

Ratnapura Development Plan 2019 - 2030

Volume I



Urban Development Authority
June 2019

Ratnapura Development Plan

2019–2030

Volume I



Ministry of Megapolis and Western Development
Urban Development Authority

Ratnapura Development Plan 2019 – 2030 - Volume 1 For Ratnapura Municipal Council Area

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Acknowledgement

It is our proud privilege to express the feeling of our gratitude and appreciation to several individuals and parties who constantly supported directly and indirectly to prepare the Ratnapura Development Plan 2030.

First and foremost, we would like to thank all the members of parliament ministers of Ratnapura District, (the) Governor of Sabaragamuwa Province and (the) Mayor of Ratnapura Municipal Council for extending their fullest support to successfully complete the Ratnapura Development Plan 2030.

Next, we would like to extend our gratitude to the District Secretary, the Divisional Secretary, and the Commissioner of Ratnapura Municipal Council and their staffs for giving us required details when preparing this Development Plan.

We also express our heartfelt and deep sense of gratitude to the Chairman of Urban Development Authority, Director General, Deputy Director (Planning), Research and Development Division, Development Planning Division, Geographical Information Systems Division and Environment & Landscape Division of the Urban Development Authority for the encouragement and the support given to prepare and finalize Ratnapura Development Plan.

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Last but not least, we would like to extend our gratitude to all the government institutes, semi-government institutes, private institutes, various resource persons and the urban community who have directly and indirectly supported in all stages from the initial data collection stage to the publication of the Gazette of the Ratnapura Development Plan 2019 – 2030.

Minister's Foreword



Having been established under the provisions of the Urban Development Authority Law: Act No. 41 of 1978, the Urban Development Authority by now has completed 40 years of service contributing to planned urban development in Sri Lanka. At this moment the UDA marks another milestone by completing a comprehensive Development Plan for Ratnapura District.

This development plan has been prepared for the implementation of the envisaged integrated development of Ratnapura Municipal Council area. Ratnapura town which is the commercial center and the administrative capital of the Ratnapura District, serves a large catchment of population. Further, Ratnapura and its surrounding area possess a large repository of gem resources and a very high potential for tourism industry development.

Our effort is to support the entire Ratnapura District to be developed in par with the rest of the area by facilitating the appropriate physical environment.

My understanding is that the preparation of this Plan involved extensive consultation with professionals, experts, stakeholders and the communities, while engaging modern methods, sound techniques and innovative approaches. In this regard, I appreciate the extraordinary efforts of the Chairman, Director General, Planning Team and all staff of the Urban Development Authority those who have contributed in numerous ways to successfully complete this work. I also appreciate the support and contribution of relevant local authorities, state and private sector agencies and general public by working equally on the same platform to make the Ratnapura Development Plan a success.

Hon. Patali Champika Ranawaka
Ministry of Megapolis and Western Development

Chairman's Forward



Today, the Urban Development Authority (UDA) is the apex planning and plan implementation body in Sri Lanka that is responsible for managing the state of the urban environments of the nation. The Authority was established in 1978 with the objective of introducing integrated planning and implementation in order to promote and regulate the developments for the common benefit of all inhabitants of the urban areas.

Under the Amendment Act No 4 of 1982; (Part II section 8A [1]) the Urban Development Authority has been mandated to prepare Development Plans for the Urban Development Areas, declared by the Minister-in-charge. The development plan for Ratnapura has been prepared and enforced under such provisions. As a result of the declaration of the Ratnapura as an urban development area, the Urban Development Authority initiated the preparation of Ratnapura development plan considering physical, economic, social and environmental aspects of the Ratnapura and its surroundings.

For the implementation of this Plan, we have not forgotten that our path is not as smooth as silk, but as rough as gravel, full of challenges, filled with uncertainties, and fouled by vicious intents. Yet the UDA today is equipped with necessary systems, tools and strategies to face such challenges, withstand those uncertainties and to make the Ratnapura: "The Gem City of Sri Lanka in the Greens".

I take this opportunity to offer my sincere gratitude to the Team of the UDA who had to work hard and was committed to deliver this comprehensive work and also to all those who have supported and contributed with various means towards its formulation and hope the equal and continuous support of the all of them will be there towards its successful implementation.

Dr. Jagath Munasinghe
Chairman
Urban Development Authority

Local Authority Chairman's Forward



We extend our gratitude towards the Urban Development Authority for the initiative taken to prepare a new Development Plan for Ratnapura enhancing its specific character with the strategic planning approach. Ratnapura is an identifiable city in Ratnapura District with inherent water potentials and gem resource. It is important to understand the Ratnapura MC boundary drawn in legal documents no longer reflect in real grounds and expect to develop with the vision of "The Gem City of Sri Lanka in the Greens".

The Ratnapura Development Plan further opens a positive platform for the upgrading of major two sectors of Gem and Tourism in the economy and enhances its value as the major commercial and transport center, the administrative and health service provider for the Region. This attempt leads to encourage more investors for Ratnapura and create a self-sufficient city economy in the region.

I appreciate UDA attempt to formulate Ratnapura City plan a collaborative and participatory exercise by incorporating the recommendations, suggestions and criticisms given by us; the representatives of general public. Hence, we declare it as our plan and ensure our future collaboration and support in the implementation of Ratnapura Development Plan within the next eleven years. Also, I request all citizens and stakeholders of Ratnapura city to act at individual and cooperate levels to lead the city towards the shared vision as envisaged by Ratnapura Development Plan 2019 – 2030.

Tiron Attanayake
Hon Mayor of Ratnapura Municipal Council

Preface

Ratnapura City Development Plan has been created with the objective of creating sustainable cities which is the eleventh objective of Sustainable Development Goals. Accordingly, it is envisaged to provide guidance on the implementation of the development activities within the Ratnapura Urban Development Area for the next decade. The main objective of this urban development plan is to gradually improve the living conditions of the residents of Ratnapura, the capital city of Sabaragamuwa Province.

The land use pattern, the density and character of residential communities, the migration community, the economic pattern of the city, the transport system, the nature of the health services and the institutional pattern have been studied in the preparation of the Ratnapura city plan. Further analysis has been carried out in line with the above studies and strategies and projects have been formulated with the aim of identifying the vision for the year 2030.

With a focus on gem and tourism, the objective of this city plan is to make Ratnapura a planned, sustained and adored city. Therefore, the city plan is focused on the physical, social and environmental development of the city in addition to the economic development of the city. It is hoped that the city will benefit from the resources available within the Ratnapura Municipal Council area and thereby create a more attractive and attractive city for the urban people to live in and to protect the existing ecosystem.

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Abbreviations

UDA	Urban Development Authority
RMC	Ratnapura Municipal Council
GND	Grama Niladhari Division



Part 1



Chapter 01



INTRODUCTION

Chapter 01
Introduction

Background

1.1. Background

The social, economic, political and environmental forces of a city, their mutual relationships and trends provide a strong basis for forecasting the future development of a city. Preparation of a Development Plan for the future of a city therefore, requires recognizing these variables within the Planning Process.

Urban development authority is the regulatory body of urban development in Sri Lanka. Thus, it has been empowered to function as the key urban planning implementing agency in the country by Urban Development authority act no 41 of 1978. The preparation of Development Plans for a Declared Urban Area is a vital aspect under the legal background of the authority. Considering these scenarios along with a futuristic vision, the UDA staff prepares development plans for the wellbeing of a city and to take advantage of the city's new development opportunities, so that its inhabitants may experience the anticipated benefits.

Ratnapura Town based Local Board was established in 1887 for the town's administration and management, and brought under a Local Government General Council established in accordance with the Local Government Council Act of 1922. The gradual development of the town resulted in the establishment of Ratnapura Municipal Council in 1968, an elevated urban status. Ratnapura Municipal Council area was declared as an Urban Development Area on 1st June 1979 under the Urban Development Authority Act No: 41 of 1978.

As a result of this declaration, the UDA identified the need of a New Town Centre in Ratnapura and acquired lands for this purpose under an extraordinary gazette notification No. 172/8 of 23rd December, 1981.

The preparation of Ratnapura Development Plan initiated in early 2006 based on this dual city concept and it has been gazetted under the extraordinary gazette notification of No. 1483/8 – 07th February, 2007. The updating process of the development plan was initiated in 2013, which contributed to upgrade the disaster management aspects of the city. This updated plan was gazetted under the extraordinary gazette notification of No. 1884/25 – 14th October, 2014.

The preparation of the current Ratnapura Development Plan commenced in early 2017. Along with the emerging urban scenarios of the city, this Development Plan is focused on enhancing the physical, environmental, economic and social well-being of the city and its inhabitants over the next 12 years. To support the city in achieving these objectives, it is also proposed to introduce developmental strategies and guidelines for the city over the next 10 years. The working process of the particular plan commenced on 15th March, 2017.

1.2. Planning Team

As a key element of the Planning Process for the preparation of this Development Plan, the following key stakeholders representing a wide range of areas of interests, have been consulted.

1.2.1. Key Stakeholder

- *Ratnapura Municipal Council*

1.2.2. Administration Related Consultancy Agencies

- *Sabaragamuwa Provincial Council*
- *District Secretariat Office*
- *Grama Niladhari Officers of Ratnapura Divisional Secretariat area*

1.2.3. Economy Related Consultancy Agencies

- *National Gem & Jewellery Authority*
- *Department of Agrarian Development*
- *Department of Provincial Agriculture*
- *Department of Export Agriculture*
- *Ministry of Plantation Industries*
- *Traders Association*
- *Gem Traders Association*
- *Sri Lanka Tourism Development Authority*
- *Provincial Tourism Ministry*
- *Archeological Department*

1.2.4. Environment Related Consultancy Agencies

- *Geological Survey and Mines Bureau*
- *Irrigation Department*
- *Department of Survey*
- *Department of Meteorology*
- *Forest Department*
- *Central Environment Authority*
- *National Building Research Organization*
- *Disaster Management Center*
- *Provincial Land Commissioner Office*
- *Land Reform Commission*

Chapter 01 Introduction

Planning Team

Key Stakeholder

Administration Related
Consultancy Agencies

Economy Related
Consultancy Agencies

Environment Related
Consultancy Agencies

Chapter 01 Introduction

Planning Team

Infrastructure Related
Consultancy Agencies

Social Related
Stakeholders

Planning Team

Supporting Divisions

Supporting Studies

1.2.5. Infrastructure Related Consultancy Agencies

- *Road Development Authority*
- *Provincial Road Development Authority*
- *Ratnapura Highway Development Project*
- *Ratnapura Depot*
- *Road Passenger Transport Authority*
- *National Water Supply and Drainage Board*
- *Community Water Supply Project*
- *Ceylon Electricity Board*
- *Sri Lanka Telecom*
- *National Housing Development Authority*
- *Health Services Department*
- *Provincial Education Office*
- *Sri Lanka Police*

1.2.6. Social Related Stakeholders

- *Religious leaders of the area*
- *Community based organizations*
- *Experts in identified sectors*
- *Social Media Community (Facebook)*
- *General Public (Randomly and purposely picked)*

1.2.7. Planning Team (Sabaragamuwa Provincial Office)

- *Plnr. Sisira M. Dissanayaka, Director, Sabaragamuwa Province, UDA*
- *Plnr. D. A. D. Athukorala, Dy. Director (Planning), Ratnapura District, UDA*
- *Plnr. Hasini N. Artigala, Strategic Planner, Ratnapura Cluster, UDA*
- *Ms. K.A.S. Gunasekara, Enforcement Officer, Ratnapura Cluster, UDA*
- *Ms. H.K.D.M.K. Pathirana, Enforcement Officer, Ratnapura Cluster, UDA*
- *Ms. H.M.P.H. Menike, Enforcement Officer, Ratnapura Cluster, UDA*
- *Ms. Sandya Bambaranda, GIS Officer, Ratnapura Cluster, UDA*
- *Ms. W.M.W. Menike, Draughtsman, Ratnapura Cluster, UDA*

1.2.8. Supporting Divisions

- *Research & Development Division*
- *Development Planning Division*
- *Planning Support Division*

1.2.9. Supporting Studies

- *2006/2010 Batch - Department of Town & Country Planning, University of Moratuwa*
- *Studio 5 (2017/18) - City School of Architecture, Colombo*

1.3. Scope of the Work

Ratnapura Development Plan is both a perspective and a vision for the future development of the city. It presents the current development state of Ratnapura city – where it is now? It sets out directions for change – what is the desired vision for Ratnapura? It identifies the thrust areas – what needs to be addressed as priorities. It also suggests alternative routes, strategies, and interventions for bringing about the desired changes – what interventions should be made in order to realize the vision? Ratnapura Development Plan therefore, is focused on making Ratnapura an economically productive, efficient, equitable and responsive City by 2030.

This plan is formulated for the entire Municipal Council area of Ratnapura consisting of 18 Grama Niladhari Divisions (GNDs) with a total population of 49,083 over 22.2 km² area.

Historically, Ratnapura is renowned as the country's centre for gem trade & industry. As an integral component of the Development Plan, it is focused on boosting the local economy by strengthening and diversifying the gem trade and industry whilst preserving the sensitive environmental and cultural elements of the region. The ultimate goal of the Ratnapura Development Plan is to create a livable city for the local community with strong and sustainable Economic, Environmental and Cultural perspectives.

Chapter 01
Introduction

1.4. The Planning Process

The Planning Process

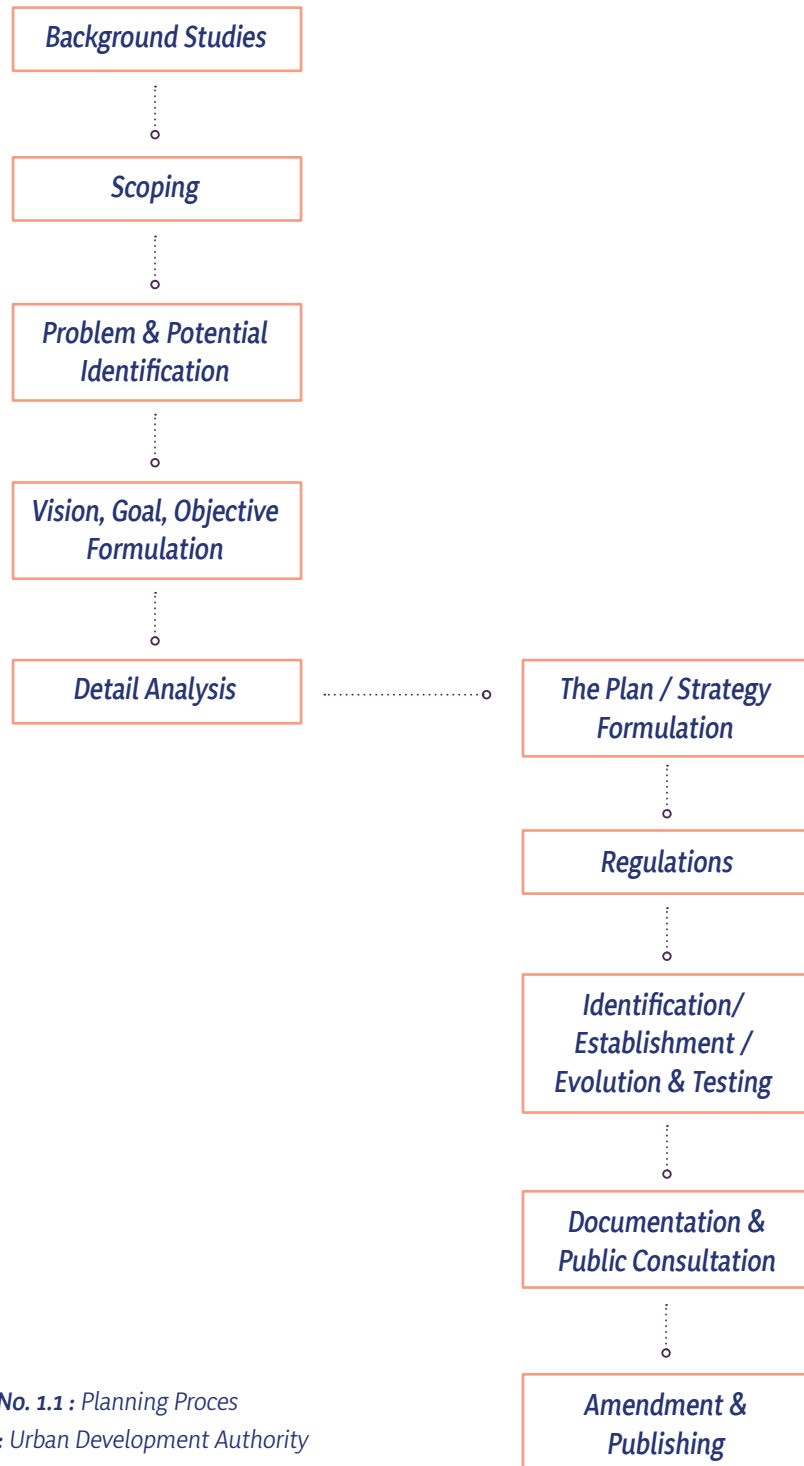


Figure No. 1.1 : Planning Process
Source: Urban Development Authority

Ratnpura Development Plan has been prepared by following the 10 steps in the Planning Process as shown by Figure 1.1 above.

Step 1 : Background studies primarily involved the establishment of a 'Geodatabase' to

- *Explore the base data with regard to the study area;*
- *Identify data gaps;*
- *Update the base data by field survey or other data collection methods; and*
- *Collect other necessary data required for analysis.*

Subsequently, all data and information have been stored in the Geo Database under defined feature classes. This was carried out from March 2017 to August 2017.

Project scoping under Step 2 involved understanding the order of Ratnapura urban area in relation to its context. Accordingly, a review on the relevant development policies at national and regional level policies and regulations have been undertaken, along with surveys on vehicular and pedestrian traffic, land values etc. and an evaluation on ongoing and proposed projects and their impacts. This was carried out from September 2017 to October 2017.

A set of prioritized key issues, both in terms of constraints and potentials for development, were identified under Step Three. Under the subsequent Step Four the public along with the before mentioned stakeholder were invited to provide ideas and comments for the preparation of a development plan for Ratnapura Municipal Council area. The fifth, sixth and eight steps involved the formulation of a Vision, Goals, Objectives and strategies, which provide an outline of the envisaged spatial form for the study area, along with its physical, environment, economic and social roles. Step Seven included a Detailed analysis of the study area i.e. Sensitivity Analysis, Development Pressure Analysis, Connectivity Analysis and Multi Criteria Suitability Analysis etc. This was carried out from November 2017 to August 2018.

Based on this analysis, a number of Priority Projects were identified and evaluated against the key constraints and potentials. This provided the opportunity to test and prioritize these ideas and understand their influence in terms of Physical, Social, Economic and Environmental Impacts. The prioritized projects were then supported by Urban Design Schemes, Form Based Analysis, Simulations, Building and Planning Regulations and Guidelines with Legal Implications and Social/Political Sensitivities.

Steps ten, eleven and twelve involved coordination work such as liaison and consultation with stakeholders and planning committees, and internal reviews and quality assurance, obtaining Ministerial approvals and working with Gazette Notification. This was carried out from September 2018 to May 2019.

Chapter 02



PRELIMINARY SURVEY

Chapter 02
Preliminary Survey

The Study Area

2.1. The Study Area

Ratnapura City is located approximately 100 km to the Southeast of Colombo and it is the Capital of Sabaragamuwa Province. The study area for The Ratnapura Urban Development Plan includes the administrative boundaries of Ratnapura Municipal Council Area. (Map 2.1) Due to nationally significant environmental systems and economic activities, Ratnapura has been protected as a worthy land since the historic kingdom period. During the colonial period the Dutch built a fort in Ratnapura and other two colonial rulers, the Portuguese and the British also had shown great interest over Ratnapura.

The region's particular ecological environment is a product of two southwest oriented mountain slopes (Adam's peak and Rakwana mountain range) within the central uplands. Due to its strategic location, sensitivity and identity, Ratnapura has the potential of becoming a thriving city with a strong economic and environment base.

Ratnapura town is situated at 18m Mean Sea Level between the northern latitudes 600-41' and 600-42' and eastern longitudes 800-23' – 800-24. The town and its adjoining area consist of a variety of biophysical features such as mountain areas with steep slopes, river valleys, lowlands and plains. (figure 2.1) Due to these variations, the natural terrain of the study area ranges between 18-305m (Mean Sea Level). The town itself is located on the floodplain of Kalu Ganga, one of the main four rivers in Sri Lanka. Together, these features form a highly complex natural environment, which is an integral element of the urban development in Ratnapura.

Cross Section of Ratnapura Town

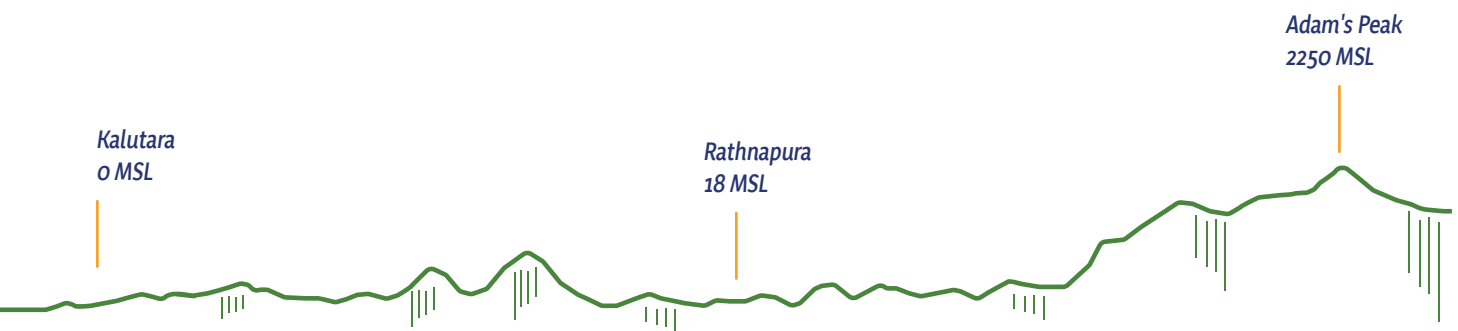
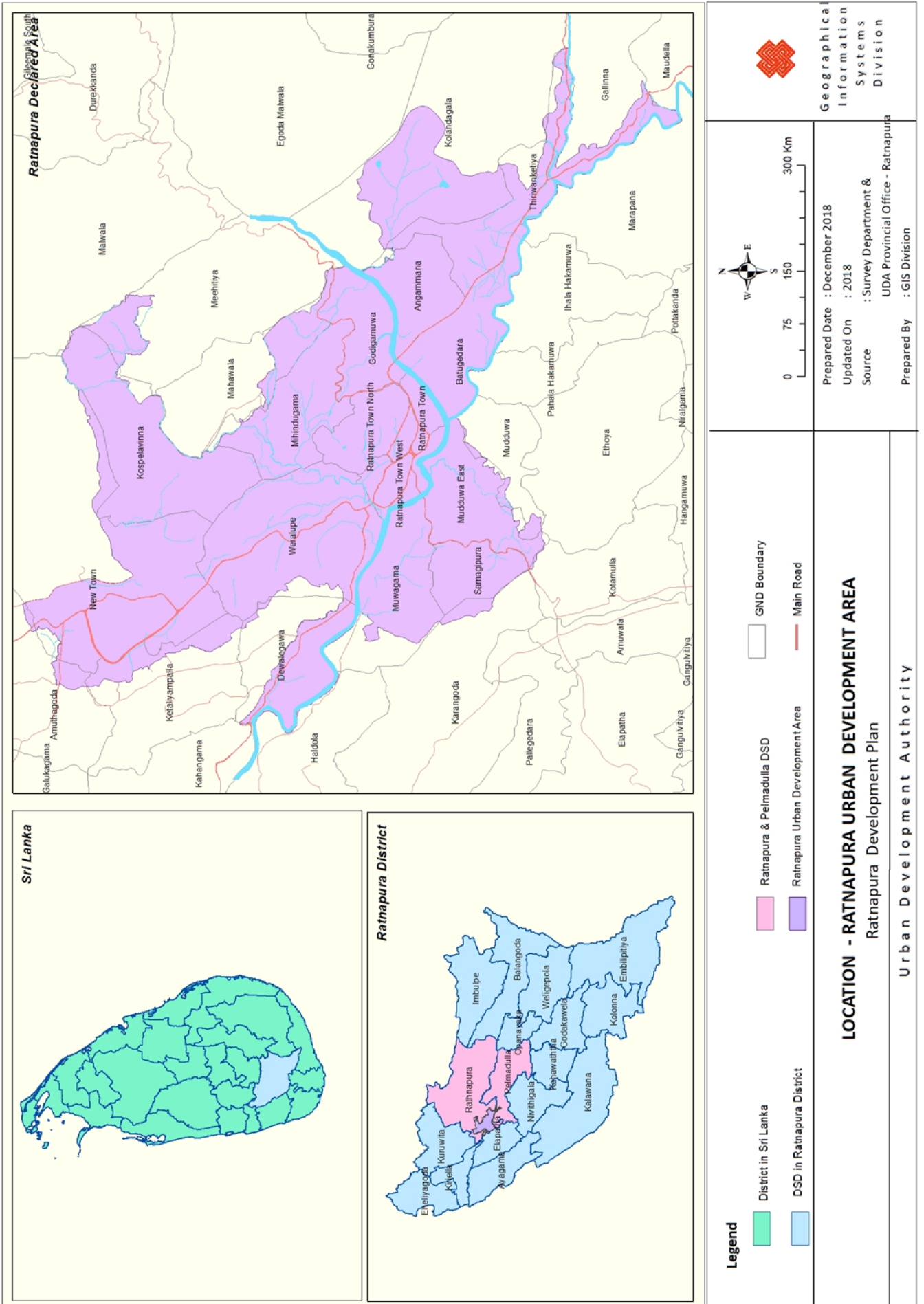


Figure No. 2.1 : Cross Section of Ratnapura Town

Source : Studio 5 (2017/18) – City School of Architecture, Colombo



Map No. 2.1 : Spatial Location of Ratnapura MC Area

Chapter 02 Preliminary Survey

The Study Area

The average annual temperature of the region is 29.44°C and the highest temperatures are usually being recorded in March and the lowest in January. (Figure No. 2.2) Average rainfall within the town varies between 3,000 mm and 4,000 mm. and the highest rainfall is usually being recorded from May to June during the southeast monsoon and from September to October during the inter monsoon.



Figure No. 2.2 : Climate Variation of Ratnapura Town (2018)
Source : Studio 5 (2017/18) – City School of Architecture, Colombo

Ratnapura is renowned for its association with the Sri Padaya (also known as Adam's peak) and the deity Sumana-Saman, two highly respected religious symbols among the Buddhist community. According to historic sources, Kalu Ganga (River) had been used as a naval route by pilgrims to reach Sri Padaya via Ratnapura. In addition, there were few man-made pathways, such as the Raja Mawatha (King's Path), which had also been used by pilgrims to reach Sri Padaya via Ratnapura. It is therefore evident that Ratnapura has historically been one of the key access points to Sri Padaya. Sri Sumana Saman Dewalaya, the shrine dedicated to deity Sumana Saman, is a key historic site within the study area, which is several hundred years old. (figure 2.3) Another important aspect of Ratnapura's history is its Gem industry, which has been internationally recognized for producing gems with high quality and purity.

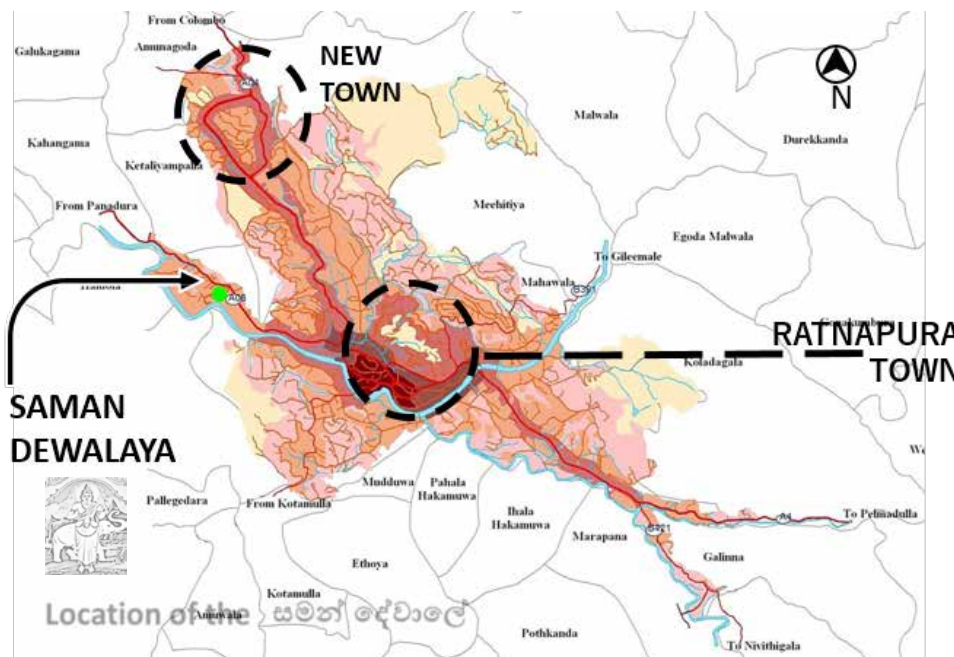


Figure No. 2.3 : Location of Saman Dewalaya

Source : Studio 5 (2017/18) – City School of Architecture, Colombo

According to 'The National Physical Planning Policy and Plan of Sri Lanka (2011-2030)' prepared by the Department of National Physical Planning, Ratnapura is within the proposed Protected Area Network. Due to the higher elevation Ratnapura town is also situated within the nominated 'Central Fragile Area'. As such, planning for the future development of Ratnapura requires considering these national policies and the requirements associated with them. In response to these policies, it has been identified that even though Ratnapura is the capital of Sabaragamuwa Province, by 2030, the study area's population should remain below 100,000.

Ratnapura town is also an important node in the regional transportation network with direct links to Eastern, Southern and Central Provinces of the country. As the central point of Colombo (western coast) – Batticaloa (eastern coast) Highway, Ratnapura town directly joins the Western - Eastern Provinces. It also connects with Southern Province along Ratnapura – Kalawana route. (figure 2.4) To strengthen the potential of this strategic node, the National Physical Plan proposes an expressway between Colombo and Pelmadulla via Ratnapura and it is to be connected with the existing expressway network from Kahatuduwa interchange.

Chapter 02
 Preliminary Survey

The Study Area

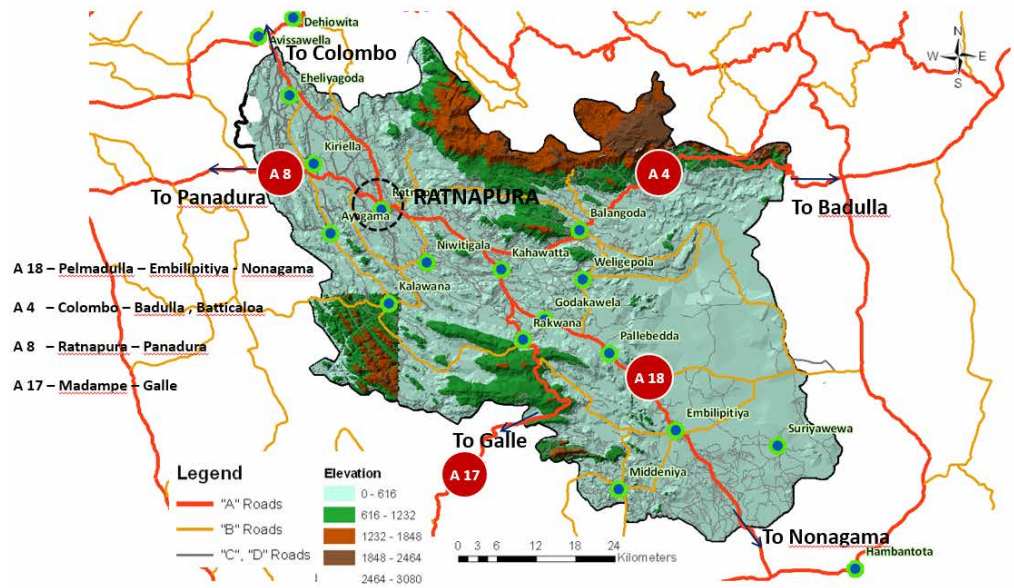


Figure No. 2.4 : Regional Connectivity of Ratnapura Town

Source : Regional Study (2006/10) – Department of Town & Country Planning, University of Moratuwa

Being a major transportation node and the provincial capital of Sri Lanka, Ratnapura attracts over 100,000 daily commuters from all areas of the district. (figure 2.5) This is in addition to its existing population 49,083.

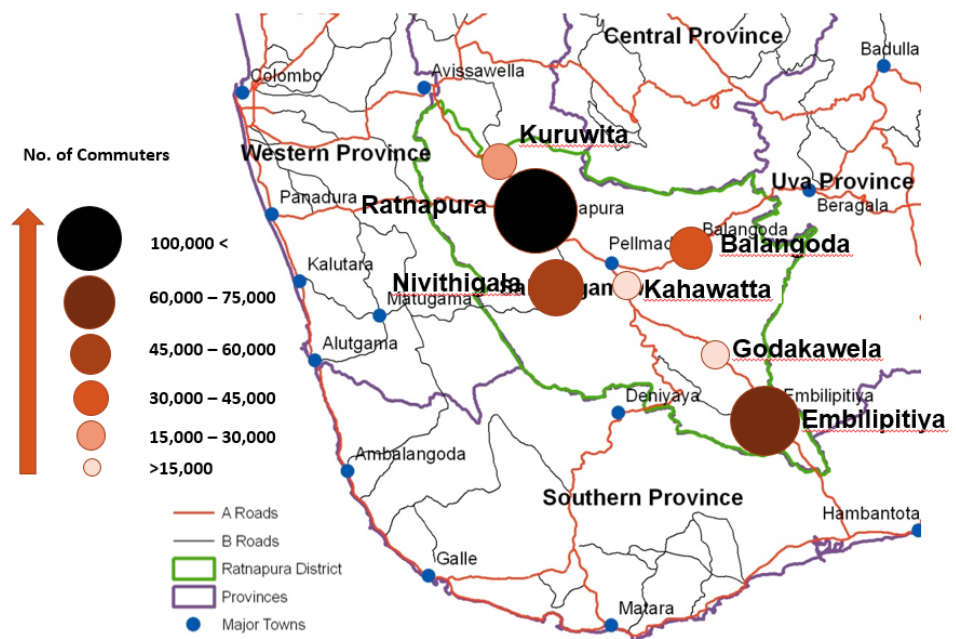


Figure No. 2.5 : Commuter Population of Ratnapura

Source : Regional Study (2006/10) – Department of Town & Country Planning, University of Moratuwa

The following is a list of identified key trip generators that put significant demand on the town's infrastructure and service supply.

- *Employment purposes.*
- *Health & educational facilities.*
- *Economic purposes such as Gem dealing.*
- *Transportation services.*
- *Agricultural services.*
- *Banking and financial facilities.*

The strongly established Gem Industry and Trade has been largely determined the spatial distribution of economic activities in Ratnapura Town. On one hand, Gem mining is based on the region's geography; on the other, Gem trading activities and therefore other complementary economic uses, have been located at key nodes where accessibility is high.

The centralized administrative functions and education activities along with the recently upgraded health facilities have contributed to this situation. Ratnapura is also the center for many social and economic services. It is therefore evident that Ratnapura acts as the first order town of Sabaragamuwa Province.

Chapter 02
Preliminary Survey

Planning &
Situational Context

2.2. Planning & Situational Context

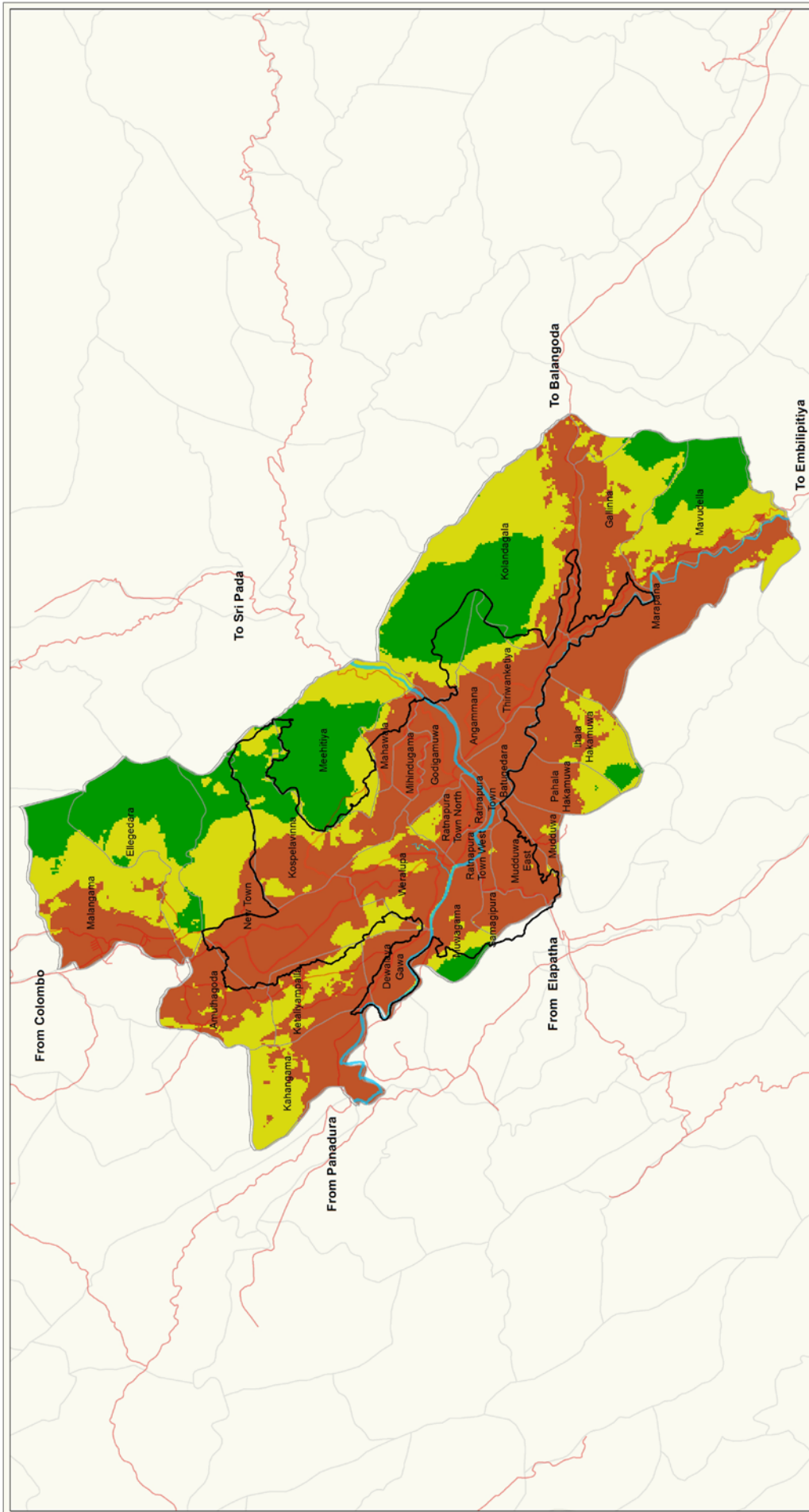
The study area is 70.43 km² consisting of 69,994 populations in year 2011 within 29 Grama Niladhari Divisions. Population growth rate is 1.5% and by 2030, the expected population within the study area is 77,925.

Ratnapura has been developed as a “Dual City” based on a previous planning attempt during 1980–2015 with the intention of creating a disaster free settlement according to the National Physical Plan. The two city nodes are located approximately 5 km apart, and have two distinct roles: the existing town center (Old Town) operates mainly as the commercial center along with the strong focus on the Gem Industry, whilst the new city node (New Town) is the administrative center. (figure 2.6)



Figure No. 2.6 : Ratnapura as a Dual City
Source : Urban Development Authority

Thus, a Development Pressure Analysis was carried out to identify areas with high demand for land and development. (Map 2.2) Depending on variables such as accessibility, proximity, property market and land use typology, both planned development and spontaneous growth together direct the demand into various locations. In order to identify its spatial impacts, a Development Pressure Index has been formulated along with the relevant factors: Level of Accessibility, Urban Potential as a result of connectivity, Existing Population Density and the Types of Land use etc. According to these studies, it has been identified, the development of Ratnapura city flows towards Kuruvita and Pelmadulla.



<p>Legend</p> <ul style="list-style-type: none"> High Moderate Low <ul style="list-style-type: none"> MC Boundary Water Body Main Road 		<p>Geographical Information Systems Division</p>
	<p>DEVELOPMENT PRESSURE ANALYSIS - RATNAPURA URBAN AREA</p> <p>Ratnapura Development Plan</p> <p>Urban Development Authority</p>	

Map No. 2.2 : Development Pressure Analysis

Chapter 02
Preliminary Survey

Delineation of the
Planning Boundary

2.3. Delineation of the Planning Boundary

The delineation of the planning boundary is based on the following three aspects.

a) The Functional Region

Ratnapura has a large commuter population that is greater than its resident population. According to the perception survey, daily commuters include gem traders and businessmen, people seeking administrative services and daily retail & commercial needs etc. Since Ratnapura acts as both an administrative capital and a service center, two catchment areas have been considered for the purpose of preparing the development plan. (figure 2.7)

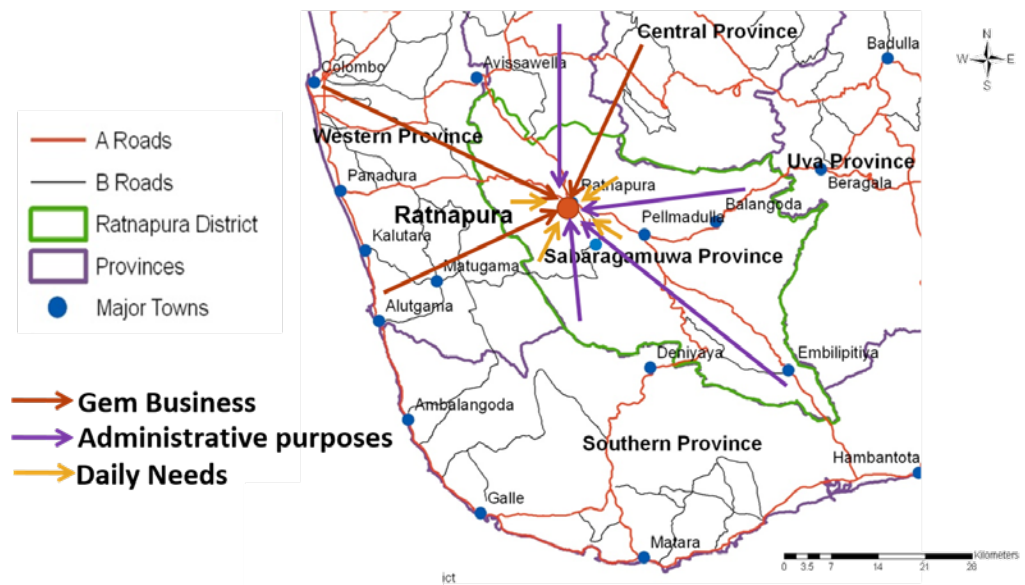


Figure No. 2.7: Functional Boundary of Rathnapura

Source : Regional Study (2006/10) – Department of Town & Country Planning, University of Moratuwa

Through this Development Pressure Analysis (Map No. 2.2), the study observed that the recent developments, along with the region's urban growth over the years, have imposed more pressure for development in certain areas. Evidently, there is a positive correlation between development pressure and the ongoing trends of urban development. The analysis shows that development pressure extends from the Ratnapura City Center into the periphery areas, along the major arterial roads. Development pressure experienced by Kuruwita is a strong example, whilst Ellegedara, Meehitiya and Kolandagala areas also experience similar phenomena with moderate levels of urbanisation.

b) The Geographic Characteristics

Ratnapura is within the South West topographical region in Sri Lanka. The elevation of the city varies between 18m and 305m above the mean sea level, however, the town center lies below 50m (Mean Sea Level). Four distinct geographical features can be identified within the study area, which includes steep slopes, river valleys, low-lying land and plains. (figure 2.8)

Chapter 02
Preliminary Survey

Delineation of the
Planning Boundary

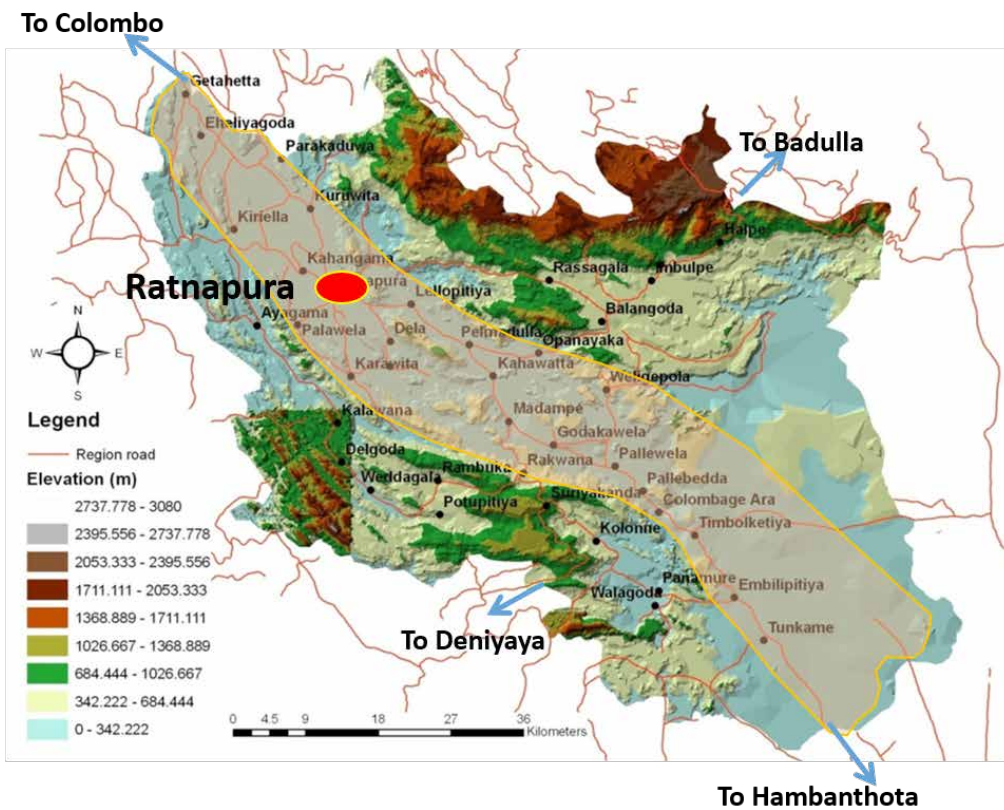


Figure No. 2.8 : The Geographic Formation of Ratnapura Town
Source : Regional Study (2006/10) – Department of Town & Country Planning,
University of Moratuwa

Chapter 02 Preliminary Survey

Delineation of the Planning Boundary

Godigamuwa, Katandola, Mudduwa, Muwagama, Weralupe and Ratnapura Town Centers lie at the lowest elevations within the municipal council area, whilst Mahawela and Thiriwanaketiya centers are at higher elevations. Kospalawinna North, Galkaduwa, and Mudduwa west are hilly areas with dissecting slopes.

c) The Administrative Divisions

The UDA declared area for this development plan is consistent with the boundary of Ratnapura Municipal Council area, which accounts for 22.2km² containing eighteen (18) Grama Niladhari Divisions. (Table 1.1) Thus, the 49,083 residential population along with the 100,000 daily commuters will be affected by the Ratnapura Urban Development Plan. (Refer to annexure 1 and 2 for more details)

	Planning Area (Study Area)	Implementing Area (UDA Declared Area / MC area)
No. of DSD	02	01
No. of GND	29	18
Land Extent (Sq. km)	70.43	22.2
Residual Population	69,994	49,083
Expected Population by 2030	77,824	64,340
Population Growth Rate	1.0	1.0
Commuter Population	100,000	100,000
Expected Commuter Population by 2030	150,000	150,000

Table No. 2.1 : Brief Information about Development Planning Area

Source : Urban Development Authority

The planning boundary has been demarcated to optimize the potential benefits envisaged by the Ratnapura Development Plan. Even though the strategic interventions are aimed at addressing the land use objectives, streetscape design, and roadway conditions within the Ratnapura Municipal Council area, it is anticipated that this development plan will benefit a broader area consisting the three adjoining local authorities within the Ratnapura District.

