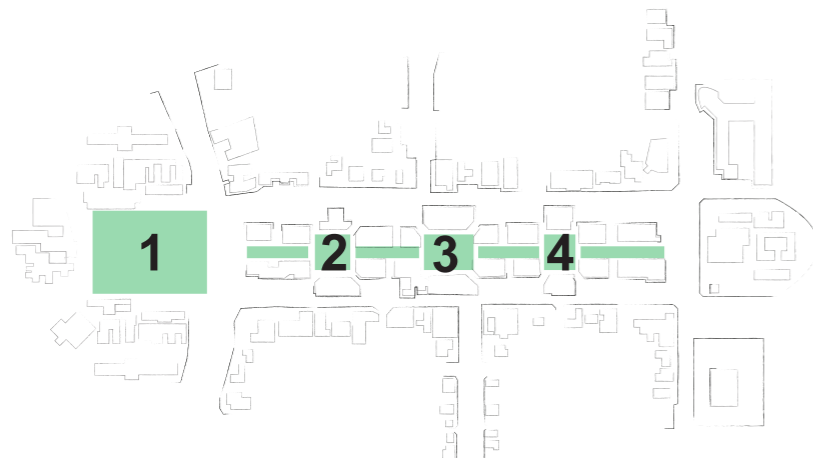
2. Blood Donation Centre Square
Fashion and clothing sales space



4. Diamond Square
Youth dominated space



REFERENCE MAP



Market Stalls Typology

Figure 8.12: Main Mall Public Squares Character

The images above represents the different market typologies that exist within Main Mall spaces. While some of the structures are unsightly, others are placed haphazardly along pedestrian pathways. Therefore, it would be necessary to properly designate market stalls and recommend structures that would enhance the aesthetics of the spaces.

Source: Author (2021)

8.5 DESIGN INFORMANTS AT MAIN MALL

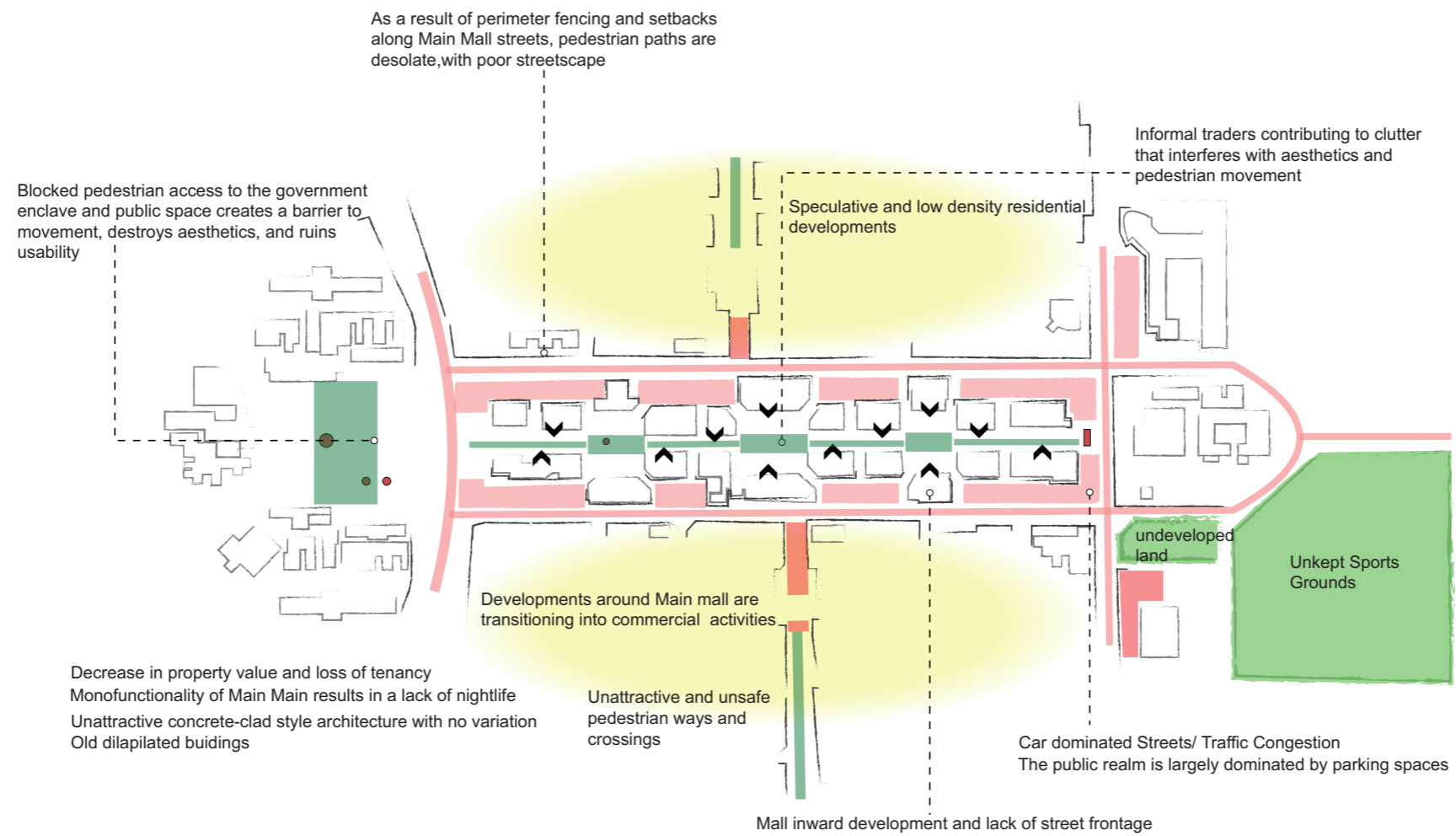
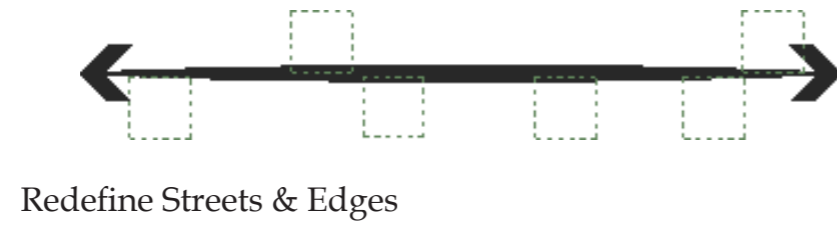
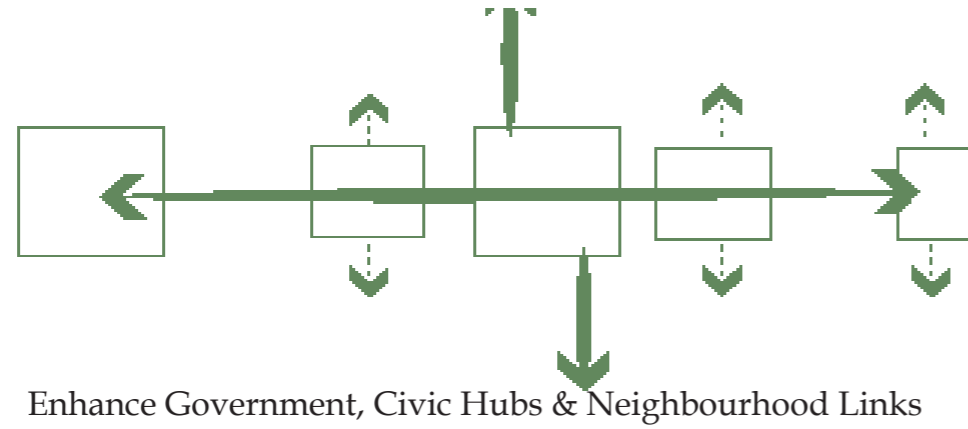


Figure 8.13: Main Mall Design Informants
Source: Author (2021)

8.6 UNPACKING DESIGN STRATEGIES AT MAIN MALL



Redefine Building Form

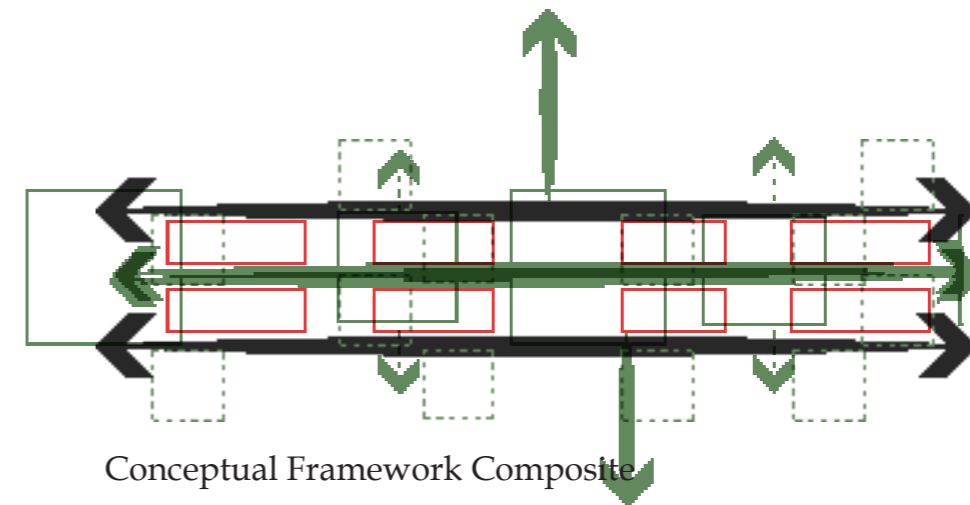


Figure 8.14: Conceptualization at Main Mall Precinct based on identified design informants.
Source: Author (2021)

ENHANCE GOVERNMENT, CIVIC HUBS & NEIGHBOURHOOD LINKS

- Active linear park/NMT
- Multifunctional pedestrian spine and public squares
- Distinct character of each square
- Landscaping/pervious paving
- Active and distinct Passageways

- Cultural Square (Main Square)
- Crafts and curio markets/kiosks/shops at ground level
 - Restaurants/ outdoor dining (traditional /local cuisine)
 - space that transform into stage for cultural events/celebrations
 - frequent/daily cultural events (night markets)
 - Amphitheater
 - Siting, public art

- Youth Square (Diamond Square)
- Graffiti Walls (Urban Art)
 - Stage for performances (space can be converted into stage/outdoor cinema)
 - Wall climbing/scalling
 - WiFi
 - Youth Markets/ frequent events and activities (night markets)
 - Young professionals/artists live-in studio apartments
 - Cafes; outdoor dining on higher floors overlooking the space

- Fashion Square (Blood Donation Centre Square)
- Second hand fashion goods Markets
 - Space that can be converted into ramp for fashion and beauty shows
 - Clothing shops
 - Live-in fashion designer studios
 - WiFi
 - Frequent fashion events/daily activities (night markets)
 - Outdoor sitting, cafes/dinning

linear park (NMT, recreational facilities, overlooked by buildings for surveillance, landscaping, outdoor furniture and lighting, pedestrian and cycling routes.)