Chapter 02
Preliminary Survey

Delineation of the
 Planning Boundary

The predominant ethnic group within the study area is Sinhala – Buddhist, whilst there are communities with other ethnic backgrounds. (figure 2.9) Around 70% of the working force is made up by the 18 – 60 age group (figure 2.10), however, there is an increase in school drop-out rates after G.C.E O/L examination.

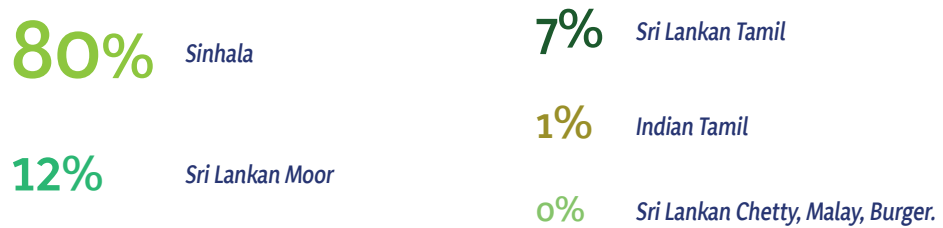


Figure No. 2.9 : The Existing Population Pattern – 2017
 Source : Resource Profile (2016) Ratnapura

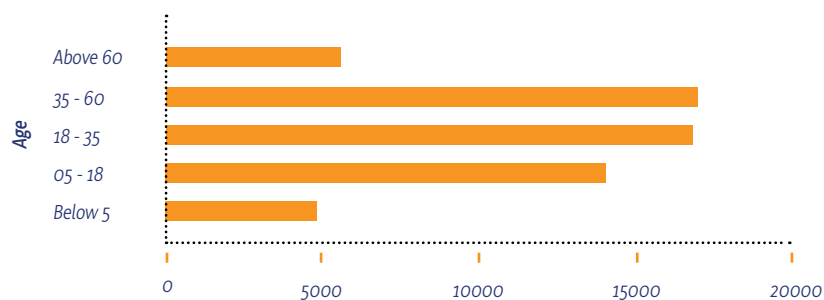


Figure No. 2.10 : Population Distribution by Age groups - 2017
 Source : Resource Profile (2016) Ratnapura

According to 2016 census a total of 49,083 people were employed in 8 major economic sectors. More than 30% of this consisted of government employees, whilst half of the working population was employed in private sector, or self-employed related to gem industry and agriculture. (figure 2.11)

29 %
Government Sector

18 %
Self Employment

16 %
Business Sector

18 %
Private Company

11 %
Agriculture Sector

8 %
Other

Chapter 02 Preliminary Survey

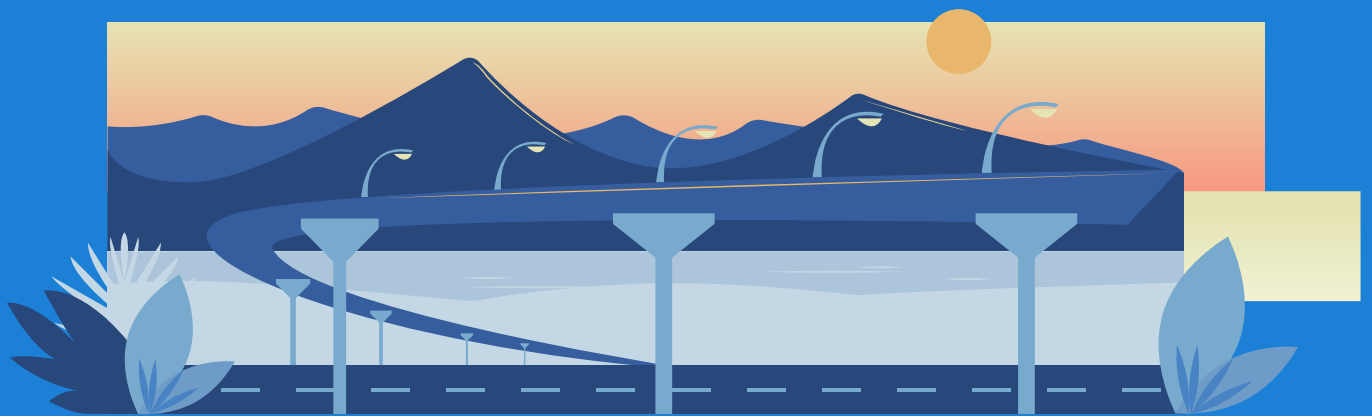
Delineation of the
Planning Boundary

Figure No. 2.11 : Population by Employment Sector in Ratnapura MC Area - 2017
Source : Resource Profile Ratnapura (2016)

The predominant land use within the UDA declared area is residential which accounts for approximately 40% land coverage. Residential development can be both seen along the main arterial roads in the form of linear developments and as isolated clusters within agricultural lands. There is a development trend of converting agricultural lands to residential uses in several areas, whilst recent planned development within the New Town area consists of new residential uses. 14% of the total land use in Ratnapura is crop cultivation, 13% is forests and woodlands and 11% is paddy cultivation while most of these paddy cultivation lands are used for gem mining. (refer the annexure 2)

Both the New Town and the Old Town together contribute to the Region's economy, however, due to distinctive roles, they have substantially different catchment areas. The Old Town mainly caters for the local population, whilst the New Town is an important administrative center, serving the entire Sabaragamuwa Province. Gem Trade has been established at certain activity nodes such as the clock tower, Ambagahayata and Demuwawatha Streets. The study area accounts for 3% of the national GDP produced by Sri Lanka's gem trade, whilst 25% of country's trading industry consists of traders from Ratnapura. According to the Gem & Jewelry statistics, 30% of the gem miners are based in Ratnapura.

Chapter 03



NEED OF THE DEVELOPMENT PLAN

Chapter 03 Need of the Development Plan

Problems of the Planning Area

Ratnapura Development Plan has been prepared to address the identified issues within the study area, as well as, to optimize the potentials. Development plans are being prepared for areas which experience significant development pressures or negative effects of growth and development. The objective is therefore, to find strategic solutions to these problems and to manage the future growth through the alignment of local area planning. The identified issues for the study area have been compiled through the coordinated inputs from UDA planners, detailed analysis and stakeholders. Subsequently, these issues have been prioritized according to the context, magnitude and significance. As such, the need for Ratnapura Urban Development Plan can be identified as follows;

Similar to many other towns or urban centers in Sri Lanka, Ratnapura settlement has been established within a nationally-significant environment. Currently, Ratnapura Municipal Council area consists of natural and urban forests, rivers, mountains with high biodiversity along with a complex hydrological pattern. Additionally, its reputation as the country's center for Gem industry has earned Ratnapura a special status among other cities. At the same time, the area also experiences urban encroachments, deforestation, illegal mining activities, unauthorized constructions. The conflicting relationship between the natural environment and human needs/ settlements is therefore, apparent within the study area. When considering this situation, few identical issues related to the Ratnapura Town can be identified.

3.1. Problems of the Planning Area

- *Flood*

Historically, Ratnapura has been affected by three levels of flood hazards, namely: Critical, Major and Minor flood events (Table 3.1). Due to the monsoon rainfall pattern, Ratnapura is prone to annual flooding between May and June, and October (Figure 3.1). Additionally, the city is affected by 1 into 10-year major flood event that causes significant destruction on lives and property. During this flood event, approximately 80% of the land within the city lies under flood water for an average period of 2 – 5 days (Refer to Annexure 03, 04 and 05 for more details). According to the statistical information provided by the Disaster Management Center, a total number of 206 families and 1,203 people were affected by the major floods in 2017.

<i>Type of flood</i>	<i>Return period</i>	<i>Level of flood</i>	<i>Recorded years</i>
<i>Critical Floods</i>	<i>50 Year</i>	<i>Over 80ft MSL</i>	<i>1913, 1947, 1989, 2003, 2017</i>
<i>Major Floods</i>	<i>10 Year</i>	<i>70ft MSL – 80ft MSL</i>	<i>1857, 1872, 1893, 1924, 1957, 1969, 1978, 1982, 1993, 2017</i>
<i>Minor Floods</i>	<i>01 Year</i>	<i>66ft MSL – 70ft MSL</i>	<i>1939, 1940, 1966, 1967, 2006, 2017</i>

Table No. 3.1 : Disaster History of Ratnapura (by 2018)

Source : Irrigation Department – Ratnapura

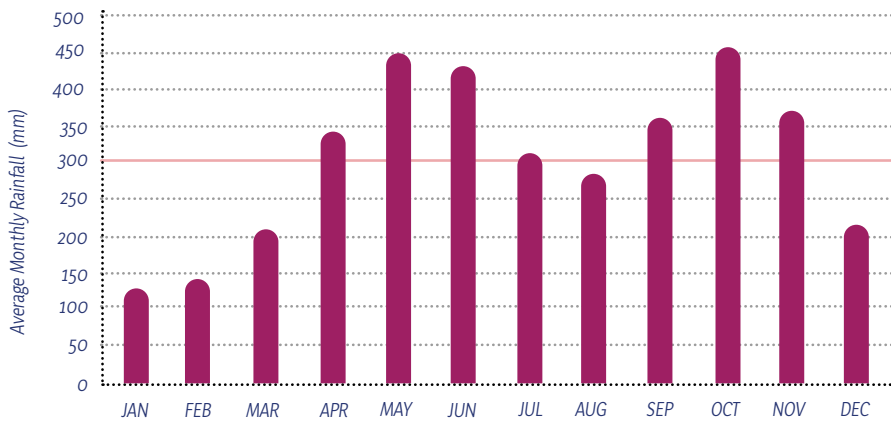


Figure No. 3.1 : Average Monthly Rainfall - 2016

Source : Irrigation Department – Ratnapura

In addition to these direct tangible impacts, major flood events in Ratnapura also cause indirect and intangible impacts on disaster affected communities. These include emotional turmoil of loss of family or friends and property, which may subsequently lead to long term psychological conditions. The town center is the provincial capital and the focal point for the region’s commercial and retail activities, with over 700 registered businesses within the municipal council area. (figure 3.2) The annual flood hazard causes direct impacts on more than 80% of these businesses, and approximately 70,000 people living in the study area who depend on this supply chain. Regional and local level transportation networks also experience interruptions due to these major flood events in Ratnapura. Cumulatively, resolving these issues requires both local and regional level authorities to allocate significant financial resources on an annual basis.

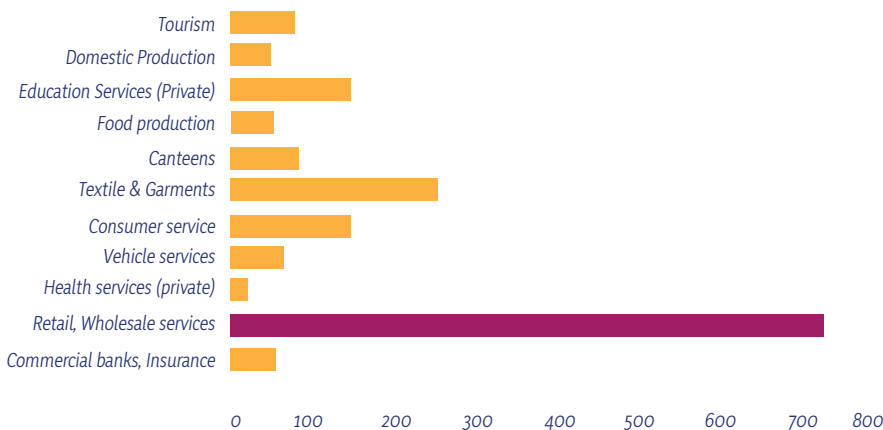


Figure No. 3.2 : Distribution of Commercial Activities of Ratnapura Town- 2016

Source : Municipal Council – Ratnapura

Chapter 03 Need of the Development Plan

Problems of the Planning Area

Ratnapura is the central point of the arterial road A004 connecting the west and east coasts of the country. It is also an important node of the inland road that connects Colombo and Panadura (Western region) with Hambantota (Southern region) and Batticaloa (East region). (figure 2.4) As the administrative capital of the Sabaragamuwa province Ratnapura attracts over 100,000 commuters seeking various services and needs, including commercial, retail, health and education facilities. 30% of the school attendees within Ratnapura district are enrolled in schools which are located in the town center. Ratnapura base hospital serves more than 5,000 people daily, and other private and government health institutions serve an additional 10,000 people on a daily basis. It is therefore evident that a major flood event in Ratnapura can potentially create multifaceted issues at a regional level. Thus, flood damages to the regional connectivity and the smooth service flow of the city at this viewpoint.

In addition to these primary impacts, during a disaster in Ratnapura, post-disaster recovery such as resettling affected communities, rebuilding damaged structures and infrastructure, reinstating services and facilities, and preventing secondary impacts such as contamination, spread of diseases etc. also incur significant financial cost on the central government. A major flood event can potentially cause the government to declare a 'national emergency' situation, which requires allocation of additional funding, support services and personnel into the region, at the expense of other regions and economic sectors in the country. (figure 3.2)

District	Affected		Impact			Displaced People
	Families	People	Deaths	Missing	Injured	
Kegalle	1,437	5,250	2	2	6	2,261
Rathnapura	4,815	18,031	47	-	2	4,844
Kaluthara	8,606	37,492	37	72	22	4,829
Gampaha	4,41	19,535	2	-	1	7127
Matara	*	6,003	11	17	-	*
Hambanthota	1,860	4,405	1	-	-	-
Galle	32,215	128,047	-	-	2	1,218
Matale	7	31	-	-	1	-
Colombo	2,672	10,849	-	-	-	772
Kandy	9	40	-	-	-	-
Batticaloa	4	20	-	-	-	-
Trincomalee	206	696	-	-		
Vavuniya	31	102	-	-		
Mullaitivu	26	70	-	-		
TOTAL	56,529	230,571	100	91	34	27,054

Table No. 3.2 : Final Situation of 27 May 2017 Major Flood, 0800HRS
Source : Disaster Management Centre

Therefore, preventing a potential major flood disaster in Ratnapura or minimizing its impacts is a crucial need of the study area. A primary objective of this plan is therefore, to formulate solution(s) through development planning interventions that could effectively satisfy this need.

- **Degrading the sense of the place**

Historically, Ratnapura's identity has been well established as "The Gem City" of Sri Lanka. The records made by historical sailors such as Plini, Xuanzang and Iban Batuta, recognizes that Ratnapura was internationally renowned for the quality of Gems produced. Additionally, these records document that the Kalu Ganga had been used as a naval trade route from Western coast (the primary port is in Colombo) to Sabaragamuwa Province. It is believed that due to abundance of high quality Gems, the town later earned its present name: 'Ruwan Puraya' or 'Ratnapuraya', with the meaning: 'the town where gems are found' (Source: Sabaragamuwa Wansha Kathawa).

Moreover, Ratnapura is also renowned for both Gem mining and trading activities. (figure 3.3) 30% of the minors and 25% of the traders of region's labor force involved in the gem industry have claimed Ratnapura as their native place, whilst Beruwala gem market, Thailand Gem market and other markets worldwide are reducing the trading power from Ratnapura Market by now.

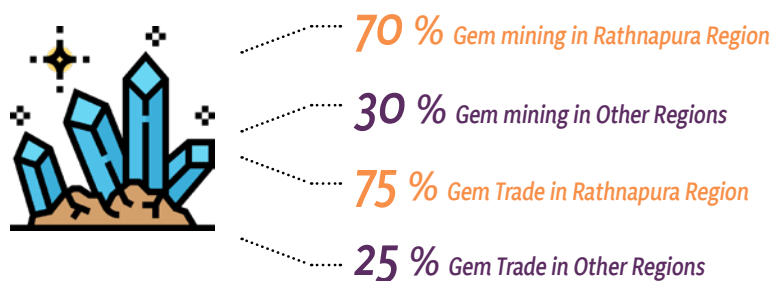
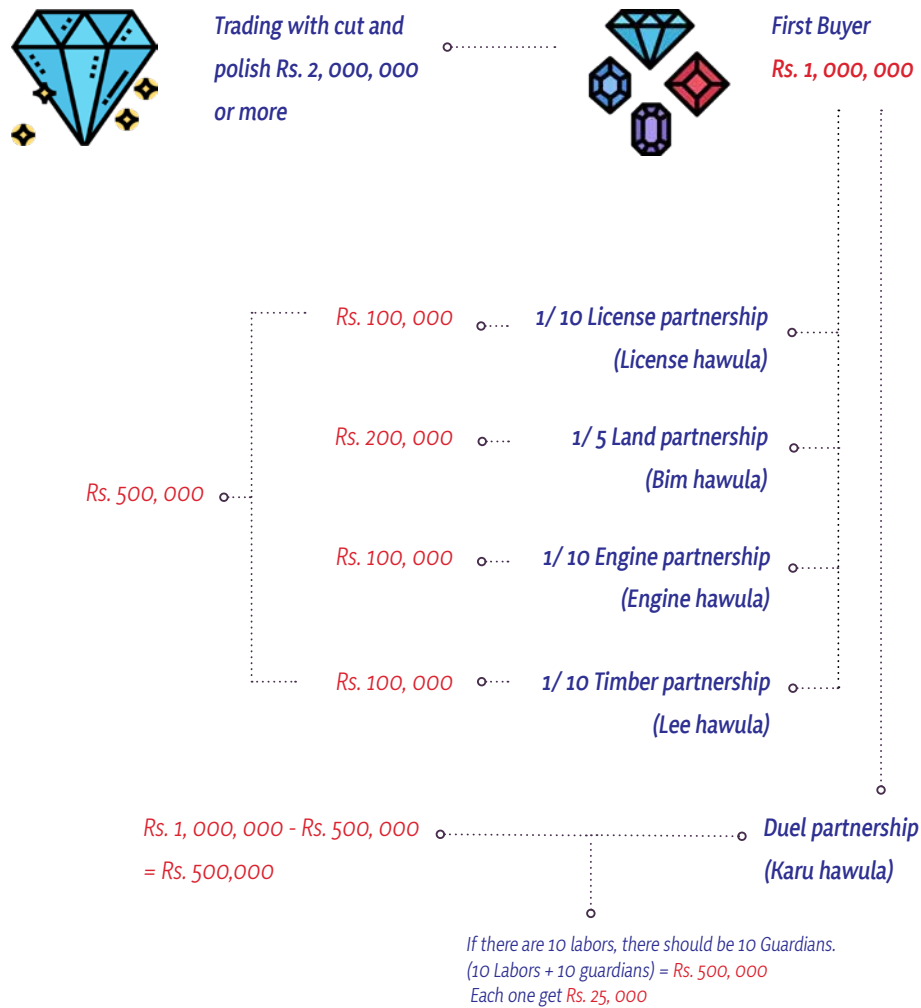


Figure No. 3.3 : Current Situation of Gem Mining and Trading
Source : Regional Study (2006/10) – Department of Town & Country Planning,
University of Moratuwa

Approximately 1/3rd of the labour force involved in the gem industry engages in labor intensive activities such as mining or small scale trading that involves little to no value addition, whilst the higher level gem trade is occupied by a minority. The gem 'trade chain' can be understood through the gem value chain, which depicts the value of a gem at each point of exchange based on 'free market exchange' principles.

Chapter 03
Need of the
Development Plan

Problems of the
Planning Area



Each labor has one guardian to pay his weekly salary (Rs. 1000 per one labor). So each labor and his guardian have the dual partnership. Those will get their share as 1/7. Here, the rest of money (Rs. 500,000) will go to the dual partnerships or the leader of the dual partnerships called basunnahe.

Figure No. 3.4 : Example for a money leakage in the gem industry chain from mining to trading
Source : Urban Development Authority

Studies based on this value chain show that exchange value of a gem doubles or rises even more when a particular gem has been introduced to the market by a primary seller or a miner (those who excavated the gem). Evidently, the value increases significantly at the secondary or tertiary markets when the exchange take place between traders who are based in areas outside of the region. (figure 3.4) As such, the primary sellers or miners based in the Sabaragamuwa Region, and subsequently the local economy, does not receive the benefits of the true market value for the natural resource produced in the region. This mechanism has ultimately resulted in a significant financial drain on both the gem industry and the local economy. With lack of adequate financial return

and depleting deposits, Ratnapura's gem industry has suffered major setbacks in the recent past. At the same time, people whom get the benefits do not invest that money into Ratnapura again. Thus, local money leakage to the other cities and countries through gem trading cause to degrade the sense of the place in Ratnapura.

- **Declining forest cover**

The National Physical Plan for Sri Lanka identifies land above 300m (Mean Sea Level) elevation as 'The Central Fragile Area', consisting of nationally significant hydrological and biophysical systems. The Plan discourages extensive urban or population growth within this area and calls for the preservation of existing forest reserves, waterways and the habitats within them.

Similar to the urbanization pattern of other historic cities and towns in Sri Lanka, the location for Ratnapura settlement has been established based on its proximity to the primary water source, the Kalu River. In addition to this, Ratnapura is the only town in Sri Lanka, apart from Kandy, Kegalle and Galle to be located next to an urban forest in its natural habitat, the Pompakaele Urban forest. The study area, as mentioned earlier, is within the declared 'Central Fragile Area', and therefore the National Physical Plan requires existing forest cover to be preserved.

Despite this, due to settlement expansion and other urban and commercial agricultural practices, in 2017, the forest cover within the study area has been reduced by approximately 10%. Due to encroachments, Pompakale has lost approximately 30% of its forest cover. (figure 3.5)

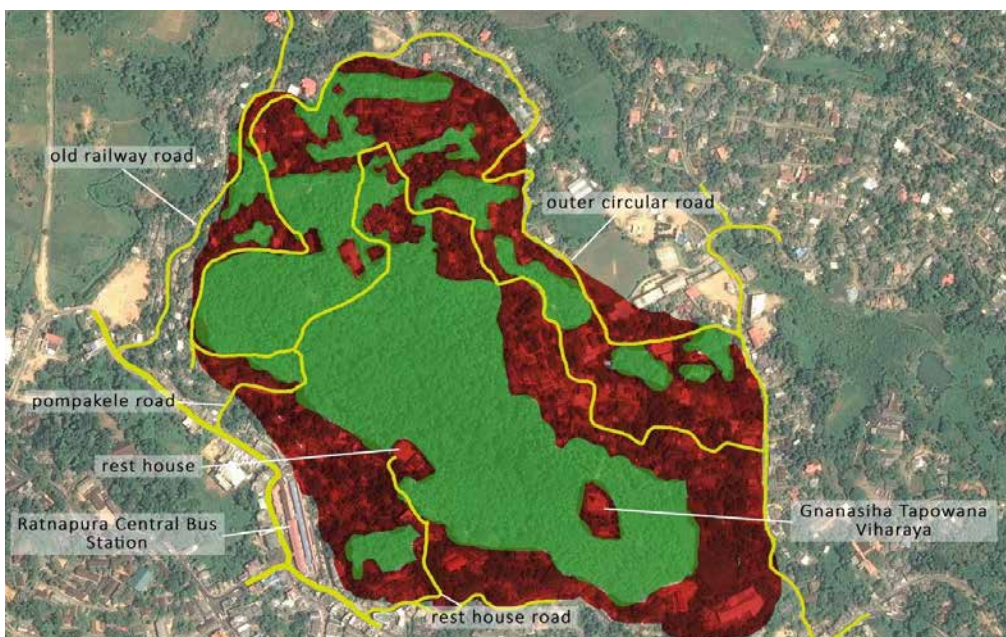


Figure No. 3.5 : Encroachments to the Pompakale Urban Forest - 2017
Source : Studio 5 (2017/18) – City School of Architecture, Colombo

Chapter 03 Need of the Development Plan

Problems of the Planning Area

Consequently, the declining forest cover has contributed to increase the urban heat effects within the town center. During the dry period (December - March), the day time temperatures within Ratnapura Town Center increases up to 33 °C. The town center being located in a basin area with inadequate cross-wind and high humidity, this can be felt around 37 °C. The increasing urban heat levels have direct impacts on the town's walkability and people's daily functions.

Resolving these multifaceted environmental issues therefore requires a holistic planning intervention.

- **Traffic congestion**

As described earlier, Ratnapura is an important nodal point within multiple regional transportation networks of the country. The anticipation of commuters in these routes therefore, is to have smooth passage through Ratnapura. However, due to the region's complex geographic pattern and the town's spatial structure, access through Ratnapura during peak hours is often congested and therefore the traffic is slow-moving. (Refer annexure 6 – 12)

On one hand, due to the region's complex biophysical setting, the town has been developed as an island with only three entrances via bridges (figure 3.6) and two major roads (Panadura Road & Malwala Road) which connects adjacent to those bridges (figure 3.7). These entry points are bottlenecks for both local and regional traffic, as it has been recorded that during peak hours, approximately 2,500 vehicles enter the town center at a single instance via A004 road.

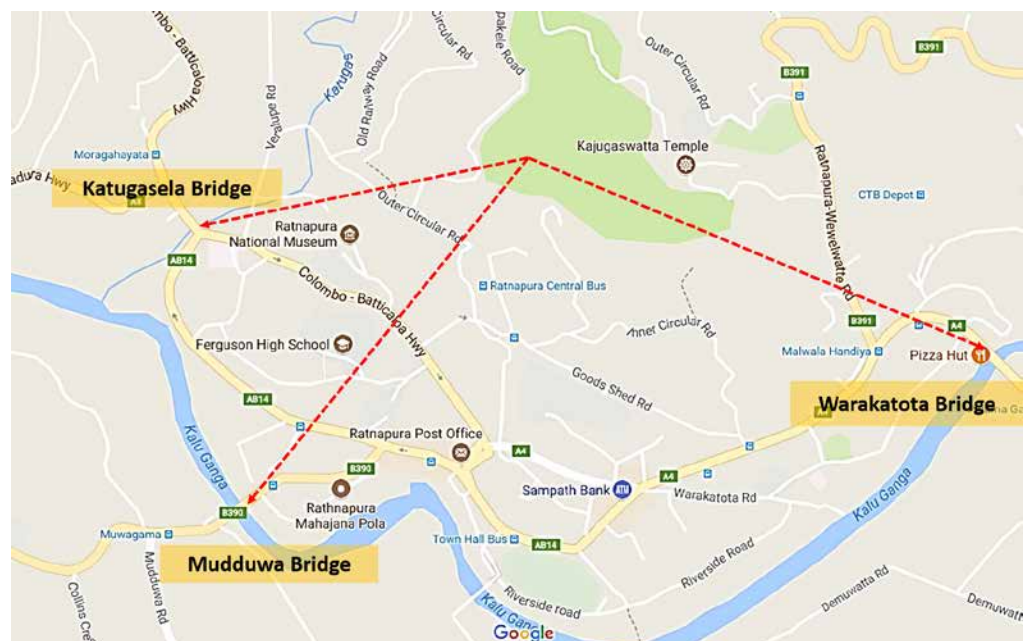


Figure No. 3.6 : Geographic Formation in Ratnapura - Bridges
Source : Urban Development Authority

Chapter 03 Need of the Development Plan

Problems of the Planning Area

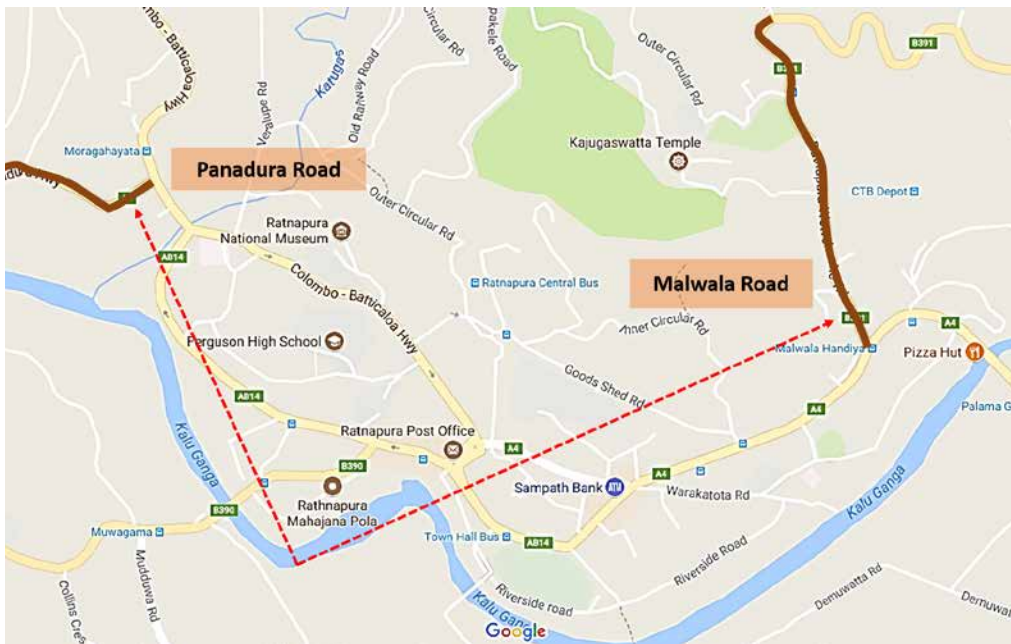


Figure No. 3.7: Geographic Formation in Ratnapura - Roads
Source : Urban Development Authority

On the other hand, the town center hosts five major schools with approximately 12,000 daily school attendees, which accounts for 30% of total school attendees within the study area. The town attracts a further 10,000 students attending many private educational or tuition facilities located within the town center. (figure 3.8)

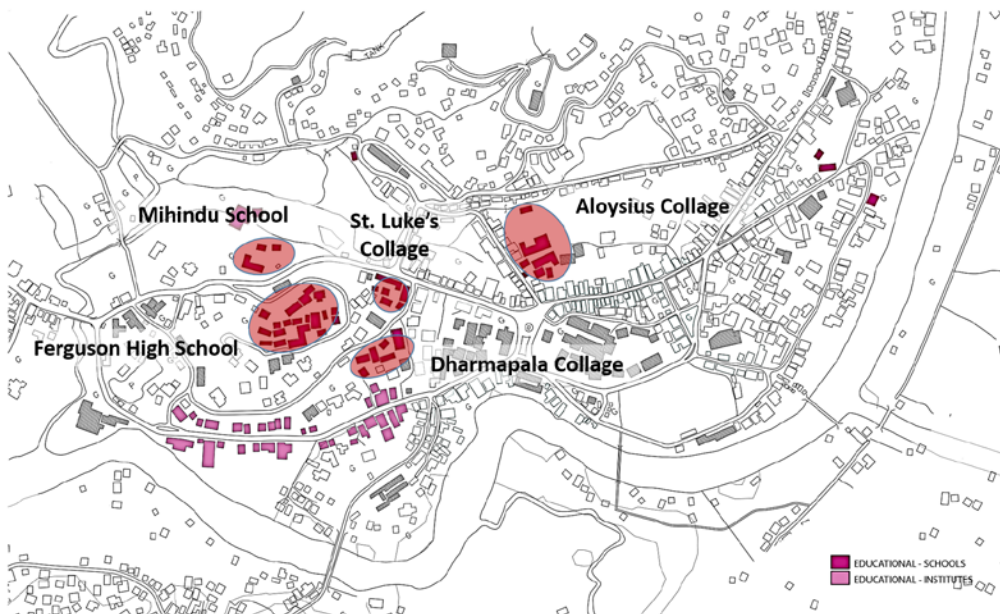


Figure No. 3.8: Spatial Formation in Ratnapura - Schools
Source : Studio 5 (2017/18) – City School of Architecture, Colombo

Chapter 03 Need of the Development Plan

Problems of the Planning Area

Moreover, in the absence of an appropriate bypass route, the town center also attracts unwanted vehicular movements between other regional centers. These additional movements together with local traffic create heavy congestion on A004 arterial road, on which more than 15 minutes traffic waiting periods have been recorded

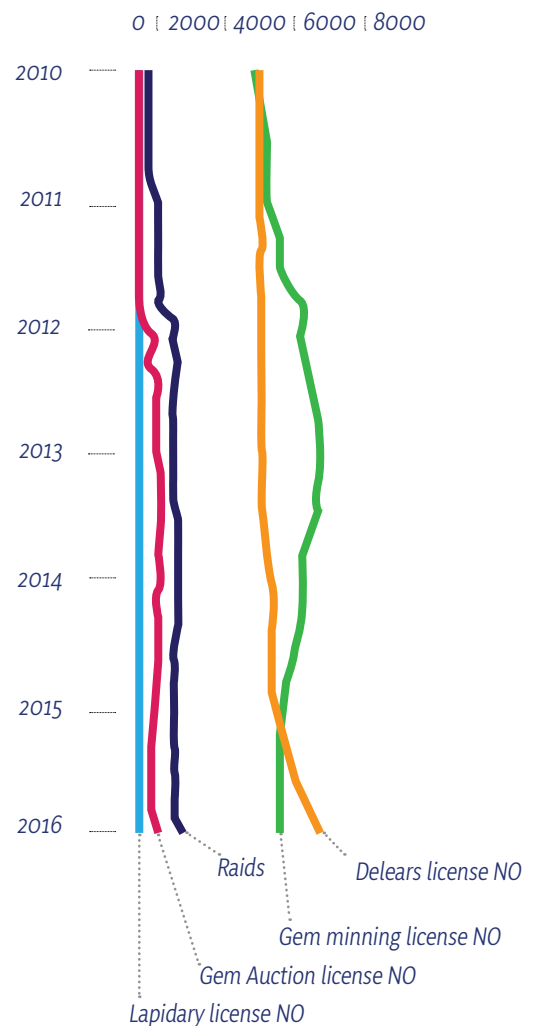
Traffic congestion in Ratnapura have obvious impacts on both the Regional and Local level transportation networks, and land uses and functions that depend on it. Thus, there is a critical need for strategic interventions to address these issues.

- **Land of the planning area is unstable for larger scale developments due to horizontal mines**

The entire study area is located over land containing rich gem deposits which have been subject to extensive mining activities over a long period of time. These excavations have been undertaken as horizontal mines scattered throughout the study area. Statistical records indicate that over 6,000 gem mining licenses are being issued each year within the study area. (figure 3.9) It is believed that there are a higher number of unauthorized mines in some areas, operating illegally.

The study area is also affected by inappropriate mine closure practices. It is required by law to undertake the recommended practices for postexcavation rehabilitation and closure of mines. However, these are rarely being implemented, leaving a large number of mining sites in an unstable state. These mining sites pose a significant risk for potential larger scale construction or development projects. (figure 3.10)

Figure No. 3.9 : Issuing of Mining License 2010 - 2016
 Source : Gem & Jewelry Authority



Chapter 03 Need of the Development Plan

Problems of the
Planning Area

Potentials of the
Planning Area

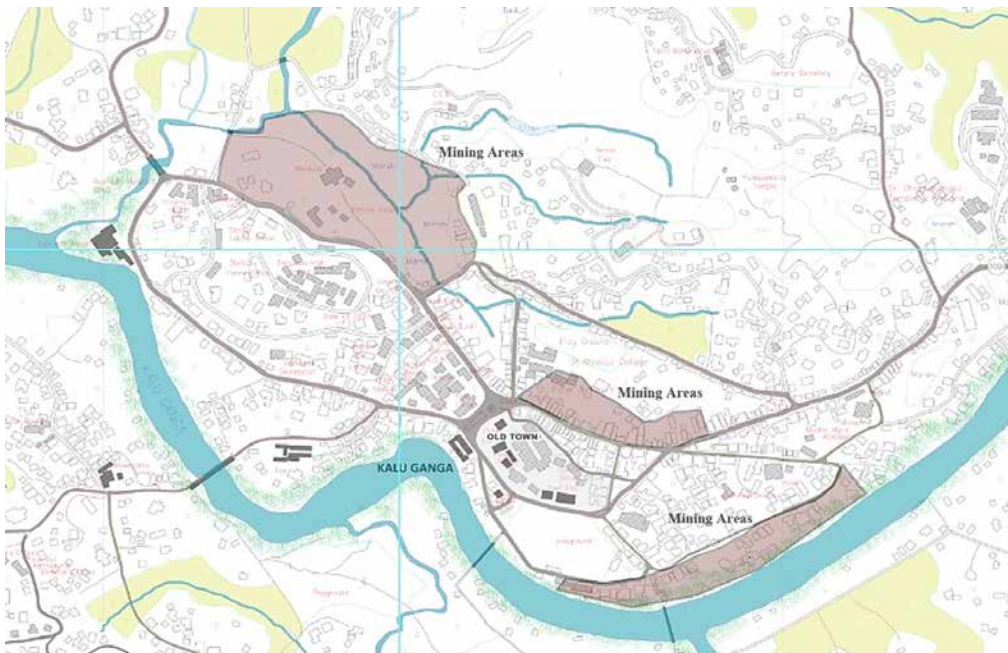


Figure No. 3.10 : Mining Areas at the City Center - 2017
Source : Studio 5 (2017/18) – City School of Architecture, Colombo

3.2. Potentials of the Planning Area

International Acceptance for Gems

Due to the geological and geographical features of the region, approximately 90% of the land within the study area contains underground gem deposits. (Refer to annexure 13) These existing deposits, along with the national and global reputation Ratnapura has earned as the Gem city of Sri Lanka, present key economic potential for future development. According to the latest Central Bank statistics, the gem industry is Sri Lanka's fifth largest export economy, accounting for 3% of the national economy. (figure 3.11)

Chapter 03
 Need of the
 Development Plan

Potentials of the
 Planning Area

Composition of Exports – 2016

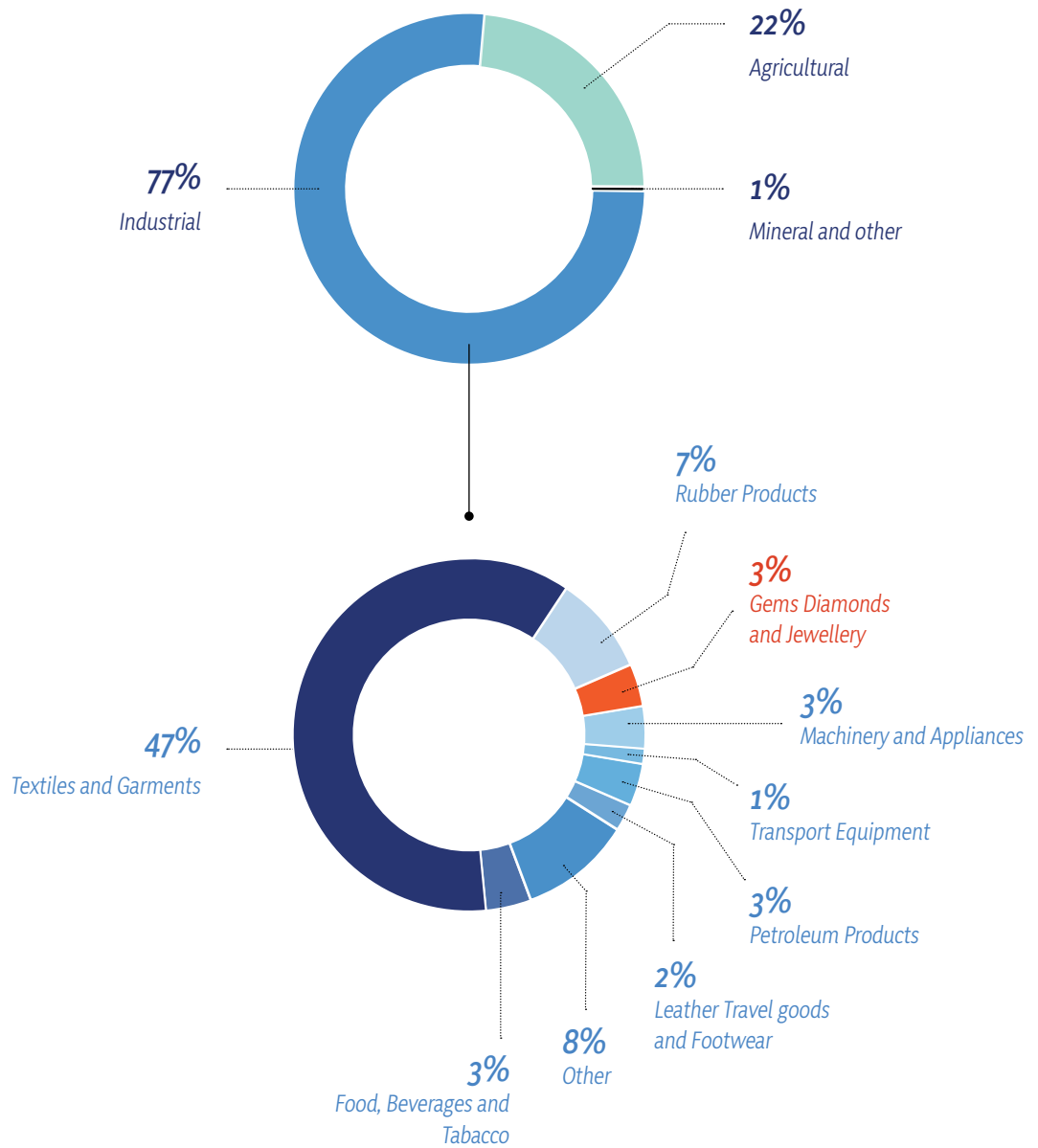


Figure No. 3.11 : Composition of Exports - 2016
 Source : Central Bank Report 2016 – Sri Lanka

Ratnapura is also the center of Gem trade, Gem & jewelry making and associated services, which has a large catchment population consisting of both local and foreign traders, business tourists etc. The local catchment area for Ratnapura's Gem Trade extends over the entire Sabaragamuwa province, and parts of Uva, Central and Western provinces. (figure 3.12) The supporting networks and facilities that have been established in Ratnapura is also a potential that can be utilized to eliminate inefficiencies of the local economy.

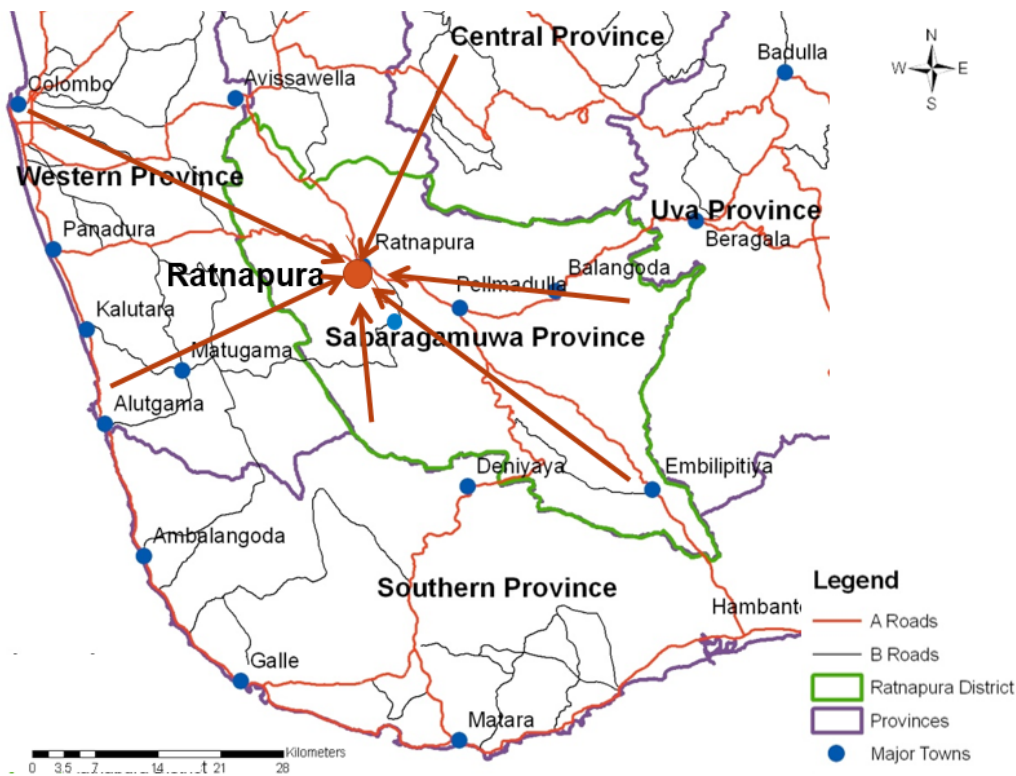


Figure No. 3.12 : Catchment of the Gem business
Source : Regional Study (2006/10) – Department of Town & Country Planning,
University of Moratuwa

The gem industry based in Ratnapura has a national economic significance; however, it is also built on a complex and dynamic supporting network consisting of natural, cultural and socioeconomic values. As such, optimizing the potential of this industry requires a holistic planning approach.