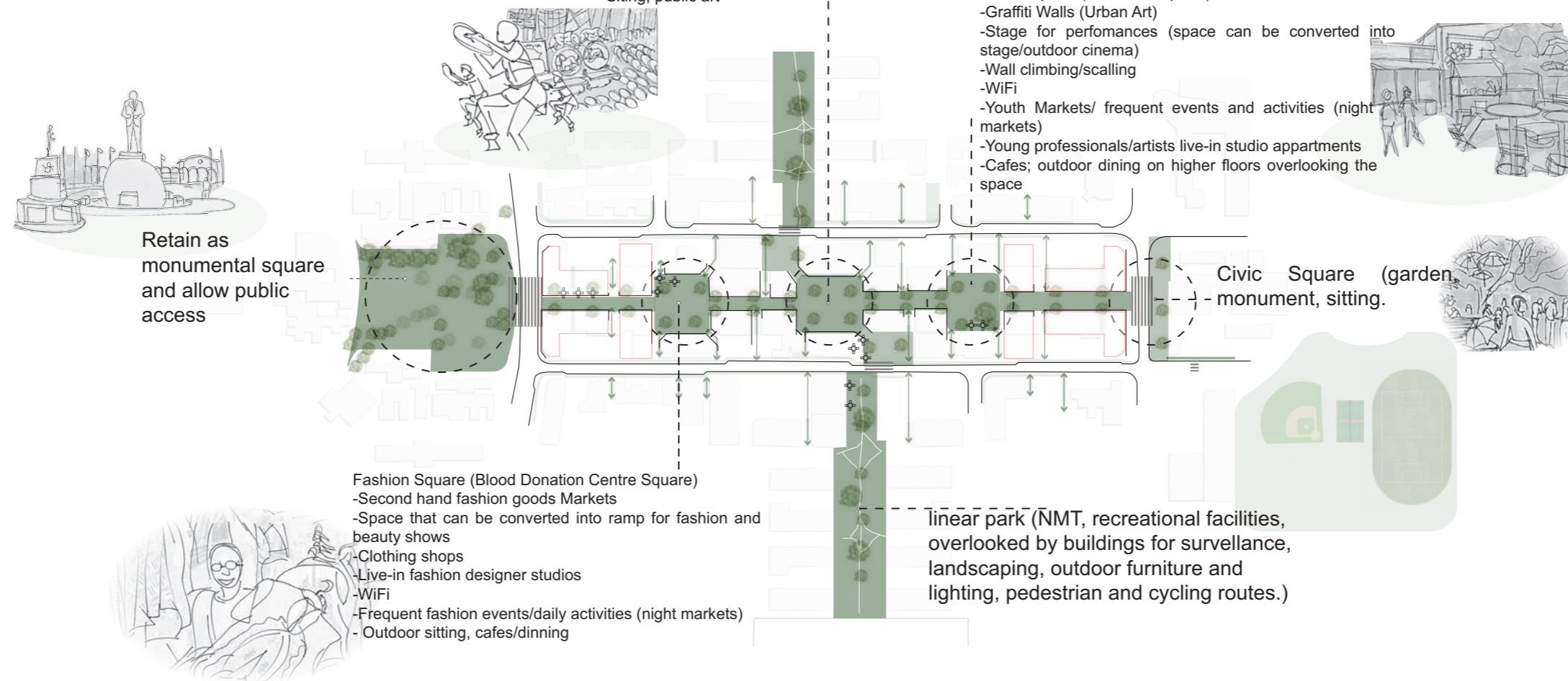
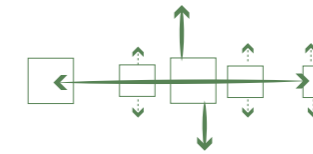


Figure 8.15: Enhance Government, Civic Hubs and Neighbourhood links
Source: Author (2021)

REDEFINE STREETS & EDGES

- Open up the Mall
- Multifaceted building frontage
- Shared Streets
- Street trading /Markets
- Traffic calming pinch points (graded crossings)
- Parallel parking
- Landscaping and Street furniture
- Forecourts
- Permiability

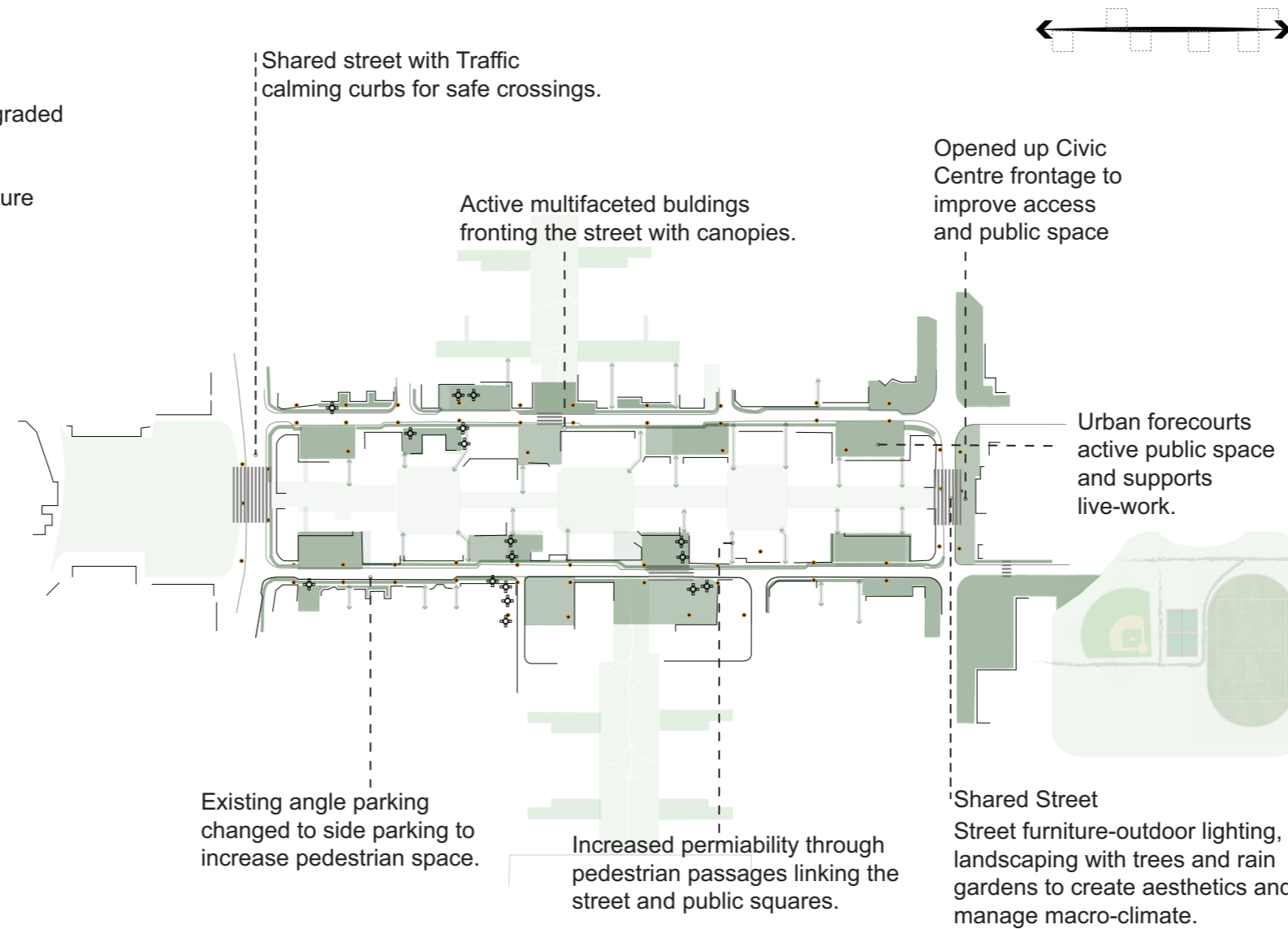


Figure 8.16: Refine Streets and Edges
Source: Author (2021)

REDEFINE BUILDING FORM

- Densification (reclaim surface parking space/underutilised land)
- Mixed Use/adaptable Buildings (live-work)
- Refurbish and Repurpose buildings

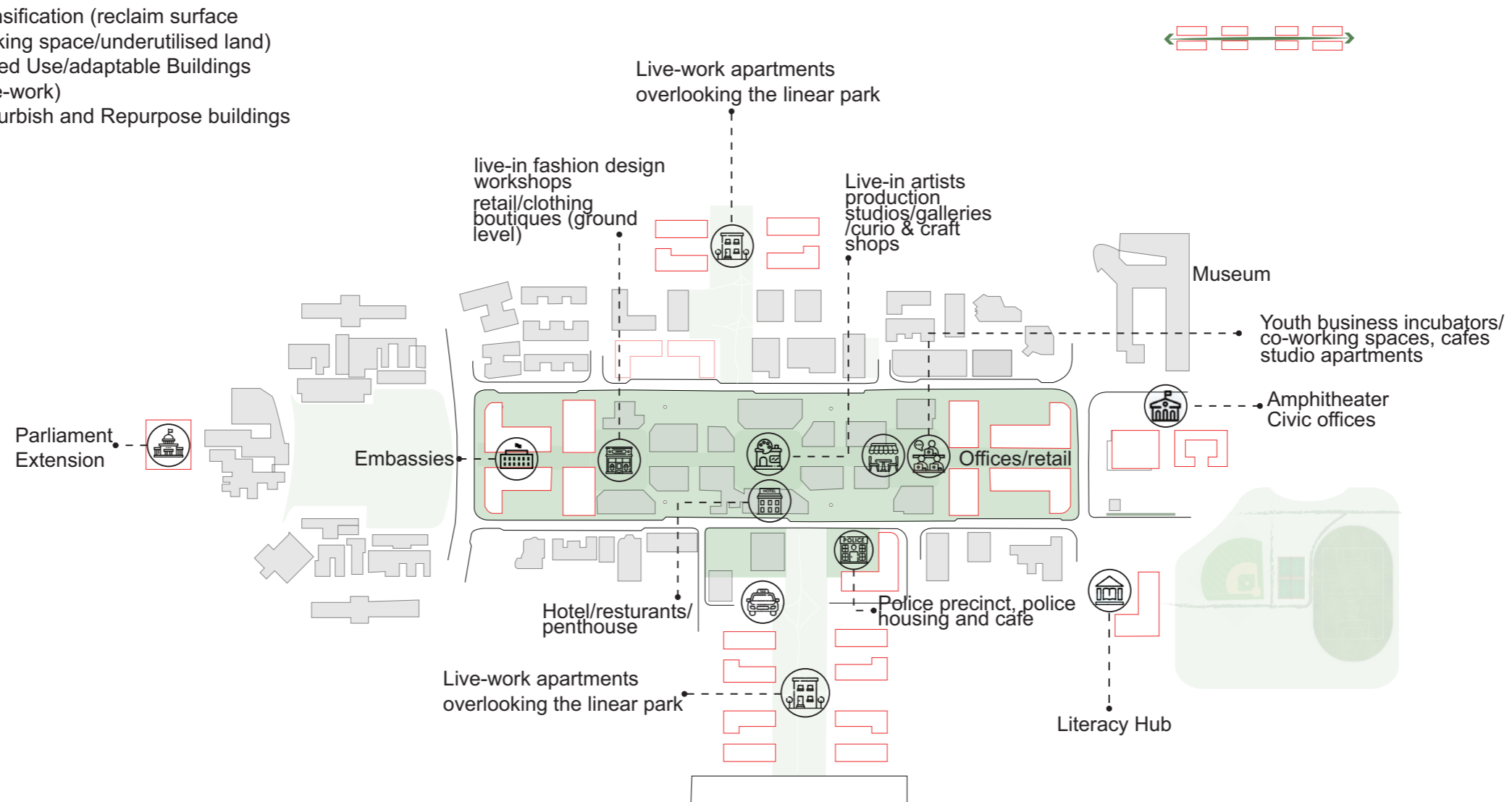


Figure 8.17: Redefine Urban Form
Source: Author (2021)

8.7 MAIN MALL URBAN REGENERATION FRAMEWORK

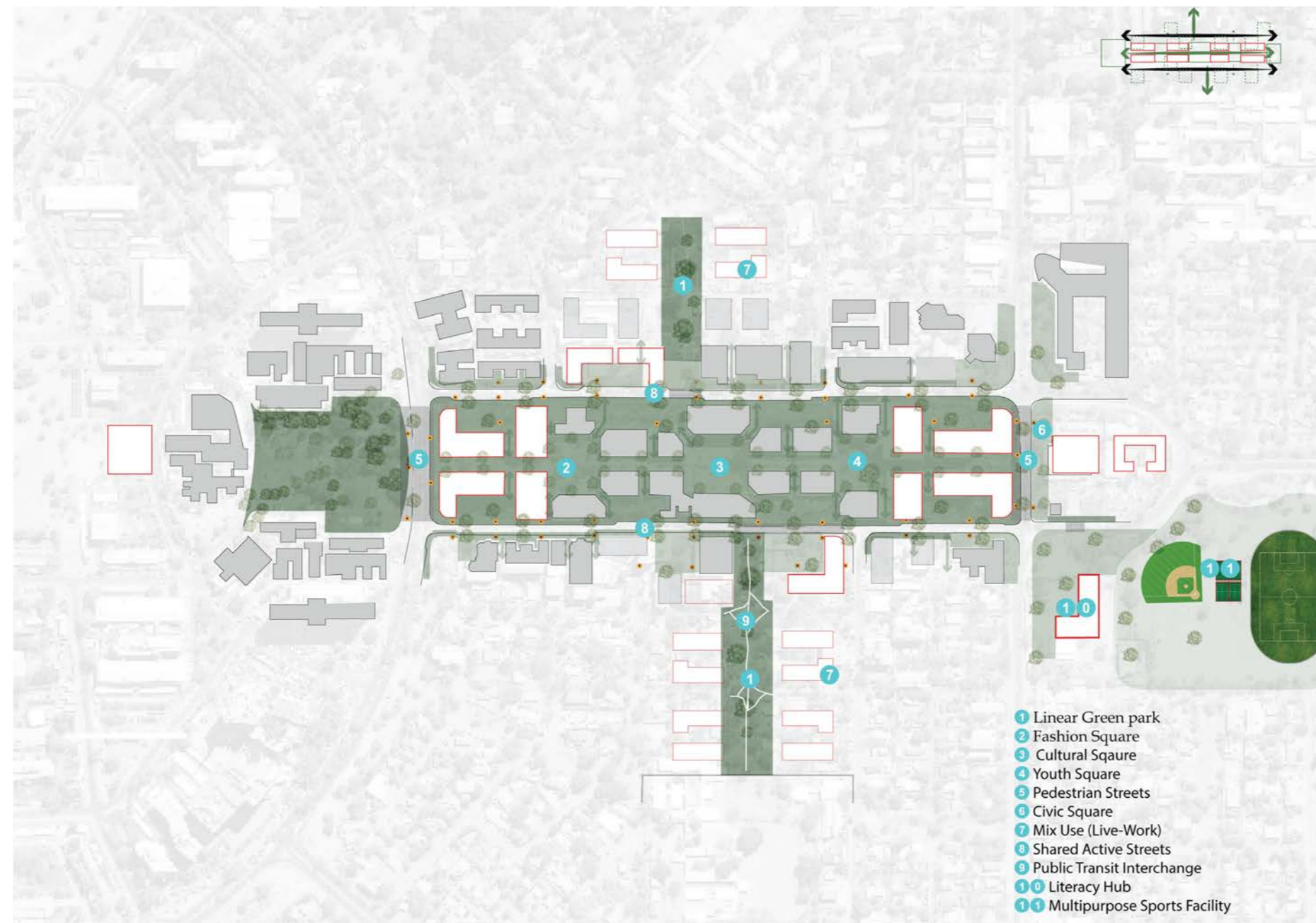


Figure 8.18: Main Mall Urban Regeneration Framework
Source: Author (2021)

8.8 THE SUB-PRECINCTS INTERVENTIONS

PLAN

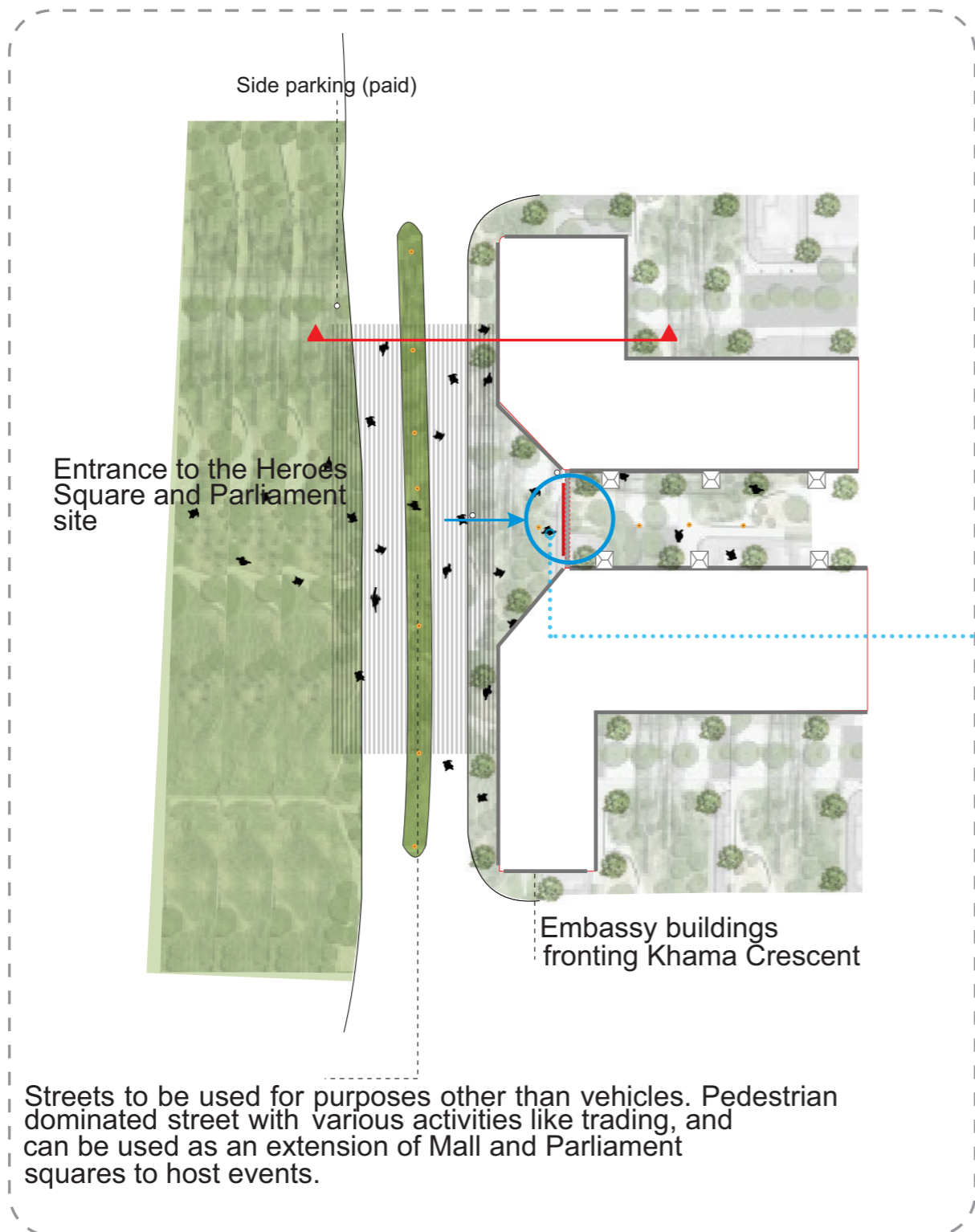
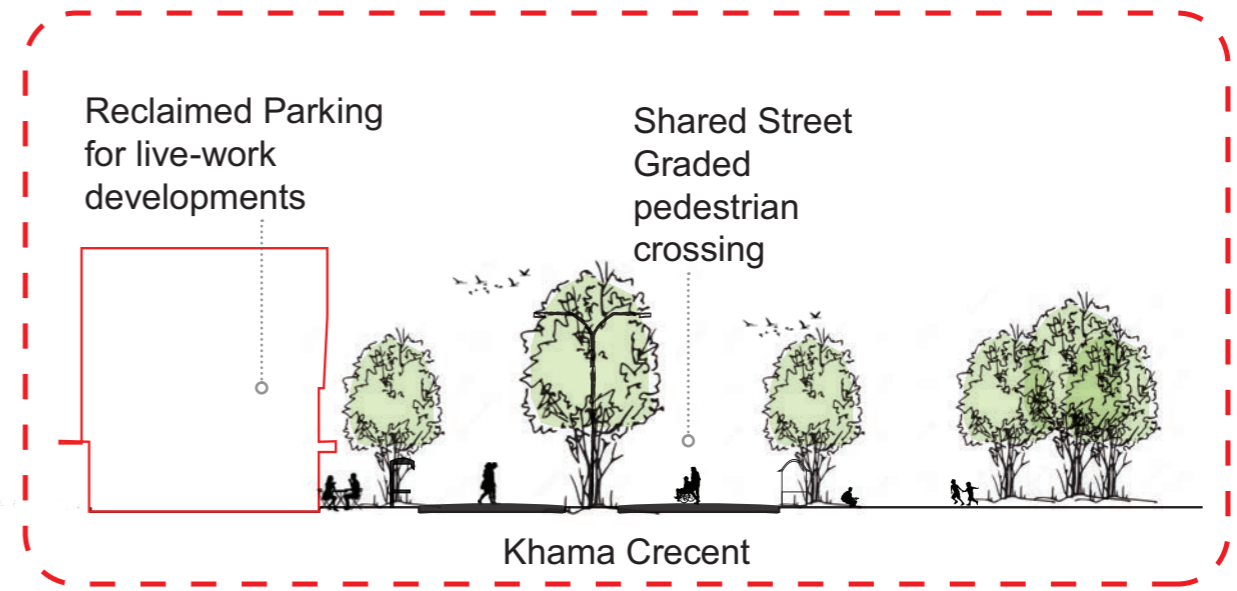
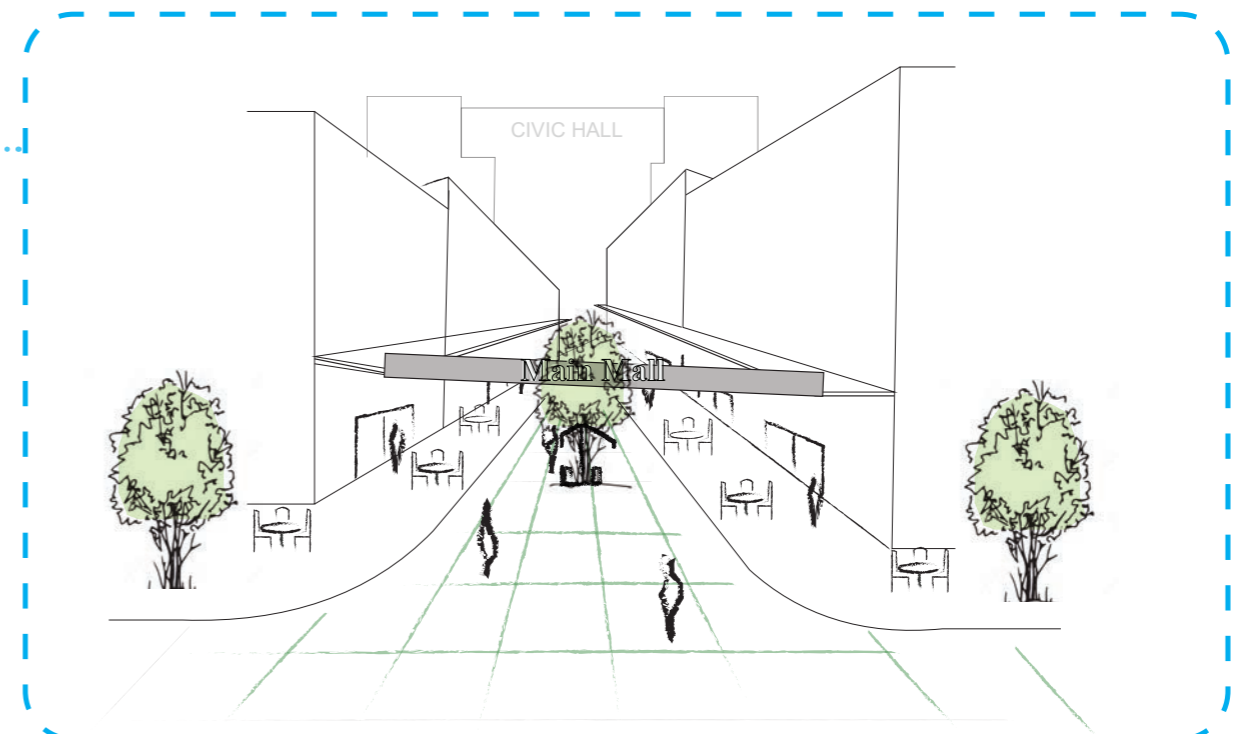