Considering the processes of gem industry, those gem trading processes have already been established in Ratnapura from ancient time. The nodes, streets, squares have been organized by people and the time periods of the particular places are known to them. Thus it is easy to have a smooth flow of gem trading with the acceptance of nationally and internationally.

Marketing is the hardest part of any product. The current society spend a lot on it since it is needed for having financial benefits. In this case, Ratnapura already has the national and international acceptance for the gem industry and as the gem city so the potential has to be tapped through the development plan.

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Potentials of the
Planning Area

- **Historic, Religious and Cultural Identity of the City**

Ratnapura's association with the Sri Padaya and the Deity Sri Sumana Saman are also key potentials in terms of elevating the region's socio-cultural identity. The Sabaragamuwa Region and Ratnapura is the gateway to some of the iconic religious and tourist sites in the country. (figure 3.13) Sri Sumana Saman Dewalaya, the shrine dedicated to the deity Saman is a major religious site which attracts pilgrims from across the country throughout the year with a varying visitor level. Approximately 5,000 to 6,000 pilgrims visit the shrine during the off season, whilst this number increases up to 100,000 during the Dewala Perahera Season. (Table 3.3)



Figure No. 3.13 : The oldest Sri Pada Route (Adam's Peak)
Source : Studio 5 (2017/18) – City School of Architecture, Colombo

Chapter 03 Need of the Development Plan

Potentials of the
Planning Area

Number of visitors- Sabaragamuwa Maha Saman Devalaya	
Daily	5000 - 6000
Saturdaz, Sundaz and Poya Days	9000 - 10, 000
School Vacation Period	10, 000 - 12, 000
January 1 st	200, 000 - 400, 000
Perahera Season (August)	50, 000 - 12, 000
Sri Pada Season (per one day)	15 - 20
Sellers in Devala premises (Daily)	80 - 150
Sellers in Perahera Season	80 - 150
Sellers- After Perahera Season	15 - 25

Table No. 3.3 : The Visitors Amount for Saman Dewalaya

Source : Field surveys 2017 – Urban Development Authority

The study area also consists of many important heritage sites from the Pre-colonial and Colonial Era. There are also several ancient temples within the study area and the adjoining areas. The study area falls within the Kuruwita – Ratnapura (Minipura) Tourism Zone, and is centrally located to the adjoining four major tourism zones: Seethawaka, Samanala, Udawalawa and Sinharaja. (Refer to annexure 14) Ratnapura National Museum is one of the 10 museums managed and operated under the Department of National Museums, which is also a part of the region's historic and cultural identity. (Table 3.4).

Museum	Foreign Tickets		Local Tickets	
	No. of foreign Tourist	Revenue (in Rs.)	No. of Domestic Tourists	Revenue (in Rs.)
Colombo National Museum	46, 643	27, 419, 700	166, 092	3, 216, 990
Natural History Museum	5, 303	3, 061, 800	64, 887	940, 245
Kandy National Museum	0	0	0	0
Rathnapura National Museum	135	38, 100	28, 327	348, 905
Galle National Museum	174	51, 000	1, 059	8, 090
Anuradhapura Folk Museum	164	50, 400	7, 305	94, 070
Dutch Museum	4, 090	2, 013, 000	5, 510	100, 280
Galle Maritime Museum	2, 925	837, 000	40, 780	419, 325
Independence Memorial Museum	501	144, 000	26, 607	205, 696
Hambanthota National Museum	42	21, 000	1, 987	26, 175
Total	59, 982	33, 636, 000	342, 554	5, 359, 775

Table No. 3.4 : The Visitors Amount for Ratnapura Museum - 2017

Source : National Museum Department

Chapter 03 Need of the Development Plan

Potentials of the Planning Area

Together, these elements establish Ratnapura as an important tourist destination that is located centrally to other key tourist zones. However, according to the analysis, the number of local and foreign tourists visiting Ratnapura is less in the recent past. Hence, tap the tourist potential of the study area also requires a strategic planning intervention.

- **Rich Bio-diversity**

Being located within the wet zone along a valley surrounded by several mountain ranges, the region experiences a wet and humid tropical climate that supports high biodiversity. On one hand, due to the surrounding hilly terrain the region receives heavy rainfall both during the south-west monsoon and inter monsoonal periods, with an average 3,760mm rainfall. On the other hand, the valley has been constantly enriched by minerals and rich soil deposits brought in by fluvial processes. Together, the region forms a unique habitat for a wide range of fauna and flora species, including many endemic species. (Table 3.5)

	No. of Species of Rathnapura	Total in Sri Lanka	100%	No. of Endemic in Rathnapura	Total in Sri Lanka	100%
<i>Butterflies</i>	65	242	26.85%	21	41	51.21%
<i>Fishes</i>	10	64	15.62%	7	17	41.17%
<i>Amphibians</i>	19	38	50.00%	8	19	42.10%
<i>Snakes</i>	29	90	32.22%	14	39	35.89%
<i>Birds</i>	141	384	36.71%	24	26	95.00%
<i>Mammals</i>	40	85	47.05%	7	12	58.33%

Table No. 3.5 : Bio Diversity in Rathnapura - 2017

Source : Young Biologists Association, Sri Lanka

The region's wet and warm climate, along with high rainfall and fertile soil is a key potential not only for its rich biodiversity, but also for the potentials it may present in improving the crop agricultural sector within the study area.

- ***Kalu River and Inland Water Bodies***

Kalu River meanders closest to the city and it flows slowly within the city limits and apart from Kalu River, Wey River and several other waterfalls and streams located within the planning area. (figure 3.14) Also, 80% of the planning area consist with inland water bodies. Thus, the surface water potential has a potential to use these inland water bodies for the aesthetic beauty to the city and the lives of people in it.



Figure No. 3.14 : Kalu Ganga (Kalu River)
Source : Urban Development Authority

- ***Major Transportation Node & Construction of Ruwanpura Expressway***

Ratnapura's significance within the country's regional transportation network was previously established. It is a key node on the two major arterial roads that connect the West coast with the southern and eastern regions. (Figure 2.4)

To reduce the existing congestion at Ratnapura, a new highway, Ruwanpura Expressway, bypassing Ratnapura Town, has been proposed. The planning and implementation of this new highway would have direct impacts on the study area's land use development and future growth. It is estimated that upon completion, the highway would cut down the travel time between Colombo and Ratnapura to 1 hour, bringing Ratnapura and its residents closer to the capital. (Table 3.6) It is expected that the change will have a direct impact upon the present development trends in Ratnapura so it would certainly be a major potential that this development plan should take into account. (Refer to annexure 14)

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Need of the
Development Plan

Potentials of the
Planning Area

<i>Project Name</i>	<i>Ruwanpura Expressway Project</i>	
<i>Project Type</i>	<i>Expressway Construction</i>	
<i>Funding Agency</i>	<i>Not yet finalised</i>	
<i>Location</i>	<i>Kahathuduwa to Pelmadulla via Rathnapura. Interchanges at Horana, Ingiriya, Kiriella, Kuruwita and Rathnapura</i>	
<i>Length (km)</i>	<i>73.9 km</i>	
<i>Width (m)</i>	<i>20.4 m</i>	
<i>Date of Commencement</i>	<i>2018 (not finalized)</i>	
<i>Target Completion Date</i>	<i>2021 (not finalized)</i>	
	<i>Description</i>	<i>Progress as at 31. 12. 2017</i>
	<ul style="list-style-type: none"> • <i>Feasibility study is in final stage</i> • <i>Environmental Impact Assesments</i> • <i>Land Acquistion</i> • <i>Resettlement Action Plan</i> • <i>Procument Civil Work</i> • <i>Resettlement</i> • <i>Grievance Redress Mechanism</i> 	<ul style="list-style-type: none"> • <i>99%</i> • <i>95%</i> • <i>18%</i> • <i>Prepared</i> • <i>40%</i> • <i>Not Started</i> • <i>Included in RAP</i>

Table No. 3.6 : *Details about Ruwanpura Expressway Project*
Source : *Road Development Authority*

The constraints and potentials identified within this chapter shall provide direction for formulating a vision for the future development of the study area, and developing strategies to achieve this vision through local planning interventions. In this sense, addressing these identified situations are prime activity to boost the future economy of Ratnapura in this development planning intervention. Also, considering the potentials over issues, it is recognized that the situation is directing to the vision which relates with Gem to flourish the Ratnapura town in future

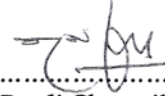


Part 2



**APPROVAL OF THE DEVELOPMENT PLAN FOR THE RATNAPURA
MUNICIPAL COUNCIL AREA**

I, Patali Champika Ranawaka, Minister of Megapolis and Western Development do hereby approve the Development Plan for the Ratnapura Municipal Council Area having considered the recommendation made by the Board of Management of the Urban Development Authority on the 28th day of June, 2019 by virtue of the powers vested in me under Section 8F of the Urban Development Authority (Amendment) Act No. 4 of 1982.



.....
Patali Champika Ranawaka,
Minister of Megapolis and Western Development.

Ministry of Megapolis and Western Development,
17th and 18th Floors,
"Suhurupaya",
Sri Subhuthipura Road,
Battaramulla.

Date: 28th June, 2019



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The Gazette of the Democratic Socialist Republic of Sri Lanka

EXTRAORDINARY

අංක 2129/95 - 2019 ජූනි මස 28 වැනි සිකුරාදා - 2019.06.28

No. 2129/95 - FRIDAY, JUNE 28, 2019

(Published by Authority)

PART I : SECTION (I) — GENERAL

Government Notifications

NOTICE OF APPROVAL OF THE DEVELOPMENT PLAN FOR THE RATNAPURA MUNICIPAL COUNCIL AREA

NOTICE is hereby given to the General Public of the Democratic Socialist Republic of Sri Lanka under Section 8G of the Urban Development Authority Law, No. 41 of 1978 as amended from time to time that I, Patali Champika Ranawaka, the Minister in charge of the subject of Megapolis & Western Development, by virtue of the powers vested in me under Section 8F of the said law, had approved the development plan on the 28th day of June, 2019 for the Ratnapura Municipal Council Areas, prepared under Section 8A of the said Law.

PATALI CHAMPIKA RANAWAKA,
Minister of Megapolis and Western Development.

28th June 2019.

Approval of the Development Plan for the Ratnapura Municipal Council Area

Public are hereby informed that the Development Plan prepared under Section 8A of the Urban Development Authority (Amendment) Act, No. 4 of 1982, for the Ratnapura Municipal Council Area, has been approved on 28th June 2019, by Hon. Patali Champika Ranawaka, Minister of Megapolis and Western Development by virtue of powers vested on him under Section 8 "F" of the said Amendment Act.

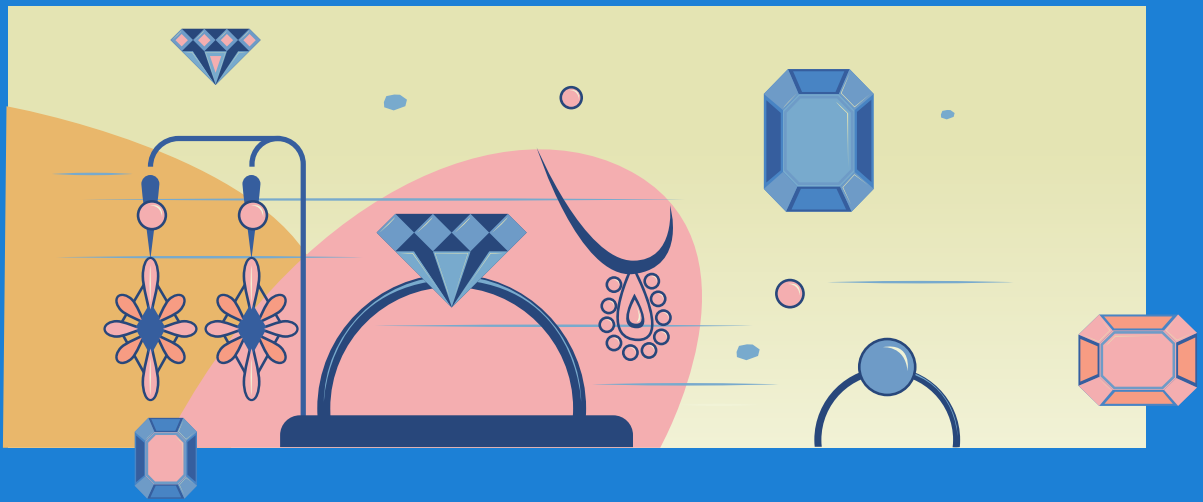
DR. JAGATH MUNASINGHE,
Chairman,
Urban Development Authority.

28th June 2019.

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Chapter 04



THE PLANNING FRAMEWORK

4.1 Vision

'The Gem City of Sri Lanka in the Greens'

4.2 Vision Statement

Ratnapura will be reinstated as 'The Gem City of Sri Lanka' to become a global trademark in gem industry & trade. It will also be an iconic city with a thriving economy based on the region's gem industry. The socio-cultural, environmental and economic factors associated with the Gem trade and industry will be realigned to strengthen and prioritized the concept of Gem City.

The 'Greens' refers to the region's unique natural environment that consists of nationally significant forest and river ecosystems with rich biodiversity, a valley and a floodplain with fertile soil, and above all a region with rich gem deposits. It also refers to the amenity and the beauty that this natural environment offers within the existing settlements and for future urban development of Ratnapura. The forests, rivers, lakes, green patches and blue network make up green sense furthermore. The focus of Ratnapura Development Plan therefore, is to achieve sustainable economic development, whilst ensuring these sensitive natural environments will be appropriately preserved.

Thus, the vision envisages to direct the future spatial development of the city towards building a creative economy primarily based on gem industry, and supported by other sustainable local economic sectors such as culture, heritage or nature based tourism. Accordingly, this plan aims to set a framework which would enable Ratnapura (as physically defined) to prompt the image of Sabaragamuwa Region through expanding its values of places and improving its residents' living conditions, whilst being the national icon for gems.

In 2030 economic activities in Ratnapura will be opened directly to the other regions and to the other countries through the boosting development of gem industry and tourism by utilizing the resources. Moreover, Ratnapura will act as a magnet to attract the entire country around it as well as to become a centre to the national level economy through Gem Industry in relation to Tourism Industry.

Goals

Objectives

4.3 Goals

Goal 01

Make Ratnapura, 'The National Center for Gem related business in Sri Lanka'.

Goal 02

Create Ratnapura, 'An attractive Destination for Visitors in Sri Lanka'.

Goal 03

Create Ratnapura, 'A livable City' for the local community.

4.4 Objectives

Goal 01

Make Ratnapura, 'The National Center for Gem related business in Sri Lanka'.

Objectives

1. Facilitating Gem Industry to contribute GDP by 7% share by 2030.
2. Facilitating the Gem related activities and an attractive environment / streetscape by 2030.

Goal 02

Create Ratnapura, 'An attractive Destination for Visitors in Sri Lanka'.

Objectives

1. Facilitating to enhance green space up to 40 % by 2030.
2. Facilitating to enhance the archeological value of cultural and historical sites of Ratnapura and convert it into economic value by 2030.
3. Facilitating to attract 100,000 tourists per annum through the gem related eco-tourism by 2030.

Goal 03

Create Ratnapura, 'A livable City' for the local community.

Objectives

1. Facilitating to create a vibrant city space with gem industry related economic opportunities to the local community by 2030.
2. Facilitating to create a disaster resilient city through green blue network by 2030.

Chapter 05



SWOT & DETAIL ANALYSIS

Chapter 05
SWOT & Detail
Analysis

Goal 01

A Strategic SWOT is an upgraded version of a SWOT which provides a vision based baseline assessment. It considers the internal and external potentials and constraints in achieving the envisaged vision. This sub section of the baseline assessment explains the strengths, weaknesses, opportunities and threats in developing Ratnapura as “The Gem City of Sri Lanka in the Greens”.

Goal 01

Make Ratnapura, ‘The National Center for Gem related business in Sri Lanka’.

Strengths

International market presence - Gem Industry remain at the 5th place in the export economy & 3% of contribution gives to the GDP by 2017

Location - Suitable Geographical Location

Culture - Well-established logistics and service networks for efficient gem trading practices

Skilled Labor Force - A significant portion of the labor force is involved in gem mining and trading sector

Brand Recognition -International identity as a gem trading point and International acceptance for quality gems

Accessibility- Located only 100 km away from Colombo (commercial capital) & located in a major transportation node

Weaknesses

Lack of facilities or resources to support scientific or technological advancement of the gem industry

Opportunities

Proposed Ruwanpura Expressway

Threats

Flood

The local Gem trade suffer from financial drain due to increasing competition from other countries and regions

Table 5.1 : SWOT analysis for Goal 01
Source : Planning Team of UDA - 2018



1. *Gem Industry remain at the 5th place in the export economy & 3% of contribution gives to the GDP by 2017 - International market presence*

Gem Industry owned a bigger place in Ratnapura economy since pre-colonial period. It was remained at the 5th place of the export economy in the Sri Lanka according to the statistics of Central Bank 2016 report. 3% of contribution is given to the national economy by Gem industry at present. (figure 3.11)

2. *Suitable geographical Location*

due to its elevation and location within the wet zone, Ratnapura experiences a warm-wet climate, which offers favourable conditions for settlement development and agricultural practices. The region's topography and its associated fluvial processes has resulted in unique geological formations where 90% of the study area consists of rich gem deposits. (Source: Gem & Jewelry Authority) (Refer annexure 13)

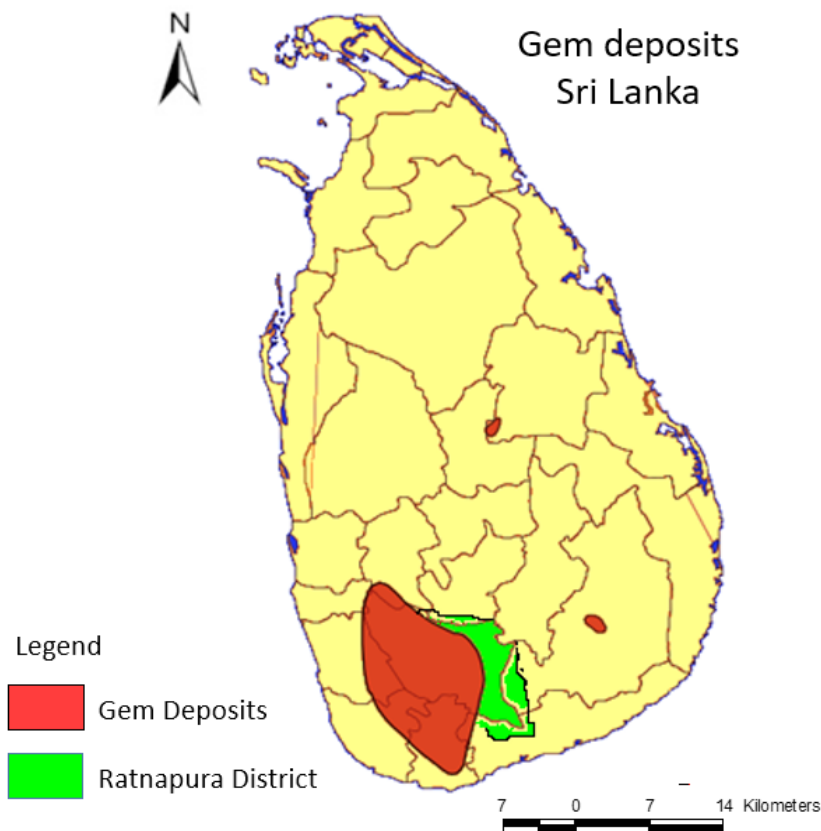


Figure No. 5.1 : Gem Deposits – Sri Lanka
Source : Study (2006/10) – Department of Town & Country Planning,
University of Moratuwa

Chapter 05
 SWOT & Detail
 Analysis

Goal 01

3. Well-established logistics and service networks for efficient gem trading practices

The gem trading activities operates on a long-established system that create links between buyers and sellers, and supportive networks that ensures a smooth flow of information and transactions. As shown by the diagram below, the logistics of this network have been set up around urban nodes, streets, squares of the town center, at predetermined times and venues. The local community along with many stakeholders involved in the gem mining and trading activities are already familiar with this system.

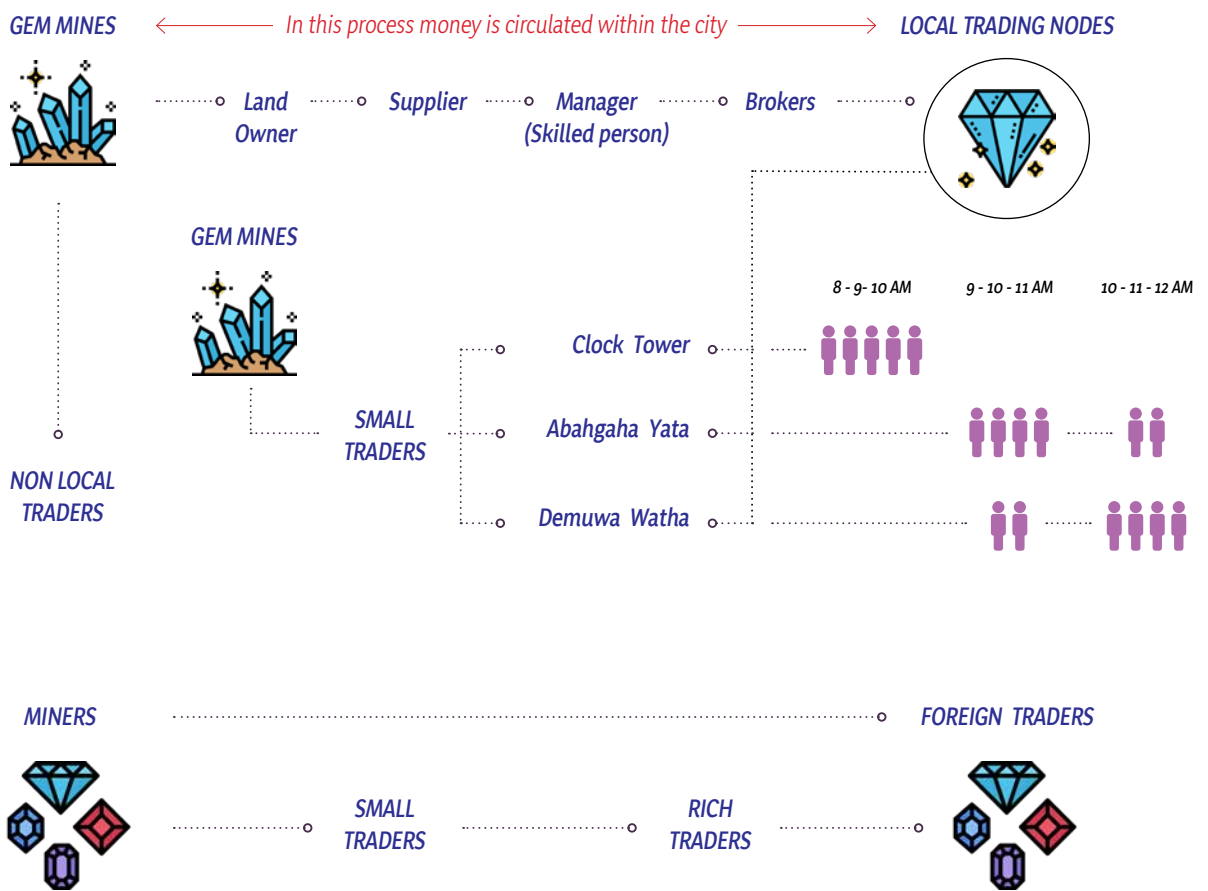


Figure No. 5.2 : Process and Chains of Gem Culture
 Source : Studio 5 (2017/18) – City School of Architecture, Colombo

4. *A significant portion of the labor force is involved in gem mining and trading sector*

A variety of people and jobs are needed to make a city work. 49,083 of the total population were employed in 8 major sectors of the city's economy in the year of 2016. More than 30% of them were employed as government officers, while half of the total working population was employed in private businesses, and self-employment which are related to gem industry and agriculture. (figure 2.11) Moreover, one third of the labor force within the study area are engaged in the mining industry and one fourth is engaged in the gem trade. (figure 3.3) This is a significant advantage for the study area in terms of achieving this development plan's vision for Ratnapura.

5. *International identity as a gem trading point and International acceptance for quality gems – Brand recognition*

Three of the world's largest blue sapphires have been excavated in Ratnapura. These include the "Blue Belle of Asia" which adorns one of the official crowns of the British Monarch and holds the world record for the highest bid placed on any Sapphire at an auction; the 'Star of India', displayed at the New York Museum of Natural History. Historically, Sri Lanka has also been known as a land of gems. King Solomon was said to have procured a great ruby for the queen of Sheba from Serendip (Sri Lanka's former name). It is believed that Sinbad's visit to the mountains of Serendib refers to Ratnapura in Sri Lanka. (Source: Sabaragamuwa Wansha Kathawa)

GEM LICENSE ISSUING RATNAPURA



Figure No. 5.3 : Gem License Issuing
Source : Gem & jewelry Authority

% OF GEM EXPORT (SRI LANKA)



Figure No. 5.4 : Gem Exports
Source : Gem & jewelry Authority

6. *Located only 100 km away from Colombo & being located in a major transportation node – Accessibility*

Areas with high accessibility have a greater potential to attract people and investments, and therefore it is a major factor in economic and spatial growth of a city. Ratnapura has convenient access to Colombo City, country's capital, and located within 101 km or 3 hours driving distance via A004 road, approximately 97 km via Panadura Road, and 98 km via The Southern Expressway from Galanigama interchange.

Chapter 05
SWOT & Detail
Analysis

Goal 01



Weaknesses | Goal 01

1. *Lack of facilities or resources to support scientific or technological advancement of the gem industry*

- Lack of alternative transportation modes to reach the city (rail / water / air transport)
- Lack of opportunities for academic or scientific advancement in the field of gemology.
- Absence of larger scale state owned gem museums
- Lack of stakeholder interest and resources for product diversification or value addition.

Although Ratnapura is strategically located within the regional road network, there are no alternative transport modes i.e. railway, air transport or naval transportation to access the city, which at the moment is a major constraint for promoting business tourism.

A majority of the people involved in the Gem Industry undertakes trade and mining activities based on traditional know-how that has been passed on to them by the previous generations. Whilst this local knowledge provides valuable insights into the gem industry in Sri Lanka, this know-how alone is inadequate to optimize the potential economic benefit of the industry or to achieve brand recognition at a global level. Lack of opportunities or interest for product diversification or value addition in the gem industry, including absence of scientific or technological study of gemology at graduate or postgraduate levels are key weaknesses.

Absence of a diversified gem related economy and absence of government authorized gem museums with auction facilities have created an unfavorable situation for the local gem market. In the absence of adequate value addition, Ratnapura markets supply gem as the raw material, causing a significant financial loss to the industry and the local economy. As explained under Chapter 3, this is evident with the pattern of Gem value chain. (Refer to figure 3.4)



Opportunities | Goal 01

1. *Proposed Ruwanpura Expressway*

The RDA has proposed Ruwanpura Expressway, a new dedicated highway connecting Palmadulla with the existing Colombo Outer Circular Highway interchange at Kahatuduwa. The project is proposed to be completed by 2021, which will improve the Ratnapura's connectivity with Colombo and the Western coast. It is anticipated that this new expressway will reduce commuter time between Colombo and Ratnapura down to 45 minutes. (Refer to Table 3.6)



1. Flood

Goal 01

As explained under Chapter 3, Ratnapura is impacted by three types of flood hazards i.e. critical flood, major flood and minor flood. The town center is affected by one in 10-year major flood event, which causes significant destruction to life and property and cause interruptions to the functions of the region. Recovering from these disaster events requires allocation of additional resources and personnel by central governments. Moreover, this situation damage for the connectivity, accessibility, physical infrastructure and city beautification which is closely connected with the commercial activities. (Refer to figure 5.5)

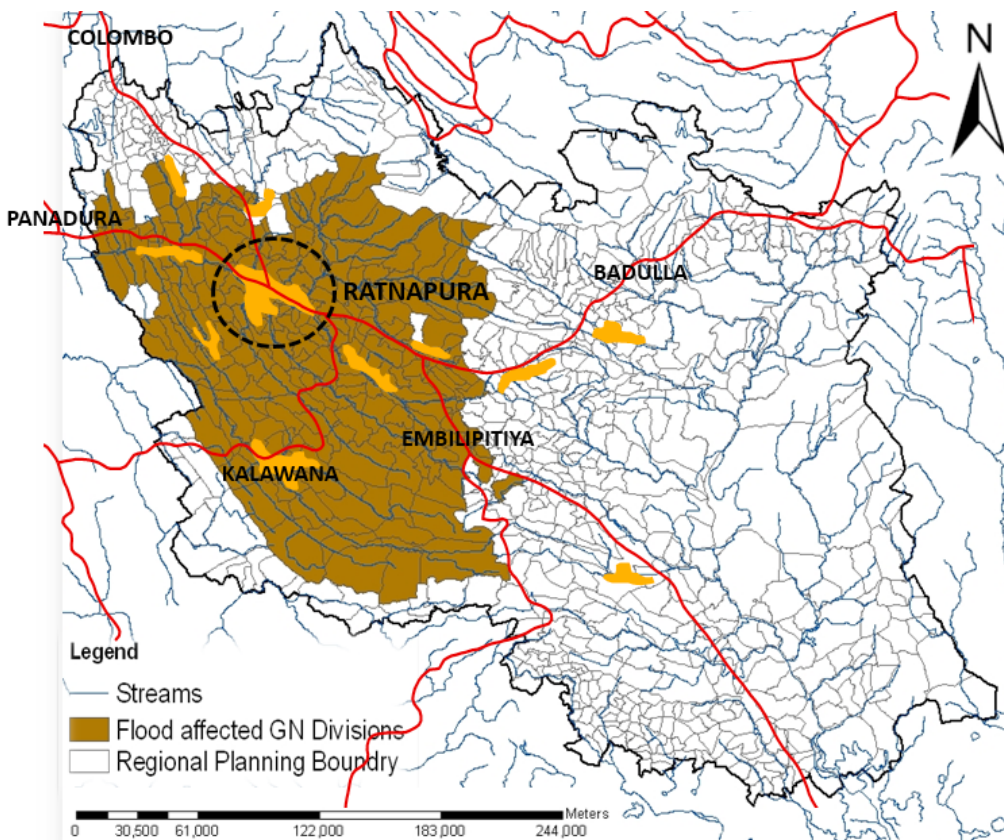


Figure No. 5.5 . Flooded Area – Ratnapura Region
Source : Regional Study (2006/10) – Department of Town & Country Planning,
University of Moratuwa

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Analysis

Goal 01

2. *The local Gem trade suffer from financial drain due to increasing competition from other countries and regions.*

Ratnapura Gem trade experiences increasing competition from Beruwala gem market, Thailand Gem market and other worldwide markets. As such, currently the local traders account for only 25% of the Ratnapura market. (refer to figure 5.6)



Figure No. 5.6 : Gem Trade

Source : Regional Study (2006/10) – Department of Town & Country Planning, University of Moratuwa

Goal 02

Create Ratnapura, 'An attractive Destination for Visitors in Sri Lanka'.

**Chapter 05
SWOT & Detail
Analysis**

Goal 02

Strengths

National & International recognition as the 'Gem City'

Sabaragamuwa Maha Saman Dewalaya

Existing sites of heritage and cultural significance (20 - 25 places)

Rich bio diversity

Kalu river and inland water bodies

Major transportation node

Weaknesses

Poor link between gem industry and tourism industry

Lack of infrastructure and support services to facilitate tourists

Declining forest cover

Urban Heat

Land within the planning area is unstable for larger scale infrastructure developments due to inappropriate mining practices

Opportunities

Located centrally within four major tourism zones and belongs to central fragile area

Proposed Ruwanpura expressway and bypass road

Threats

Flood

*Table 5.2 : SWOT analysis for Goal 02
Source : Planning Team of UDA - 2018*

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Strengths | Goal 02

Goal 02

1. *National & international recognition as the ‘Gem City’*

There are numerous historical records and sources to suggest that Ratnapura has long been internationally renowned as a center for gem mining and trade. Historical records produced by sailors such as Plini, Hiyunsan and Iban Batuta confirm this. It is believed that the name Ratnapura has been originated due to the abundance of high quality Gems in the area, which translated into ‘Ruwan Puraya’ and subsequently to ‘Ratnapuraya’. (Source: Sabaragamuwa Wansha Kathawa)

2. *Sabaragamuwa Maha Saman Dewalaya’*

Ratnapura has a strong cultural background linked with Deity Sumana Saman. Sri Padaya, also known as Adam’s Peak and the Deity Sumana Saman are two main religious icons that people associate with Ratnapura. Sabaragamuwa Maha Saman Dewalaya, the shrine dedicated to Deity Sumana Saman is also another main attraction. Sumana Saman Dewalaya has a long history and to this day it has been attracting over 150,000 pilgrims and visitors each year. (Refer to Table 3.3)

3. *Existing sites of heritage and cultural significance*

Ratnapura city is gifted with a rich heritage from both colonial and pre-colonial eras, which has left unique impressions in the existing built environment. The city currently consists of over 20 heritage sites and a number of ancient temples, which contribute to the attractiveness and sense of Ratnapura.

4. *Rich bio diversity*

Due to the unique geographical and biophysical setting of the region, Ratnapura forms a part of a nationally significant ecosystem that supports a variety of endemic flora and fauna species. These ecosystems along with the warm-wet climatic condition of the region provides a favourable environment to develop and grow settlements. (Refer to Table 3.5)

Moreover, Urban forests are lesser to be seen in many countries as well as in Sri Lanka. But apart from the Urban forests in Kandy, Galle and Kegalle, Ratnapura has its’ own urban forest close to the city center. These environmental systems also provide natural amenity, which is an essential ingredient of successful urban development and tourism development.

5. *Kalu river and inland water bodies*

As recorded by historic archives, the Kalu Ganga had been used as a naval trade route from Western shores to Sabaragamuwa Region. Kalu River meanders adjoining the city and has direct link with the town center. (Figure 3.14) Apart from Kalu River, there are several other water bodies and streams i.e. Wey River within the study area, which accounts for 80% of the land area.

6. Major transportation node

Ratnapura is located in a major transportation node and it is connected with east, west and south of the Sri Lanka. Thus, as a tourism attraction point, it is easy accessible and within 3 hours it can be reached from Colombo (101 km). (figure 2.4)



Weaknesses | Goal 02

1. Poor link between gem industry and tourism industry

Ratnapura is located in the center of four tourist zones and it is a major tourist corridor to the hill country and the southern coast. Irrespective, the region attracts relatively low tourists. (figure 5.7) The Gem industry as the region's primary economic base, has not been able to create links with other economic sectors to take advantage of its potential for tourism

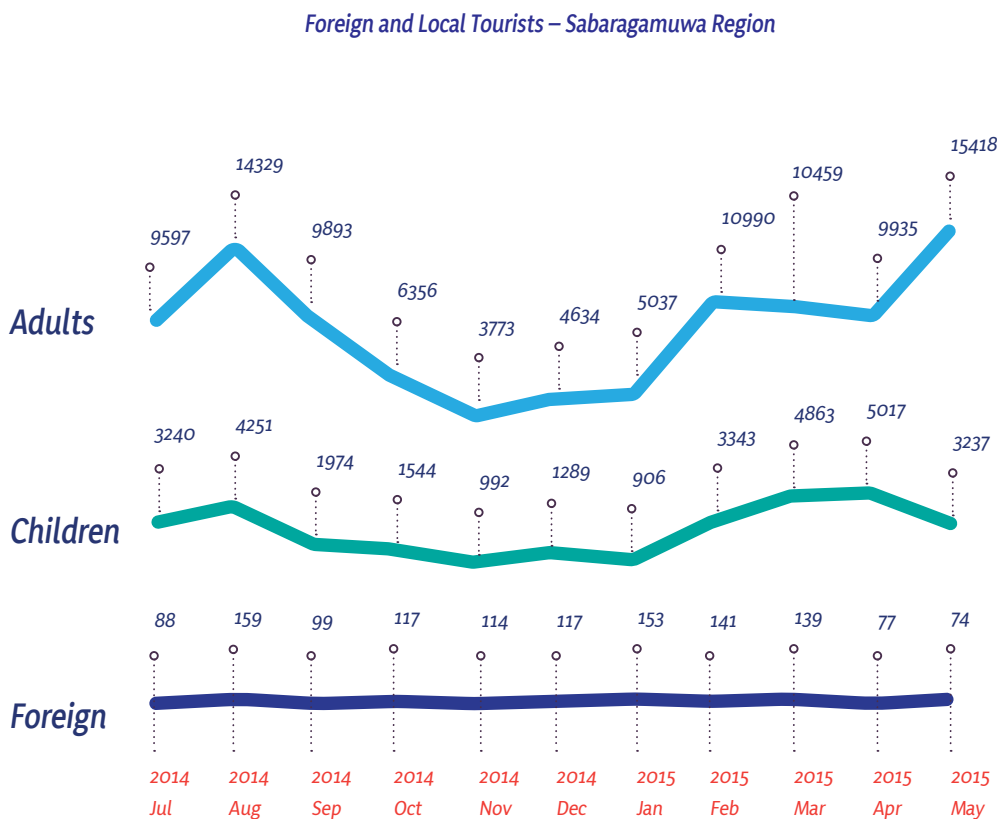


Figure No.5.7 : Foreign and Local Tourists – Sabaragamuwa Region (2014 - 2015)
Source : Ministry of Tourism, Provincial Council – Ratnapura

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2. *Lack of infrastructure and support services to facilitate tourists*

Ratnapura has many important tourist sites that can potentially attract large number of both local and foreign tourists. However, these sites lack adequate infrastructure or service networks to facilitate and manage tourists and their needs. As a result, there is lack of awareness among tourists on some of these sites, which is an economic loss to the region.

3. *Declining forest cover*

Forest cover in Ratnapura is both a locally and nationally significant resource. The National Physical Plan of Sri Lanka identifies Ratnapura as a part of the declared 'central fragile area' which is proposed to be preserved for the environmental sustainability of the country. But due to the deforestation, the forest cover has been reduced by 10% within the planning area in 2017. This is further evident with the current state of Pompakele Urban forest, where only 30% of the forest cover has been lost due to encroachments. (figure 5.7 and 5.8) Declining forest cover and its ecosystems is counterproductive for the creation of an attractive tourism destination by 2030.

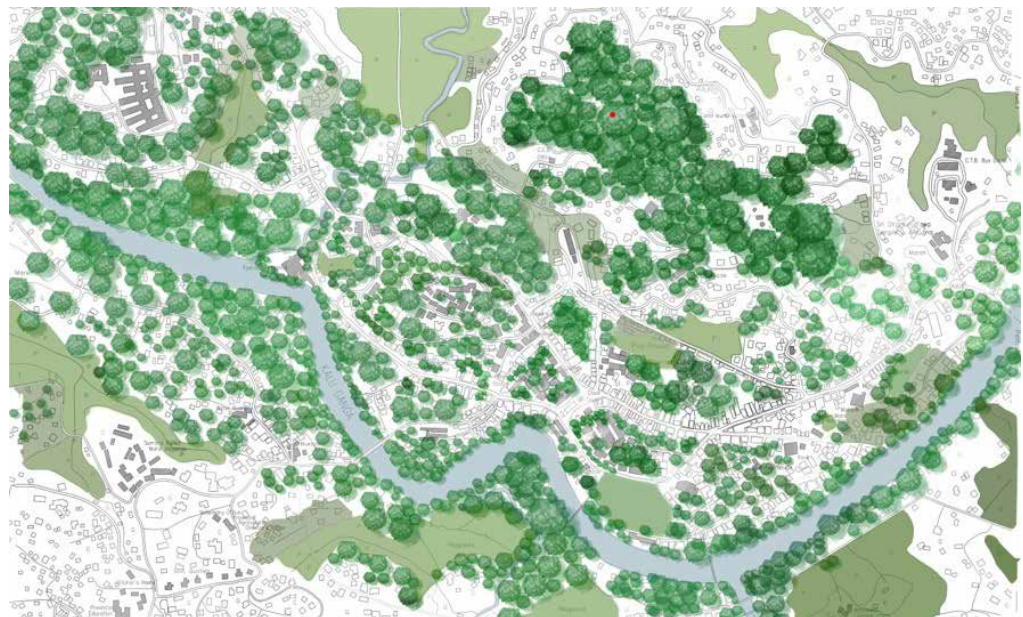


Figure No. 5.8 : Forest Cover in 2007

Source : Studio 5 (2017/18) – City School of Architecture, Colombo



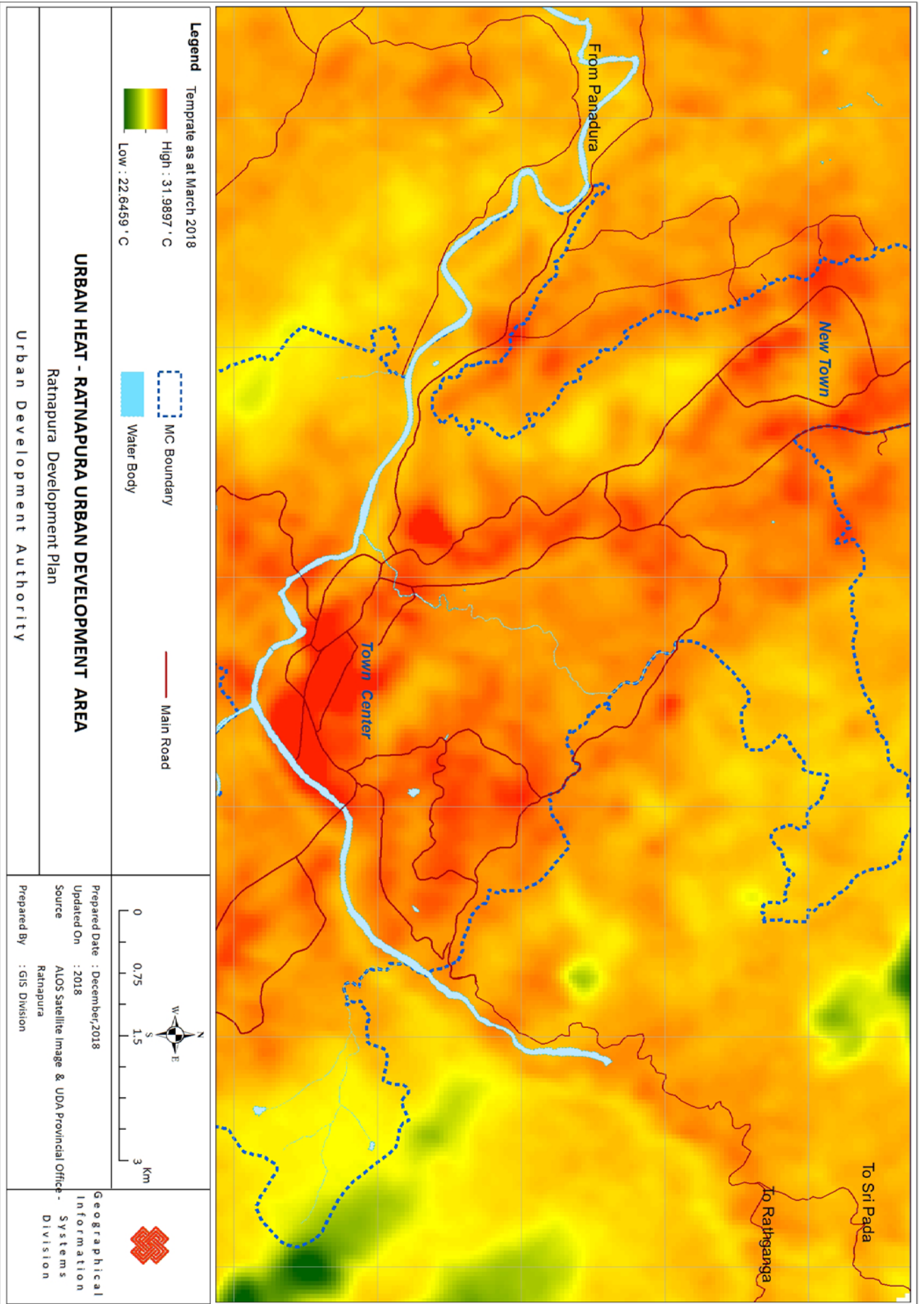
Figure No. 5.9 : *Decreasing the Forest Cover by 2017*
Source : Studio 5 (2017/18) – City School of Architecture, Colombo

4. *Urban Heat*

During the dry seasons (December – March) the daytime average temperature within Ratnapura city increases up to 31°C. Due to the local climatic and geographical conditions people this can be felt around 35°C, which can potentially impact on the city's walkability and the attractiveness. (Refer map 5.1)

5. *Land within the planning area is unstable for larger scale infrastructure developments due to inappropriate mining practices*

Most of the land underneath the study area contain rich Gem deposits that has created a significant demand for gem mining via underground excavations (horizontal mines). The city issues over 6,000 gem mining licenses annually, and it is believed that there are substantial number of illegal mines in operation. It has been identified that most of these mines lack appropriate mine closure and rehabilitation practices. As a result, in most areas, the land has become unstable or unsuitable to support structures, which has direct consequences on the livability and attractiveness of the city. (Figure 3.9, 3.10 and annexure 13)



Map No. 5.1 : Urban Heat in Ratnapura



1. Located centrally within four major tourism zones and belongs to central fragile area

Goal 02

Ratnapura tourism zone consisting of Kuruwita & Ratnapura (Minipura), is centrally located within the region's four major tourism zones: Seethawaka, Samanala, Sinharaja and Udawalawa. (Figure 3.7)

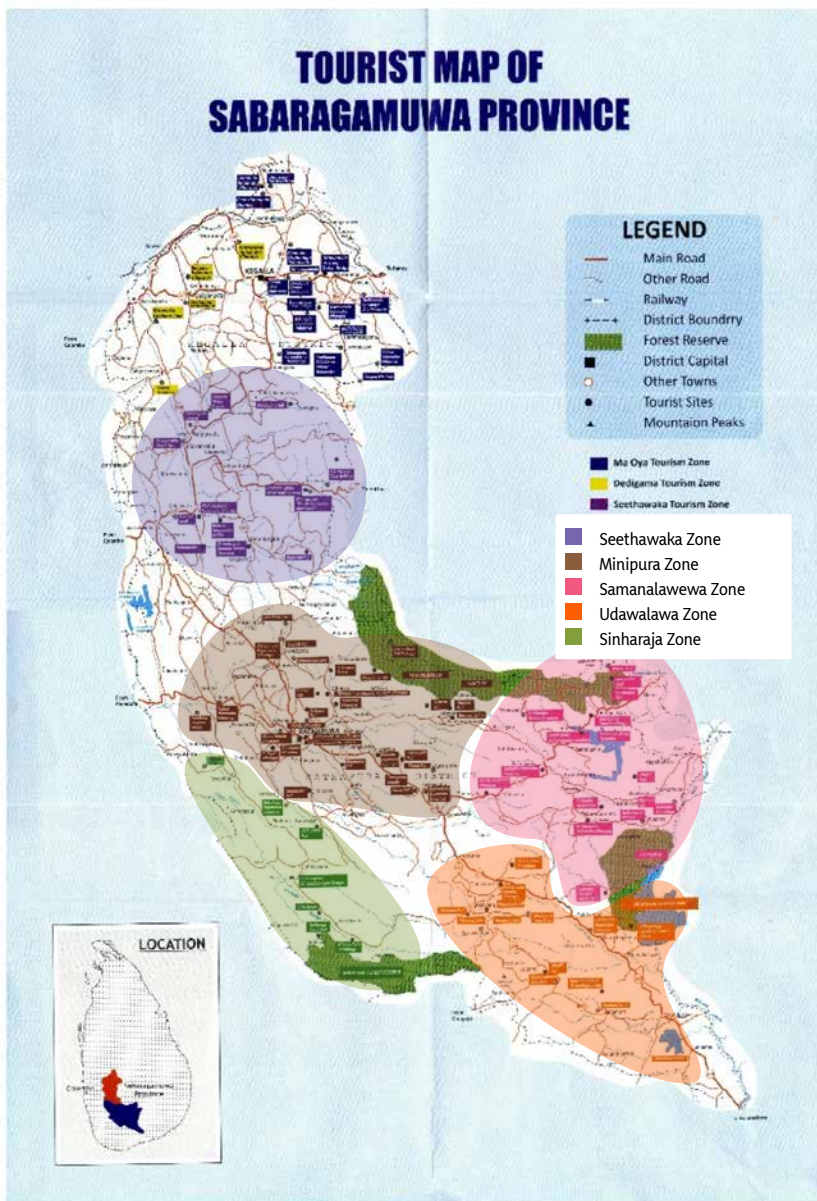


Figure No. 5.10 : Tourist Map of Sabaragamuwa Province - 2017
Source : Tourism Department, Sabaragamuwa Provincial Council

Chapter 05 SWOT & Detail Analysis

Goal 02

By identifying Ratnapura as a part of the 'Central Fragile Area', The National Physical Plan provides a legal and policy framework for the protection of the existing natural environment. This is beneficial for the envisaged nature-based tourism vision for the study area.