Figure 8.19: Khama Crescent Street Intervention
Source: Author (2021)

SECTION THROUGH KHAMA CRESCENT SHARED STREET



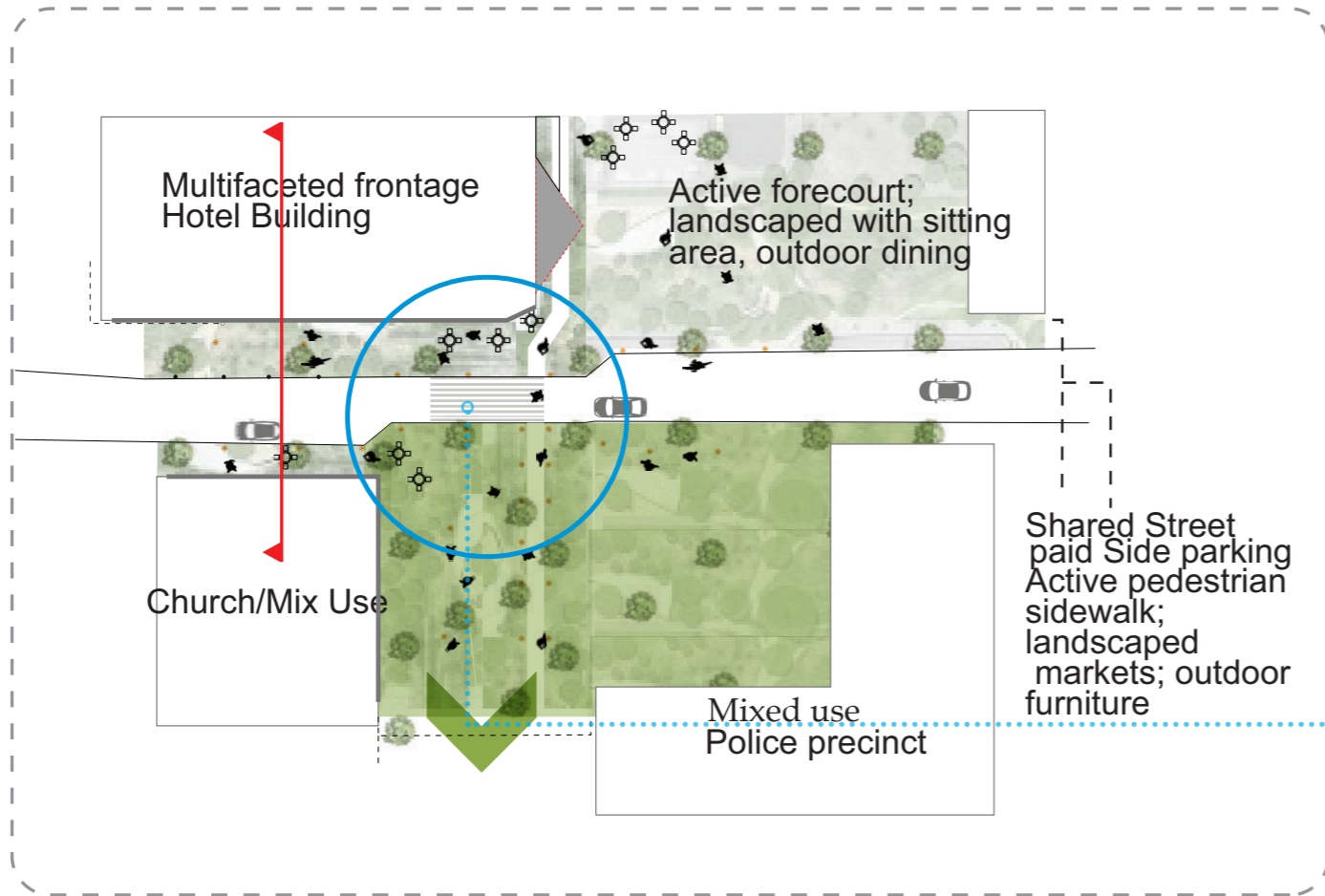
3D VIEW OF ENTRANCE GATEWAY FROM WEST



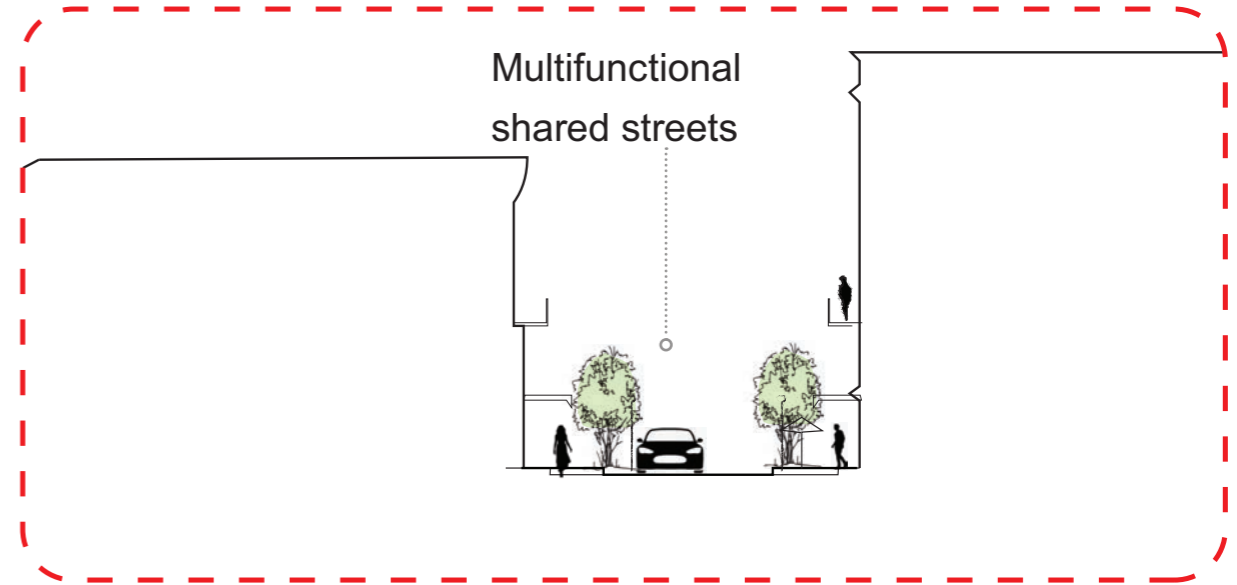
Entrance gateway into Main Mall from West. Canopies with outdoor sitting and outdoor along building frontages/pedestrian spine.



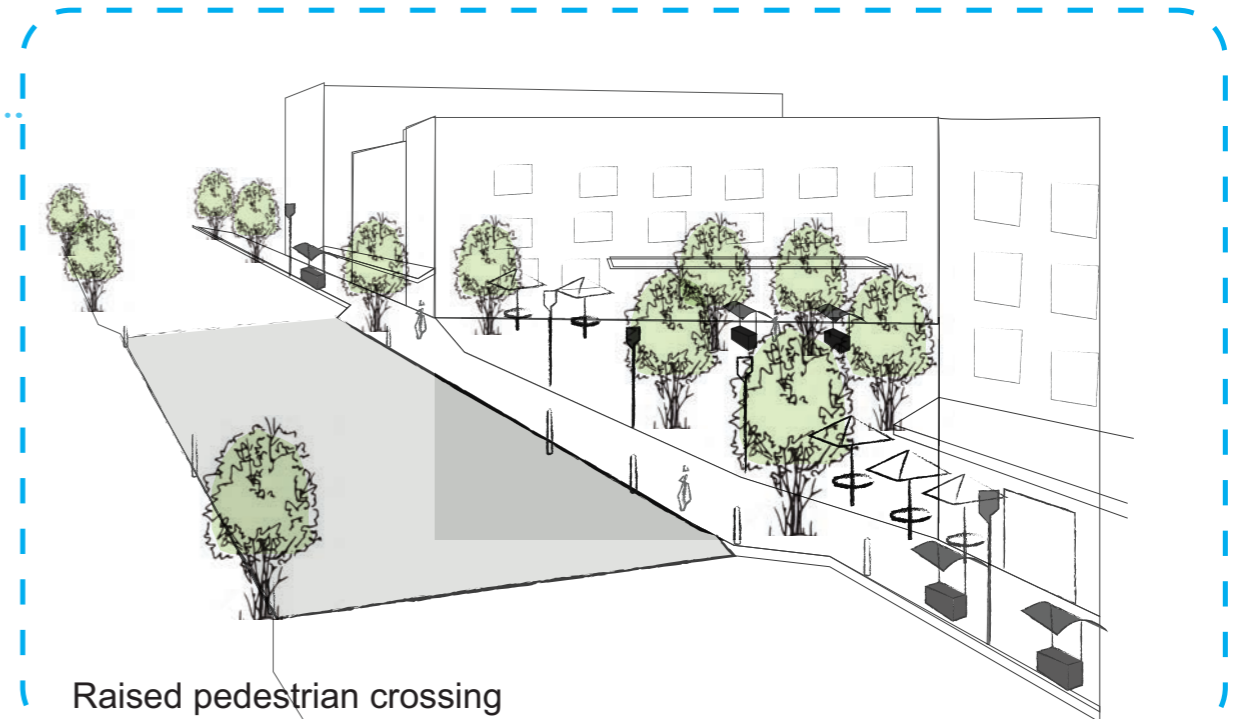
PLAN



SECTION THROUGH BOTSWANA ROAD



3D VIEW OF SHARED STREET (TRAFFIC PINCH POINT)



Pinching the street and raised pedestrian crossing to create shared and safer streets. Also introducing various activities such as trading, outdoor sitting and dining and having building fronts along the street to activate streets.

Figure 8.20: Botswana Road Street Intervention
Source: Author (2021)

PLAN

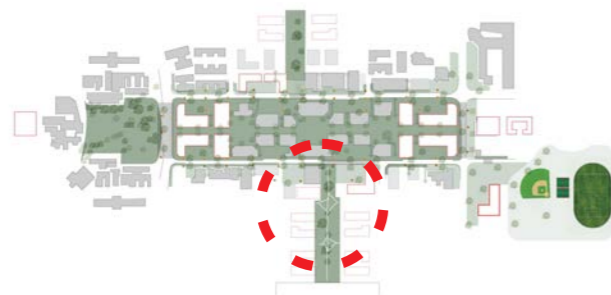
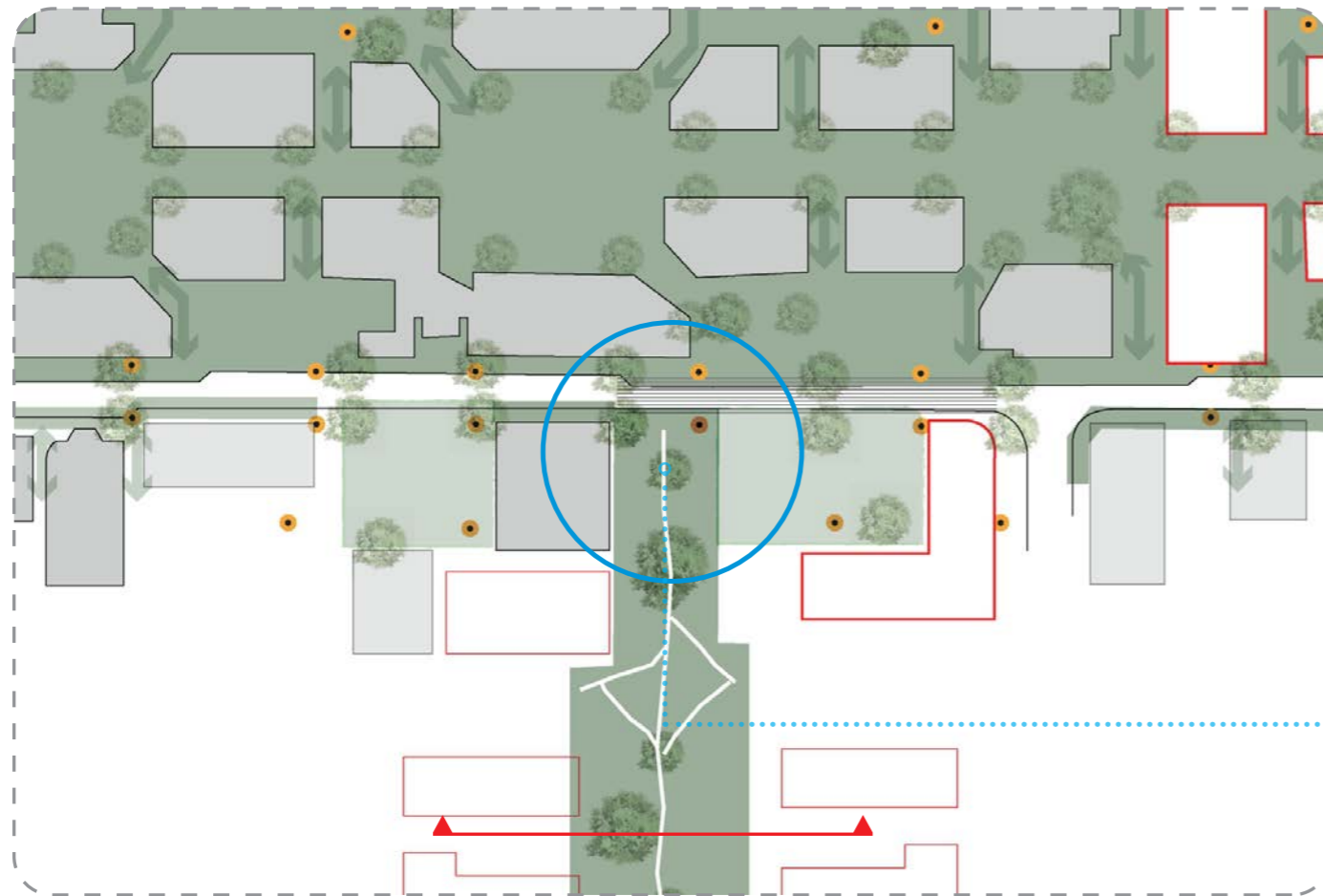
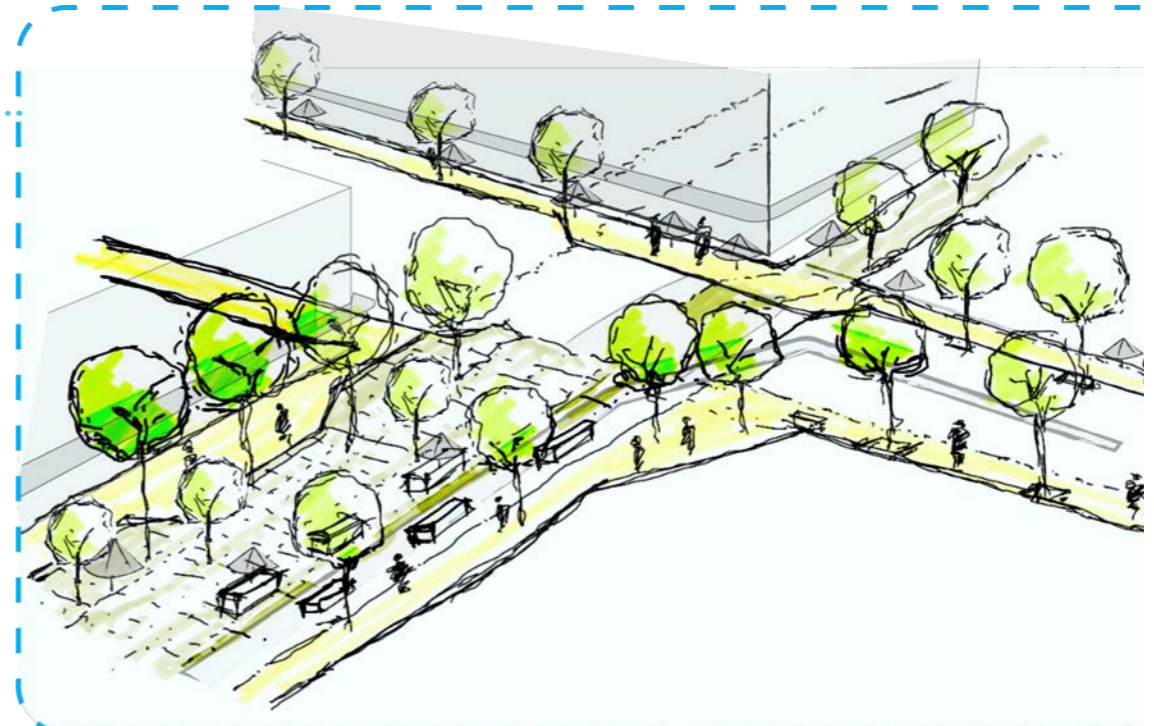


Figure 8.21: Extension 2 Linear Park Intervention
Source: Author (2021)

SECTION THROUGH LINEAR PARK

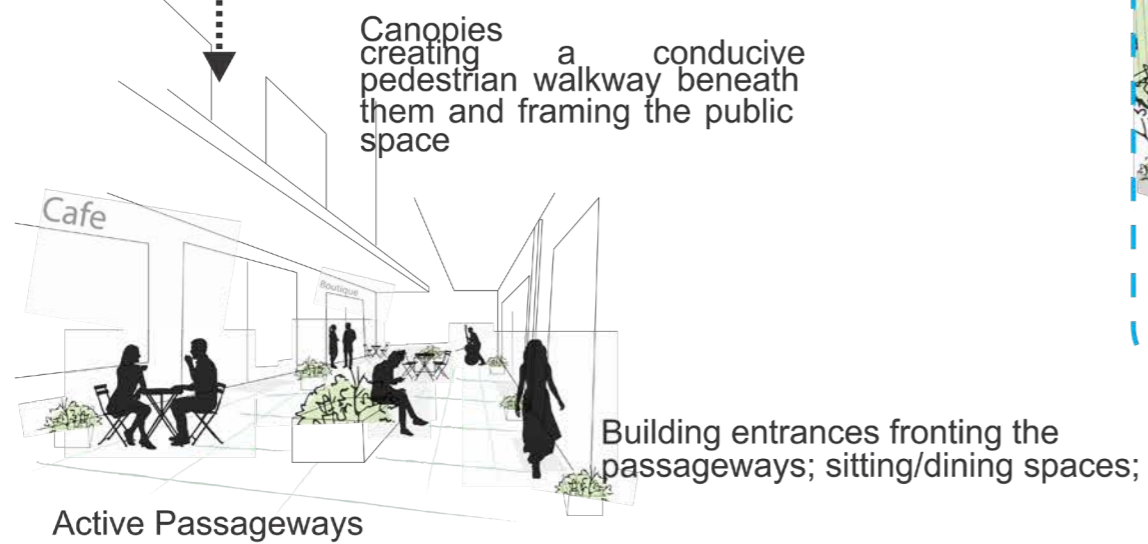
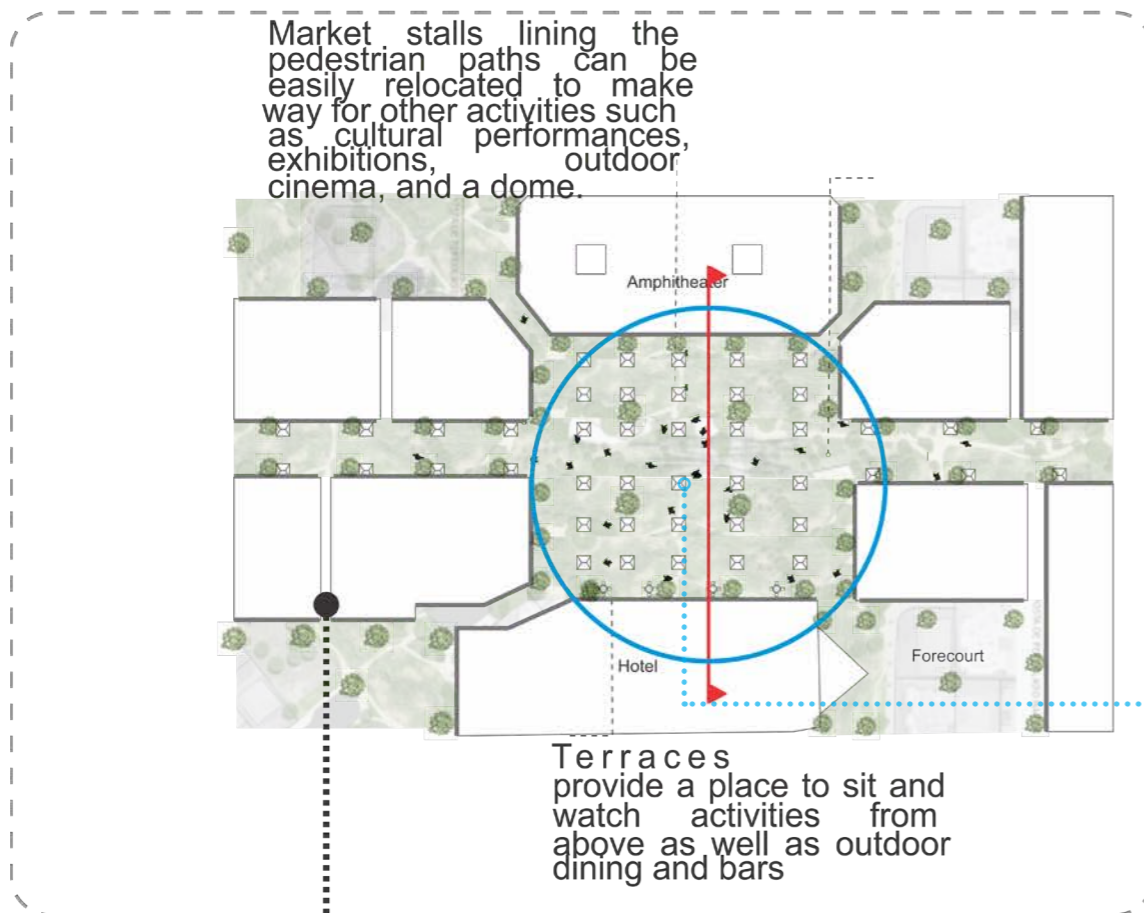