2. *Proposed Ruwanpura expressway and bypass road*

Proposed Ruwanpura Expressway is expected to substantially reduce the commuter time between Colombo and Ratnapura. It will improve Ratnapura's connectivity with the Western Coast and potentially attract more tourists into the region.
(Refer annexure 14)



Threats | Goal 02

1. *Flood*

Ratnapura's high vulnerability to various levels of flood hazard has direct impacts on the city's attractiveness and the potential for tourism-based developments. Simultaneously, accommodation facilities to the tourists will be at high risk getting flooded since those are built in sensitive areas or adjacent to sensitive areas.
(Refer annexure 05)

Goal 03

Create Ratnapura, 'A livable City' for the local community.

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Analysis

Goal 03

Strengths	<ul style="list-style-type: none">Ideal demographic conditionAdequate supply of Social infrastructureCity formed as a dual city and service delivery formed as clusters
Weaknesses	<ul style="list-style-type: none">The local economy is poorly contributed by the Gem industryTraffic congestionLosing greenery and lack of comfortability of walkingAbsence of alternative transport modesLack of cafes and restaurants to support a vibrant public realmLack of commitment to promote Ratnapura's cultural and heritage assets.Lack of active and passive recreational spaces
Opportunities	<ul style="list-style-type: none">Proposed Ruwanpura expressway and bypass road
Threats	<ul style="list-style-type: none">Flood

Table No. 5.3 : SWOT Analysis for Goal 03

Source : Planning Team of UDA - 2018

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SWOT & Detail
Analysis



Strengths | Goal 03

Goal 03

1. *Ideal demographic condition*

Ratnapura is home for a highly diverse community consisting of various religious and ethnic backgrounds, who lives in harmony. (figure 2.9) Moreover, 70% of the working force is 18 – 60 in Ratnapura. These younger generation will be an asset to the town to achieve its economic targets. The natural growth rate is 1.0 and the expected population in 2030 is 64,340 according to the analysis. To make Ratnapura a livable city in 2030, the demographic condition is ideal.

2. *Adequate supply of Social infrastructure*

Ratnapura as the regional capital of Sabaragamuwa consists of infrastructure and service networks to cater the health, education, administrative and financial needs of the region. There are five mainstream state schools located in the city, including one boys' school and three girls' schools; A base hospital with three private hospitals; A court complex and other regional branches of key administrative and financial service providers.

3. *City formed as a dual city and service delivery formed as clusters*

In Ratnapura, the city has been formed mainly into two clusters as administration activities and commercial activities. (figure 2.6) The New Town operates as the administrative capital of Sabaragamuwa Province and 90% of the land within this area is state-owned. The Old Town is still the commercial capital and almost 90% of the commercial activities are based on the old town. This has resulted in the formation of distinctive activity clusters between the two town centers i.e: New Town for the administration activities, Court Junction for the court activities, Hospital Junction for the health activities, Old town for the commercial and educational activities. These various clusters can potentially create identity of the place and a vibrant public realm for the future city.



1. *The local economy is poorly contributed by the Gem industry*

The Gem industry, Ratnapura's primary economic sector, is based on locational and geographical features. A significant amount of local resources i.e. the land, labor, supportive services and complementary economic activities have been established to support this economic sector. However, due to the weaknesses in the Gem trade practices and poor resource management, these local resources do not receive the due financial return. As a result, the gem industry has relatively poor contribution towards the local economic growth and improving the living conditions of the local communities

2. *Traffic congestion*

Due to the region's complex geographic pattern and the town's spatial structure, access through Ratnapura during peak hours is often congested. The congestion is further increased by the centrally located 5 major schools which attract approximately 12,000 daily school attendees into the city. (Figure 3.8) Simultaneously, the town center attracts unwanted vehicular movements between other regional centers in the absence of an appropriate bypass route. These additional movements together with local traffic create heavy congestion on A004 arterial road. (Refer annexure 6 – 12) Moreover, the traffic disturbs to the people activities and vice versa. In the local level, it creates a discomfort to the local community by trafficking to the local service delivery since Ratnapura is the focal point of the service distribution in the district.

3. *Losing greenery and lack of comfortability to walk*

Due to settlement expansion, between 2007 and 2017, the forest cover within the study area has been reduced by approximately 10%. (figure 5.7 and 5.8) Due to encroachments, Pompakale has lost approximately 30% of its forest cover. (Figure 3.5) The resulting effects of these phenomena is evident with the increase the urban heat effect within the town center (Map 5.1), which impacts on town's walkability and people's daily functions.

4. *Absence of alternative transport modes*

Although Ratnapura is located at a strategic point within the regional road network, there is no rail, air travel or a naval travel mode to and from the city.

5. *Lack of cafes and restaurants to support a vibrant public realm*

Having plenty of cafes and restaurants encourages street activities and therefore it is a good indication of the level of public realm that a city supports. In Ratnapura, there are only 5 such enterprises that provides enough space for dining (Pizza Hut, KFC, Kele Kade, P&S, Rathnaloka).

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Goal 03

6. *Lack of commitment to promote Ratnapura's cultural and heritage assets.*

Ratnapura has a strong cultural background based on nationally recognised religious and cultural icons i.e: the deity Sumana Saman and Sri Padaya. However, there are no additional cultural events or attractions in Ratnapura, and no commitments have been made towards enhancing the city's many other cultural and heritage items. The city consists of a theater, a national museum and two public libraries all of which remain underutilized at the moment.

7. *Lack of active and passive recreational spaces*

Ratnapura has to satisfy with the allocated 0.066 km² recreational space by present and it is not yet utilized for now. Children's park at riverside occupied by the unauthorized settlers and Ehelepola Museum premises lost its beauty with the damages of flood.



Opportunities | Goal 03

1. *Proposed Ruwanpura expressway and bypass road*

Proposed Ruwanpura Expressway is anticipated to reduce reduce the commuting time between Colombo and Ratnapura down to 45 minutes. The expressway will be an easy access to the local community as a faster and convenient way of travelling between Ratnapura and Colombo.

The bypass road has been decided to construct 3.5 km from Court junction to Warakathota bridge as a 4-lane road. The road will bypass the city center and it is set to be constructed as an elevated highway at the lower levels to avoid the damage of flood. It will improve the connectivity, accessibility of Ratnapura, as well as act as a safe evacuation route during flood events.



1. Flood

Flood situation cause for the property damages and emotional effects to the local community. It is been recorded as per the disaster management center information that the no of flood affected families are 206 and people area 1203 in the 2017 incident. (Table 3.2) this situation creates a dependable community in a long run due to the government aids in the meantime. Also, it damages to the physical infrastructure, connectivity and city beatification of the city.

Considering the commercial activities in Ratnapura, around 700 wholesale and retail shops has been registered in the municipal council and over 80% of it gets affected by annual flood. Noticeably, the entire population of the planning area, which is around 70,000 depends on this focal point of supply. In fact, the flood damages to the local supply chain annually and the local authorities and other local level institutions must spend an extra cost to recover the supply chains in a cleaned environment later on as discussed in chapter 03.

As aforementioned, flood damage is a recurring challenge that Ratnapura and its residents must constantly deal with. It has direct impacts to the lives and property and therefore, it is a major constraint for the livability of the city.

Chapter 06



THE PLAN

Chapter 06
The Plan

Concept Plan

6.1. Concept Plan

Ratnapura Development Plan is based on the metaphor of “Blue Star Sapphire” to achieve the vision of “The Gem City of Sri Lanka in Greens” in 2030. This Star Sapphire is a representation or a symbol of the gem city which is going to be re-established in future. Considering the three basic characters of the particular sapphire, it is visible that the physical formation of the road structure of Ratnapura town represents the six lines of the gem and it is a well-known factor that Ratnapura is famous for blue sapphires. Thus the concept has invented considering the above factors.

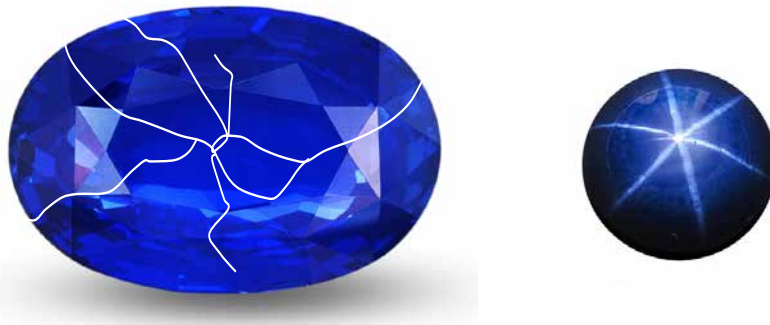


Figure No.6.1 : Blue Star Sapphire as The Metaphor of Ratnapura Urban Development

Blue Star Sapphire has three interesting facts. It cannot be identified unless it does not perform in a suitable environment. The value of the gem increases when it gets cut at the right place by a trained and experienced gem cutter. Star Sapphire has two layers as color layer and lines layer. When both the layers are sharp and thick, the value of the gem is increased.

Considering the above three facts, Ratnapura Development Plan will help to create a suitable environment to make this city shine in future. The plan itself has a zoning plan which has been done keenly to increase the value of the city also the identified two layers of the city will be strengthened through this Ratnapura Development Plan.

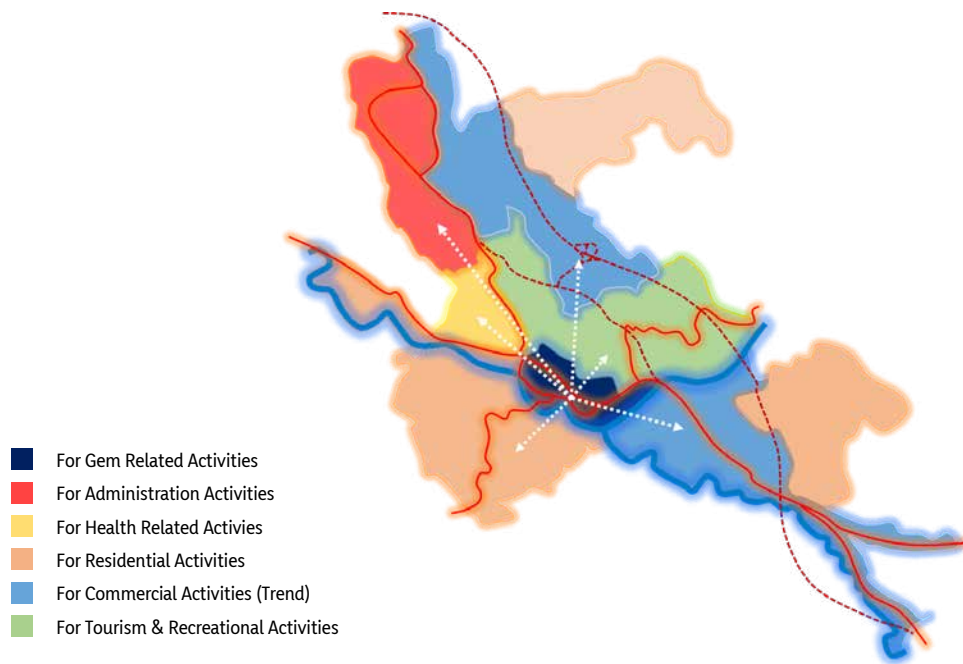


Figure No.6.2 : Concept of the Development Plan

The development pressure of Ratnapura Town will be directed into six directions by 2030 through zoning regulations of land use strategy. The identified strategic projects will be assisted for it. Administrative, commercial, residential, health, recreational and the trend of the commercial development will be pushed out from the city center to the most suitable directions to achieve sustainable development in 2030.

Moreover, the outer layer of the city center will be covered with the green and blue layer while the inner city will be strengthened based on six principals to make this gem city worth and compete with other cities in future. Connectivity, Identity, Adoptability, Opportunity, Livability and Beauty are the above mentioned principals. This will be achieved by,

1. Connectivity through convenient transportation
2. Identity by promoting the gem industry
3. Adoptability through disaster resilience
4. Opportunity through diversified economic activities
5. Livability through creating more public spaces
6. Beauty through green blue network

The vision for Ratnapura focuses on six outcomes that will be achieved over the long term according to the metaphor, it has been based. Similarly, the development will occur towards six directions in future. These are supported by a set of strategic objectives and Directions that clarify the steps that the government will take to achieve them.

Chapter 06
The Plan

Proposed Land
Use Plan

6.2. Proposed Land Use Plan

Ratnapura development will be extended towards Kuruwita and Pelmadulla directions according to the analysis of Development Pressure and there is a trend of emerging small townships based on junctions of Weralupa and Batugedara. These townships will be accessed and benefited through the proposed Ruwanpura Expressway and by pass road in future apart from the main road. Also, being a valley which is prone to natural disasters, scarcity of developable lands, high commuter population and several other factors have been considered when preparing land use plan.

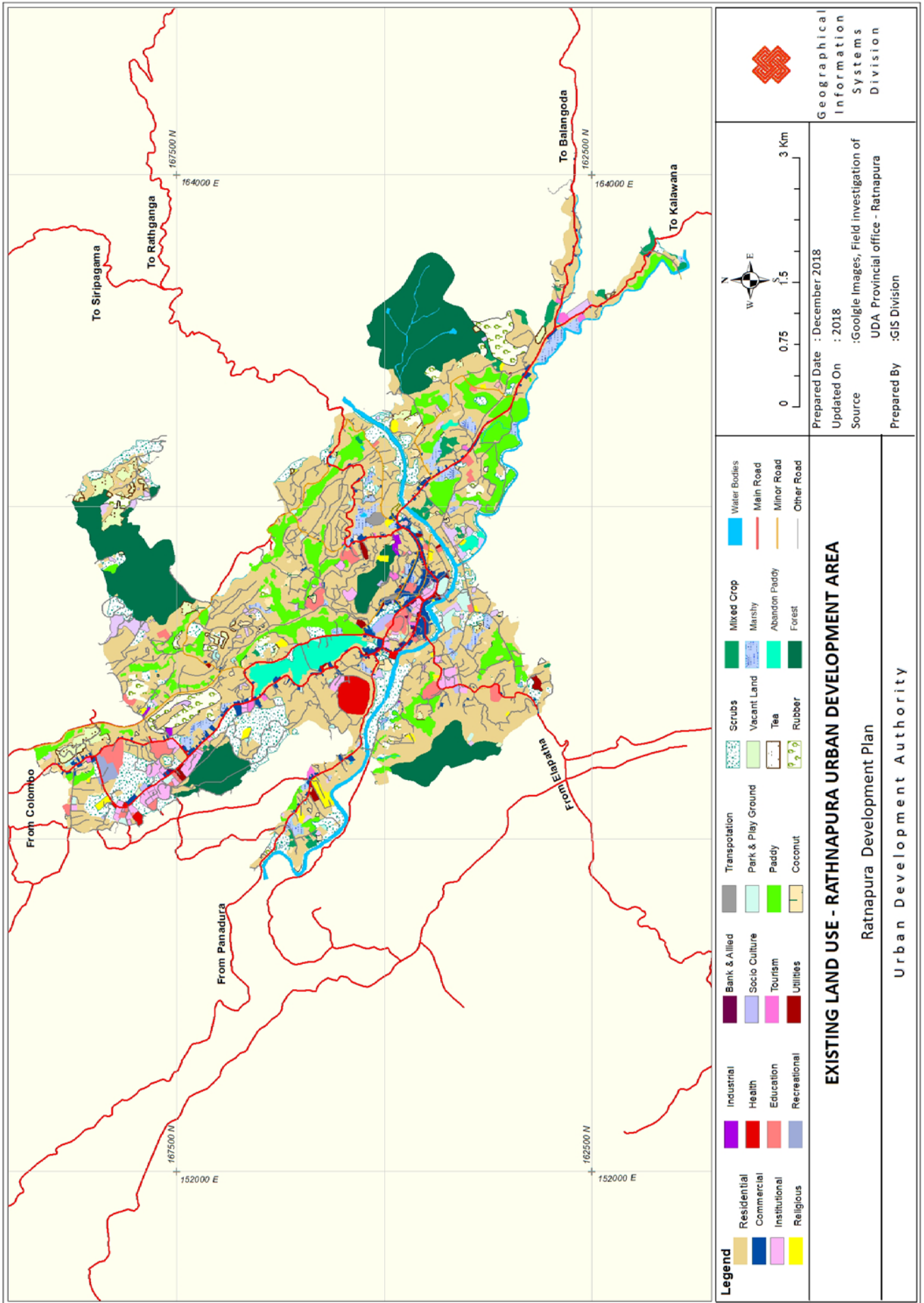
- **Strategy 6.2.1**
Clustering the areas according to serve the existing functions and promotional functions
- **Strategy 6.2.2.**
Release commercial pressure into two directions (Kuruwita & Pelmadulla) considering the existing development pressure
- **Strategy 6.2.3.**
Convert retention areas into recreational areas for enhancing the livability and tourism industry
- **Strategy 6.2.4.**
Convert Central Business District (CBD) into gem business friendly environment

Proposed land use plan is focused on achieving its goals and objectives through zoning and special projects in order to pursue the vision of the plan. Thus, it is expected to facilitate Ratnapura Town to become a national Gem Center with marketing spaces, refreshment and accommodation facilities together with smooth transportation system. The New Town will be facilitated as the provincial administration capital by providing necessary facilities for it. Creating a recreational cluster between Ratnapura town and New Town to have a visual linkage between those two is another purpose of this land use plan.

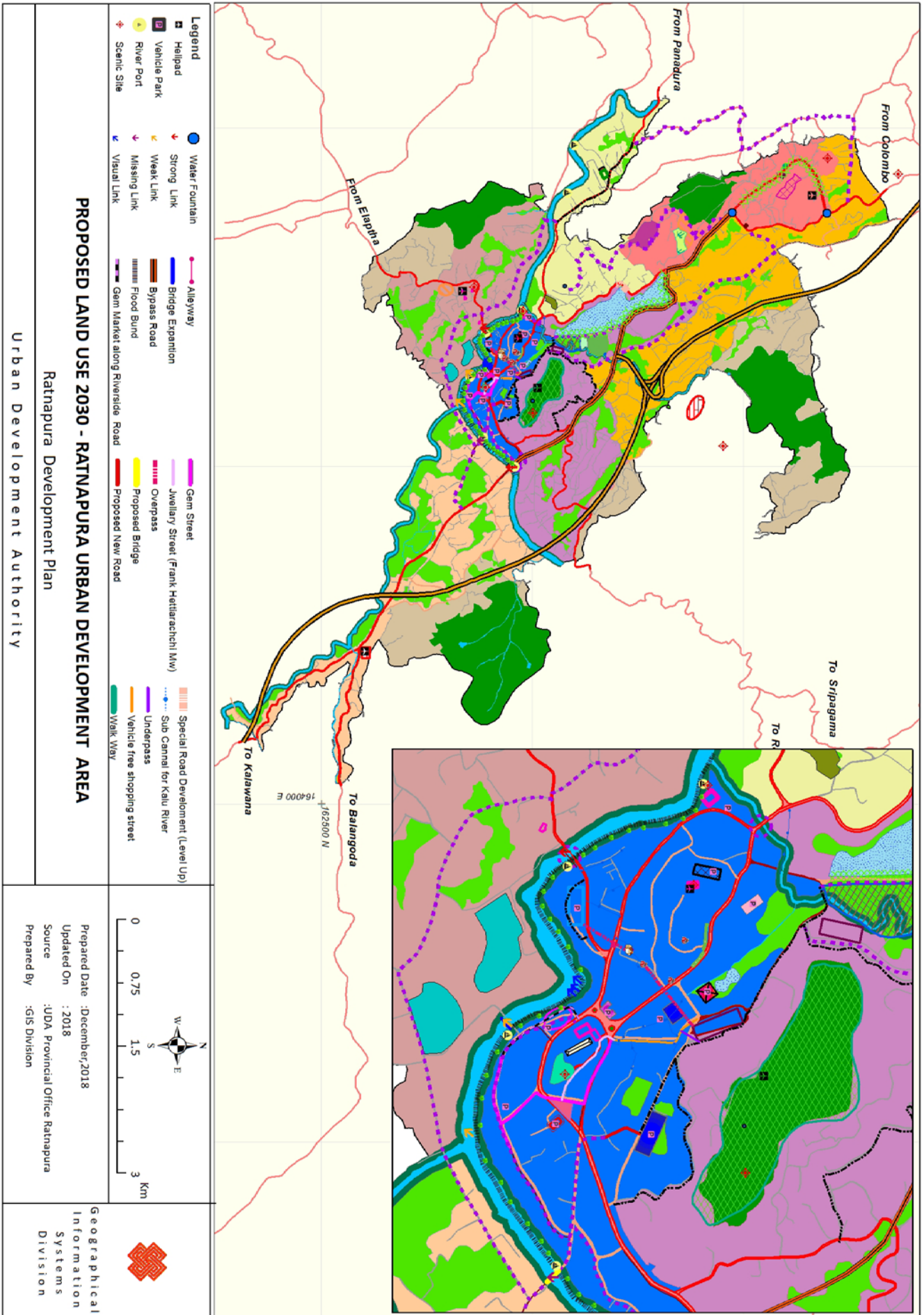
Moreover, facilitate to clustering services like health, administrative and commercial is proposed through the zoning plan. It is expected that providing necessary facilities for those clusters is easier when those are scattered in a particular boundary.

Ruwanpura expressway will act as a channel of connecting Ratnapura with Commercial capital of Sri Lanka within shorter period of time apart from the A 004 road. Besides, the proposed Weralupa lake will be sea plane accessible for tourists and Kalu river can be used as a naval route for tourism purpose. These key projects also have been incorporated within other strategies when preparing the land use plan.

Ultimately, the land use plan will serve the purpose of creating Ratnapura as the National Gem Center of Sri Lanka.



Map No. 6.2.1 : Existing Land Use Pattern



Map No. 6.2.2 : Proposed Land Use Plan

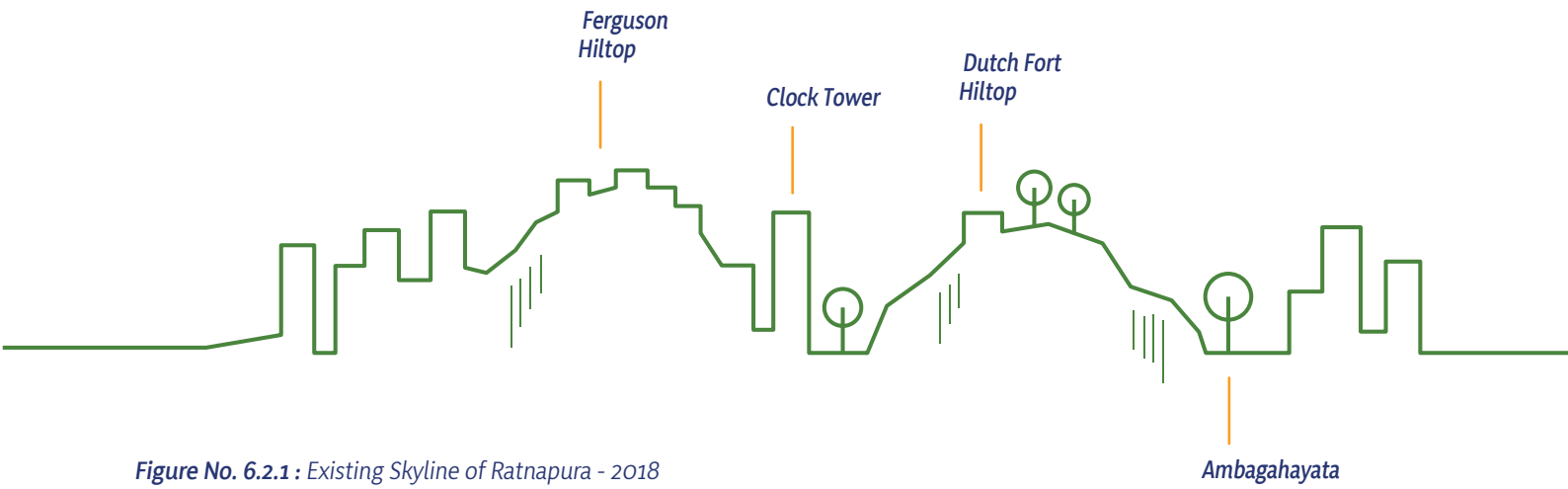


Figure No. 6.2.1 : Existing Skyline of Ratnapura - 2018

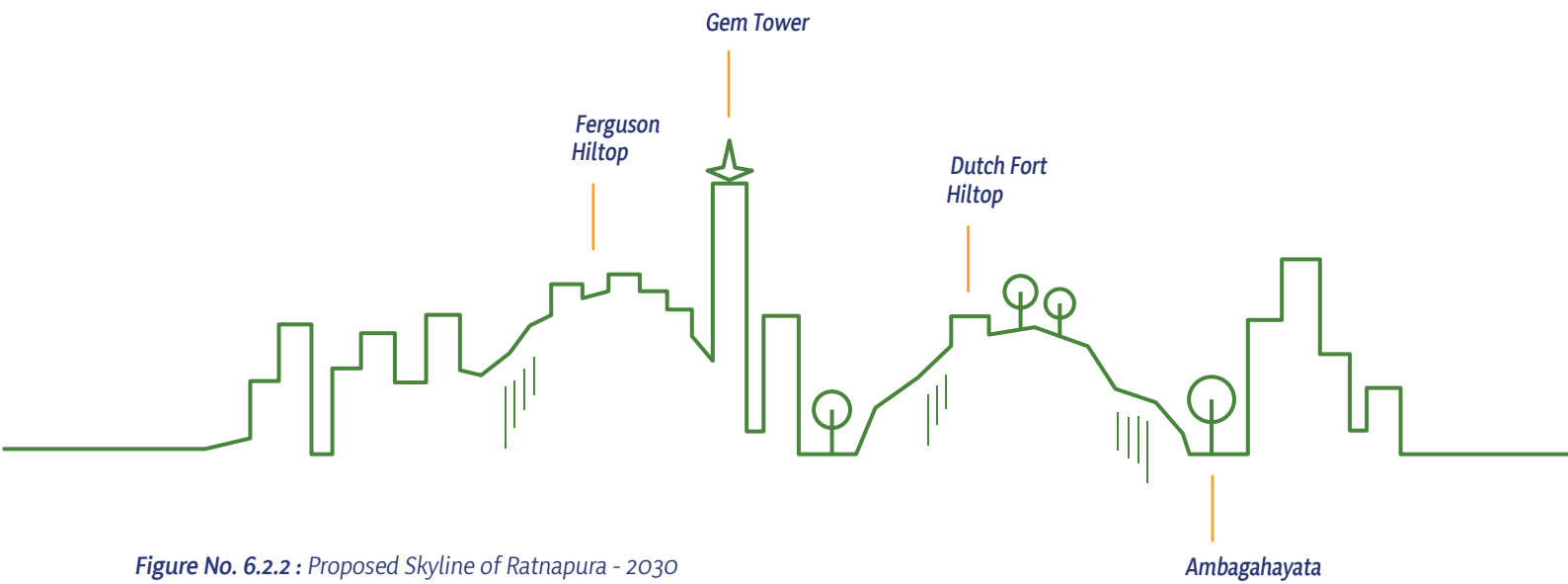


Figure No. 6.2.2 : Proposed Skyline of Ratnapura - 2030

Chapter 06
The Plan

Social and Physical
Infrastructure
Development Strategies

Service Plan

Housing

6.3. Social and Physical Infrastructure Development Strategies

6.3.1. Service Plan

6.3.1.1. Housing

Housing is for peoples' living and it has many interrelated aspects in the context of built environment in Ratnapura. The total number of housing within the MC area is 10603 according to the analysis done by UDA based on the statistics of divisional secretariat in 2017. Out of the particular housing lot, 79.1% is permanent, 19.5% is semi-permanent and 1.4% is temporary.

More accurately, 50% out of the temporary housing is situated in Kospelavinne, Thiriwanaketiya, Pulingupitiya and Mudduwa areas which belong to the reservations of rivers and railway and 50% of the semi-permanent houses are in Saman Place, New Town and Samagipura area of the town and these are state owned lands. Low income earners reside in these areas without having full ownership. (Source: Resource Profile – Ratnapura, 2016)

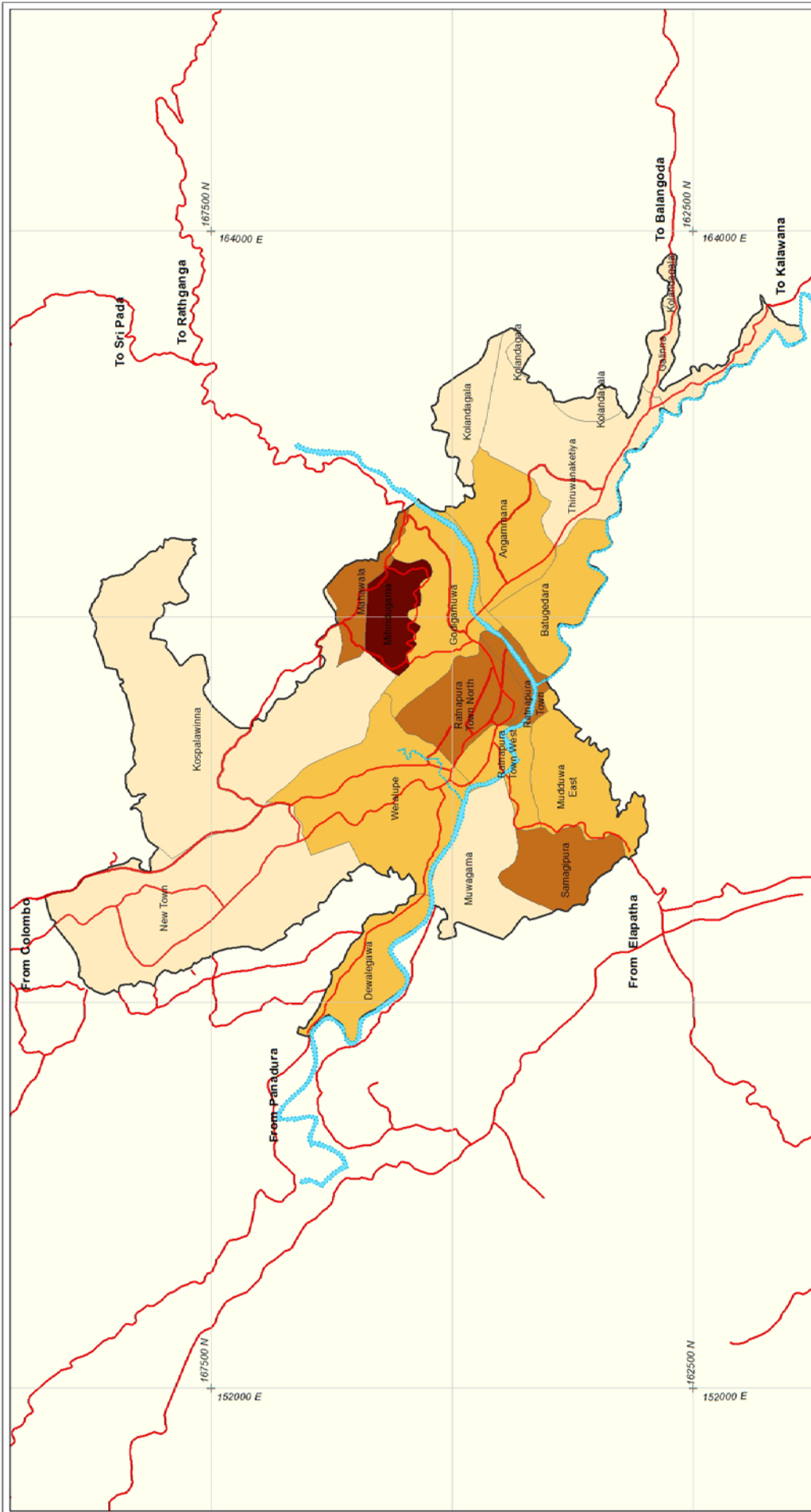
Though non-residential usages of land have increased in Ratnapura town – North, Ratnapura Town – East which belong to the town center, the residential activities too have been placed with a high density. The main reason for that is the accessibility of the existing facilities in the town center.

In determining the housing needs around Ratnapura town, the main issue is that this area is often vulnerable to natural disasters rather than other towns in Sri Lanka. The area may need more accommodation facilities than the amount determined due to the landslides and floods occur within extreme rainy season.

Year	Population	Number of Houses	Number of Families	Housing Deficit
2011	49085	9864	10908	14298
2016	52520	10603	11671	1068
2021	56197	11398	12488	1089
2026	59131	12253	13362	1109
2030	62604	13171	14298	1127

Table No: 6.3.1.1 : Housing Condition in Ratnapura

Source : Field Surveys of the Urban Development Authority



Legend

Persons per Hectare



11 - 18



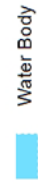
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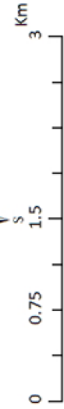
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Water Body



Road



HOUSING DENSITY - RATNAPURA URBAN DEVELOPMENT AREA

Ratnapura Development Plan

Urban Development Authority

Prepared Date : December, 2018
 Updated On : 2018
 Source : Department of Census & Statistics & UDAR Provincial Office - Ratnapur
 Prepared By : GIS Division



Geographical Information Systems Division

Map No. 6.3.1.1.1 : Housing Density

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Housing

In determining the housing deficit above, the following assumptions too were used in addition to the existing housing scarcity.

- The population growth rate is 1.5
- The average number of members in a family is 4
- The annual housing growth rate is 4.5
- The annual houses depreciation is 1%

The number of semi-permanent houses i.e. 1944 out of the existing housing units in the town i.e. 986 can be further developed in same places and the number of temporary houses i.e. 249 which are located in flood prone areas also must be added to the number of housing deficit as houses that must be re-constructed. The expected housing deficit up to 2030 is 1127 according to the analysis.

- **STRATEGY 1.1**

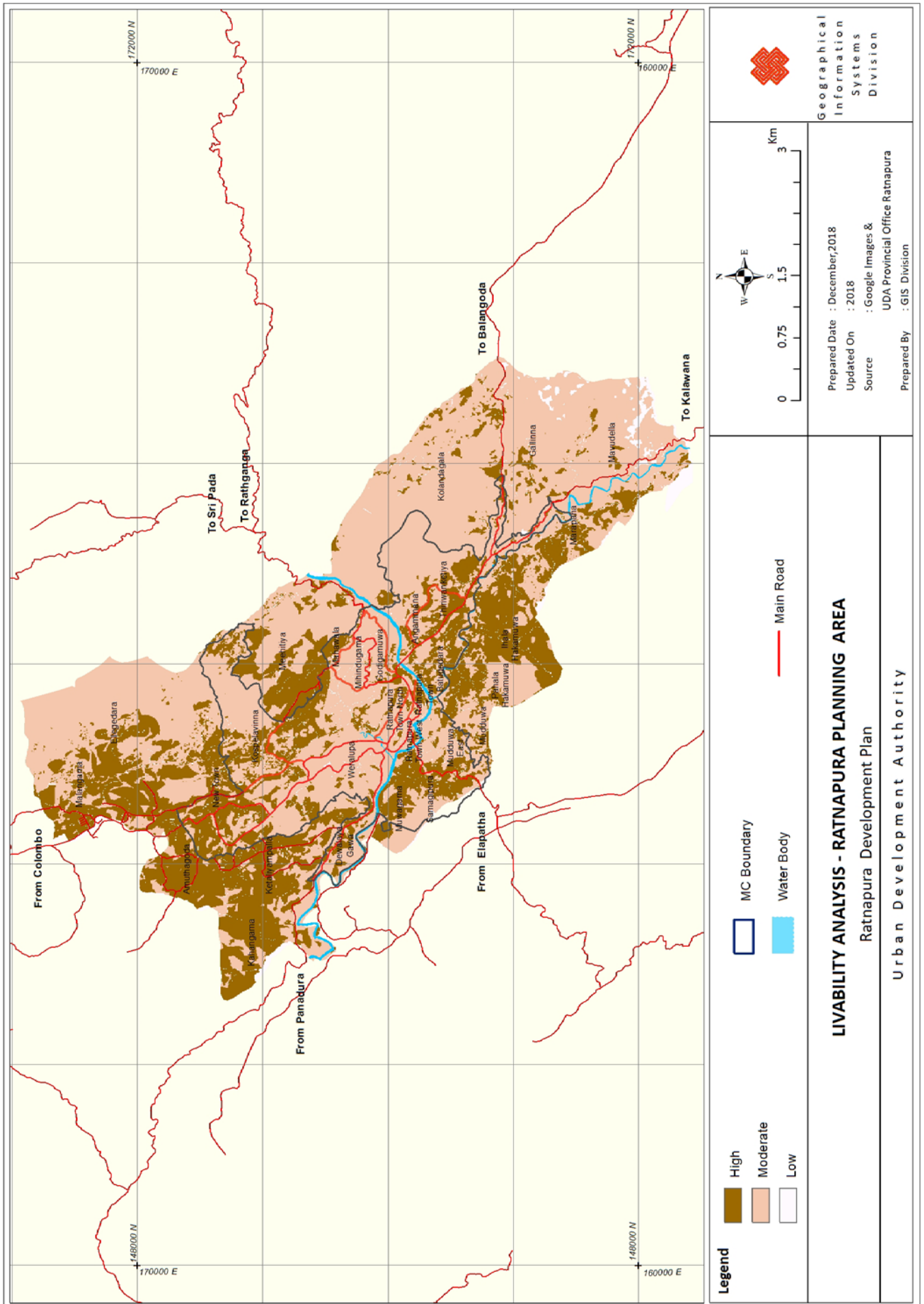
Construction of New Housing Projects within the MC boundary

1. Galkaduwatta – Middle Income Housing Project (400 units)
2. Muwagama (Colin Crescent) – Middle Income Housing Project (200 units)
3. New Town – Rental Basis apartment complex for officers (200 units)
4. Hidellana – 33 Acre Housing Project (250 units)

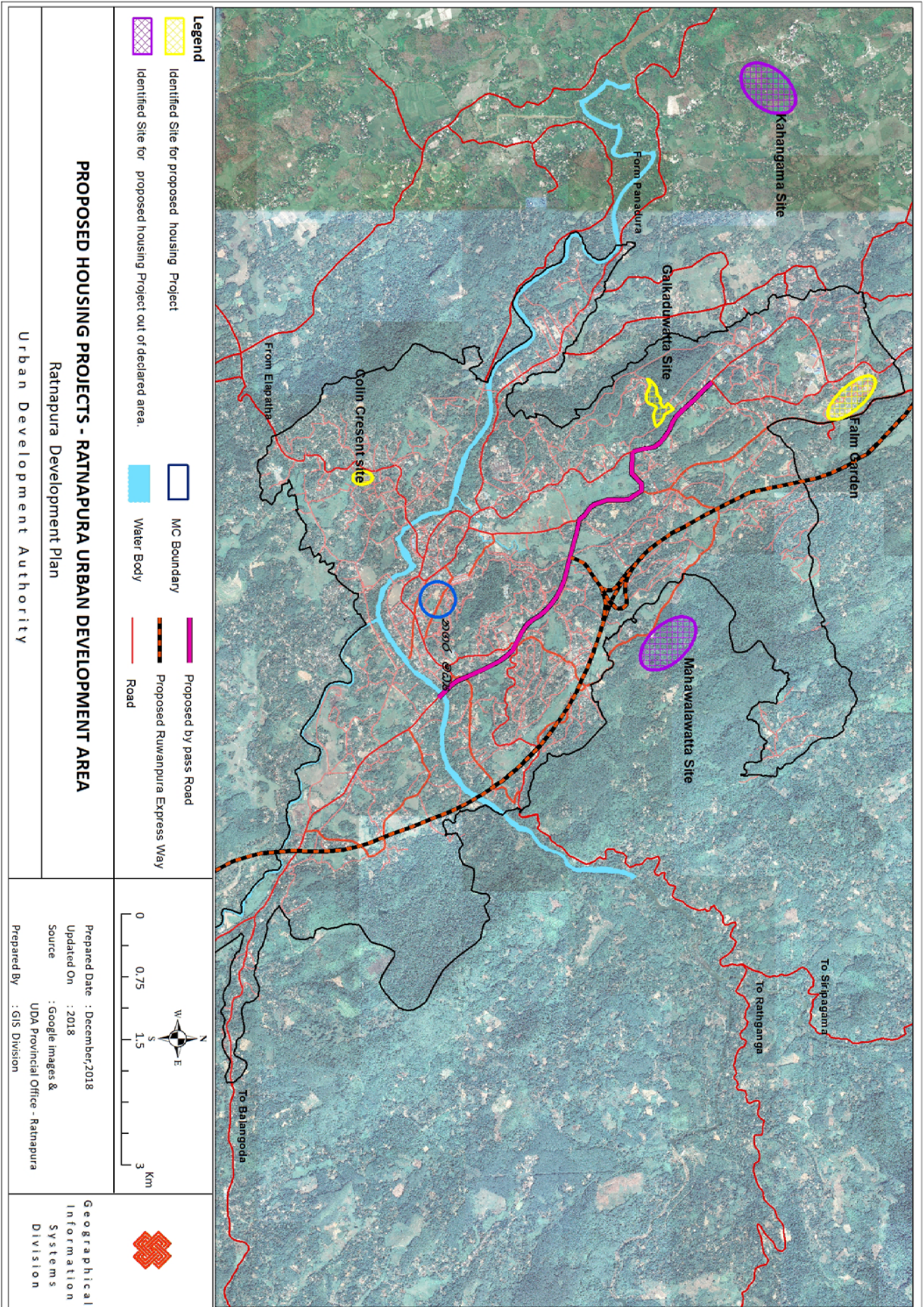
- **STRATEGY 1.2**

Construction of New Housing Projects in identified locations of outer area of the MC boundary

1. Mahawala– High Income Housing Project (200 units)
2. Kahangama – Low Income Housing Project (200 units)



Map No. 6.3.1.1.2 : Livability Analysis



Map No. 6.3.1.1.3 : Proposed Housing Projects

6.3.1.2. Education

Regarding the education facilities to the people in MC area, total number of students is 24,705 and the total number of teachers is 1,074 by 2017. Among those students 38% is studying (17,528) in the schools which are located at the city center. More precisely, around 10,888 students studying in the schools which are located next to the A004 road. Additionally, around 8000 students come for tuition purposes to Ratnapura.

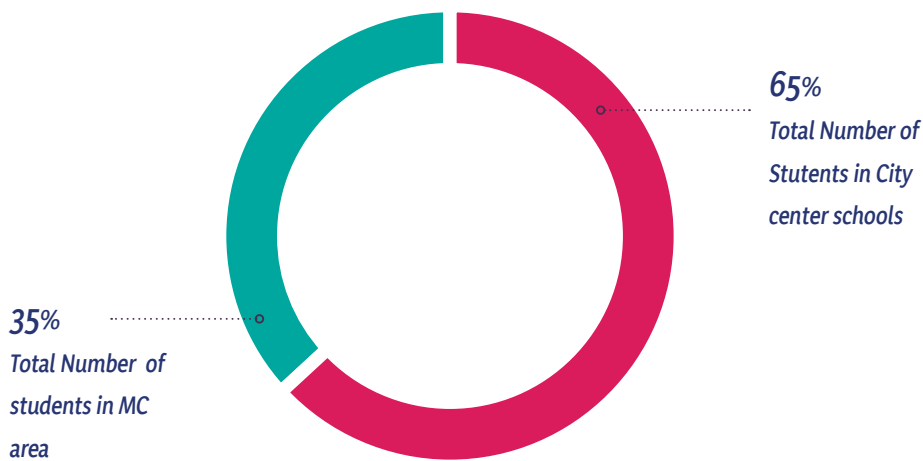


Table No: 6.3.1.2.1 : Distribution of Student Population - 2017
Source : Analysis of the Urban Development Authority based on Education Department Information

Areas where the education facilities do not serve the requirement of "A Primary School within 1 km and A Secondary School within 3 km" need to be equipped with new schools and the schools in the city centre which do not have enough space for the future expansion have to be served with new locations. 04 schools with 6633 children have been identified for shift considering above factors and these schools can be shifted completely or partially to the identified new locations in future.

Schools which have not enough space for future expansion

- St. Aloysius Boys' School
- St. Luke's Collage
- Dharmapala Collage
- Mihindu Collage

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Education

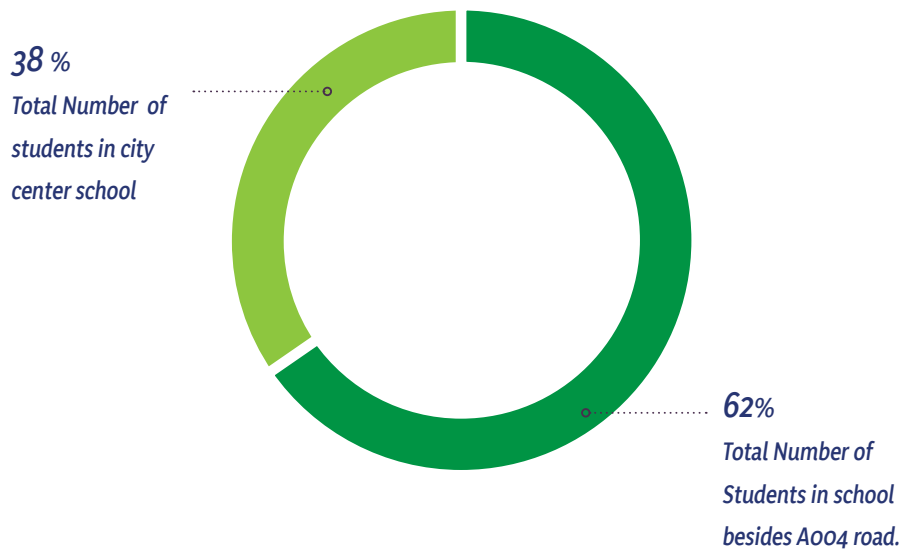


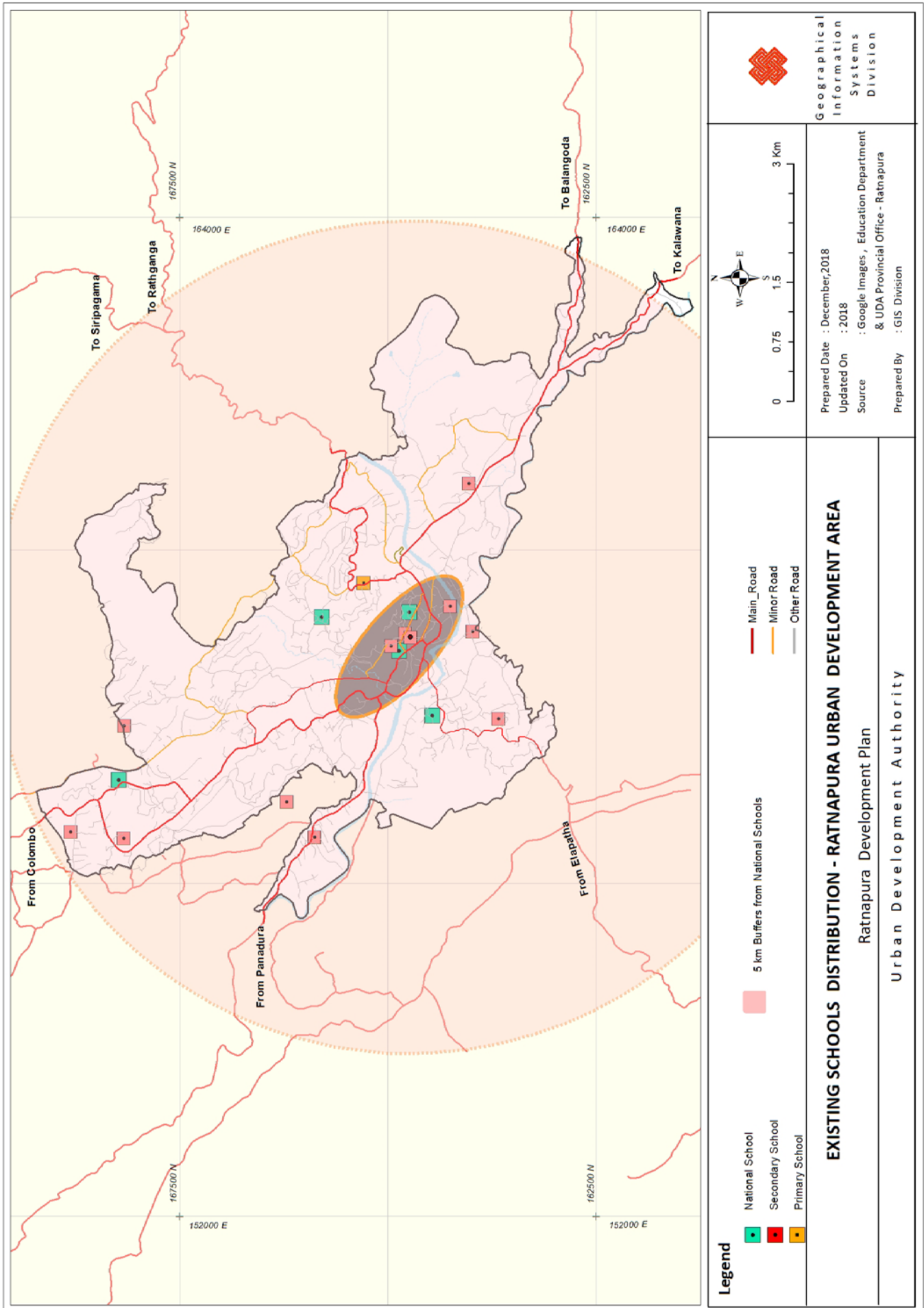
Table No: 6.3.1.2.2 : Distribution of Student Population within City Center
Source : Analysis of the Urban Development Authority based on Education Department Information

Tertiary Education

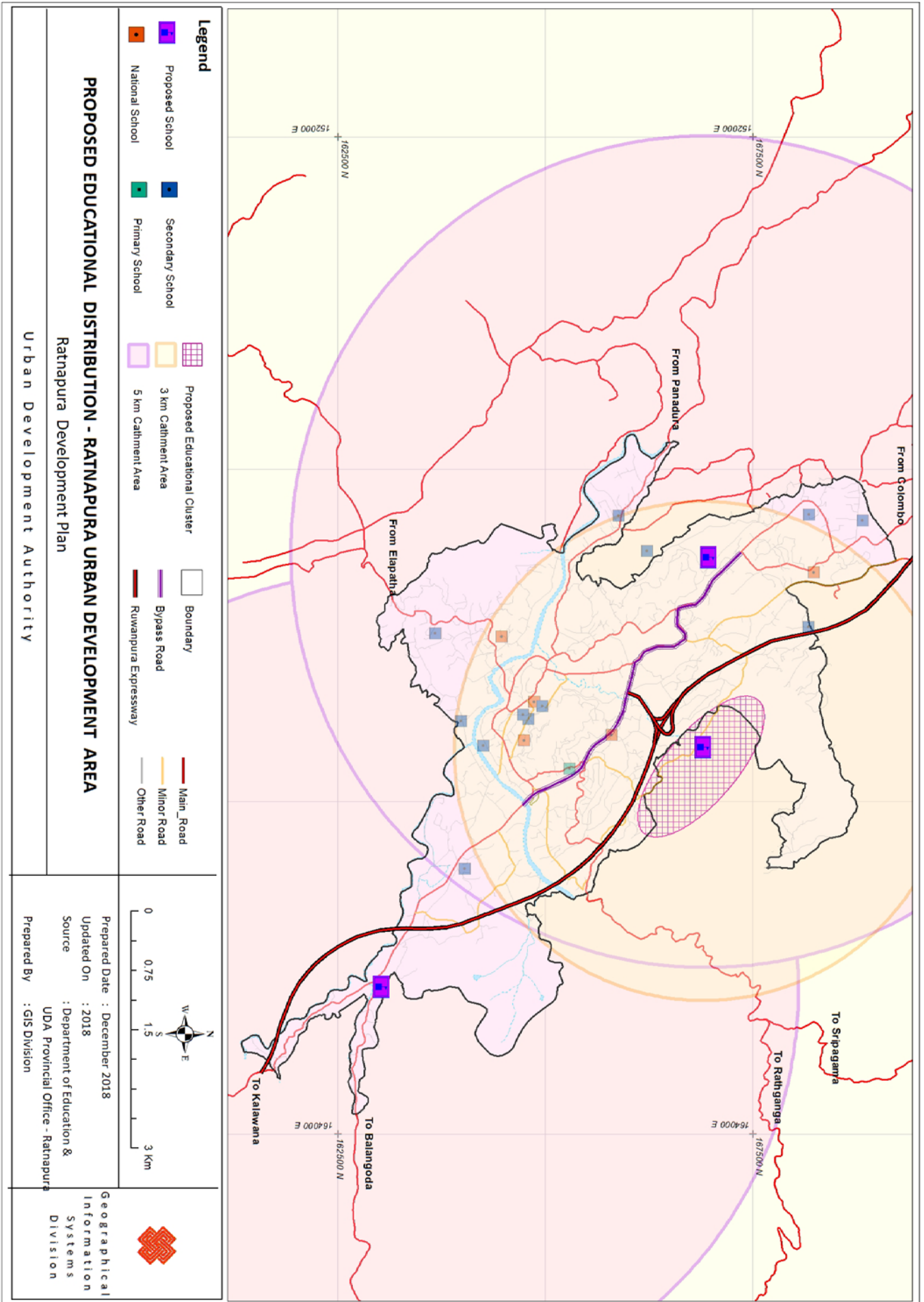
Tertiary education is increasingly important on achieving the vision of the Gem City. Also, that is recognized as a major driver of economic competitiveness in an increasingly knowledge-driven economy. It can be seen that Technical Collage, Hotel School, NAITA and various other institutions serve the area by giving tertiary education for the school leavers based on New Town, Ratnapura. Thus, it is an emerging need to establish an international gemology academia in a suitable location and facilitate to the existing gem training center to serve the purpose. Moreover, the Medical Faculty of Sabaragamuwa University will be located adjacent to the Ratnapura Base Hospital Premises and the above mentioned tertiary education will require more space for the people who are going to be professionals in future.

- **STRATEGY 2.1**
Identification of suitable land for school
 1. Thiriwanaketiya proposed school – 4000 students
 2. New Town proposed school – 4000 students
 3. Mahawalawatta proposed school – 2000 students

- **STRATEGY 2.2**
Identification of suitable lands for establishing a gemology academia
 1. Mahawalawatta area



Map No. 6.3.1.2.1 : Existing Educational Facilities



Map No. 6.3.1.2.2 : Proposed Educational Facilities

6.3.1.3. Health

The health facilities are developed based on the Ratnapura Provincial General Hospital. In comparing year 2003, the number of in-patients has increased by more than Hundred Thousand. Many special services within Ratnapura town are conducted by the Ratnapura Provincial General Hospital which are indicated in the following table.

Year	Number of Beds	Number of In-patients	Beds/Patients Ratio (Daily)	Outpatients (per day)	Doctors	Doctors / Patients Ratio	Specialist Doctors	Nurses/Male Nurses	Other Staff	Patients arrive to the Clinic (per day)	Percentage of beds according to the patients
2016	1057	116749	1.2:1	924	207	1:1.3	32	674	945	1112	82%
2006	964	1600	1:7	2100	142	11:3	20	366	575	-	-

Table No: 6.3.1.3 : Ratnapura Provincial General Hospital - Facilities and Staff Composition – 2017
Source : Ratnapura General Hospital

In addition to the above, Ratnapura Base Hospital has been converted in to a teaching hospital from January 2019 due to the establishment of medical faculty in University of Sabaragamuwa. Also, services are provided to urban people by three private hospitals with facilities, with an eye hospital and an ayurvedic hospital.

- **STRATEGY 3.1**
Establishment of a Health Cluster

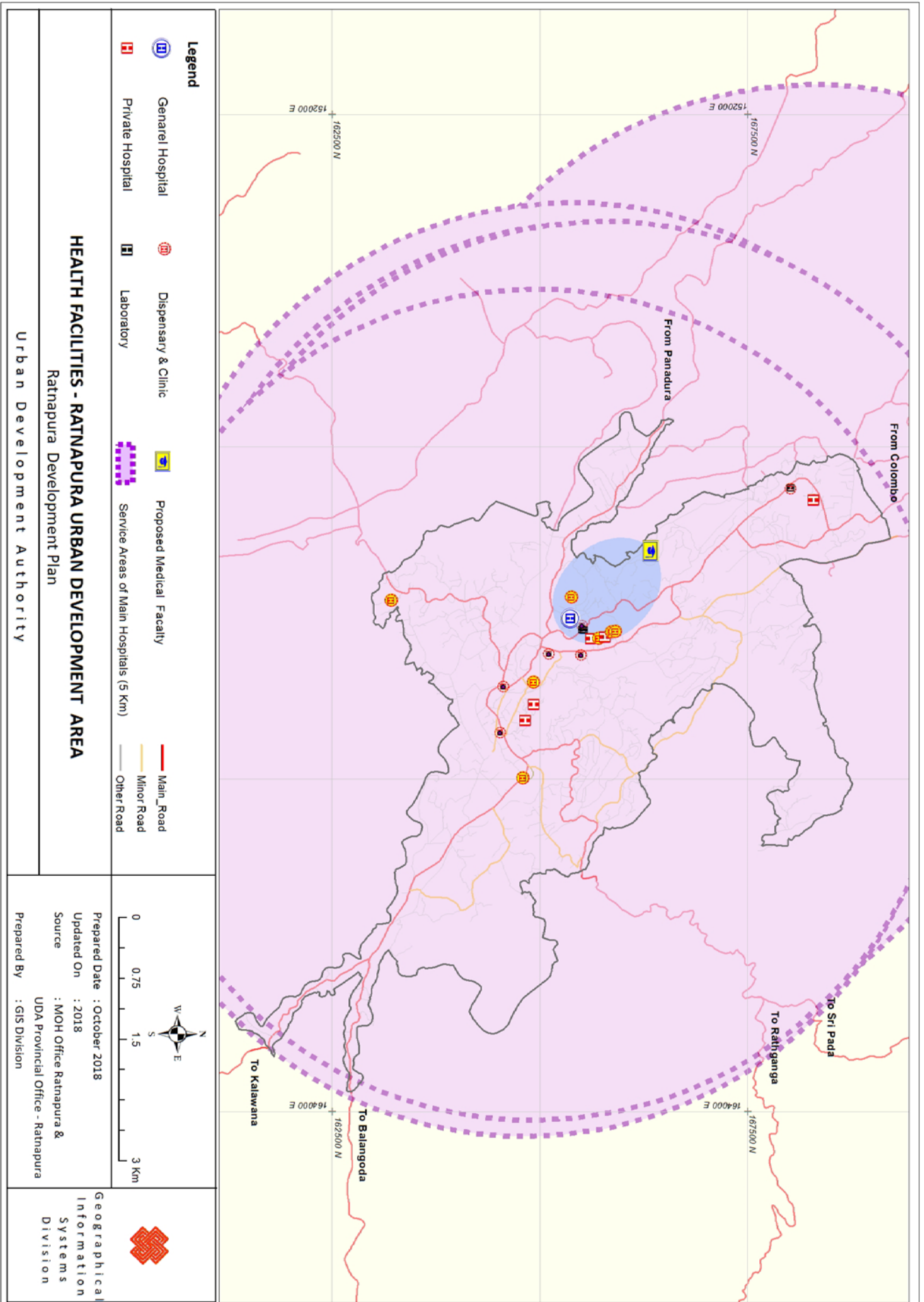
Ratnapura Base Hospital, two private hospitals and proposed medical faculty of Sabaragamuwa University will create a Health Service Base Clustered around Hospital Junction by 2020. Thus facilitating this health cluster through regulations is the identified strategy for Health Sector Development of the town. It is expected that the proposed Weralupa Lake which will be located within the close proximity to the health cluster will support the mental health of the patients and the relatives of them.

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Map No. 6.3.1.3.1 : Health Facilities

6.3.1.4. Administrative Service

Ratnapura is a place where commuting population is higher than the residential population. Those people come for gem trading, administrative needs and daily needs as per the perception survey. Since Ratnapura is an administrative capital and a service center, the catchment of each has considered at the preparation stage of the development plan. Shifting administrative institutions from old town to the new town affect the clustering administrative service into one cluster

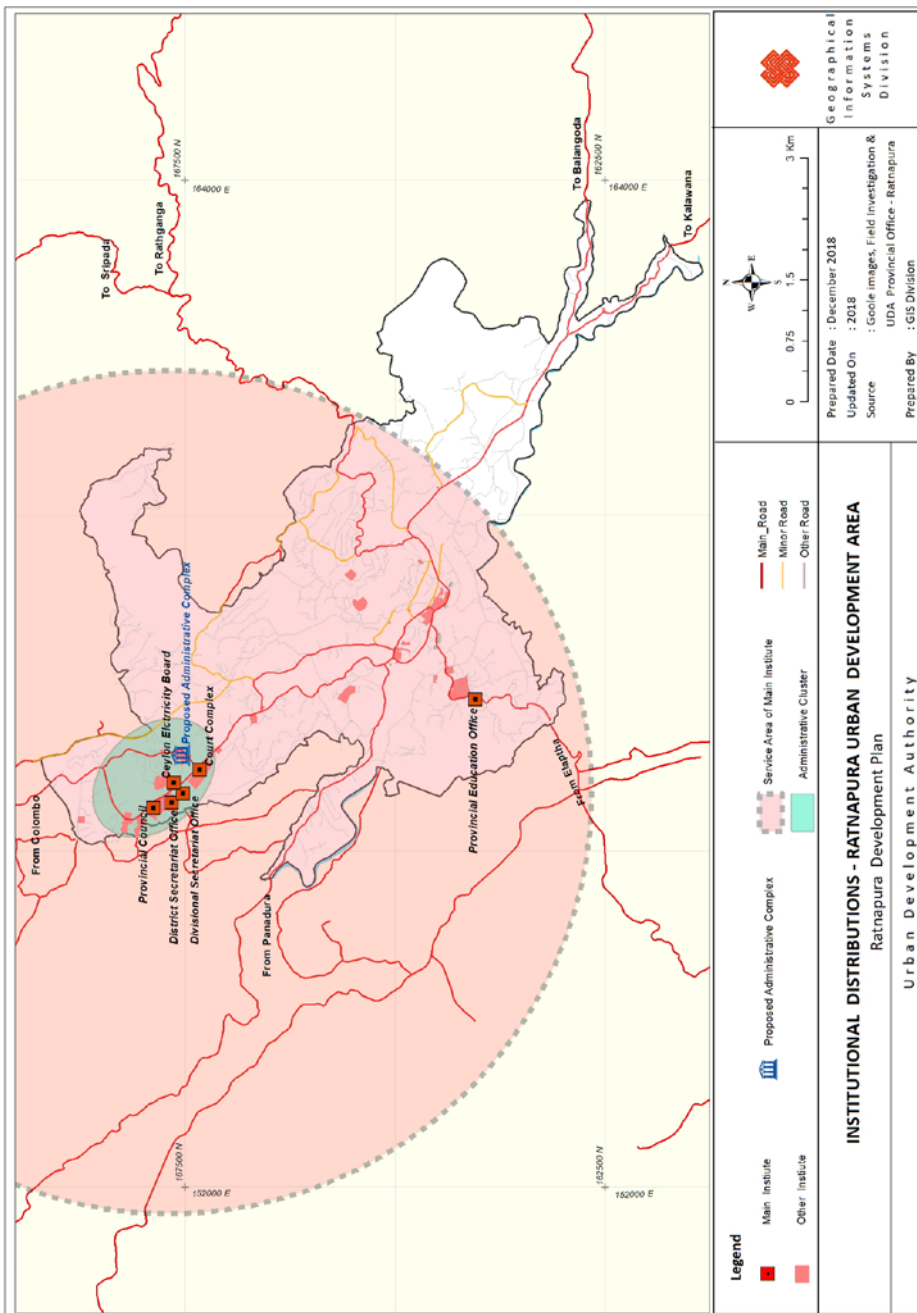
- **STRATEGY 4.1**
Establishing a new administration complex near the Court Junction

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Administrative Service



Map No. 6.3.1.4.1 : Administration Service Facilities

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6.3.2. Transportation

Ratnapura is the nodal point of the west – east connection of the country (A004). Also, it is the countryside road which connects Colombo and Panadura (western region) with Hambantota (southern region) and Batticaloa (East region). Thus, in regional transport network, Ratnapura is a city where should have a smooth traffic flow and easily pass over. But, due to geographic situation and spatial arrangement it does not happen as it should be.

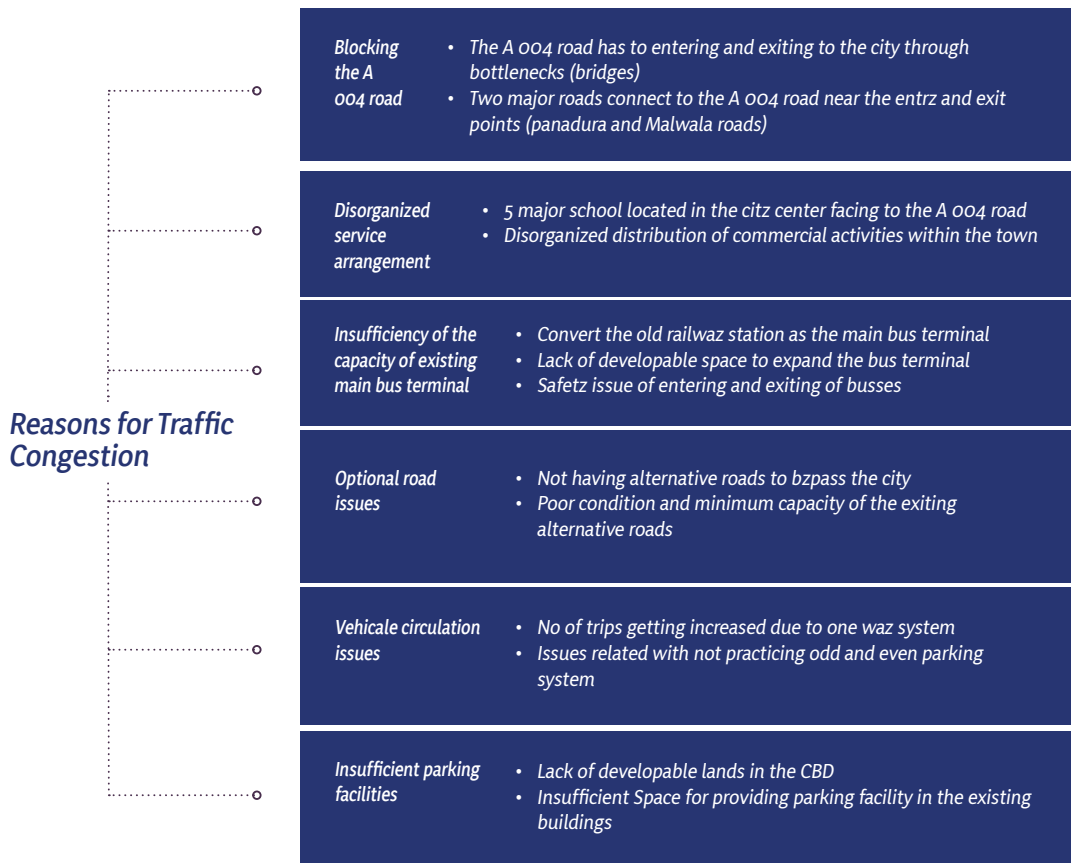


Figure No. 6.3.2.1 : Reasons for Traffic Congestion
 Source : Urban Development Authority



Figure No. 6.3.2.2 : Existing Bus Terminal of Ratnapura
 Captured by : Hasini Artigala, March 2018

Transportation strategy has been introduced to overcome the above issues and have a convenient transportation.

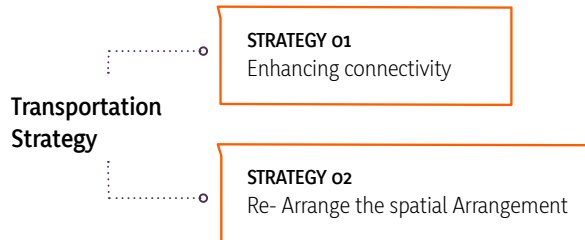


Figure No: 6.3.2.3 : Transportation Strategy

- **STRATEGY 01**
Enhancing the Connectivity

For these needs Ratnapura development plan will provide spaces through zoning regulation and special projects.

- **STRATEGY 1.1**
Construction of New Roads
 1. Construction of Ruwanpura Expressway
 2. Construction of the bypass road from Court Junction to Warakathota Bridge
 3. Construction of a new road from Good Shed Road to Church Road through Pattiwita

- **STRATEGY 1.2**
Development and Re-development of Roads
 1. Redevelopment of the road from Batugedara Junction to Karapincha Road as an alternative road
 - Phase 1 – Development of the road from Batugedara Junction to Mudduwa Junction
 - Phase 2 – Development of the road from Mudduwa Junction to Panadura Road through Balibathgoda Bridge
 - Phase 3 –Road Improvement of Panadura Road from Kotambegawa to Saman Dewalaya
 - Phase 4 –Development of the road from Panadura road (near Saman Dewalaya) to Karapincha Junction

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2. Redevelopment of the old railway from Palm Garden to Outer Circular Road as an alternative Road
3. Redevelopment of the road from Pattiowita to Main Street
4. Redevelopment of the road from Senanayaka Mawatha to Kudugalwatta Port
5. Redevelopment of Godawela Road
6. Development of the road from hospital to New Town through Saman Pedesa as an alternative road
7. Road Improvement between Railway Road and Godawela Road
8. Road Improvement of River-edge Road
9. Road Improvement of Outer Circular Road and developing it as an alternative road
10. Road Improvement of Inner Circular Road and developing it as an alternative road
11. Road Improvement of the road from Kemananda Mawatha to Ginihiriya

- **STRATEGY 1.3**

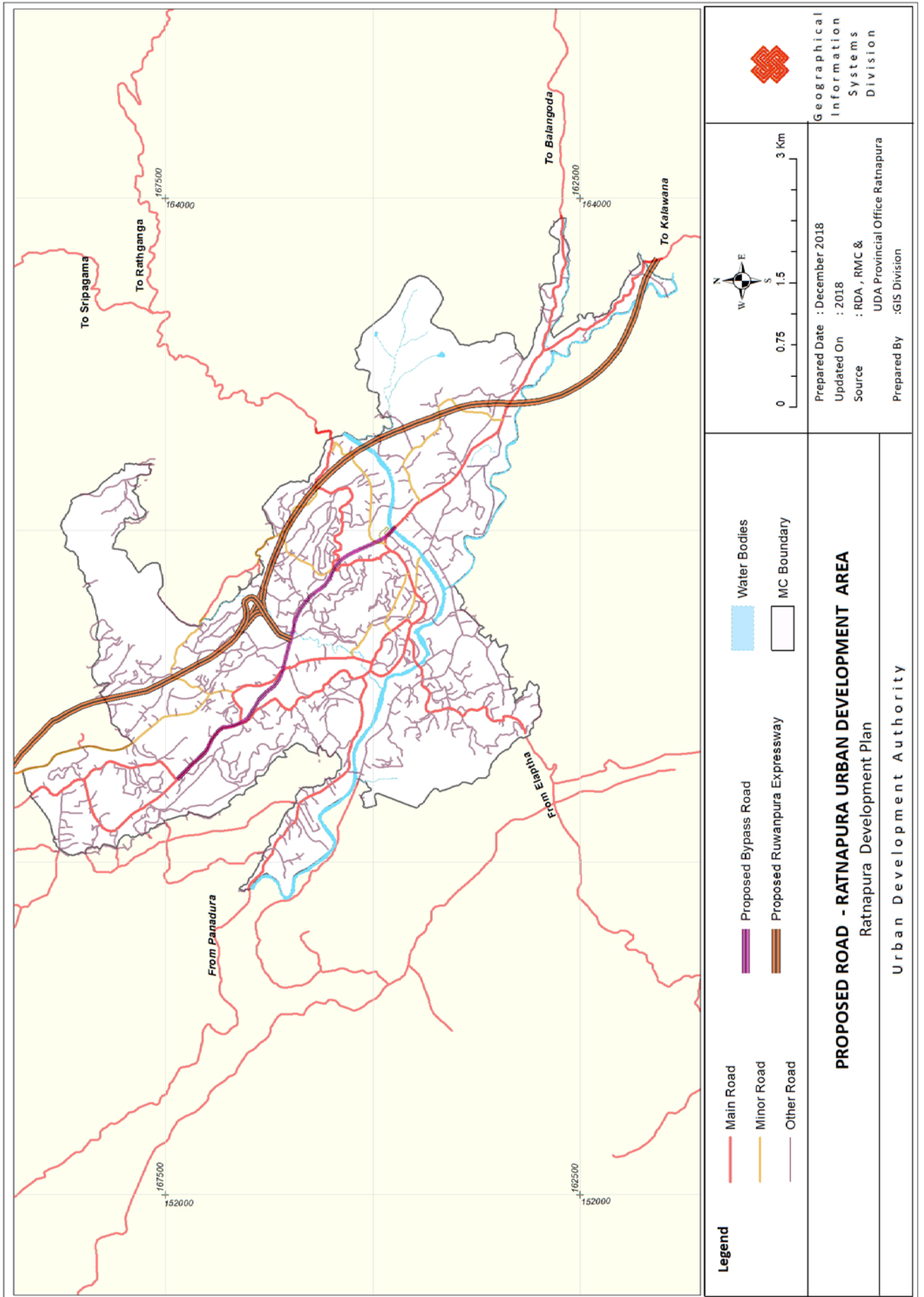
Construction of New bridges and redevelopment of existing Bridges


1. Construction of Balibathgoda Bridge to connect Balibathgoda road and Panadura Road
2. Construction of Kudugalwatta Bridge
3. Redevelopment of the bridge near Seewali Ground
4. Redevelopment of the bridges at entering points of the town with identical structures

- **STRATEGY 1.4**

Walkability improvement

1. Construction of an underpass from Church road to Main Bus Stand to avoid the traffic near Indika Hotel
2. Construction of overpasses at Pulungupitiya Junction and St.Lukes Junction
3. Green alleyway improvement within the city




 Geographical Information Systems Division

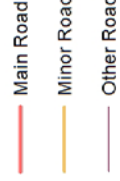
Prepared Date : December 2018
 Updated On : 2018
 Source : RDA, RMC & UDA Provincial Office Ratnapura
 Prepared By : GIS Division



 0 0.75 1.5 3 Km



 Water Bodies
 MC Boundary

Legend


 Main Road
 Minor Road
 Other Road
 Proposed Bypass Road
 Proposed Ruwanpura Expressway

PROPOSED ROAD - RATNAPURA URBAN DEVELOPMENT AREA
 Ratnapura Development Plan
 Urban Development Authority

Map No. 6.3.2.1: Proposed Road Constructions

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- **STRATEGY 1.5**
River Transportation Improvement

1. **Construction of river port series at identified locations**

- a. **Phase 1**

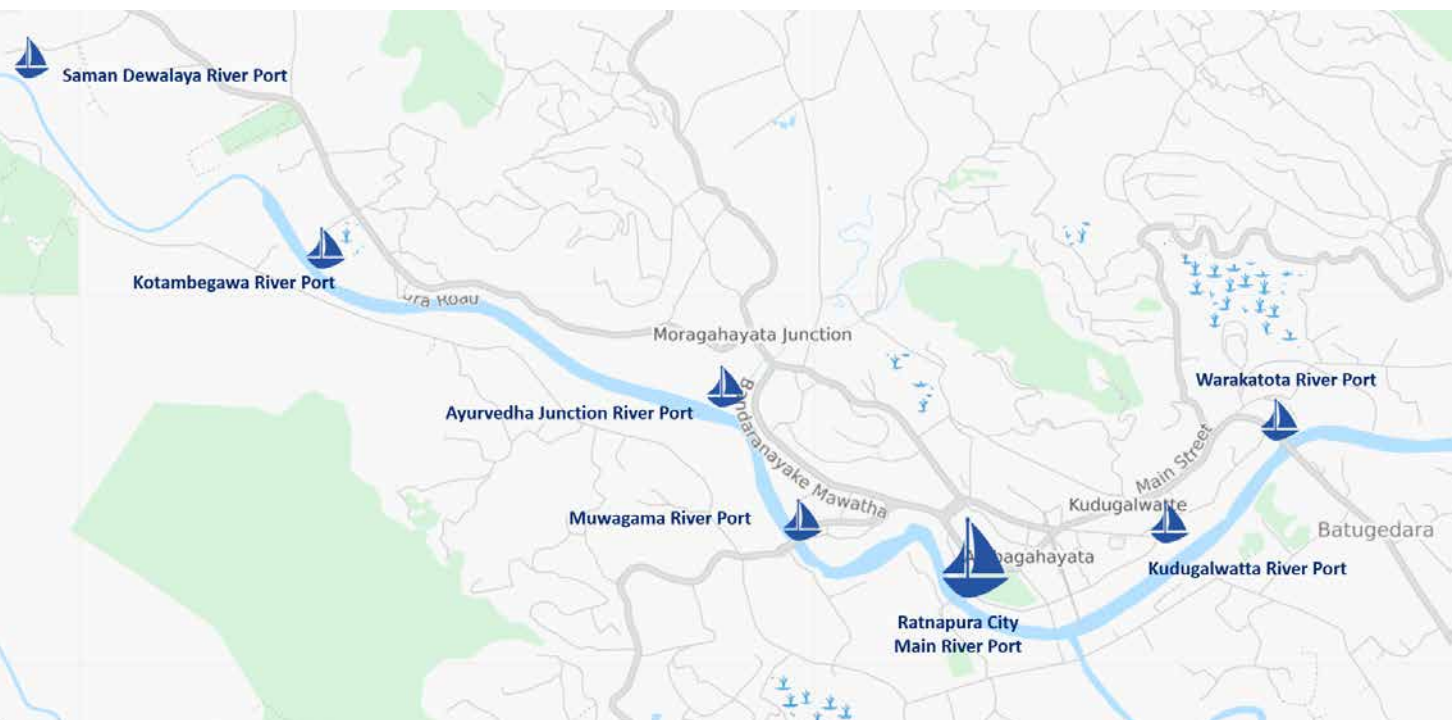
- I. **Main River Port – Existing Children’s Park behind the Seevali ground conversion to a river port**
- II. **New river port construction near hanging bridge close to Saman Dewalaya**

- b. **Phase 2**

- I. **New river port construction near Warakathota Bridge**

- c. **Phase 3**

- I. **New river port construction at Kudugalwatta**
- II. **New river port construction at Ayurveda Premises**
- III. **New river port construction at Kotambegawa**



Map No. 6.3.2.4 : Proposed River Ports

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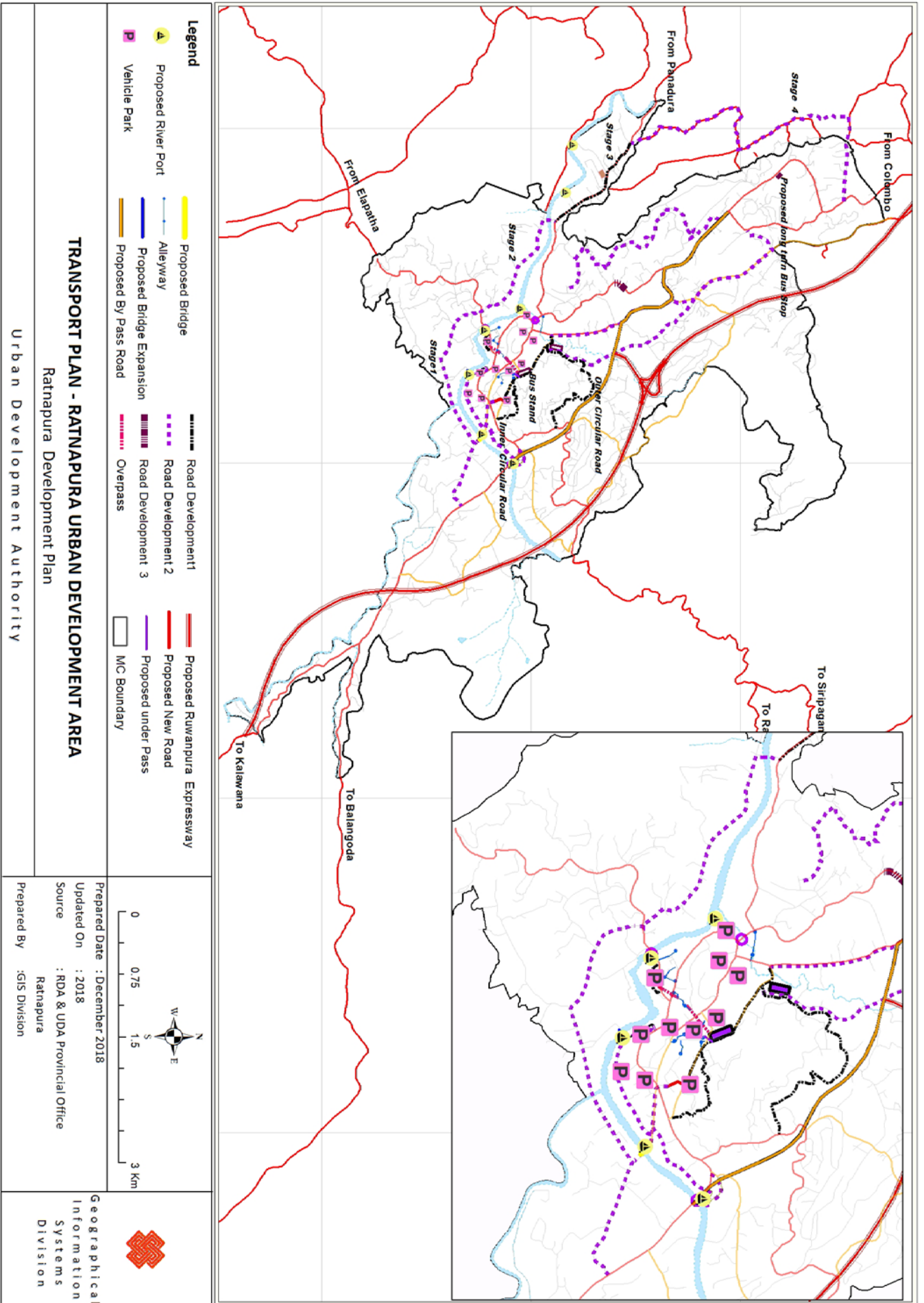
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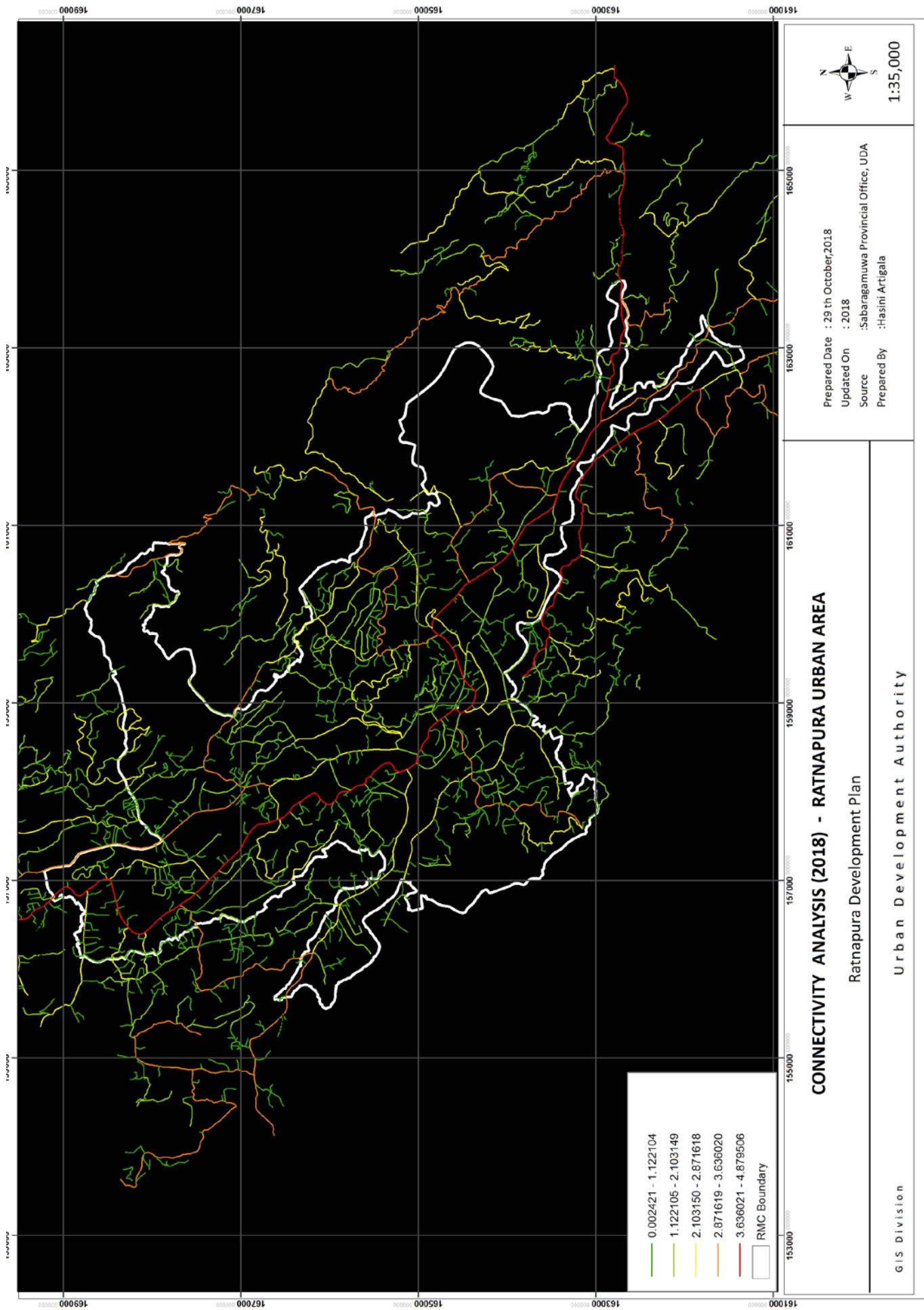
- **STRATEGY 2**
Re-arrange the Spatial Arrangement
- **STRATEGY 2.1**
Bus Terminal Development Walkability improvement
 1. Development of the main bus terminal at the old town
 2. Development of overflow parking at the old town
 3. Construction of a new bus terminal at new town (long distance bus service to Pelmadulla direction)
- **STRATEGY 2.2**
Development of Parking Facilities
 1. Development of parking facilities at the identified places in the city
 - I. Polhunuwe Premises, Good shed Road
 - II. Ratnapura Municipal Council Parking Premises, Near Sivali Ground
 - III. Near Ayurveda Office Premises
 - IV. Nagahamuttettuwa Premises
 - V. Proposed Lakshmi Hall Shopping Complex Premises
 - VI. Proposed Shopping Complex Premises within City Center
 - VII. Post Office Premises



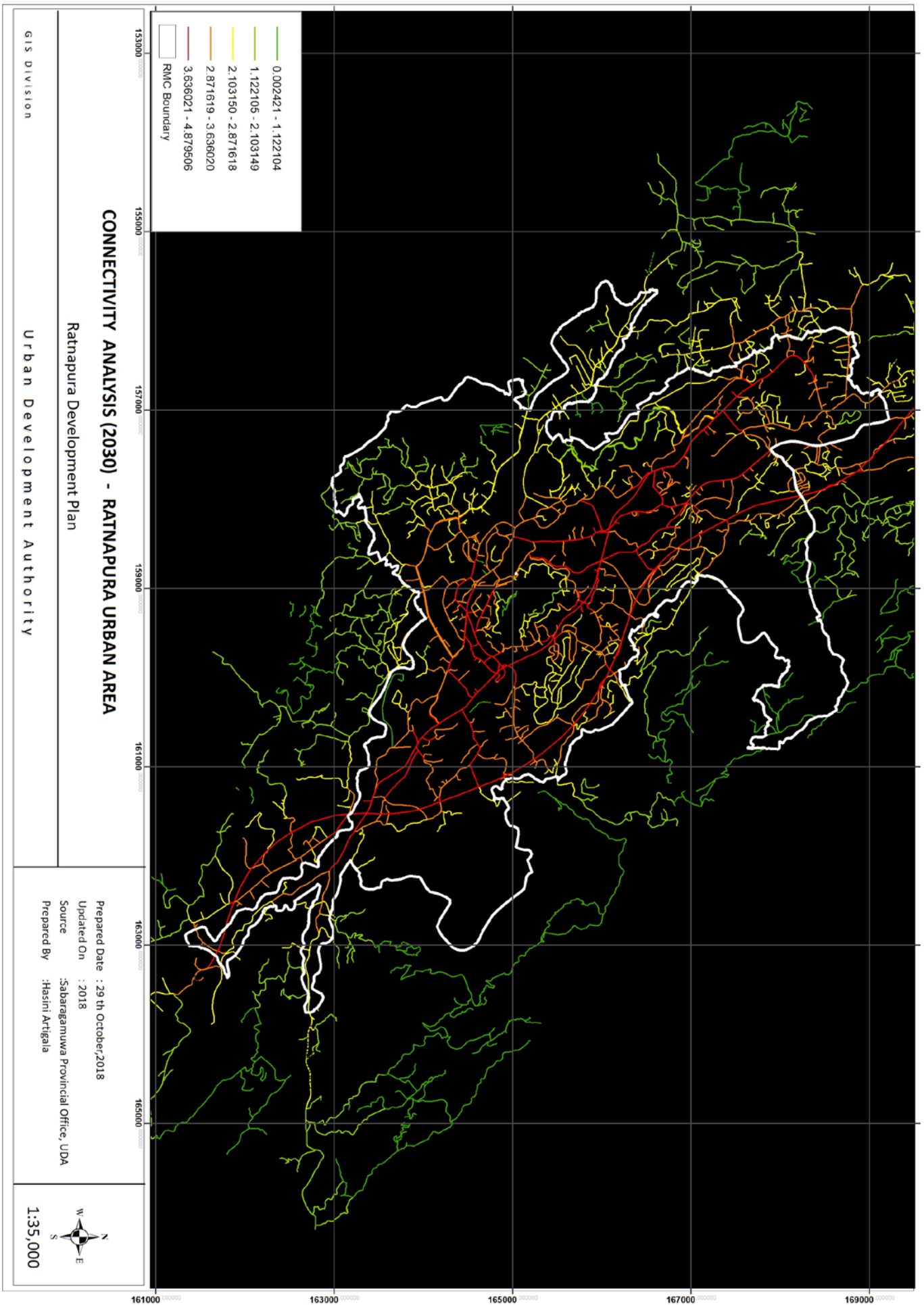
Map No. 6.3.2.5 : Proposed Parking Spaces



Map No. 6.3.2.2 : Proposed Transport Plan



Map No. 6.3.2.3 : Connectivity of Planning Area – Existing Situation (2018)



Map No. 6.3.2.4 : Connectivity of Planning Area – Proposed Situation (2030)

6.3.3. Water Supply

Supply of pipe water within the town is operated by the National Water Supply Drainage Board. The length of water supply ways within the town is approximately 75 km. Five (05) water collecting tanks within the town are available and their total capacity is 4500 m³. The following table describes the water connection amount according to the usages.