3D VIEW OF LINEAR PARK

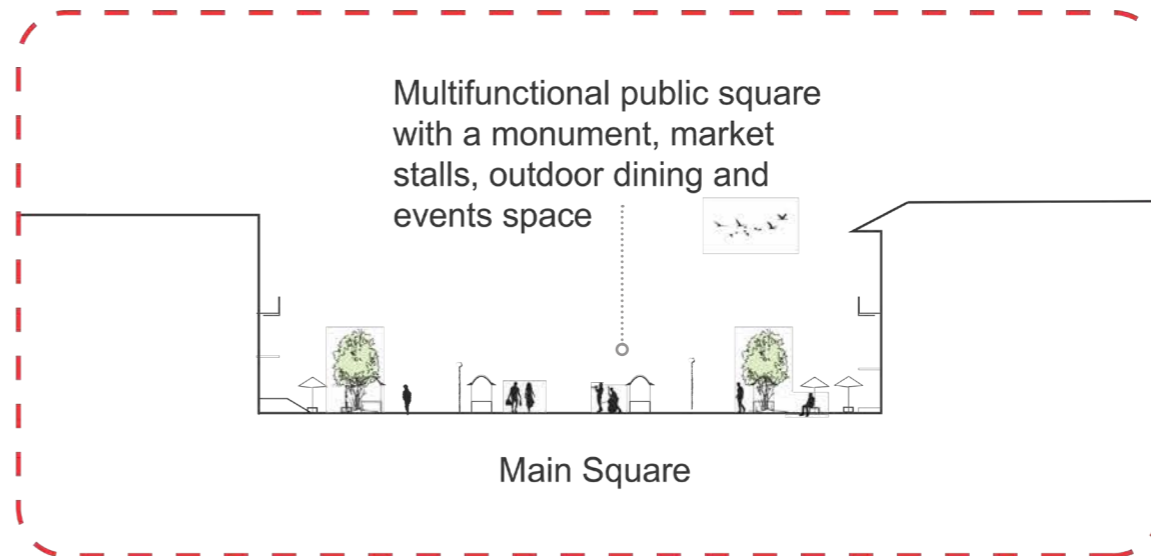


An impression of the linear park intersecting with the street linking Main Mall with surrounding neighbourhoods (NMT). The linear park will have activities (e.g. recreational, trading) along, landscaping, pedestrian/cyclist ways with mixed use buildings overlooking it to ensure surveillance and vibrancy throughout.

PLAN



SECTION THROUGH MAIN SQUARE



3D VIEW OF MAIN SQUARE

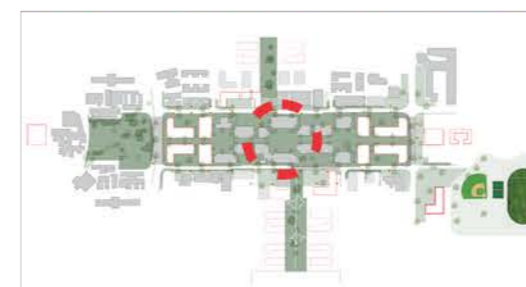
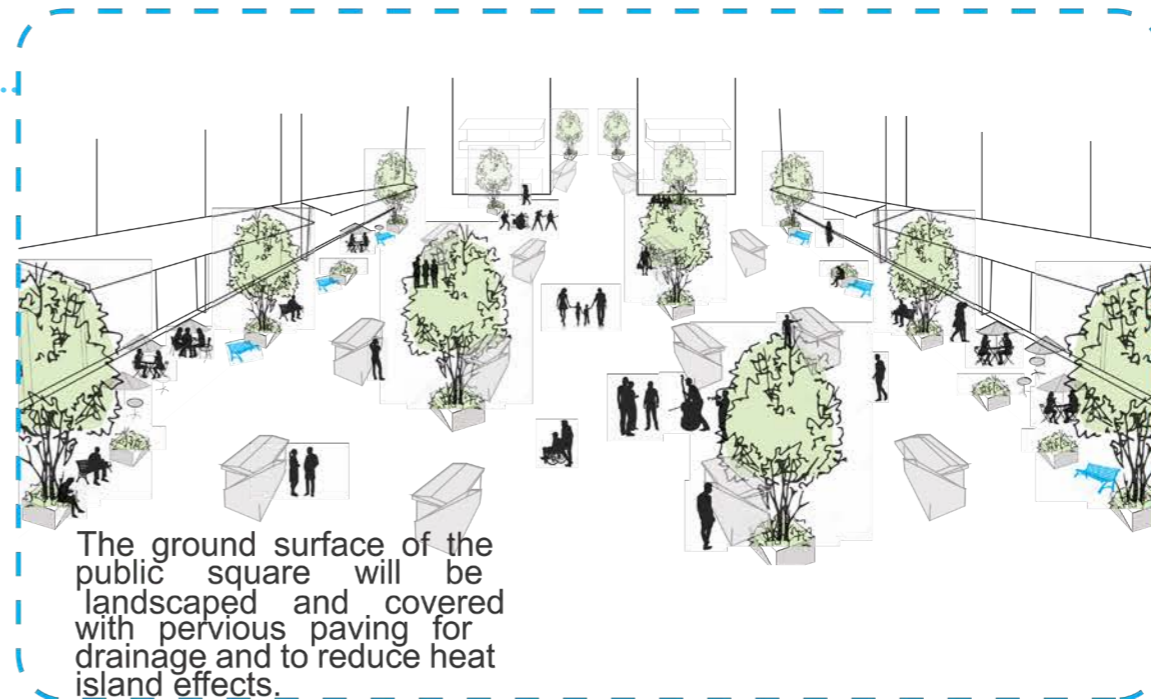
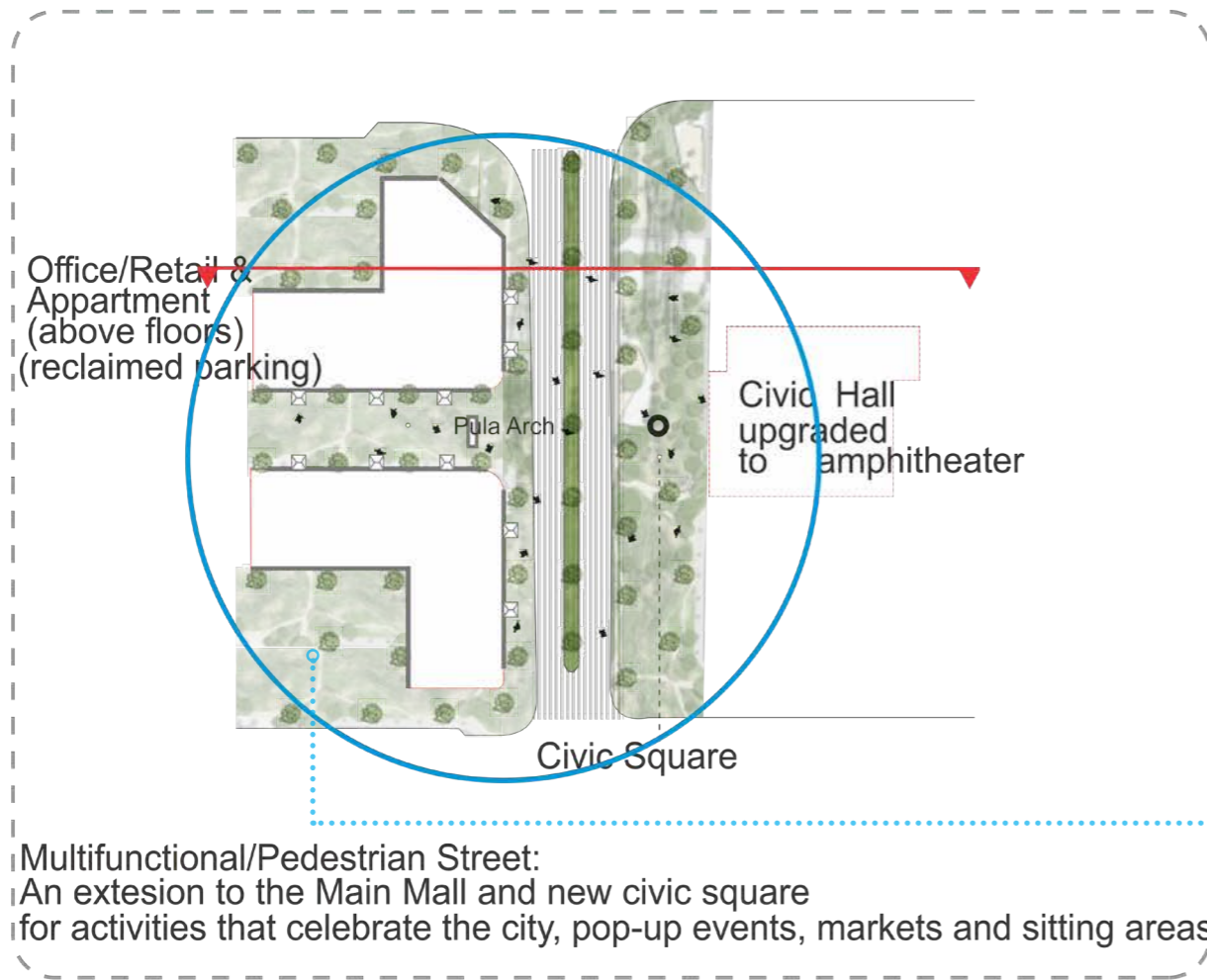
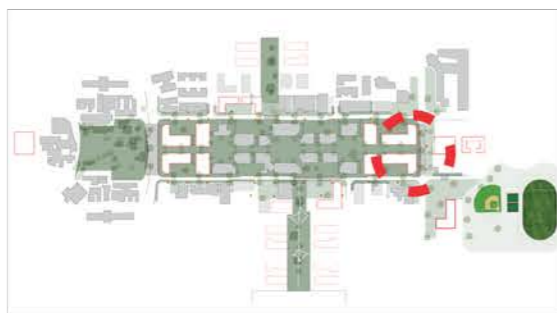