Usage	Number of Connections	Percentage
Residential	6447	80.89
Commercial	1233	15.47
Industries	44	0.55
Government Institutions (together with schools)	196	2.46
Religious	42	0.53
Hotels	08	0.10
Total	7970	100.0

Table No: 6.3.1.1 : Water Consumption – 2017

Source : National Water Supply and Drainage Board, 2017

The water supply is mainly directed for residential usage and has obtained only 79.5% from the total number of houses. Certain areas where the water supply is not available, unprotected wells and river water is used and this is an unacceptable situation.

About 150 of public taps are available within the town for low income residents and for those who arrive the town built by the Municipal Council.

Future water demand of Ratnapura Town is affected by housing need, commercial need and commuter need including tourism and recreational activities. Additionally, the town will need seasonal water requirement based on Saman Dewala Perahera season in August/ September. Furthermore, the plan recommends the adequate availability of fire hydrants within the city limit.

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Water Supply

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Water Supply

		Daily Consumption as 120 l	Requirement in 2018 (m ³)	Requirement in 2030 (m ³)
Existing Residual Population	49,083	49083*120	5889.96	
Commuting Population	100,000	20 percent (24 L)	2400	
Expected Residual Population (2030)	64,340	62340*120		7480.8
Expected Commuter Population (2030)	150,000	20 percent (24 L)		3600
Seasonal Requirement (per Day)	100,000	20 percent (24 L)	2400	2400
Total			10,689.96	13,480.8

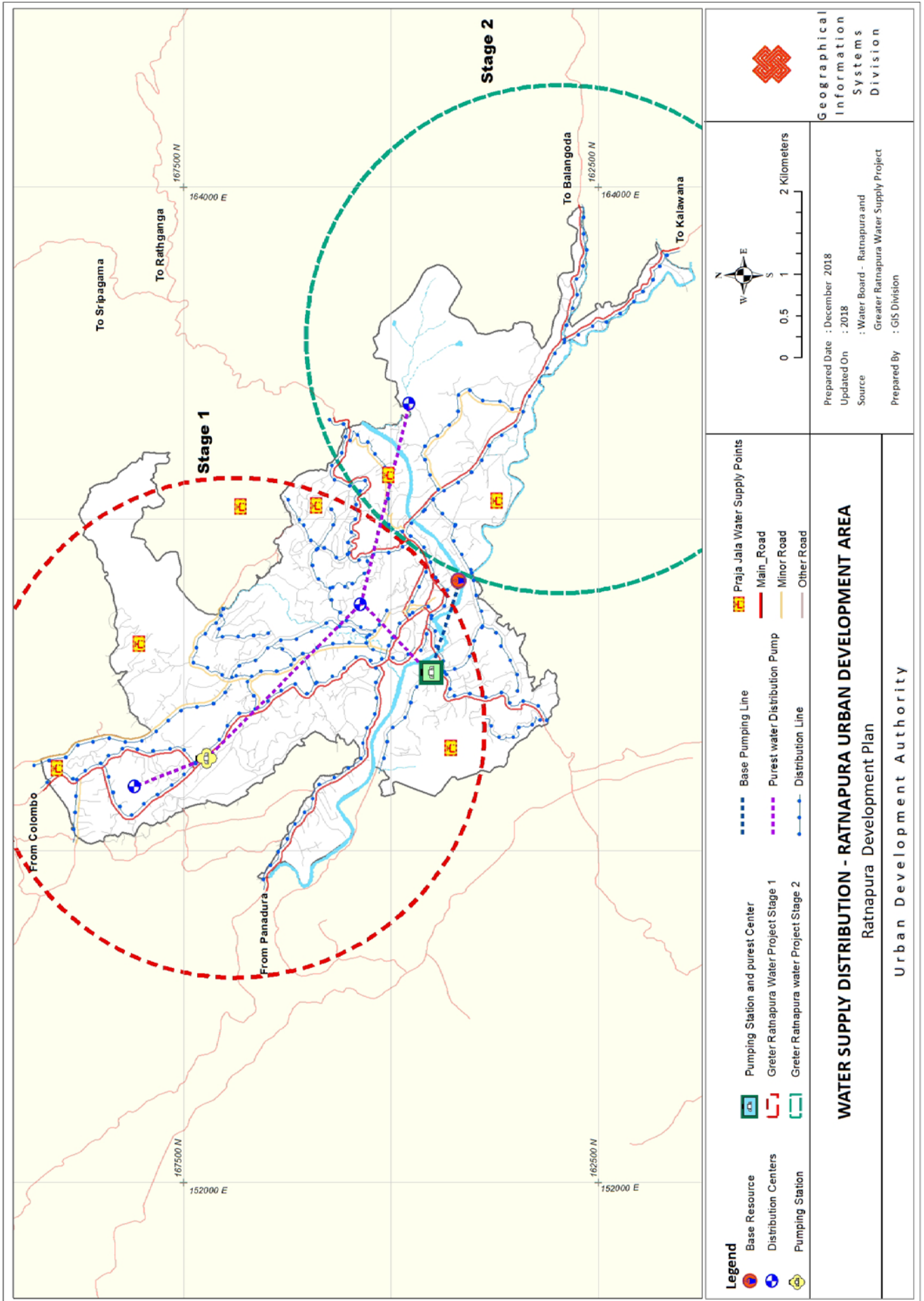
Table No: 6.3.2.2 : Water Consumption Need for 2030

However, the prevailing water supply in Ratnapura town is insufficient for urban area and it has been expected that 'Greater Ratnapura Water Supply Project' and 'Rural Water Supply Project' will be able to meet the projected demand by 2030. Additionally, following suggestions are made to fulfill the increasing water consumption.

- Further development of existing water supply system under extensive water scheme. (increasing the capacity)
- Awareness programmes for safe usage of unprotected wells.
- Increasing capacity of the water tank in "Pompa Kele" Forest) by 13000 cubic meters.
- Construction of a water tank in the new town with a capacity of 10,000 cubic meters.
- Construction of a new well nearby river edge road.
- Development of communal water facilities by small water projects.

Details about Greater Ratnapura Water Supply Project

- Covered DSD – Ratnapura, Kuruwita, Pelmadulla
- Target Population – 160,000
- Construction Stages – Stage I (2013 – 2015) and Stage II (2020 – 2023)



Map No. 6.3.3.1 : Proposed Water Supply Distribution for 2030

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Electricity and Data Lines

6.3.4. Electricity and Data Lines

Continuous power supply is a major element in the Ratnapura town development. For a continuous supply of power in Ratnapura it is very essential to have strong and smart transmission and distribution. The details about electricity consumption in the town are indicated as follows.

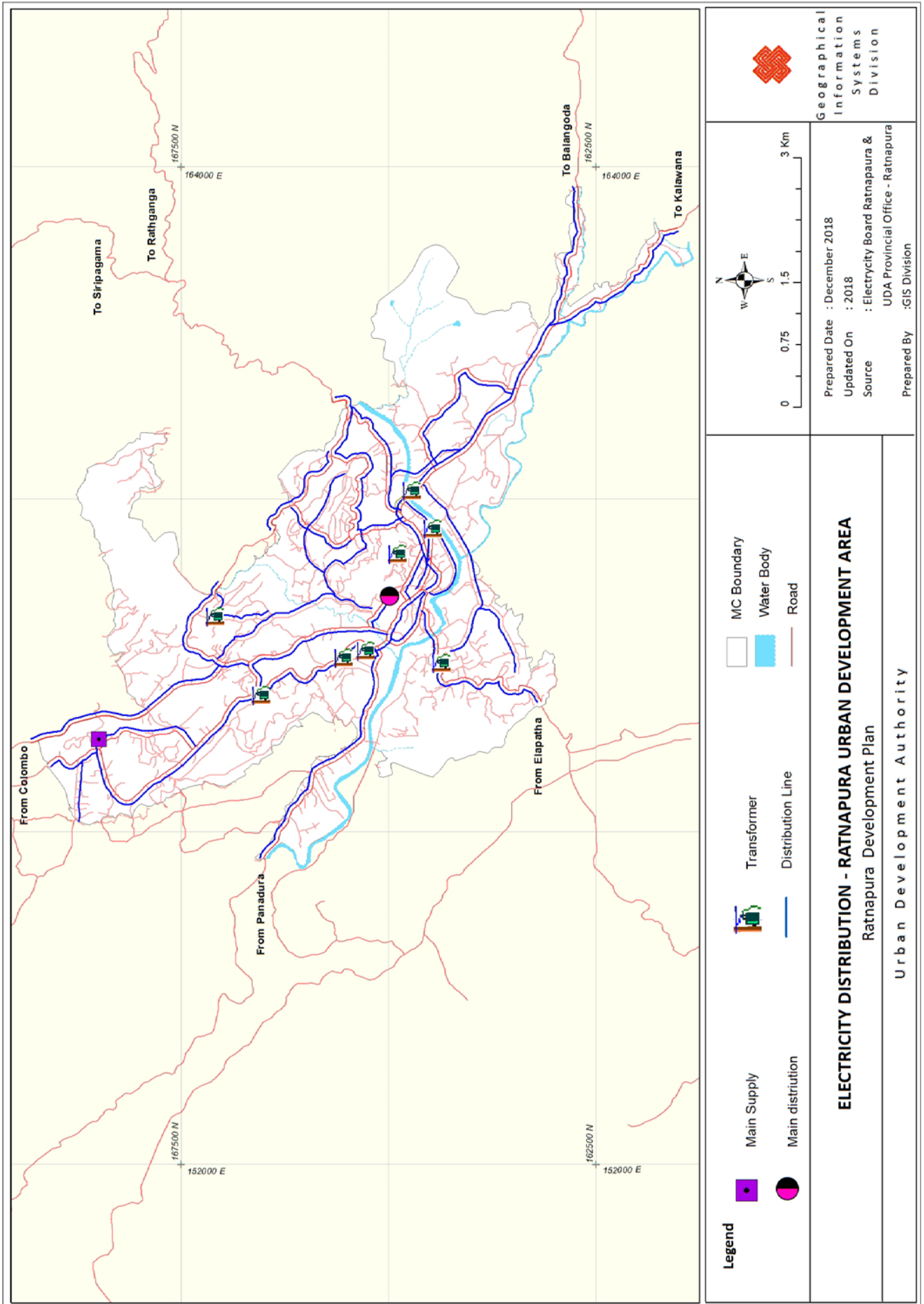
Sector	Connections	Percentage %
Residential	9864	74.0
Commercial	3213	24.0
Government & non-Government Institution	198	1.5
Industry	89	0.4
Religious	48	0.1
Total	13412	100.0

Table No: 6.3.1.1 : Electricity Consumption 2018

Source : Electricity Board, 2017

According to the CEB information 90 – 120 (KW) Electricity units concerned as average usage and it was assumed that 105(KW) electricity units for each units of given sector according to this situation as average. Hence, existing requirement of electricity units are 1408260 KW. Moreover, it is considered that the electricity supply to the Ratnapura urban development area is 100% covered by 2018 according to the Ceylon Electricity Board.

In each year, flood and extreme weather conditions are expected and more commonly it damages the above-ground utility poles. Thus it is suggested by the Ratnapura Development Plan to put power lines underground within the urban development area. Additionally, it is suggested to install water and telephone services together as a joint trench when installing electric services underground. A joint trench can contain multiple utilities and usually this is part of the planning for new infrastructure. Furthermore, it is recommended to take necessary precautions to avoid interferences with high tension lines when plans are approved.



Geographical Information Systems Division

Prepared Date : December 2018
 Updated On : 2018
 Source : Electricity Board Ratnapura & UDA Provincial Office - Ratnapura
 Prepared By : GIS Division

- MC Boundary
- Water Body
- Road

- Transformer
- Distribution Line

- Main Supply
- Main distribution

ELECTRICITY DISTRIBUTION - RATNAPURA URBAN DEVELOPMENT AREA
 Ratnapura Development Plan
 Urban Development Authority

Map No. 6.3.4.1 : Proposed Electricity Distribution for 2030

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Street Lighting

Drainage and
Sewer Lines

Street Lighting

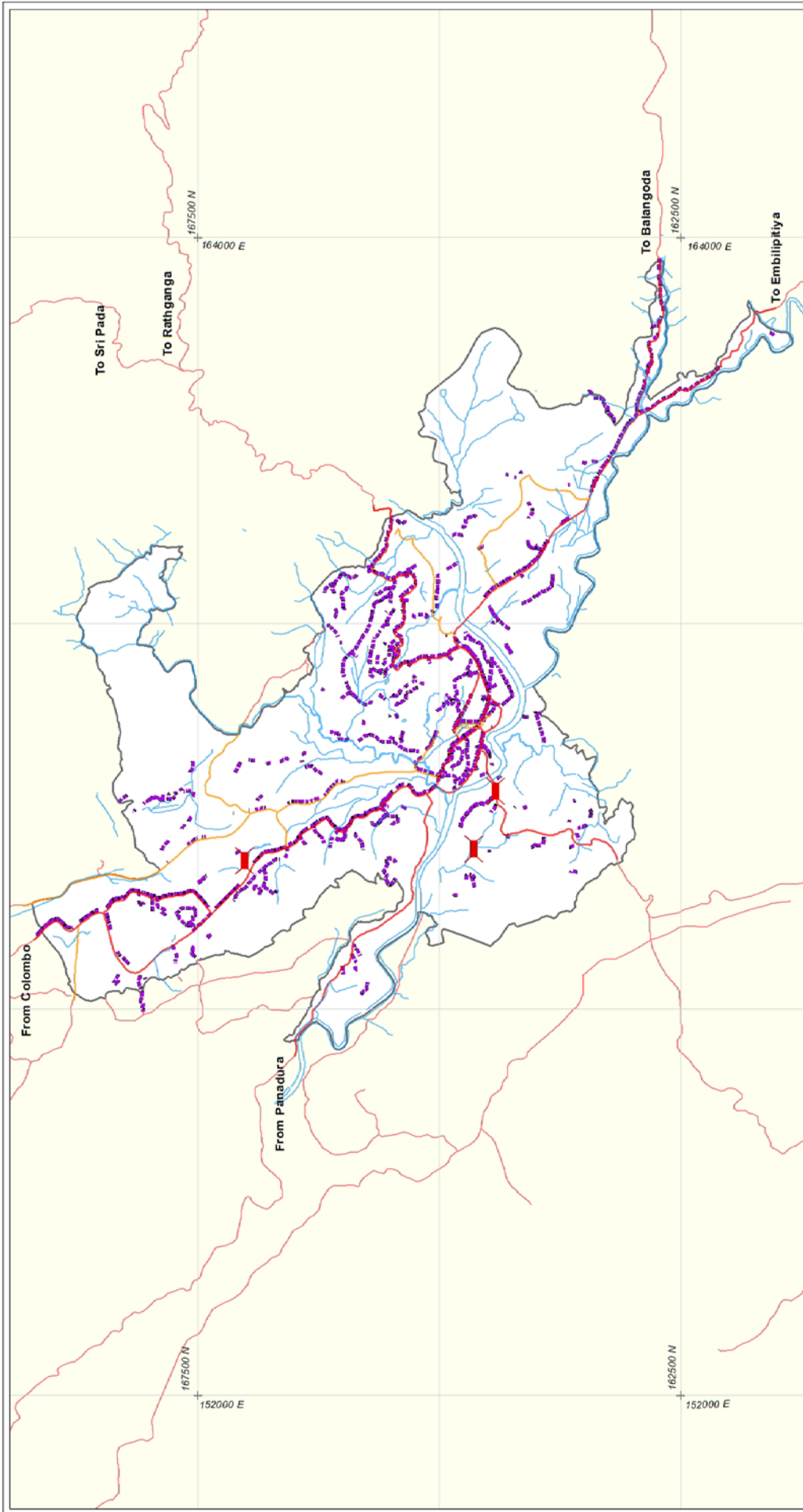
The proposed lighting is designed to be well distributed, illuminating routes and key features. It will be achieved from an 'Intelligent Motion Sensor Street Lighting Control System' (Smart/ Intelligent Street Lighting) that automatically activates when a car or pedestrian walk on the streets. The Linear Parks and walkways of New Town, Lake Round and river banks are needed to be covered with street lighting with the above mentioned technology. To be more specific, the light is automatically adjusted to an optimized minimum light level if there



Figure No. 6.3.4.1 : Proposed Smart Street Lightning System

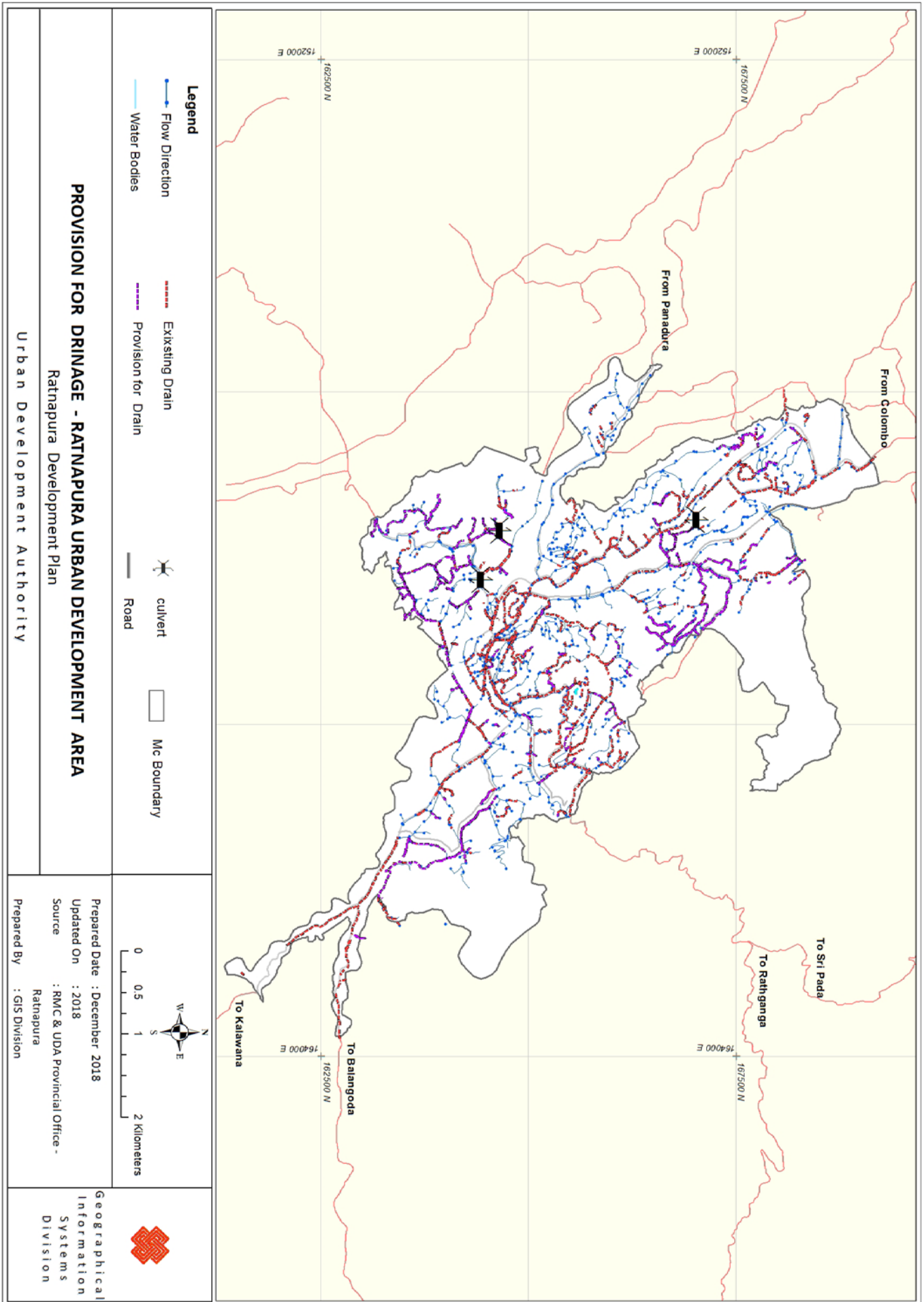
6.3.5. Drainage and Sewer Lines

The drainage system of the town area extends up to 31km. A part of it is remodified by the funds recieved from Asian Development Bank. Moreover, the area has elongated paralleled ridges which are systematical and being gentler towards the east. The drainage system is developed in a rectangular shape. However, the local drainage network is frequently changed due to gem mining, causing an impact on the flow direction and flow pattern of drainage network. Thus, introducing of a central sewerage system and counseling public to use only water-sealed toilets are advisable through this development plan to achieve its vision in 2030.



 <p>Geographical Information Systems Division</p>	<p>Prepared Date : December 2018 Updated On : 2018 Source :UDA Provincial Office - Ratnapura Prepared By :GIS Division</p>
<p>Legend</p> <ul style="list-style-type: none"> ----- Existing Drain System — Water Bodies — Main Road — Minor Road + culvert MC Boundary 	<p style="text-align: center;">EXISTING DRAINAGE - RATNAPURA URBAN DEVELOPMENT AREA Ratnapura Development Plan Urban Development Authority</p>

Map No. 6.3.5.1 : Flow Direction of Drainage System



Map No. 6.3.5.2 : Existing Drainage Plan

6.3.6. Waste Management

Municipal solid waste (MSW) is a term usually applied to a heterogeneous collection of wastes produced in urban areas, the nature of which varies from region to region (UNEP, 2005). MSWM refers to the collection, transfer, treatment, recycling, resource recovery and disposal of solid waste in urban areas (Schübeler, 1996). Mainly, urban wastes can be categorized into two major components: general waste and recyclable waste.

There, MSW includes wastes generated from residential, commercial, industrial, institutional, construction, demolition, process, and municipal services.

Waste generation increases with population expansion and economic development. Improperly managed solid waste poses a risk to human health and the environment.

Existing situation of Ratnapura Municipal Council Area

According to the data provided by the Municipal Council, Ratnapura, the collection of solid waste per day is approximately 30 Mt tons. Composition of waste generation shows the table 01.

Waste type	Number of tons
Bio degradable (short term)	17.1
paper	1.8
wooden	1.8
Saw dust/paddy husk	1.8
Bio degradable (long term)	1.8
Polythene and plastics	1.8
Demolition waste	1.2
Metals	0.9
Slaughter house waste	0.6
Glass and others	1.2

Table No: 6.3.1.1 : Composition of Solid Waste Generation - 2017
Source : Municipal Council, Ratnapura

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COMPOSITION OF DAILY COLLECTION OF WASTE (TONS)

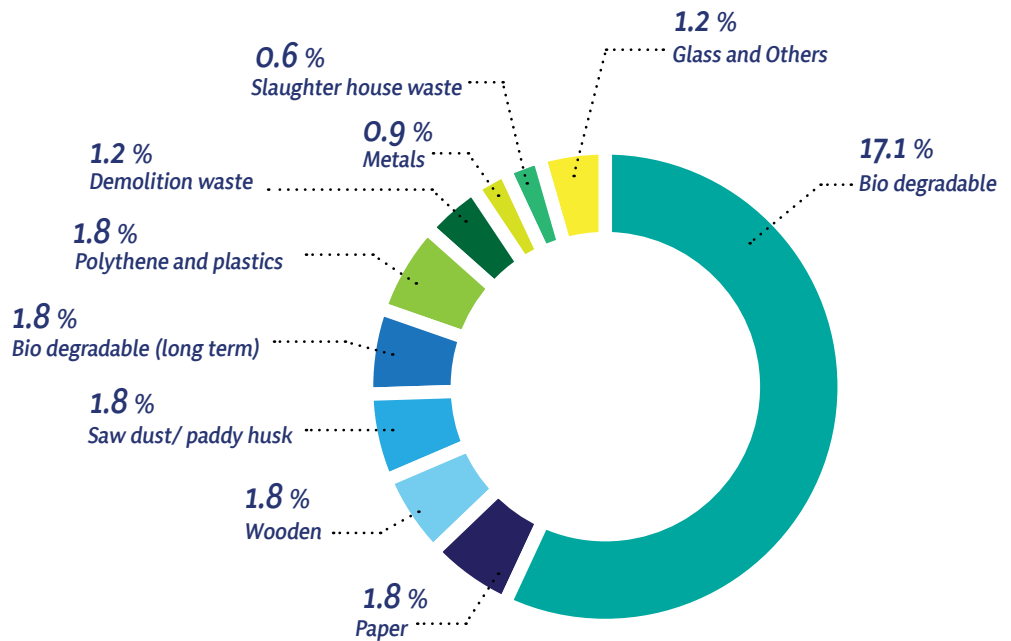


Figure No. 6.3.6.1 : Summary of Waste Collection - 2017
 Source : Municipal Council, Ratnapura

The municipal waste composition varies depending on the community status. As well as the other areas of Sri Lanka organic part is high (63%) in the Ratnapura municipal council area also.

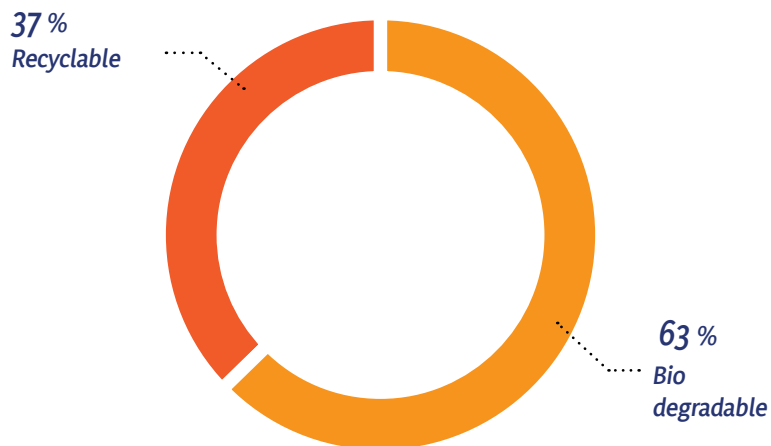


Figure No. 6.3.6.2 : Collection of Municipal Solid Waste by Type - 2017
 Source : Municipal Council, Ratnapura

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Waste Management

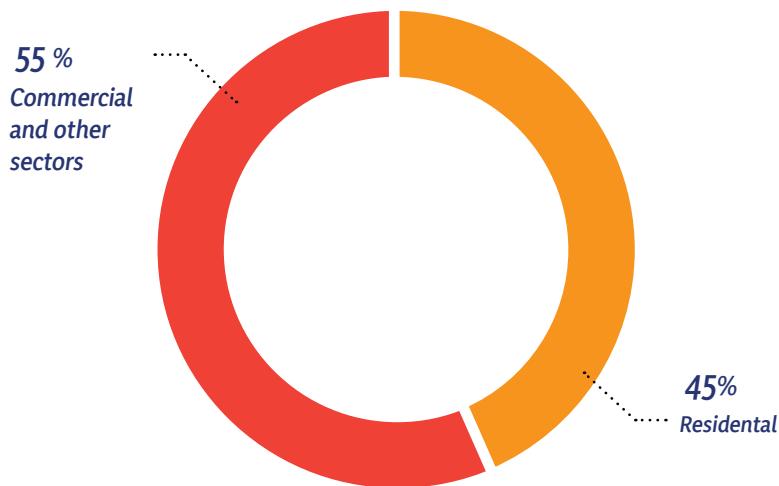


Figure No. 6.3.6.3 : Collection Municipal Solid Waste by Source of Origin - 2017
Source : Municipal Council, Ratnapura

Only 50% of the collected waste are sorted into organic and inorganic waste at the source of generation

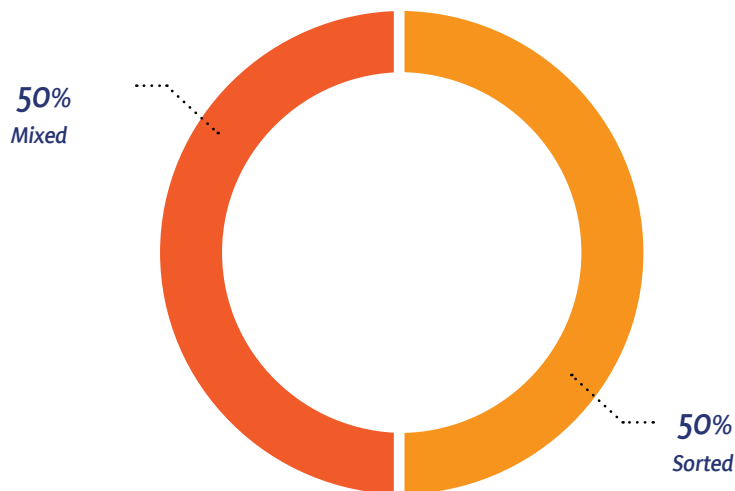


Figure No. 6.3.6.4 : Collection of Municipal Solid Waste by Type - 2017
Source : Municipal Council, Ratnapura

At present the MC practices to open dump the collected waste in Kanadola area in approximately 08 acres' land belonging to the municipal Council. Approximately 25 tons of generated solid waste are brought to this disposal site and at the site 12% (3 tons) of waste is used to produce compost fertilizer. 1% of the waste is being recycled and the rest is 84% (21 tons) and it is dumped without doing any treatment.

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Waste Management

Waste in the urban center, common areas and the areas located along main roads are collected daily as door-to-door collection. On the other hand, the waste in by roads are collected as 03 days per week. Further, Municipal Council has distributed compost bins in every household in Devalegawa GN division of the town limits.

There are about one People Health Inspectors, 04 health supervisors, 12 work supervisors and 15 drivers and 50 laborers for the process of collection and transportation of solid waste. Vehicles used for garbage collection includes 12 tractors, 14 trailers, 02 compactors, 2 hand carts and 01 hullers. (Source Ratnapura MC)

Municipal Council earns approximately Rs. 300,000 per month by selling recyclable materials like plastic, poethylene, tin, iron, cardboard and paper to the buyers. They produce 40,000 kg of compost fertilizer per month by using biodegradable waste.

Population of the area in 2011 was 49,083 and in addition to these, there are approximately 20,732 household units. Average per capita waste generation per day is 06Kg within the MC limits. The forecasting population for the year 2030 will be 64,340 and it is estimated that the forecasting waste generation will be 38 tons.

Identified issues

1. Shortage of vehicles and equipment for collection, sorting, transport, processing, and transfer of waste to disposal sites.
2. Lack of sufficient space for existing compost yard to cater generated bio degradable waste.
3. Lack of storage facility and sorting area for recyclable items.

At present Municipal council has no sufficient resources to manage daily collected waste. Approximately 23 Mt of solid waste is disposed at Kanadola dumping site. Disposal of waste in to the land situated at Kanadola area where 3 km away from the town doesn't carried out according to an environmental friendly way. Disposing of waste without segregation has been created many health issues.

The Projection of Solid Waste Generation

Waste generation of Ratnapura MC area in future will be based on housing need, commercial need and commuter need including tourism and recreational activities. Additionally, the town will have seasonal waste generation based on Saman Dewala Perahera season in August/ September.

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Waste Management

		Ton per day	Ton	Total (Ton)
Existing Residual Population (2017)	49,083	0.00110231	54.10468173	54.10468173
Commuting Population	100,000	0.000220462	22.0462	22.0462
Expected Residual Population (2030)	64,340	0.00110231	70.9226254	70.9226254
Expected Commuter Population (2030)	150,000	0.000220462	33.0693	33.0693
Seasonal Requirement (per Day)	100,000	0.000220462		22.0462

Table No: 6.3.6.2 : The projection of solid waste generation for 2030

Source : Urban Development Authority

- Waste generation based on the assumption of waste generated per capita per day is 1 kg
- Commuter waste generation based on the assumption of waste generated per capita per day is 20% of its consumed daily quantity
- Seasonal waste generation based on the assumption of waste generated per capita per day is 20% of its consumed daily quantity

Waste Management

(I) Strategy 1 - Reduction of Waste Generation

Introduce methodologies to encourage domestic, commercial and industrial sectors for reduction of waste generation.

- (a) Awareness-creation and education programme will be organized in public places and schools to educate and mobilize the citizens to apply the principles of 10Rs and minimize waste and particularly to discourage the excessive use of polythene and plastic products.
- (b) Where possible, the users will be encouraged to re-use polythene and paper. The use of material and products such as plastic and paper plates, cups and serviettes should be discouraged through public campaigns. Instead, the use of conventional and more permanent material like ceramics crockery and cloth napkins will be promoted. The restaurants, hotels and institutions should be encouraged to use re-usable material to the best possible extent.

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Waste Management

(II) Strategy 2 - Maximize Resource Recovery

(a) Segregation of waste at the point of origin i.e., house, office, school or institution, etc. Local authority directs the households, shops and institutions not to mix recyclable waste with biodegradable waste and will encourage them to keep the properly designed bins labeled separately according to the National colour code for collection by the informal sector recyclers or by the local authority.

- *Biodegradable (Food) – Green*
- *Paper – Blue,*
- *Plastic – Orange,*
- *Metal – Brown*
- *Glass – red*

(b) Regular education and public awareness sessions should be organized in each locality with the help of residents' associations and other NGOs. Though such sessions, 'No separation-No collection' policy must be communicated and adopted using participatory techniques.

(III) Strategy 3: Promote conversion of all short term biodegradable waste material into compost and promote community participation to ensure sustainable composting

(a) Composting of bio-degradable waste should be promoted. Bio-degradable matter from residences and small scale generators should be composted at the point of origin using composting bins, and other appropriate and low-cost technologies that can generate energy or manure. Home composting should be encouraged for purchase of compost bins.

(b) Biodegradable waste from large scale generators (some hotels, restaurants, hospitals, markets etc.) and residences where home composting is not practical should be composted in decentralized composting plants with simple technologies like windrowing, static files etc.

(IV) Strategy 4 - Facilitate environmentally sound, economically feasible appropriate waste treatment technologies to treat all non-biodegradable waste

(a) Introduce an awareness programme at all levels to promote reuse practices

(b) Return of Recyclable material to the market.

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- (c) The Municipal Council should be facilitating the services provided by the private informal sector. This is the sector that organizes the recycling of city waste. Therefore, as an integral part of the SWM strategy, the Council will facilitate its operations through registration of these service providers, regular consultation with them, collaborating with NGOs to recognize rag-picker associations and issuing an identity card system to provide recognition and legal protection to the group.
- (d) The Council should be encouraged recycling as a livelihood and facilitate area-based waste recycling enterprises and coordinate different recyclers and help improve their capacity. It will also and recognize and network the CBO's and other resident level waste recycling and purchasing agents and also encourage the entry of Community Based Organizations.
- (V) Strategy 5 - Institutional mechanisms should be established to prevent hazardous biomedical / healthcare waste entering the municipal waste stream
 - (a) Make mandatory source segregation of Healthcare waste
 - (b) Establish mandatory requirement for treatment of waste to convert healthcare waste in to non-infectious, material before final disposal or discharging
 - (c) Establish final disposal option for Health Care Waste eg: Incineration
 - (d) Establish institutional mechanisms at all healthcare institutions to ensure that waste is treated and disposed by an authorized facility, with a monitoring mechanism
- (VI) Strategy 6 - E-Waste Management

E-wastes are considered dangerous, as certain components of some electronic products contain materials that are hazardous, depending on their condition and density. The hazardous content of these materials pose a threat to human health and environment. Discarded computers, televisions, VCDs, stereos, copiers, fax machines, electric lamps, cell phones, audio equipment and batteries if improperly disposed can leach lead and other substances into soil and groundwater. Many of these products can be reused, refurbished, or recycled in an environmentally sound manner so that they are less harmful to the ecosystem. hazards of e-wastes, the need for its appropriate management and options that can be implemented.

- (a) Hand over Electronic Waste to a Certified E-Waste Recyclers

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(VII) Strategy 7 - Strengthen Waste Collection and Transport System

- (a) Introduce door to door collection system.
- (b) Create awareness among public about waste collection time schedule.
- (c) Introduce horn bell collection system - The collection truck plays music to inform residents of its approach. Residents come out with dustbins or bags.
- (d) Provision of necessary instruments / equipments for Local Authority where compost sites are being operated.
- (e) Use compartmentalized vehicles.
- (f) Use handcarts to reach places inaccessible by large vehicles.

(VIII) Strategy 8 – Establishment of Sanitary Land fills

Land filling should be limited to non-recyclable, non-compostable and inert material generated through the waste treatment process. Sanitary landfill for disposal of residue by using appropriate technology in line with minimization of impact on health and environment. Moreover, It has identified optional areas in Rambukkanda and Kanadola for this. (Map No. 6.3.6.1)

(IX) Strategy 9 - Awareness programmes

The public corporation and the public participation are other important facts. A proper SWM can start in the household level by the implementation of 10R concept to give an effort to minimize the waste. Reduce and Reuse practices should be built within the public through awareness programmes and health related workshops.

- (X) Strategy 10 - Regular monitoring and evaluation systems should be established to ensure system improvement

Solid Waste Management Strategy

- **STRATEGY 1.1**

Systemize the waste collection

- a. **Bell Collection System**

Allowing waste compactors to collect waste by door to door system in selected days of the week falls for this category. Community base awareness program for reduction and reuse of waste at house hold level, Community base program for improving composting at household level and improve community participation in source – separation of waste also needed to be happen simultaneously.

- b. **GPS Technology**

Controlling vehicle activity based on safety, advanced vehicle performance data, responsive service, boost billing accuracy, reduce fuel consumption and maintenance costs are the benefits of using GPS technology.

- c. **Introducing Mobile Application**

It will improve communication between general public and drivers (waste collectors), and reduce route times. These kind of apps allow users to manage their waste and recycling, find nearby locations for pick-up, discover industry news and insights and increase their knowledge about where items should go to avoid landfill buildup.

- **STRATEGY 1.2**

Make compulsory of waste segregation

- a. **Bio-degradable waste**

Composting method can be used for bio-degradable waste. School base and household base awareness program on waste management can be used for it. Simultaneously, expansion of existing compost yard at Kanadolato cater extra 10 tons of degradable waste is possible at present.

- b. **Recycle waste**

It is better to use 'Further Segregation' method by arranging the centers for it. The recycle waste can convert into financial resource after that. Also Construction of sorting area and storage facility for recyclable items also needed to be done simultaneously.

- c. **Land Filling waste**

This method can be used to constructing roads and creating various products. Rambukkanda Site (05 acres) is an ideal solution for the sanitary landfilling method. simultaneously.

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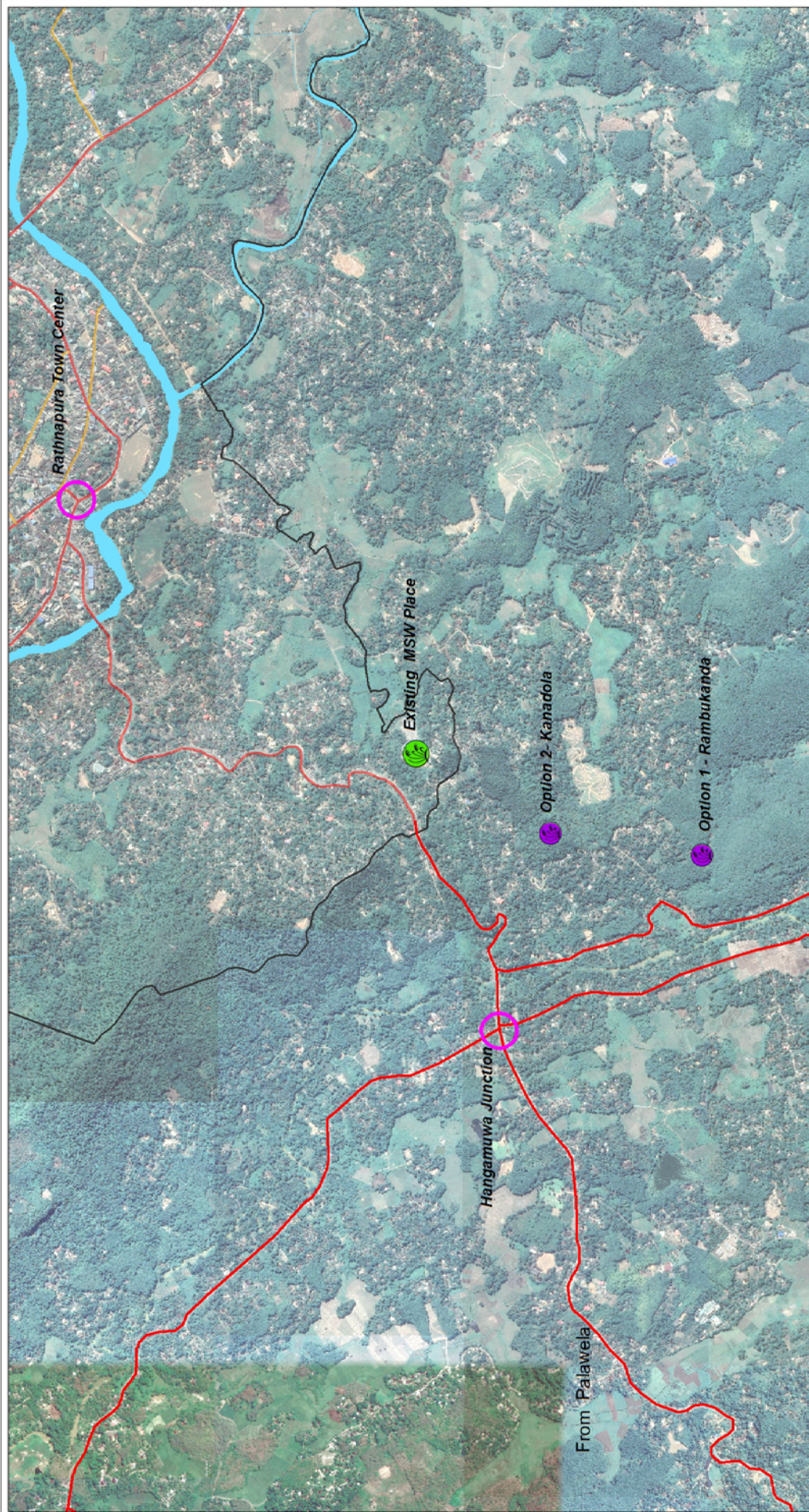
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<i>Items</i>	<i>Indicator</i>	<i>Situation 2017</i>	<i>Target</i>
1. Waste Minimization (Reduction of discharge amount)	Number of household doing onsite home compost	6% (2014)	10%
2. Compost production	Receiving waste amount for offsite composting (ton/day)	2.3 ton/day	15 ton/day
	Compost production at Kanadola (ton/month)	2.3 ton/month	15 ton/month
3. Recycling	Sales amount of recyclable wastes at Kanadola (ton/day)	0.14 ton/day	10.5 ton/day
4. Awareness	Percentage of 5 separation categories at generation level	0 %	80 %
	Number of annual awareness rising programs on SWM in 15 divisions	3	15
5. Training/ education	Number of training for staffs of RMC	Not regular	biannually
6. Waste disposal	Final disposal amount (ton/day)	47.3 ton /day	27.2 ton/day
	Acquisition of a Rambukkanda land and construct a sanitary landfill	Proposed	To be achieved

Table No: 6.3.6.3 : Solid Waste Management Plan - RMC (2030)



<p>Legend</p> <ul style="list-style-type: none">  Existing SWM Place  Proposed Site  Water Body  Main_Road  Minor Road  MC Boundary 	<p style="text-align: center;">  W E S N </p> <p style="text-align: center;"> 0 0.75 1.5 3 Km </p>	 <p>Geographical Information Systems Division</p>
<p>SOLID WASTE MANAGEMENT PLAN - RATNAPURA URBAN DEVELOPMENT AREA</p> <p>Ratnapura Development Plan</p> <p>Urban Development Authority</p>		
<p>Prepared Date : December, 2018 Updated On : 2018 Source : Google Images & UDA Provincial Office - Ratnapura Prepared By : GIS Division</p>		

Map No: 6.3.6.1 : Proposed Solid Waste Management Plan for 2030

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6.4. Economic Development Strategy

Ratnapura Economy structure has been based on two towns called old town and new town. The economy based on old town and new town, but the catchment of each town is different. Old town mainly catering for local population and new town catering for the entire province due to administrative activities. (Refer map no. 6.4.1) The economic activities happening on nodal points and along the arteries and the gem industry works as the base resource of the Ratnapura economic structure.

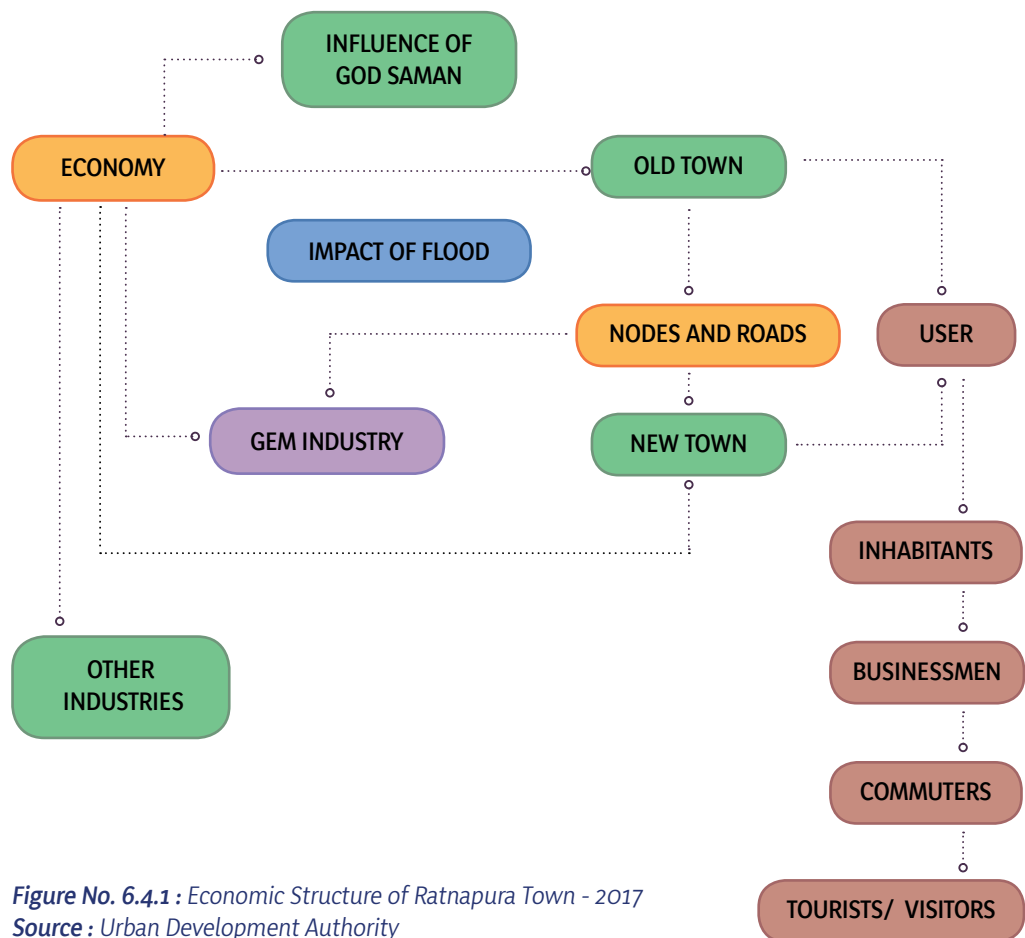
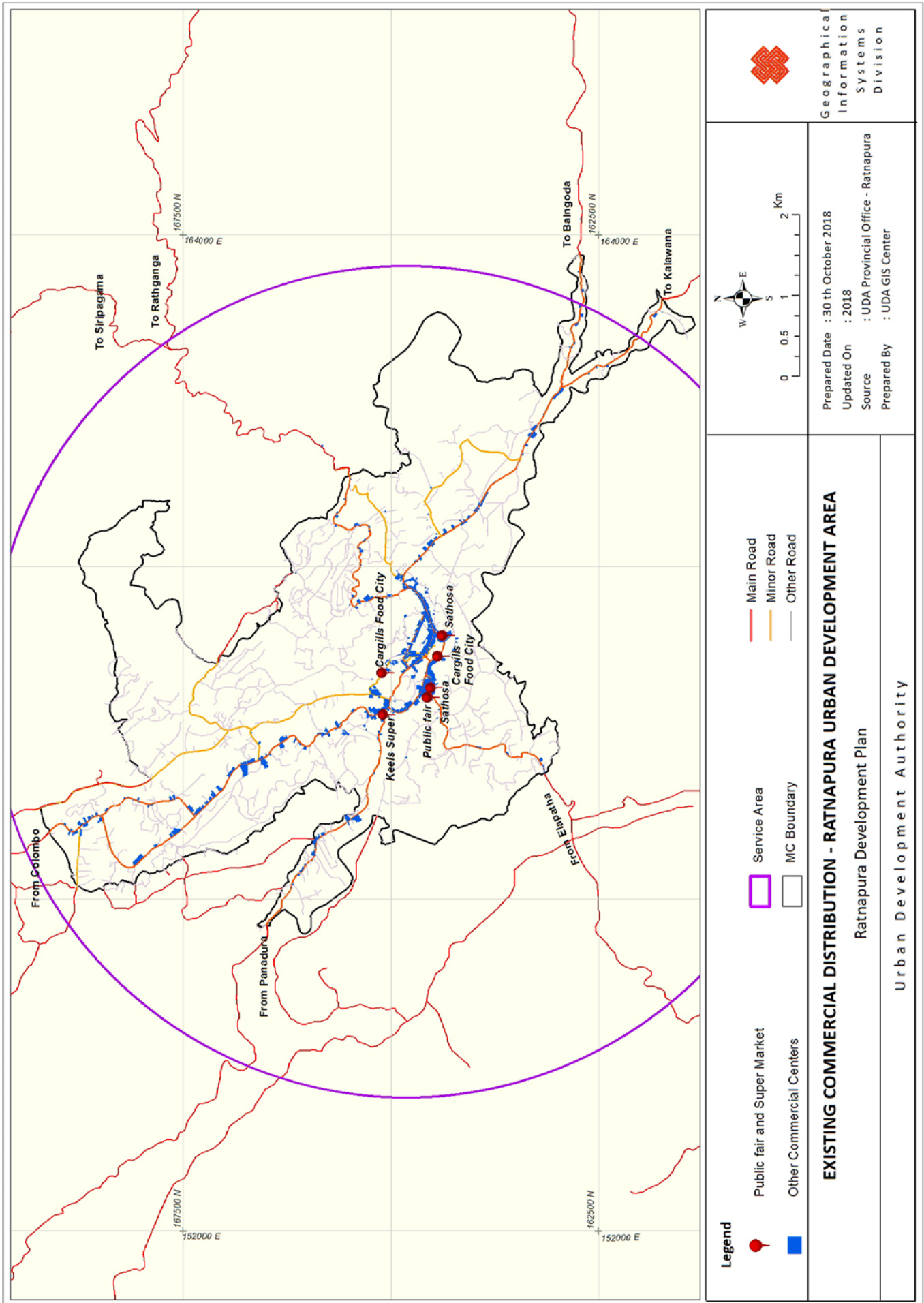


Figure No. 6.4.1 : Economic Structure of Ratnapura Town - 2017
 Source : Urban Development Authority

Gem Industry owned a significant place in Ratnapura economy since pre-colonial period. It is in the 5th place of the export economy in Sri Lanka according to the statistics of the latest report of Central Bank. 3% of contribution to the national economy is from Gem industry at present. (Refer annexures for more details) At present, 25 % of the gem trading industry is Ratnapura traders and 30% of the miners belong to Ratnapura while others come from various parts of the country according to the Gem & Jewelry statistics. Thus, using this base resource to thrive the economy and linking it with the cultural and environmental identity to strengthen the local economy is the economic development strategy of Ratnapura Development Plan.



Map No: 6.4.1 : Existing Commercial Distribution (2018)

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Economic
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Concerning the vision of 2030, economic development strategy facilitates to the four main pillars of the Ratnapura economy to flourish.

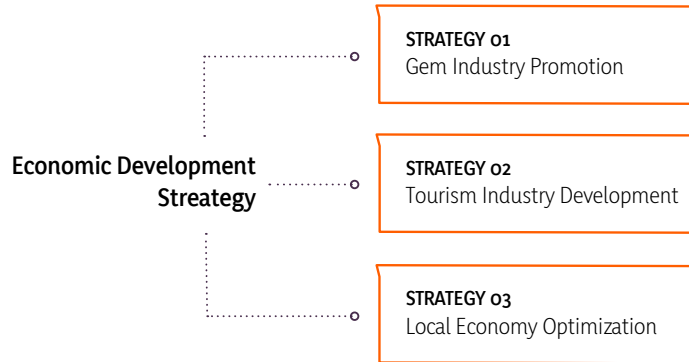


Figure No: 6.4.2 : Economic Development Strategy

- **Strategy 01**
Gem Industry Promotional Strategy

According to the vision of "The Gem City of Sri Lanka in Greens", the economic development strategy has to offer priority to gem industry promotion. At the same time, the first goal of the plan is Make Ratnapura, 'The National Center for Gem related business in Sri Lanka'. To achieve that goal, it is needed for facilitating Gem Industry to contribute GDP by 7% share by 2030 and facilitating the Gem related activities with an attractive environment/streetscape.

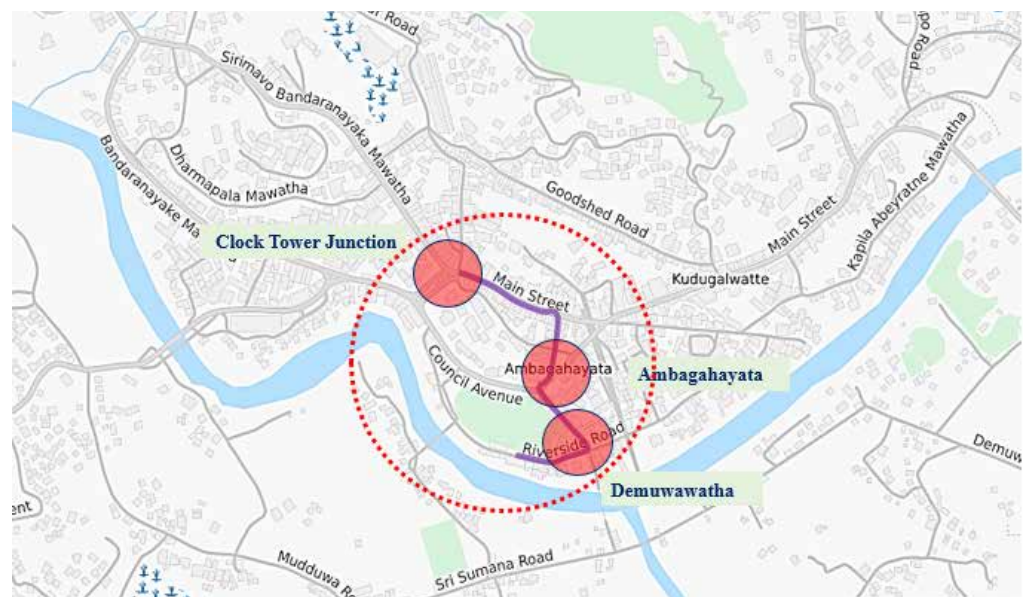


Figure No. 6.4.3 : Existing Gem Nodes and Streets - 2017
 Source : Urban Development Authority

- **STRATEGY 1.1**
Diversify the Income Generating Sources Related with Gem Culture

Gem culture has been established already with the places and processes but for generating more income, it is needed to diversify the income generating sources linked with Gem culture. Since the gem market has been seized to Beruwala and other areas by this time, the gem culture still lays on Ratnapura with traditional mining, identical nodes and streets, specific time periods, etc. Thus it is needed to convert this value of gem culture into income generating sources rather than dragging gem trade to Ratnapura back. But in a long run, Ratnapura will be the trading hub when it gets facilitated with the necessary physical infrastructure for gem trading.

Physical Development Needs

- *Easy access to Ratnapura with less time of arriving*
- *Market space for international gem community*
- *Refreshment places for the businessmen*
- *Accommodation facilities for the international and national businessmen*
- *Gathering spaces*

Market Needs

- *Luxurious boutique spaces and demonstration areas*
- *High end local gem shops*
- *Rating space for the congested market & tool shops*
- *Extended market space*
- *Small shops with hand crafted jewelry items*
- *Customized products, spaces for local entrepreneurs to exhibit their businesses*
- *DIY* gem cutting and demonstration area (traditional/international)*

**DIY is the activity of decorating, building, and making fixtures and repairs at home by oneself rather than employing a professional.*

For these needs Ratnapura development plan will provide spaces through zoning regulation and special projects.

1. Construction of Ruwanpura Expressway
2. Redevelopment of Main Street, Shaviya Mawatha and Demuwawatha Streets as Gem Streets and facilitate those streets with relevant streetscape with gem identity
3. Promote Main Street for high end local gem shops
4. Promote Shaviya Mawatha for local gem shops
5. Promote Demuwawatha for DIY* gem cutting and demonstration area, (traditional/international)
6. Convert Luxmi Cinema Complex (abandoned) into a gem related commercial project with rating spaces and tool shops

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Economic Development Strategy

7. Development of Food City Premises as a gem square (an open space) for extending gem market
8. Development of Frank Hettiarachchi Mawatha to facilitate gem related jewellery business with necessary streetscape
9. Provide more spaces for gem related activities through zoning regulation with special guidelines
10. Construction of a gem tower in Post Office premises to enhance the identity and promote commercial and communication activities.

- **STRATEGY 1.2**

- *Convert Historical Buildings for Facilitating Gem Culture*

Gem industry needs supportive factors to be thrived as museums, auction spaces, restaurants and accommodation. Ratnapura has around 15 historical buildings which can be converted to be used as refreshment spaces and accommodation spaces which facilitates to gem culture. It will give a feeling of a gem city to the business personnels who comes to Ratnapura for trading purpose.

1. Renovation of Dutch Fort and change use as the National Gem Museum with conference halls and auction facilities
2. Renovation of Library building and change use as a restaurant/ refreshment space for gem businessmen
3. Renovation of Police buildings and change use as a restaurant/ refreshment space for gem businessmen

- **STRATEGY 1.3**

- *Connect Tourism Activities with Gem Culture*

Gem industry will be populated if it gets supported by tourism culture while it has all the resources to do so. Thus, linking tourism activities with the iconic gem culture is needed.

- Facilitating to exploring traditional gem mining culture
- Facilitating to explore and experience further about gem varieties
- Facilitating to learn further about gem related jewelry production
- Facilitating to buy gem related jewelry productions

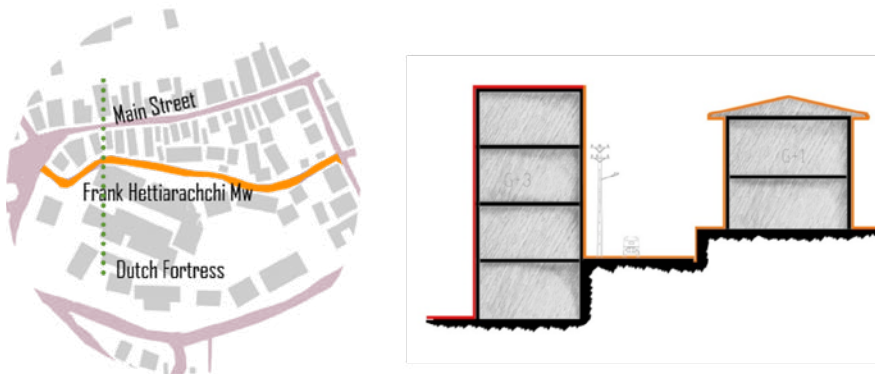


Figure No. 6.4.4 : Frank Hettiarachchi Mawatha as a Jewellery Street

- **STRATEGY 1.4**
Provide Educational and Training Opportunities for Gem Related Studies

There is no specific space for learning about gems in a scientific way for the beginners and the people who interested on it. Ratnapura development plan will provide space for those people to learn and explore more about it.

- Establishment of a National Gem Museum at Dutch Fort
- Promotion of gem training center at Hidellana

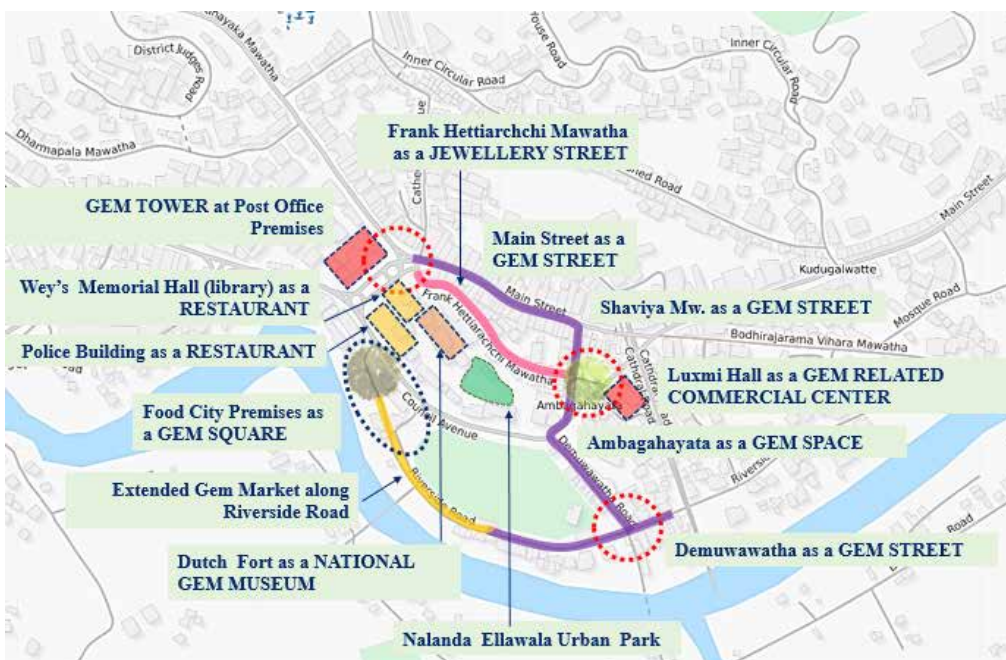


Figure No. 6.4.5 : Proposed Gem Nodes, Streets & Squares with Facilities for 2030

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Economic Development Strategy

- **Strategy 02**
Tourism Industry Development Strategy

Create Ratnapura, 'An attractive Destination for Visitors of Sri Lanka' is the second goal of the Ratnapura Development Plan. To achieve that goal, facilitating to enhance green space up to 40 %, facilitating to enhance the archeological value of cultural and historical sites of Ratnapura and convert it into economic value as well as facilitating to attract 100,000 tourists per annum for boosting the gem related eco-tourism by 2030 are needed. Additionally, facilitating to create a vibrant city space is another objective of the goal of creating a livable city.

- **STRATEGY 2.1**
Provide an alternative transport mode to access Ratnapura

Ratnapura needed to have an alternative transport mode when it focused on tourism development since it has only one mode of transport (A 004 road) by now. Being located in a valley and surrounded by a mountain range make the situation hard but introducing a sea plane destination would not give a harmful effect in the long run.

1. Introducing a sea plane destination based on Weralupa Water Retention Lake



Figure No. 6.4.6 : Weralupa Water Retention Lake

- **STRATEGY 2.2**
Convert Historical Buildings to Facilitate Accommodation and Refreshments

Tourism industry needs to be flourished with the supportive factors of restaurants and accommodation. Ratnapura has around 15 historical buildings which can be converted its use as refreshment spaces and accommodation spaces which facilitates to tourism culture. It will give an identical feeling to the tourists who comes to Ratnapura for recreational purpose.

1. Renovation of Ayurveda office building and change use as a restaurant
2. Renovation of Ehelepola Harem and change use as a restaurant
3. Renovation of Health Director's Bungalow as a guest house
4. Renovation of DIG office building at Muwagama and change use as a guest house
5. Renovation of District Judge's Bungalow and change use as a guest house
6. Renovation of Former Chief Minister's Bungalow and change use as a guest house
7. Renovation of District Engineer's bungalow and change use as a guest house

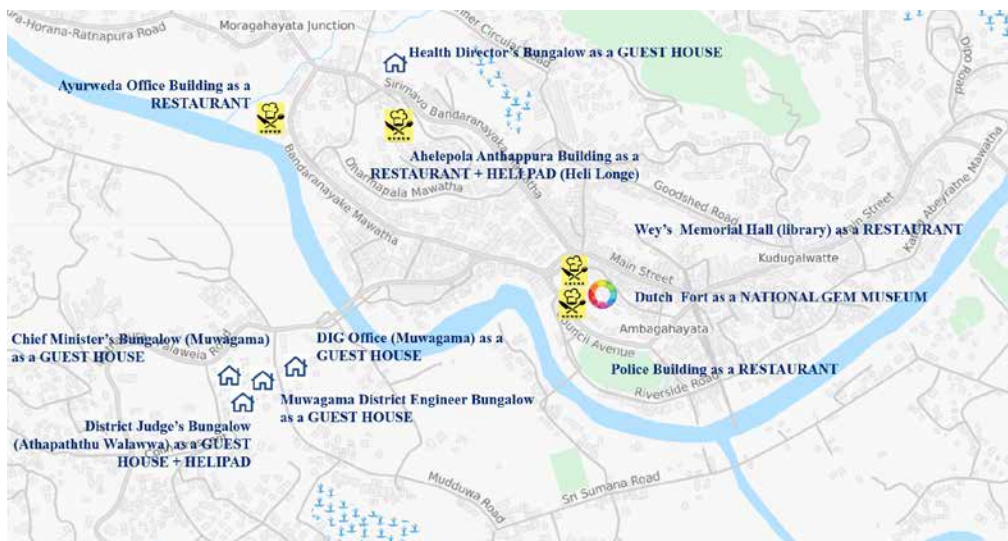


Figure No. 6.4.7 : Historic Buildings Conversion

- **STRATEGY 2.3**
Developing a Blue Green Network to promote Tourism

The Blue Green Network Strategy aims to create an attractive and environmentally sustainable urban environment that also provides more economic opportunities while addressing the threats from flooding and future climate change. It will be based around waterways (blue) and parks (green). These are managed together through a combination of infrastructure, ecological restoration and urban design to connect people and nature across the city.

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Economic Development Strategy

The strategy focuses on four themes which are :

Theme 1 – Enhancing ecosystem services and ecological connectivity

Theme 2 – Providing opportunities for economic development

Theme 3 – Connecting communities

Theme 4 – Protecting communities from natural hazards

The Strategy identifies Kalu River as the major water way and it has the potential of providing the greatest opportunity for recreational and economic development as a primary corridor. Work around minor waterways would focus on creating ecological corridors that support biodiversity and increase public amenity throughout the city. Cross city connections will link suburbs away from waterways with green space, schools and other facilities.

Implementing the Strategy would reduce the problems caused by flooding, enhance and help to restore ecological corridors and stream edges, improve water quality, increase "sense of place", and connect people and places together. It would also seek to respect and provide acknowledgement of Ratnapura cultural and historical values and may also lead to economic development and an increase in tourism opportunities.

1. Construction of Weralupa Water Retention Lake
2. Construction of Weralupa Ground
3. Construction of Aqua Base Theme Park near the Weralupa Ground Premises
4. Construction of Wetland Park at Lenthadiya Premises
5. Development of Pompakele Urban Forest and Angamma Forest Reserve to facilitate bio-diversity investigation for school children and researchers
6. Redevelopment of the natural swimming pool at Pompakelaya
7. Construction of Spice Garden at Weralupa.
8. Construction of river port series at identified locations and introduce water taxi service.

a. Phase 1

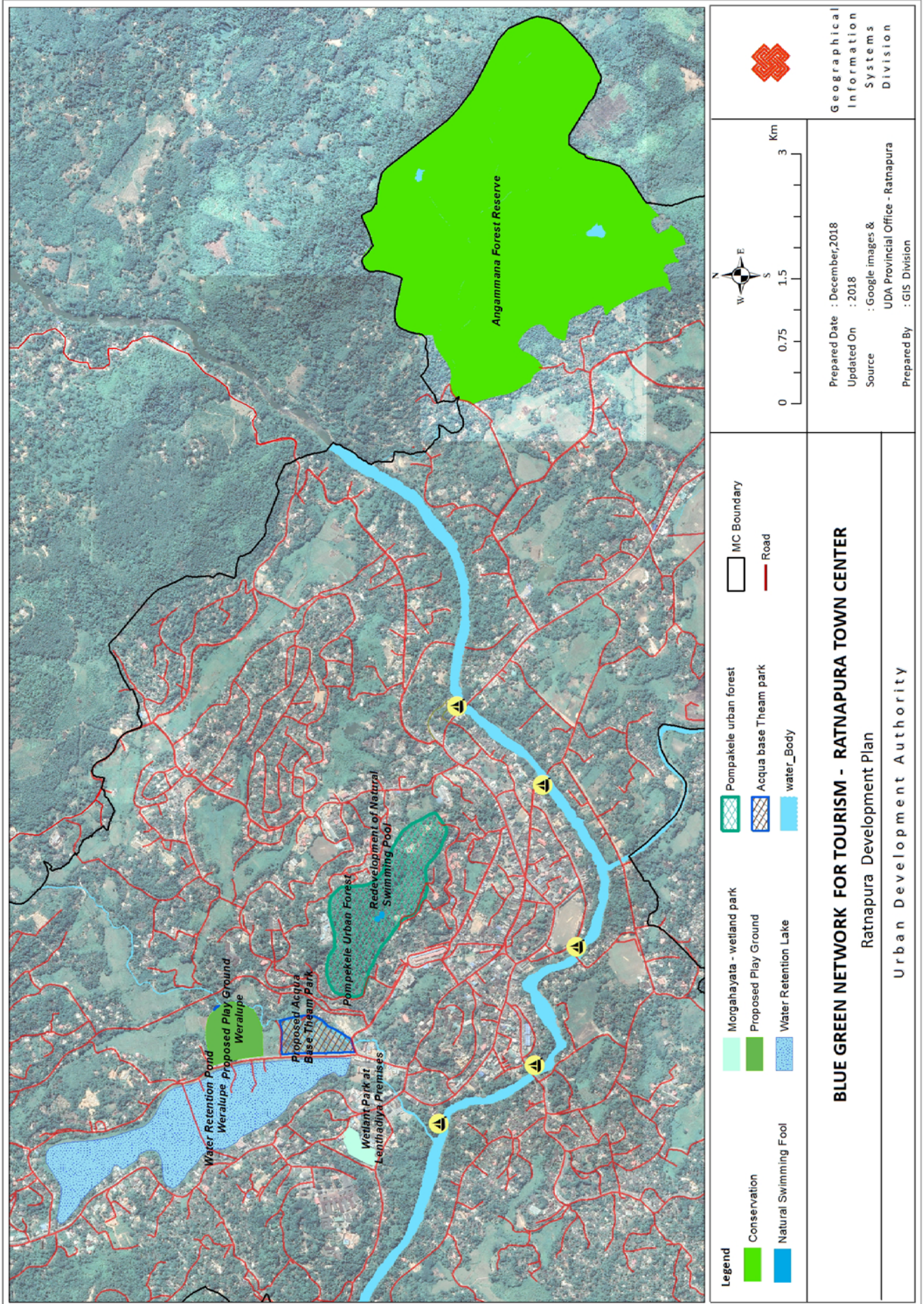
- I. Main River Port – Existing Children's Park behind the Seevali ground conversion to a river port
- II. New river port construction near hanging bridge close to Saman Dewalaya

b. Phase 2

- I. New river port construction near Warakathota Bridge

c. Phase 3

- I. New river port construction at Kudugalwatta
- II. New river port construction at Ayurweda Junction
- III. New river port construction at Kotambegawa



Map No. 6.4.2 : Creating Blue Green Network for Tourism Development

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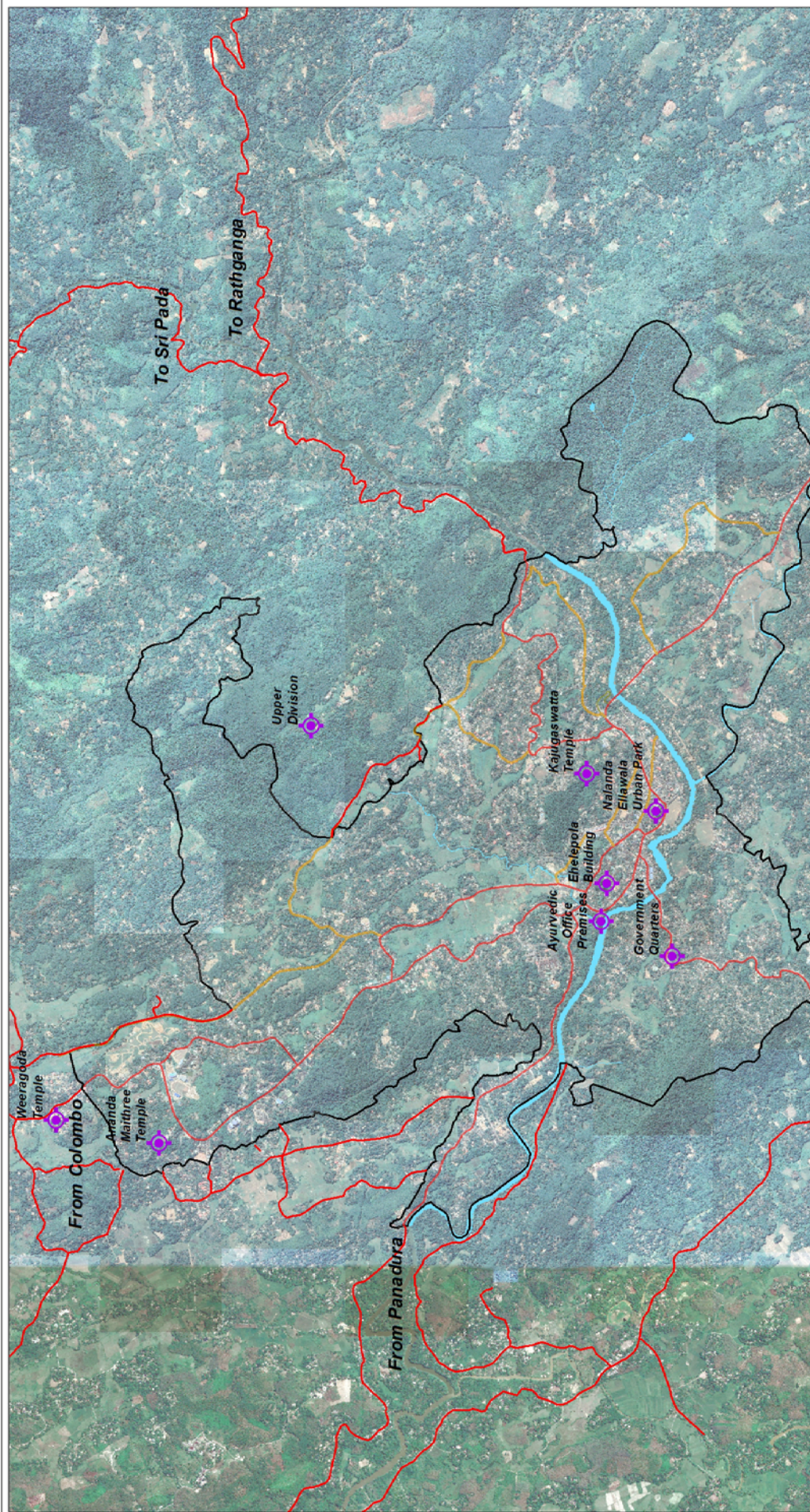
Economic Development Strategy

- **STRATEGY 2.4**
Developing Scenic Spots to promote Tourism

A scenic spot is the spatial carrier of all tourism activities, a place focusing on tourism and relevant actions and an independently administered area possessing matching tourism facilities and providing equivalent tourism services. Thus, sustainable development of scenic spots emerges to be an important area on the tourism development. Moreover, the sustainable development of tourism occupies a dominant position in Sustainable Development Goals (SDGs) of the whole world at present. In the opinion of the World Tourism Organization (WTO), sustainable development of tourism should not only meet existing demands from scenic spots and tourists but also meet future ones. Expected outcomes of this strategy are, strengthening the competitiveness and improving the sustainable capacity of the identified scenic spots.

Name of Scenic Site	Main Attractions or Activities	Development of Promotion
Ananda Maithree Temple premises	Hilltop	Preservation of scenic areas and view sheds
Kajugaswatta Temple Premises	Giant Buddha Statue, Hilltop	Preservation of scenic areas and view sheds
Weeragoda Temple Premises	Giant Buddha Statue	Preservation of scenic areas and view sheds
Nalanda Ellawala Urban Park	Urban Scenery	Additional artwork and landscaped gardens could contribute to the scenic quality of the site.
Ehelepola Harem	Urban Scenery	Additional artwork and landscaped gardens could contribute to the scenic quality of the site.
Ayurveda Office Building (near Moragahayata Bridge)	River Scenery	Additional artwork and landscaped gardens could contribute to the scenic quality of the site.
Former Chief Minister's Bungalow Premises (Near Government Quarters at Muwagama)	Hilltop	Additional artwork and landscaped gardens could contribute to the scenic quality of the site.
Upper Division of Mahawalawatta	Hilltop	Additional artwork and landscaped gardens could contribute to the scenic quality of the site.

Table No: 6.4.1 : Scenic Sites Development for 2030



<p>Legend</p> <ul style="list-style-type: none"> Scenic Site MC Boundary Main_Road Minor Road Water Bodies 	<p>Geographical Information Systems Division</p>
<p>IDENTIFIED SCENIC BEAUTY SITES - RATNAPURA URBAN AREA</p> <p>Ratnapura Development Plan</p> <p>Urban Development Authority</p>	

Map No. 6.4.3 : Scenic Beauty Sites

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Economic Development Strateg

- **Strategy 03**
Local Economy Optimization

Local Economy Optimization is more than just economic growth. It promotes participation and local dialogue, connecting people and their resources for better employment and a higher quality of life for both men and women living in the urban space.

- **STRATEGY 3.1**
Facilitating and Promoting the shopping street culture of Ratnapura

Pedestrian-oriented shopping streets can be a key to making communities more livable, particularly when they are well designed, managed and strategically connected to networks of public transit, pedestrian paths and bike routes. At the same time, it will boost the economy by facilitating to the inhabitants and visitors to buy local products in a low-cost.

1. Development of Church road as a vehicular free shopping street

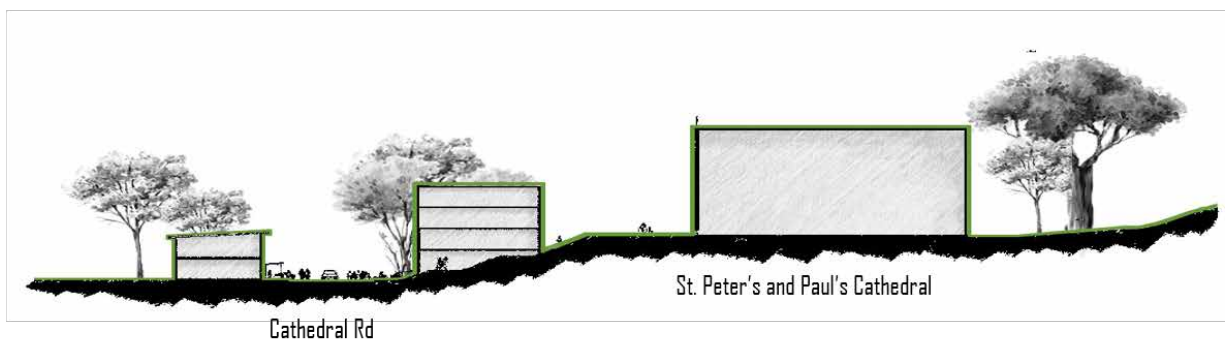


Figure No. 6.4.8 : Church Road Development
Source : Studio 5 (2017 / 2018) - City School of Architecture, Colombo

- **STRATEGY 3.2**
Facilitating to the existing commercial structure of the town

Ratnapura Town is a base for wholesale and retail industry since the municipal council area surrounded by extremely rural population (nearly 80%). Moreover, the textile industry, public fair which happens daily basis and banking with other financial activities are based on Ratnapura Town. Thus, it needs to be facilitated to the existing commercial structure in order to sustain the catchment of those.

1. Construction of a multi-purpose commercial building adjacent to the Seewali Ground
2. Redevelop the Public Fair Complex as a three-story building and facilitate it with sanitary facilities and other necessary facilities
3. Commercial complex at Polhunuwe Premises, Good shed Road
4. Construction of a Hela bojunnala (local food cafeteria) at Nagahamuttettuwa Premises
5. Economic efficiency through clustering the activities to promote wholesale and retail business
6. Giving or allowing to have compatible uses through zoning regulations

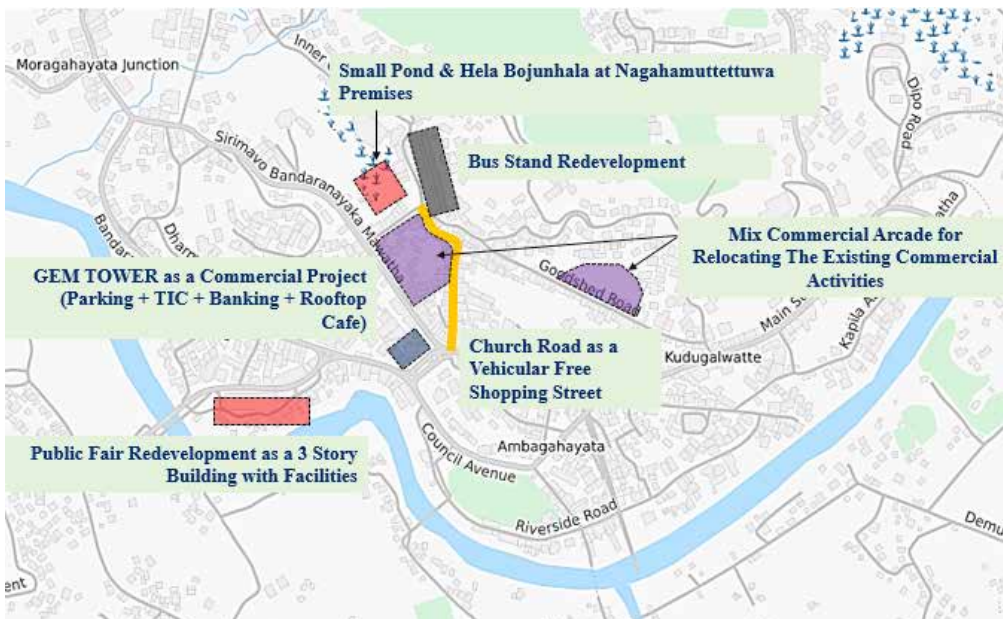
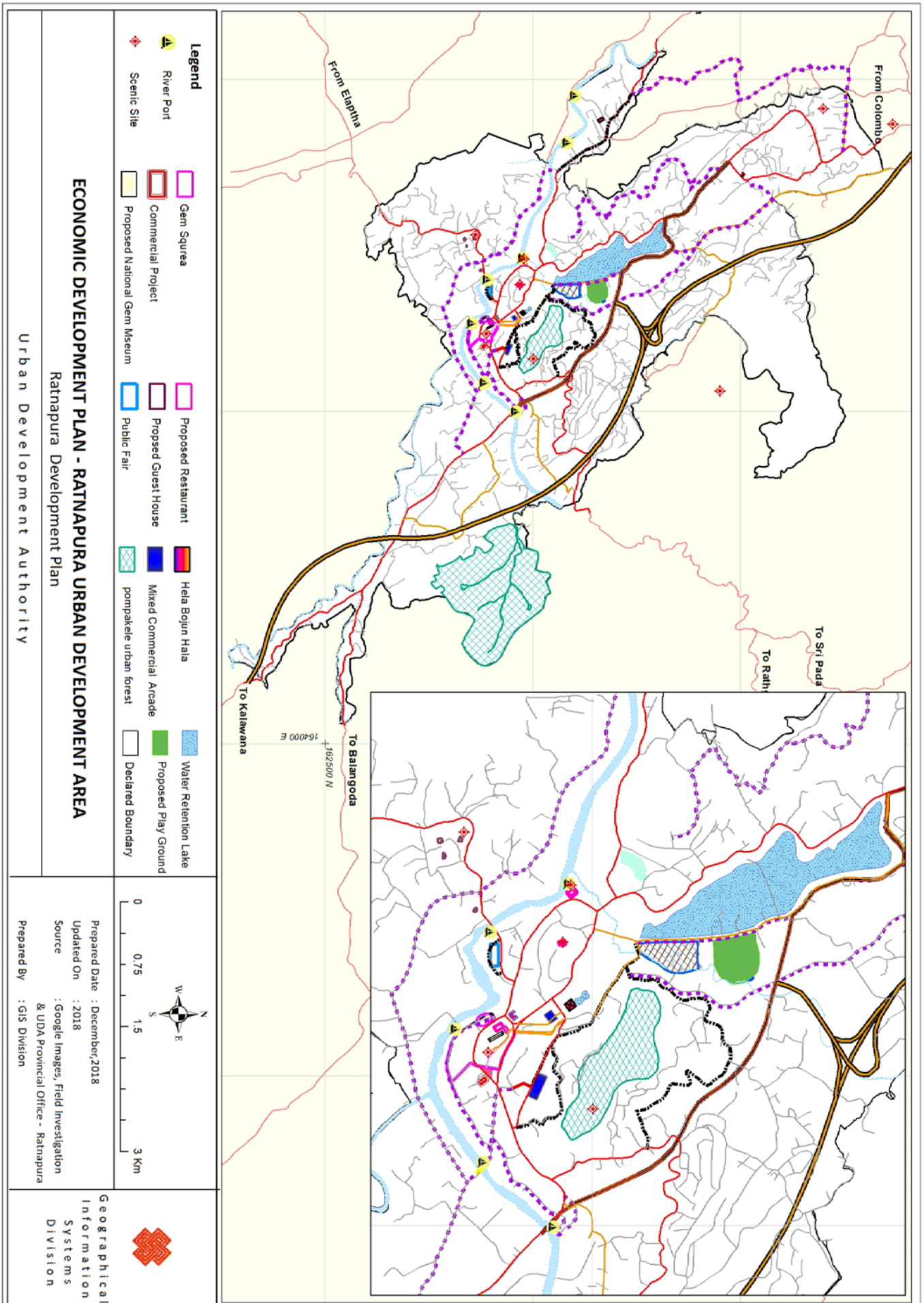


Figure No. 6.4.9 : Economy Optimization Projects for 2030

- **STRATEGY 3.3**
Zoning regulation

Within the Zoning regulation process, Ratnapura municipality area has divided into 10 zones in which certain land uses are permitted or prohibited. The type of zone determines whether planning permission for a given development is granted and whether it would facilitate the local economy optimization at the end.



Map No. 6.4.4 : Proposed Economic Development Projects

6.5. Environment Sustainable Strategies

Ratnapura is the gateway of hill country and it belongs to the central fragile area as per the National Physical Plan. But currently, the forest cover has been reduced around 10% within the planning area due to deforestation based on various reasons and it has increased the urban heat in Ratnapura as well.

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Environment Sustainable Strategies

<i>Natural Enviroment</i>		
<i>Forest cover</i>	<i>Hydrology</i>	<i>Geology and Topography</i>
<i>Natural Forest</i>	<i>Rivers</i>	<i>Mountian and Flat Terrain</i>
<i>Rich Bio- Diversitz</i>	<i>Watersheds</i>	<i>Gem and Other Minerals</i>
<i>Encroachments</i>	<i>Pollution</i>	<i>Illegal Mining Activies</i>
<i>Deforestation</i>		<i>Unauthorized construction</i>
<i>Human Settlement</i>		

Table No: 6.5.1 : Environmental Structure of Ratnapura Town - 2017

At the same time, the Pompakele Urban Forest is located close to the town center as an urban lung and the planning area has a variety of species and higher no of endemics in it due to the consistence within the wet zone. Moreover, 80% of the planning area consists of inland water bodies including Kalu River. (Refer chapter 3 and 5 for further information)

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Environment
 Sustainable Strategies

Conservation Plan

Environment Management Strategy

Concisely, Ratnapura Environmental structure has based on forest cover, hydrology with geology and topography. Nonetheless it is seen a struggle between natural environment and human settlement at present. Thus, a treaty between these two and harness the potential of natural environment to the up lift of human settlement is the environment sustainable strategy of Ratnapura Development Plan.

Concerning the vision of 2030, environment sustainable strategy will facilitate to achieve the goal of "Create Ratnapura, 'A livable City' for the local community" through the objectives of facilitating to enhance green space up to 40 % and facilitating to create a disaster resilient city through green blue network by 2030.