Figure 8.22: Main Mall Main Square Intervention
Source: Author (2021)

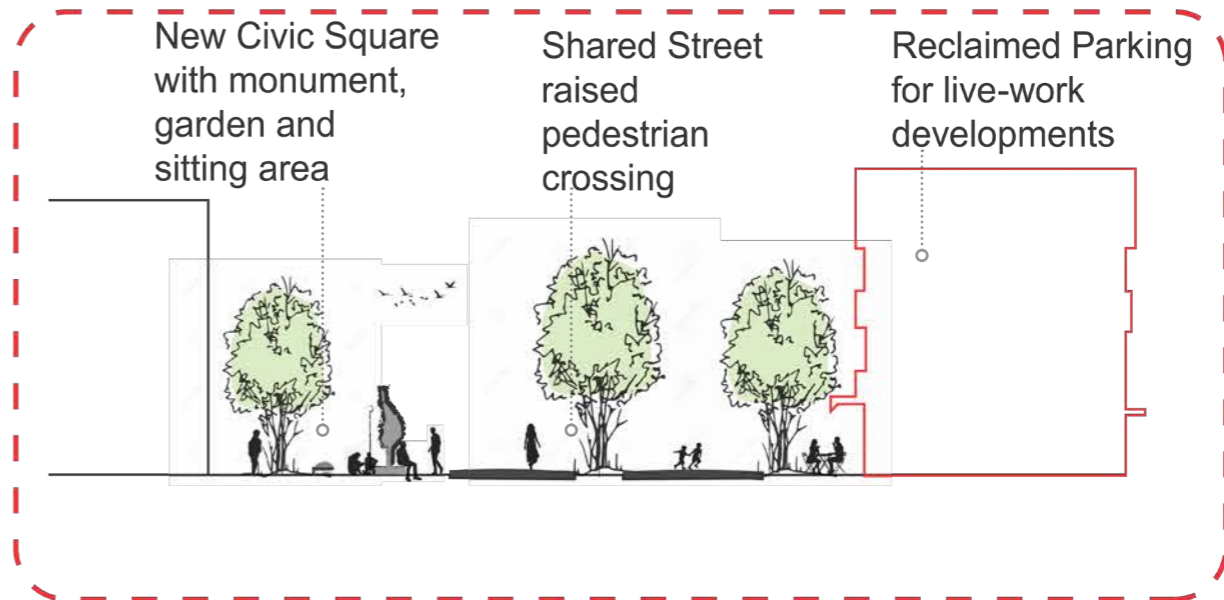
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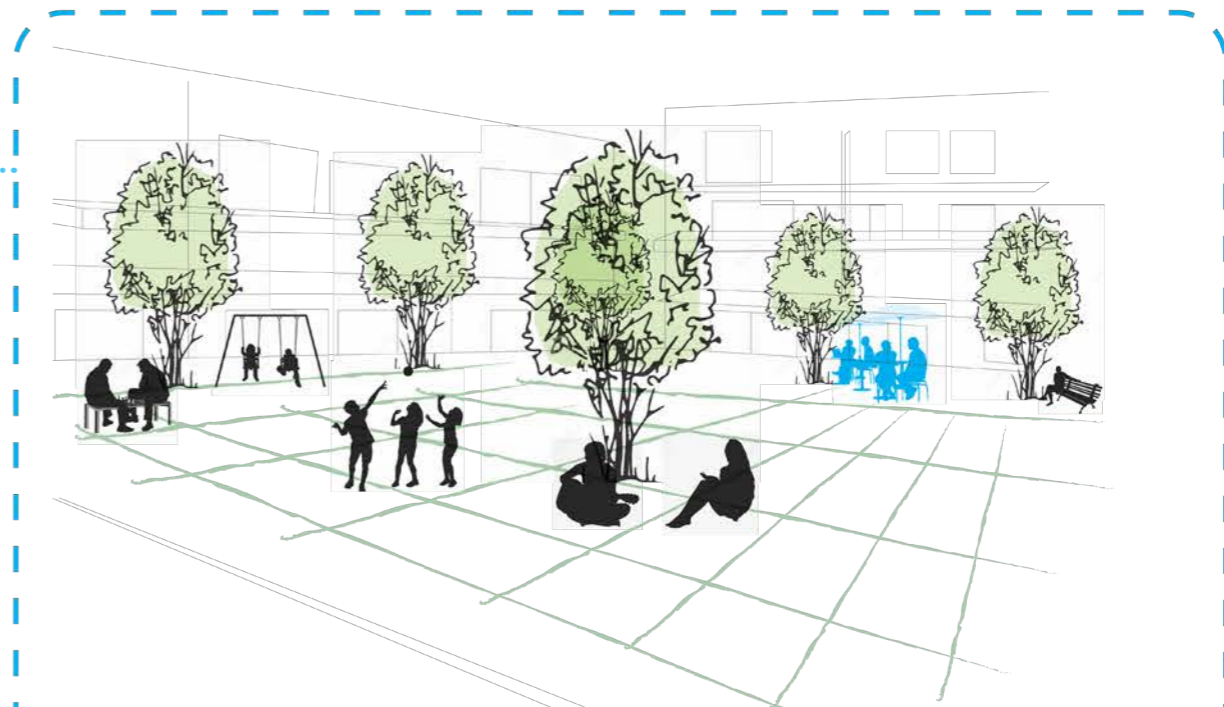
Multifunctional/Pedestrian Street:
An extension to the Main Mall and new civic square
for activities that celebrate the city, pop-up events, markets and sitting areas.



SECTION THROUGH INDEPENDENCE AVENUE



3D VIEW OF ACTIVE FORECOURT



An impression of the proposed Main Mall urban forecourt intended to serve residents and users residing within. The forecourt spaces shall be soft and hard landscaped, with sitting and dining spaces also allowing for children play spaces.

Figure 8.23: Independence Avenue Intervention
Source: Author (2021)

LONG SECTION THROUGH MAIN MALL

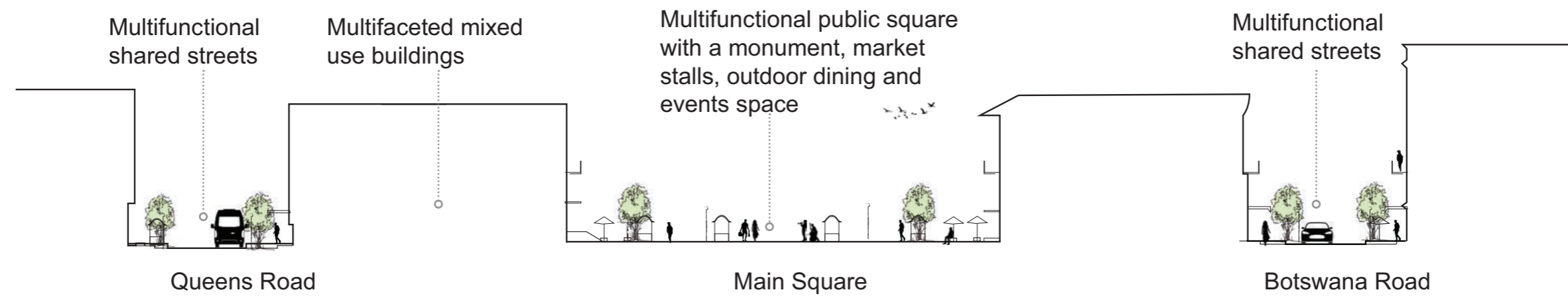


Figure 8.24: Long section of proposed interventions across Main Mall
Source: Author (2021)

9.0 IMPLEMENTATION FRAMEWORK

	1-2 year	2-5 years	5-10 years	Stakeholders/Funding
INTEGRATION AND SENSE OF PLACE	-Redefine Streets Around Main Mall			
	-Revise angular parking to parallel side parking -Install street furniture -Landscape streets -Install raised Pedestrian crossings	-Transform streets into shared streets	- Preserve and enhance existing landmarks.	-Gaborone City Council -National Museum and Art Gallery -Department of Road transport and road safety
	General Urban Core Projects			
		-Improve building conditions/facades and street edge/frontage along main corridor routes. -Develop Main Corridors routes as multiuse/shared spaces (places of celebration and interaction) -Redevelop and intensify identified underutilized land	- Relocate the railway line to subsurface and transform Nelson Mandela Highway into a Transit corridor/ Multi-way boulevard	-Botswana Railways -Department of Road transport and road safety -Gaborone City Council Private Developers -Street Vendors

ENHANCE CONNECTIONS AND ACCESSIBILITY	-Enhance Main Mall, Government, Civic Hubs & Neighborhood Links			
	-Develop Civic Square Main Mall pervious paving	-Redevelop Main Mall public squares into distinct multi functional spaces -Improvement of Main Mall passageways - Develop Mini Public transit Facility (formalize existing site)		-Street Vendors -Ministry of Youth, empowerment, Sport and Culture Development -National Museum and Art Gallery -Gaborone City Council -Department of Road transport and road safety
	General Urban Core Projects			
		-Develop more public transit stops along Mandela Road		-Gaborone City Council -Department of Road transport and road safety

IMPROVE URBAN VITALITY	-Redefine Main Mall Building Form			
		<ul style="list-style-type: none"> -Main Mall Densification -Rezone and Repurpose existing buildings into Mixed use -Transform existing buildings into multifaceted structures 	-Extension of Parliament buildings	<ul style="list-style-type: none"> -Private Developers - Gaborone City Council
	General Urban Core Projects			
	<ul style="list-style-type: none"> -Narrow roadways with raised pedestrian crossings -Development of Mixed Use Student Housing 	<ul style="list-style-type: none"> -Upgrade Library to literacy Centre -Upgrade GSS sports grounds into multipurpose/shared sports facility -Development of Live-Work in Extension 4 and 11. 	<ul style="list-style-type: none"> -Gaborone Senior Secondary School -Ministry of Youth, empowerment, Sport and Culture Development -Gaborone City Council -Department of Road transport and road safety -Private Developers 	

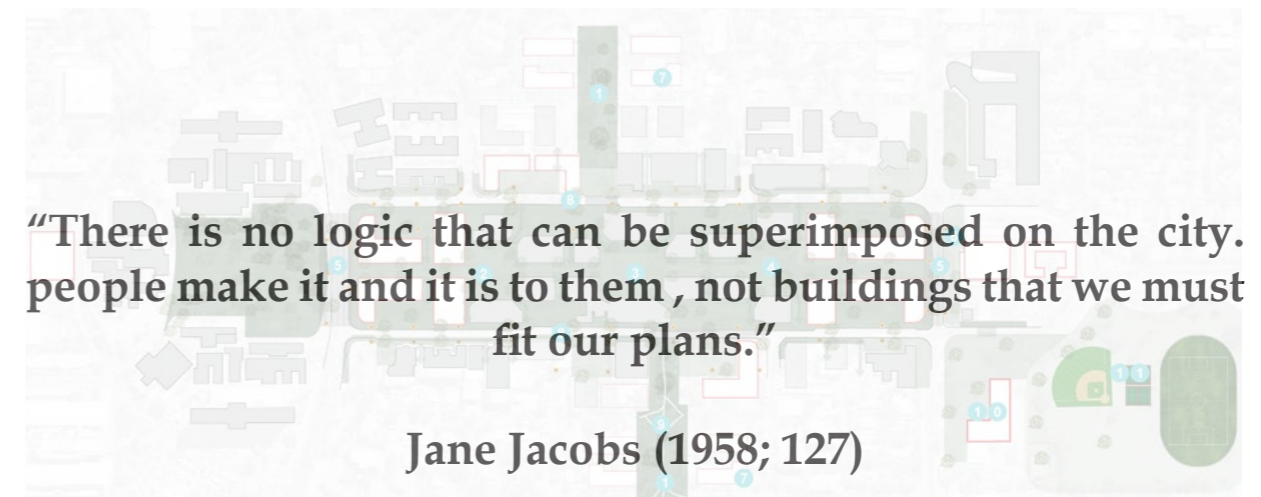
In addition to the Ethics Committee's approval, strict ethical principles were observed in this study to maintain mutual respect and fairness.

Data for this study was collected from publicly available domains and archives. No individuals were identified during non-participant observations; site visits and photographs were conducted in a manner that respected people's privacy and dignity. Additionally, all interviews were conducted with the consent of the participants, and the study's findings will be made available to them upon request.

In an effort to determine the future of Main Mall and how it can be incorporated into the future of Gaborone city, this study examined the current conditions and relevance of the mall, as well as developing and incorporating relevant urban design strategies for urban regeneration of Main Mall precinct.

The area where Main Mall is located demonstrates a disintegrated urban fabric, car-centricity, low development density, and a mono-functional land use. The study examined these issues in order to develop a framework for urban regeneration of the Urban Core and Main Mall precinct. The principles of connectivity, accessibility, integration, and a sense of place and urban vitality were deemed more vital and relevant for improving and developing strategies to counteract the current situation. Further, it is determined that, despite Main Mall's deteriorating appearance, its character and strategic location make it an ideal multifunctional precinct for the integration of urban fabric and an enhancement of the Capital Core urban vitality.

This study proposes strategies that complement and enhance the character of Main Mall precinct, while at the same time incorporating mall users' aspirations and sustainable urban design practices that consider social, environmental, economic, and physical factors. The study identifies and details a few sub-precincts that can be used to re-imagine Main Mall; however, they are not exhaustive and it is therefore essential to involve various stakeholders with a mutual interest in its long term sustainability. Consequently, the implementation framework of the study includes relevant stakeholders and their projects of interest together with the anticipated implementation time-frames.



- Albonica, M. (2021). Braamfontein Regeneration Project: rescripting public spaces.
- Anderson S, J., & Burnett, S. L. (1998). Activity corridors, spines, streets and nodes and access management. Johannesburg: Gautrans.
- Babere, N. J. (2015). Social production of space: "Lived space" of informal livelihood operators; the case of Dares Salaam City Tanzania. *Current Urban Studies* 3.04, 286.
- Carter, A., & Roberts, P. (2000). Strategy and partnership in urban regeneration. *Urban regeneration*, 44-69.
- Cascetta, E. (2009). *Transportation systems analysis: models and applications*, Vol. 29. Springer Science & Business Media.
- Cavrić, B. I. (2004). Planners' roles and techniques in developing sustainable 'eco-city': The case of Gaborone, Botswana. *Spatium*, (11), 53-76.
- City of Spokane. (2019 Update). *City of Spokane Comprehensive Plan: Urban Design and Historic Preservation*, Chapter 8. Spokane.
- Colantonio, A., & Dixon, T. (2011). *Urban Regeneration & Social Sustainability: Best practice from European cities*. Oxford: John Wiley & Sons.
- COT. (2021). Central City Walk. Retrieved from Cape Town History: http://capetownhistory.com/?page_id=1005
- de Oña, J. R. (2018). *Public Transportation Quality of Service*. Elsevier.
- Department of Urban and Rural Planning Botswana Ministry of Lands and Housing, 'Gaborone City Development Plan (1997-2021)', (Gaborone, Botswana: Gaborone City Council, 2009, Revised Plan).
- Desmet, K. a. (2015). The geography of development within countries. In K. a. Desmet, *Handbook of regional and urban economics*, vol. 5 (pp. 1457-1517). North Holland.
- Elseragy, A., Elnokaly, A., and Abul-Ela, M. (2018). Heritage-led urban regeneration as a catalyst for sustainable urban development. 6th International Conference on Heritage and Sustainable Development.
- Flores de León, R. M., Babere, N. J., and Swai, O. (2020). Implications of Cultural Heritage in Urban Regeneration: The CBD of Dar es Salaam. *Revue Interventions économiques. Papers in Political Economy*, (63).
- Gibson, M and Kocabaş, A (2001) "London: Sustainable Regeneration- Challenge and Response". Paper presented to the Rendez-vous Istanbul: 1. International Urban Design Meeting, Mimar Sinan University, Istanbul, Turkey, May
- Grant S. (2006) 'A Preliminary Chronology of Modern Gaborone', Botswana Notes and Records, 38
- Grant, S. (2005) 'Creating a New Capital from Scratch', Mmegi Botswana
- Grant, S. (2010, March 4). Botswana: Heritage. Retrieved from Mmegi Online: <https://www.mmegi.bw/news/our-heritage/news>
- Greene, G. a. (Director). (2004). *The end of suburbia: oil depletion and the collapse of the American dream* [Motion Picture].
- Ivankova, N. V., & Creswell, J. W. (2009). Mixed methods. *Qualitative research in applied linguistics: A practical introduction*, 23, 135-161.
- Jacobs, J. (1958). *Downtown is for People. The exploding metropolis*, 168.
- Kategorii, B. (2021). urban renewal projects in johannesburg. Retrieved from Restauracja Pod Żaglami: <http://restauracja.bieszczady.pl/nox/urban-renewal-projects-in-johannesburg>
- Kerr, D. (1994). The Time of Trial by Space? Critical Reflections on Henri Lefebvre's Epoch of Space. *Common Sense: Journal of Edinburgh Conference of Socialist Economists*, 15(1), 18-35.
- Kutlwano Magazine September. (2012) Gaborone Village.
- Kvale, S. (2003). *The psychoanalytical interview as inspiration for qualitative research*. American Psychological Association.
- Lefebvre, H. a.-S. (1991). *The production of space*. Vol. 142. Blackwell: Oxford.
- Liu, F., Maitlis, S., Mills, A. J., Durepos, G., & Wiebe, E. (2010). *Encyclopedia of case study research*. Encyclopedia of case study research, 2.
- Lynch, K. (1960). *The image of the city*. Vol. 11. MIT press.
- Mercoledì. (2015). *Urban Rigeneration : Torino - The case of Porta Palazzo*. Retrieved from Architetto Intelligente: http://architettointelligente.blogspot.com/2015/11/urban-rigeneration-torino-case-of-porta_18.html
- Ministry of Land Management, W. a. (2018). *Botswana National Spatial Plan (2036)*. Gaborone: Government of Botswana.
- Mwale, K. (2018). *Culture, Heritage and the Politics of Identity in National and Tribal*

Spaces: the city and the traditional village in Botswana (Doctoral dissertation). University of Sheffield.

Palazzo, C. P., & Ilda, C. (2000). Turin:Managing revitalisation in the historical city centre. Retrieved from p2infohouse: <https://p2infohouse.org/ref/24/23388.htm>

Porter, M. (2005). State of the Inner City Economies: New Learning. 3rd Annual Inner City Economic Forum (p. 3). U.S.A: retrieved from http://www.isc.hbs.edu/pdf/ICEF_2005.11.15.pdf.

Propertuity. (2013). The Maboneng Precinct: Property Growth Report. Retrieved from yumpu: <https://www.yumpu.com/en/document/read/29118533/2013-maboneng-precinct>

Roberts, P. a. (1999). Urban regeneration: a handbook. British Urban Regeneration Association.

Roberts, P., Sykes, H., & Granger, R. (Eds.). (2016). Urban regeneration. Sage.

Rutherford, L. (2014, April 25). Why public places are the key to transforming our communities. Retrieved from greenbiz: <https://www.greenbiz.com/article/why-public-places-are-key-transforming-our-communities>

Said, S. Y., Zainal, S. S., Thomas, M. G., and Goodey, B. (2013). Sustaining old historic cities through heritage-led Regeneration. *WIT Transactions on Ecology and the Environment*, 179, 267-278.

Simone, A. (2004). People as infrastructure: Intersecting fragments in Johannesburg. *Public culture* 16.3, 407-429.

Turok, I. (2004) 'Cities, regions and competitiveness', *Regional Studies*

Weiwei Zheng, X. K. (2019, August 10). Optimising land use allocation to balance ecosystem services and economic benefits - A case study in Wuhan, China. *J Environ Manage*.

World-bank. (2021). Developing Design Standards. Retrieved from worldbank: <https://urban-regeneration.worldbank.org/node/52>

World-bank. (2021). urban-regeneration. Retrieved from worldbank: <https://urban-regeneration.worldbank.org/node/45>

Yavuz, A. (2014). Permeability as an indicator of environmental quality: Physical, functional, perceptual components of the environment. *World Journal of Environmental Research*, 29-40 .

ETHICS APPLICATION FORM



Please Note:


Any person planning to undertake research in the Faculty of Engineering and the Built Environment (EBE) at the University of Cape Town is required to complete this form **before** collecting or analysing data. The objective of submitting this application *prior* to embarking on research is to ensure that the highest ethical standards in research, conducted under the auspices of the EBE Faculty, are met. Please ensure that you have read, and understood the **EBE Ethics in Research Handbook** (available from the UCT EBE, Research Ethics website) prior to completing this application form: <http://www.ebe.uct.ac.za/ebe/research/ethics1>

APPLICANT'S DETAILS	
Name of principal researcher, student or external applicant	THATO KESEGO MOTLHAPING
Department	ARCHITECTURE , PLANNING AND GEOMATICS
Preferred email address of applicant:	MTLTHA066@MYUCT.AC.ZA
If Student	Your Degree: e.g., MSc, PhD, etc.
	Credit Value of Research: e.g., 60/120/180/360 etc.
	Name of Supervisor (if supervised):
If this is a research contract, indicate the source of funding/sponsorship	N/A
Project Title	RE-IMAGINING GABORONE MAIN MALL PRECINCT URBAN DESIGN FRAMEWORK

I hereby undertake to carry out my research in such a way that:

- there is no apparent legal objection to the nature or the method of research; and
- the research will not compromise staff or students or the other responsibilities of the University;
- the stated objective will be achieved, and the findings will have a high degree of validity;
- limitations and alternative interpretations will be considered;
- the findings could be subject to peer review and publicly available; and
- I will comply with the conventions of copyright and avoid any practice that would constitute plagiarism.

APPLICATION BY	Full name	Signature	Date
Principal Researcher/ Student/External applicant	THATO KESEGO MOTLHAPING		10/06/2021
SUPPORTED BY	Full name	Signature	Date
Supervisor (where applicable)	KATHRYN EWING		10/06/2021

APPROVED BY	Full name	Signature	Date
HOD (or delegated nominee) Final authority for all applicants who have answered NO to all questions in Section 1; and for all Undergraduate research (Including Honours).	p.tumubweinee		24/06/2021
Chair: Faculty EIR Committee For applicants other than undergraduate students who have answered YES to any of the questions in Section 1.			

PLAGIARISM DECLARATION

I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.

I have used the APA convention for citation and referencing. Each contribution to, and quotation in, this project from the work(s) of other people has been attributed, and has been cited and referenced.

I declare that this project is my own work and I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

Signature:



Thato Kesego Motlhaping

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(60 Credits)
In the School of Architecture, Planning and Geomatics

University of Cape Town, December 2021

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