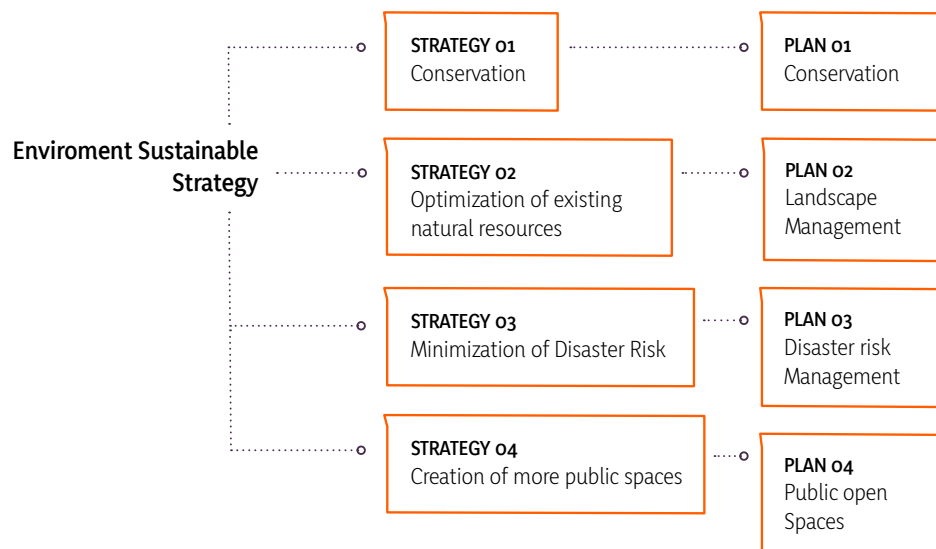


Figure No. 6.5.1 : Environment Sustainable StrategyDevelopment

6.5.1. Conservation Plan

- **STRATEGY 1.1**
Conservation of Wetlands, Water retention & Detention Areas.

This plan suggested to reserve the marshes, paddy fields, abounded paddy fields and catchment areas as flood retention & detention areas according to the flood hazards of the area. Development activities of the adjacent areas must be done in compliance to the relevant laws & regulations under the recommendations of relevant institutes.

Paddy and Abandoned Paddy Areas are zoned under "Environmental Sensitive Zone" and all the development activities of the above areas should be done according to the Agrarian Services Act.

- **STRATEGY 1.2**
Conservation of Forests

Existing forest cultivation, forest reserves (Muwagama, Angamma) and urban forests (Pompakele) should be conserved.



Figure No. 6.5.2 : Pompakele as a Green Lung

- **STRATEGY 1.3**
Conservation of Scenic Sites

Most of the roads in Rathnapura Urban area run through scenic sites. "Sri Pada", the world Heritage sacred place can be seen beautifully while travelling on these roads. Apart from that, the small hill tops within the municipality are scenic sites itself as given details in economic development strategy. Accordingly, it is proposed to conserve the identified scenic sites within the town. It is suggested to control exhibition of advertisement boards in these places and development activities which disturbs scenic beauty of the area. These sites will provide passive recreation to the municipality.

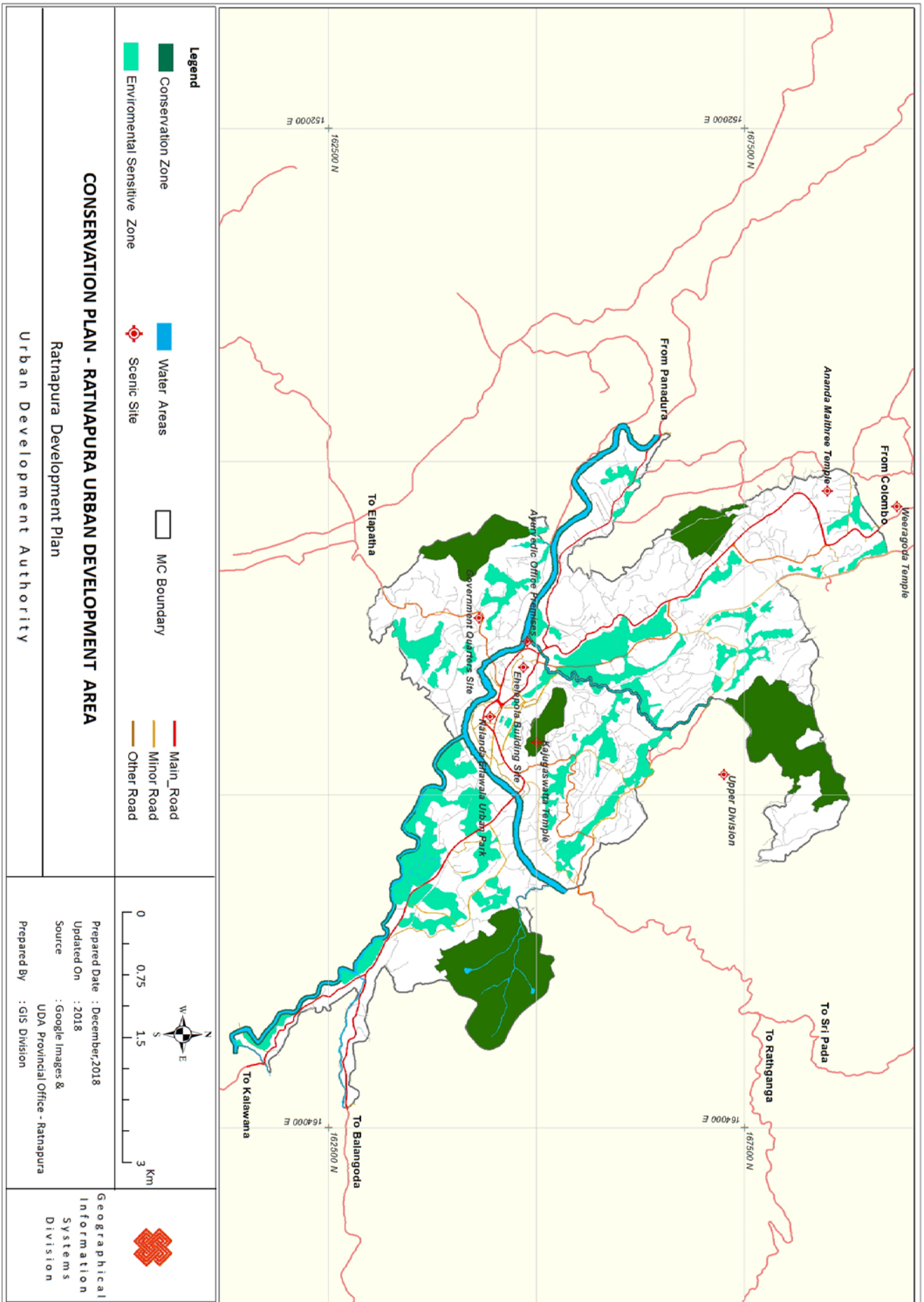
Name of Scenic Site	Main Attractions or Activities
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Kajugaswatta Temple Premises	Huge Buddha Statue, Hilltop
Weeragoda Temple Premises	Huge Buddha Statue
Nalanda Ellawala Urban Park	Urban Scenery
Ehelepola Harem	Urban Scenery
Ayurveda Office Building (near Moragahayata Bridge)	River Scenery
Former Chief Minister's Bungalow Premises (Near Government Quarters at Muwagama)	Hilltop
Upper Division of Mahawalawatta	Hilltop

Table No. 6.5.2 : Scenic Sites

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Conservation Plan



Map No. 6.5.1 : Conservation Plan of Ratnapura

6.5.2. Landscape Management Plan

Beautification is the improvement of the visual appearance and aesthetics of the town. This can range from simple, purely visual elements, such as annual planting and colorful banners, to functional elements such as street lighting, furniture, and tree planting, as well as major infrastructure projects such as road and sidewalk creation and restoration.

This plan aims to ensure that the vision of the town can be achieved through a long term, co-ordinated and informed approach to landscape management. Ratnapura has formed with a diverse landscape with green and blue network which requires an expert management to optimization of existing natural resource. Thus, Natural Landscape (trees/ forests/ riverine/ mountains), Artificial Landscape (houses/ roads/ parks) and the Urban Landscape (urban parks/ gardens/ small public gardens/ people parks) has been considered within the Ratnapura Development Plan.

Expected outcomes of the plan

- a. *Conserving and enhancing the character and diversity of the Ratnapura Landscape.*
- b. *Focusing on preservation, restoration and the creation of parks, nature centers and recreational areas*
- c. *Providing a healthier atmosphere for wildlife and the generations to come*

To attract visitors and establish town's pride in national arena, it is essential to improve the appearance of the town. Regarding the goals of the Ratnapura Development Plan, the future Ratnapura will be a tourist destination and a location where people want to live, work and cherish. The strategy is focusing to develop community-owned, vibrant, pedestrian-friendly, clean, green and sustainable streetscape of Ratnapura town, with special reference to the Gem Culture and Aquatic Resources.

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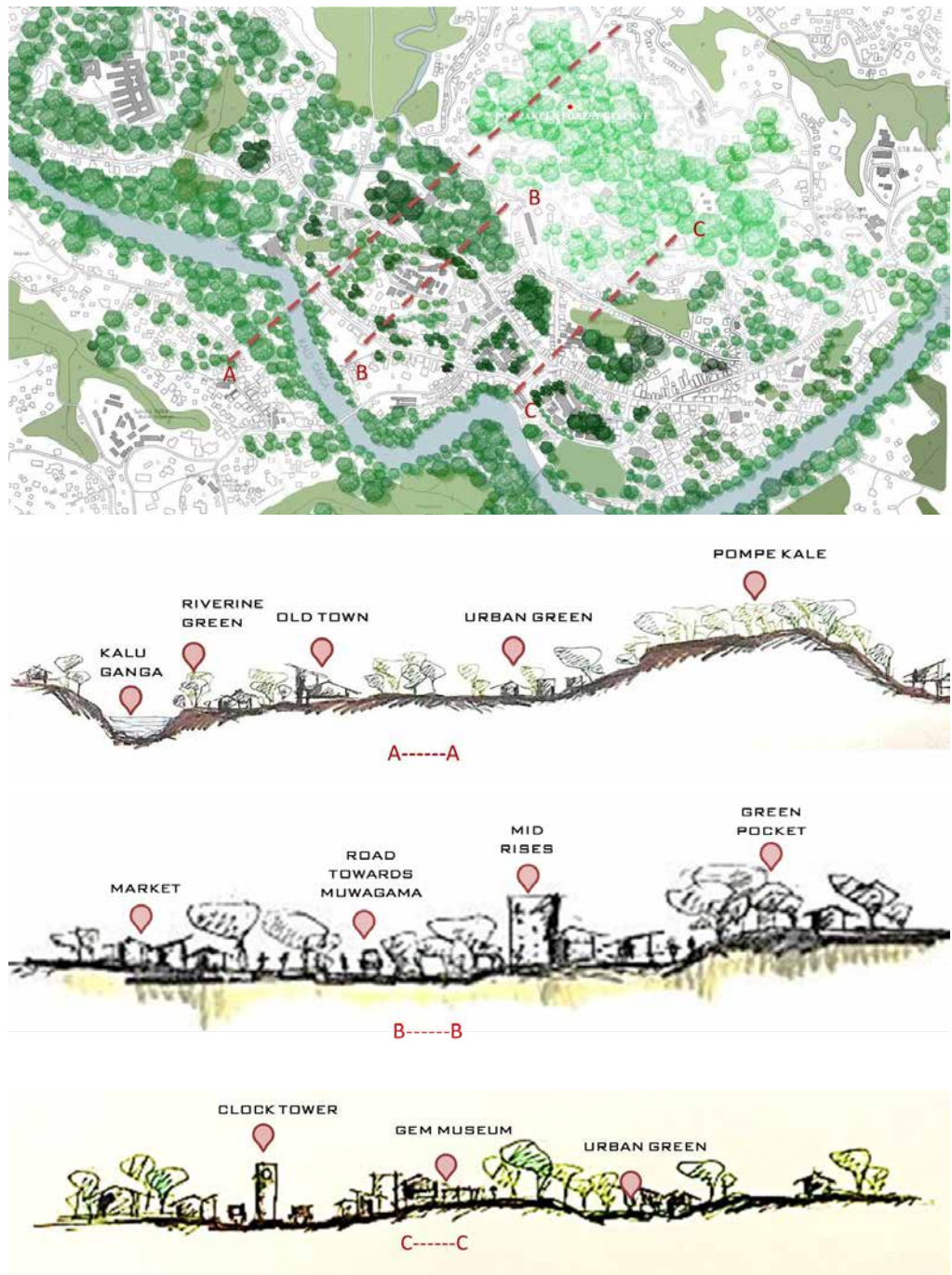


Figure No. 6.5.3 : Urban Green Pockets
Image Source : Studio 5 (2017/18) – City School of Architecture, Colombo

- **STRATEGY 2.1**
Landscape Proposals for Old Town (Ratnapura Town)
- **STRATEGY 2.1.1**
Landscape of River Banks

The Kalu River Strip is a major site for the Ratnapura Town. The specific strip can use as a linear park for serving typical, evolving urban needs which have risen with the time. Also, the plants which selected for planting along riverbanks should be those that are hardy in Ratnapura region while also being unaffected by water levels.

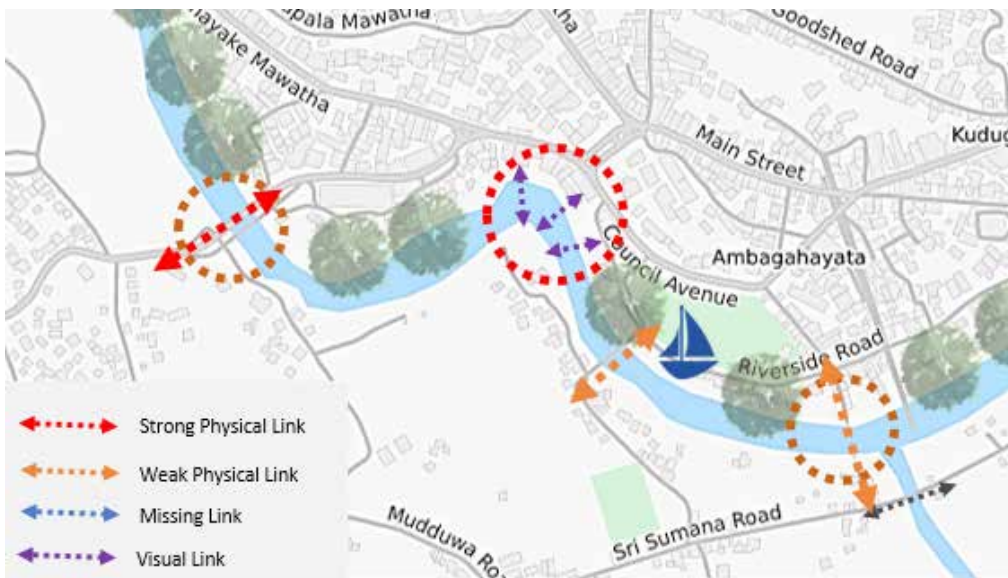


Figure No. 6.5.4 : River Front Development and Landscaping

- **STRATEGY 2.1.2**
Landscape of Scenic Sites

Identified scenic sites in Ratnapura reflect local identity and the character of landscape in those sites. It helps defining the self-image of the people who inhabit in Ratnapura and a sense of place that differentiates Ratnapura from other town. It is the dynamic backdrop to people's lives. Thus, beautifying Scenic Sites with necessary landscape is a requirement.

- **STRATEGY 2.1.4**
Landscape of Streets

Ratnapura is famous for Gem Streets since ancient time and some streets work as shopping streets in the town. But at present, almost all the streets look the same in the eyes of a stranger. Thus, landscaping of streets are required in Ratnapura Town Development.

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- Street Type 1 - Proposes changes to Main Street to be the main linear space of gem trading commercial activity. This two-way street will have wide sidewalk with sitting areas.
- Street Type 2 - Proposes changes to Shaviya Mawatha to be an extended linear space of gem trading commercial activity. This street will be facilitated with a fine landscape.
- Street Type 3 - Proposes changes to Demuwawatha Street to be a linear space for gem trading commercial activity. This street will be facilitated with a fine landscape which is business friendly.
- Street Type 4 - Proposes changes to Church Road / Cathedral Road (street) to be a linear space for walker friendly commercial activity. This street will be facilitated with a fine landscape which is business friendly.
- Street Type 5 - Proposes changes to Senanayaka Road, Bandaranayaka Road, Sirimavo Bandaranayaka Mawatha (Colombo – Batticaloa A 004 Road) and Good Shed Road to be walker friendly roads with fine landscape which consists shady areas and sidewalks.

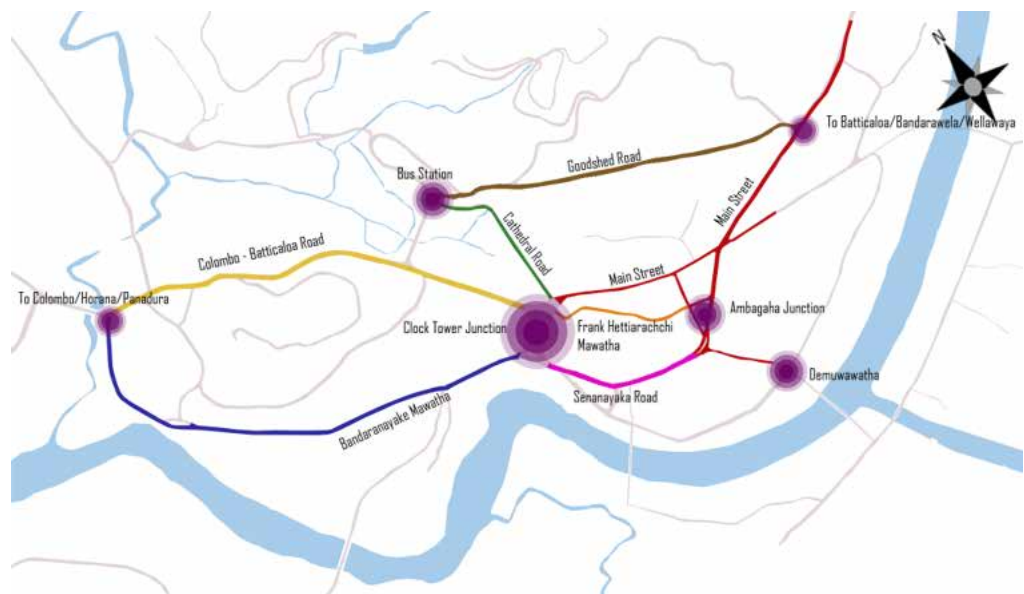


Figure No. 6.5.5 : Nodes and Streets of Ratnapura CBD

- **STRATEGY 2.1.4**
Urban Design Approach

At present, Ratnapura is not a tourist attractive destination. Identity of a gem city is missing, and it has catered only for the confusion and congestion within the city. Moreover, the city requires a holistic urban design approach.

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(Old Town)

- Establishing a city square type of space for gem traders to gather and conduct trade activities at city center
- Creating entry statements (with gem industry related sculptures) at key points of the city

- **STRATEGY 2.1.5**
Landscape of Alleyways

The redesign of alleyways located in commercial area of Ratnapura is typically undertaken to effect economic development and to develop a sense of community and a sense of place through these spaces. Some allies are pedestrian- related, while other allies are transportation- and work-oriented. Nonetheless, it is required to redesign alleyways to revitalizes social life and promote walkability in the commercial area of the town.

Identified Alleyways

- Entering from Lee Maduwa premises near Moragahayata – exit at KeleKade
- Entering from world trade premises – exit at Nawathena Restaurent
- Entering from Dharmapala Collage – exit at IOC (Bandaranayaka Mawatha)
- Entering from Good Shed Road (Palitha Stors) – exit at Church Road and in front of Aloka Hospital
- Entering in front of Indika Hotel – exit at Church Road
- Entering from public fair premises – exit in front of DFCC Bank
- Entering from Shan premises – exit in front of the public fair premises

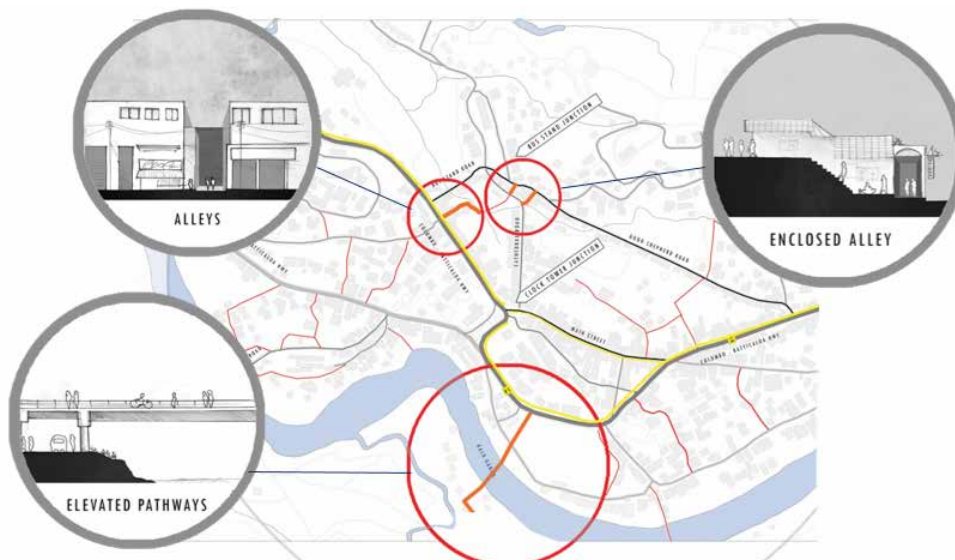
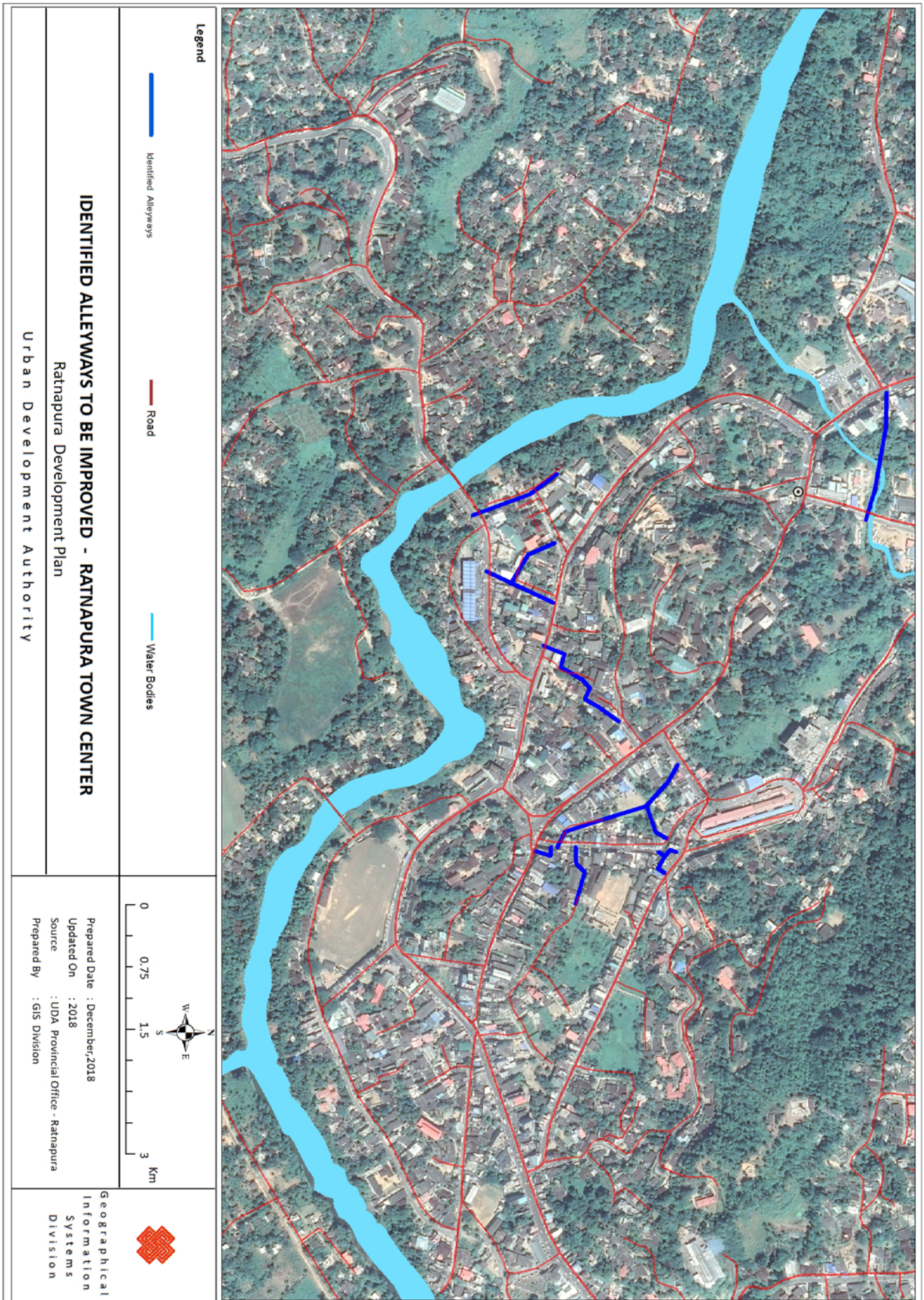


Figure No. 6.5.6 : Identified Alleyway Types
Image Source : Studio 5 (2017/18) – City School of Architecture, Colombo



Map No. 6.5.2 : Identified Alleyways to be Improved

- **STRATEGY 2.2**
Landscape Proposals for New Town

- **STRATEGY 2.1.3**
Landscape of Nodes

Major nodes in Ratnapura are identified from the field pattern and characterized according to the presence of relevant features and land uses from the viewpoint of their functions. Hence, it has been identified that water should be the main feature of node base landscape. Water feature will be designed to be both a reflective and active water element with 'white noise'.

- Construct a water fountain at Hidellana Junction
- Construct a water fountain at Court Junction

- **STRATEGY 2.3**
Landscape of Public Open Spaces

Establishing and maintaining urban parks helps revitalize communities in a variety of ways including increasing economic development opportunities; increasing daily physical activity; reconnecting children with nature; and reducing crime by providing safe, healthy alternatives for at-risk youth. But most importantly, urban parks play an important role in improving public health. Thus, it is recommended to provide enough shade and a proper landscape for the identified public open spaces.

1. Nalanda Ellawala Urban Park
2. Nanamaladola Reserve as an urban pocket park
3. YMBA premises as a green public space
4. Ehelepola Museum Premises as the Central Park with a small pond at Nagahamuttettuwa Premises
5. Wetland Park at Lenthadiya Premises

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Management Plan
(Old Town)

Landscape
Management Plan
(New Town)

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Landscape
 Management Plan
 (Old Town & New Town)

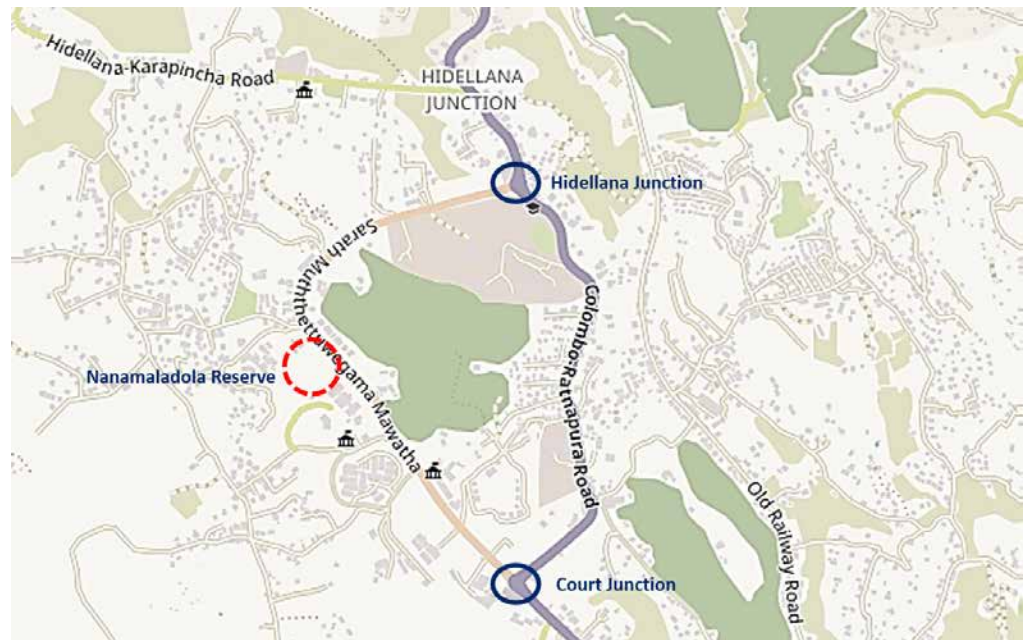


Figure No. 6.5.7 : Landscape Proposals for New Town

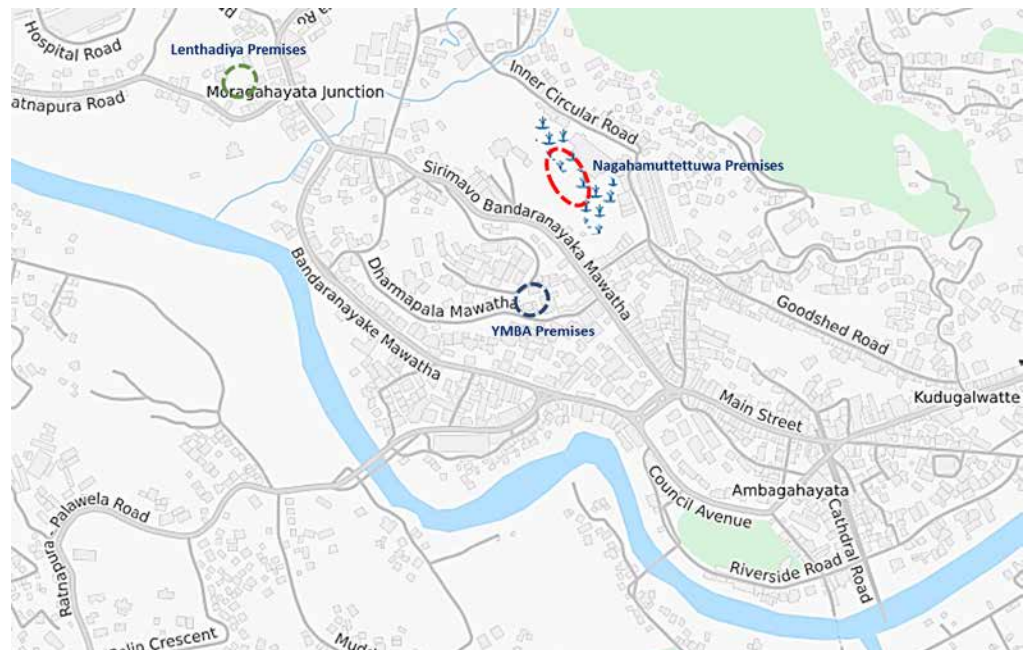


Figure No. 6.5.8 : Landscape Proposals for Ratnapura Town

- **STRATEGY 2.4**
Landscape of Rooftops

A green roof assists with city storm water management by reducing and delaying storm water runoff and absorbing pollutants in rainwater. Also, it helps to reduce urban heat island effect by lowering air temperature. Even very small urban roof areas can make a difference. Thus, it is recommended to convert rooftops within the town center into green roofs with suitable landscape

- **STRATEGY 2.5**
Landscape of Paving

The proposed paving may give urban trees the rooting space they need to grow to full size. This must integrate healthy ecology and thriving cities, with the living tree canopy above, the city's traffic on the ground, and living tree roots below.

- **STRATEGY 2.6**
Landscape of Lighting

The proposed lighting is designed to be well distributed, illuminating routes and key features. It will be achieved from a variety of sources which include feature lighting to trees and planters, under lighting from buildings where they form roofs for pedestrian and vehicular passage and wall wash lighting. The aim is to provide safely set alight routes throughout the town combined with atmospheric lighting to key areas and 'Smart Lighting System' has been proposed for it. (Refer Electricity and Data Lines chapter for more details)

6.5.3. Disaster Risk Management Plan

Ratnapura is an urban area in the country which was identified as a frequently flooding area and with recorded landslides. There are many reasons for these and some are natural while some reasons are absolutely with human involvement. But mostly Ratnapura is affected by flood. (Refer Chapter 3 and 5 for further information)

Moreover, local knowledge on disaster, disaster management skills and training skills of the community, disaster management interventions by the government and non-government organizations, leadership and institutional push up for an integrated development, and development of a new town by planning interventions in a safer location can be identified as the potentials of this area.

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(Old Town & New Town)

Disaster Risk
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DISASTER MANAGEMENT STRATEGY

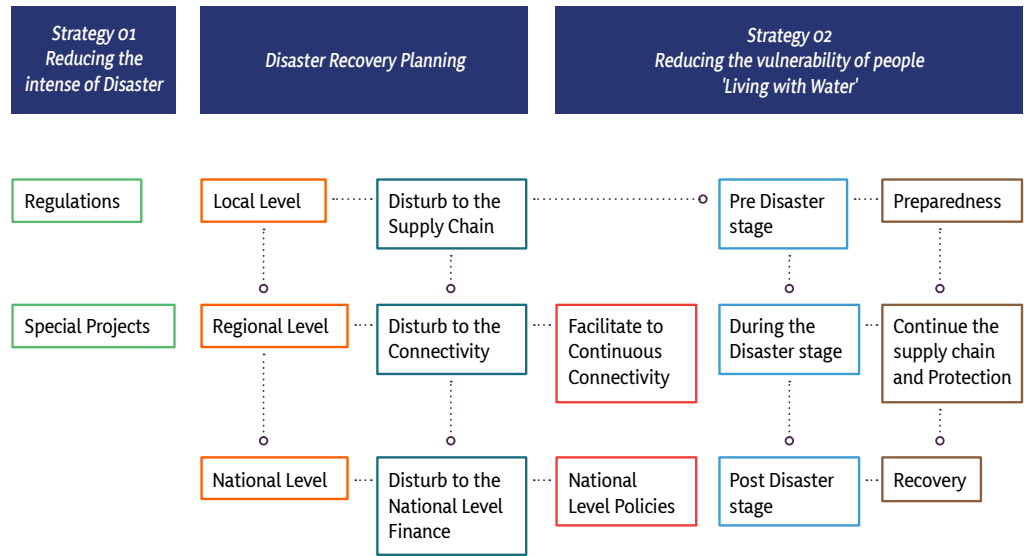


Figure No. 6.5.9 : Disaster Management Strategy

- **STRATEGY 3.1**
Reduce the Intensity of Disaster
- **STRATEGY 3.1.1**
Regulations
- **Strategy 01**
Land Use Controls- Guidelines through the zoning regulations.

Action 01: Introduce regulations for disaster areas

Preparation of hazard zonation mapping and land use controls will be based on flood-plain zoning maps and landslide zoning maps. Thus, there are three kind of zones as prohibited zones, restricted zones and warning zones concerning the flood categories minor floods, major floods, critical floods.

Criteria considered to identify the for-vulnerability landslide are slope range & category, bedrock geology, landform, land use, former landslides, hydrology & drainage. According to that the following restrictions will be given to the people.

Prohibited (Highly Vulnerable) Areas

- No development is allowed
- Relocation of existing settlements
- Reforestation Programs

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Restricted (Moderately Vulnerable) Areas

- Existing Settlements should be strictly followed the methods of building improvements
- New constructions allow only if they follow the specific building regulations
- Prohibition of mining activities

Warning (Less Vulnerable) Areas

- Encourage the settlers to follow the building regulations

Action 02: Introduce regulations for living with landslides & floods

- Introduce guidelines for construction of buildings in high & moderately vulnerable areas of flood
 - Introduce strict regulations to create parking space in ground floor within flood prone areas
 - Introduce regulations to restrict creating cement walls to separate home gardens (to allow smooth water flow in disaster situations)
 - Introduce guidelines for construction of buildings in moderate land slide prone areas
-
- **Strategy 02**
Restrictions for Mining Activities in selected areas- Guidelines for the mining activities in high and moderate land slide vulnerable areas

 - **Strategy 03**
Protecting River & Cannel Reservations Strict guidelines for the reservation areas

 - **Strategy 04**
Minimize surface and ground water to reduce the pressure of city drainage lines
 - Domestic waste water filtering system
 - Green Roof System

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- *STRATEGY 3.1.2*
Special Projects
- *Strategy 01*
Convert water retention areas into recreational spaces

OPTION 01: Diversion of Kalu River to Udawalawa Reservoir

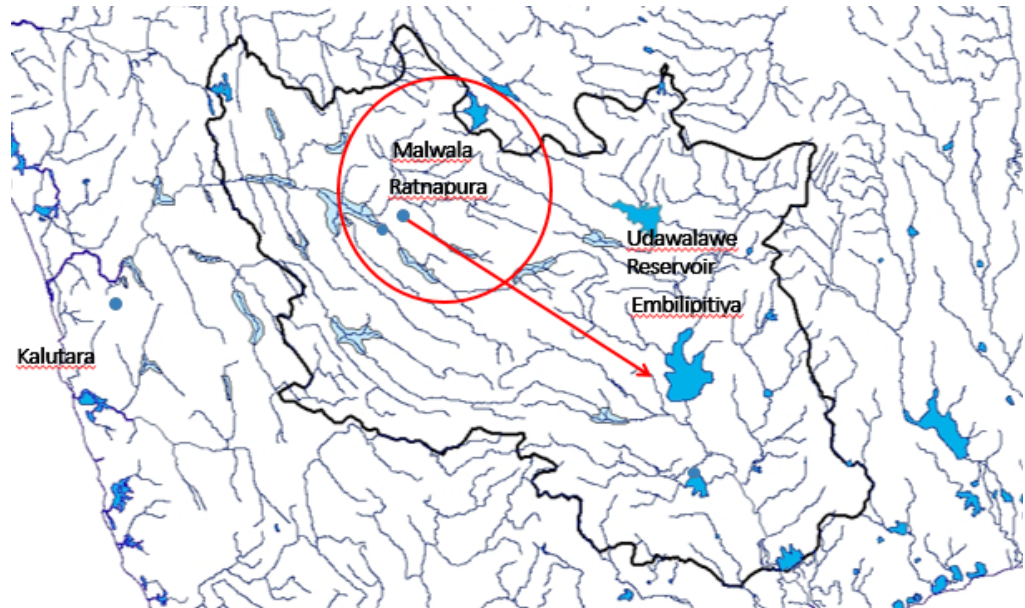
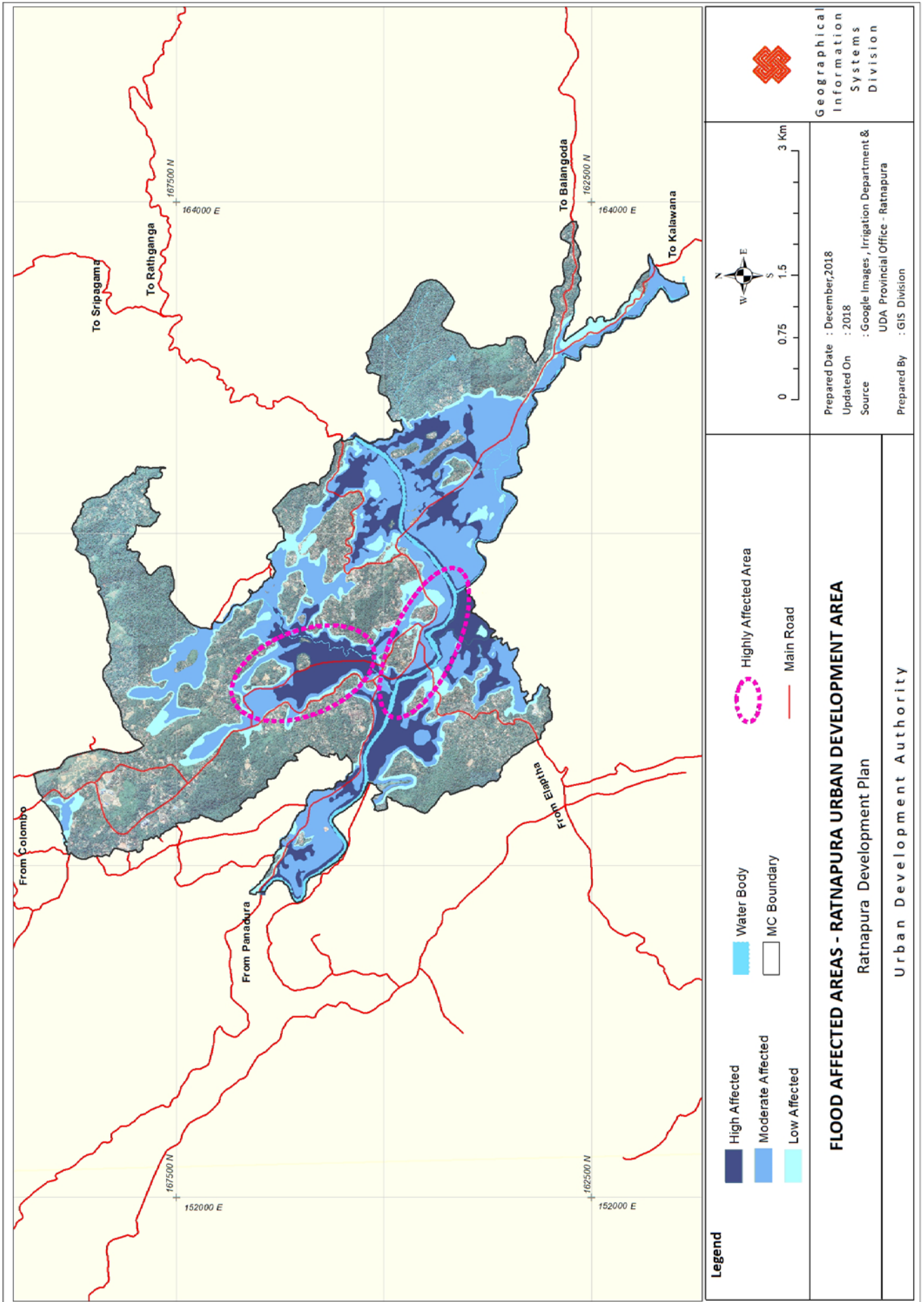


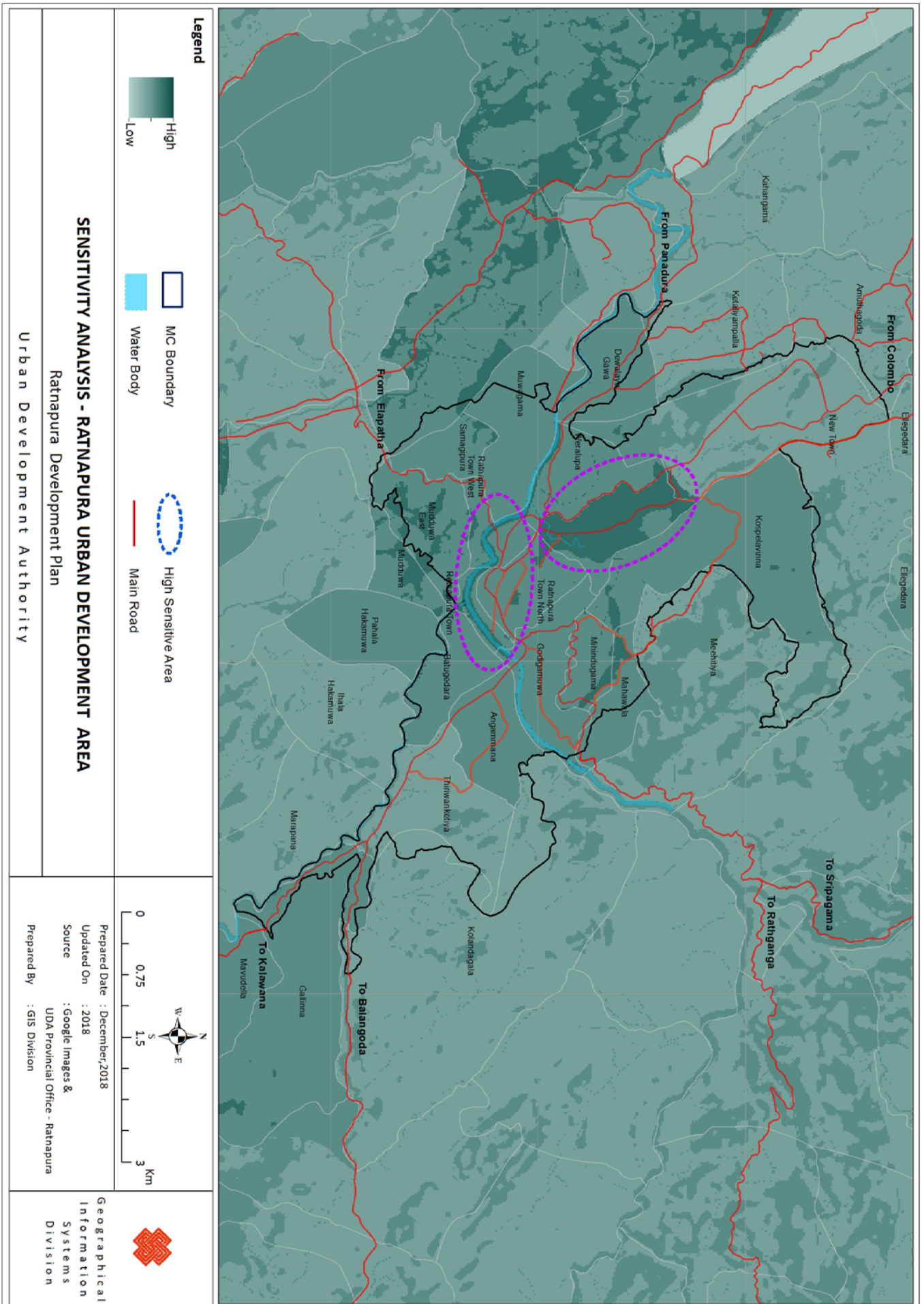
Figure No. 6.5.10 : Kalu River Diversion

OPTION 02: Diversion of Kalu River through Weralupa Lake in Flood Season (Excessive Water Flow)

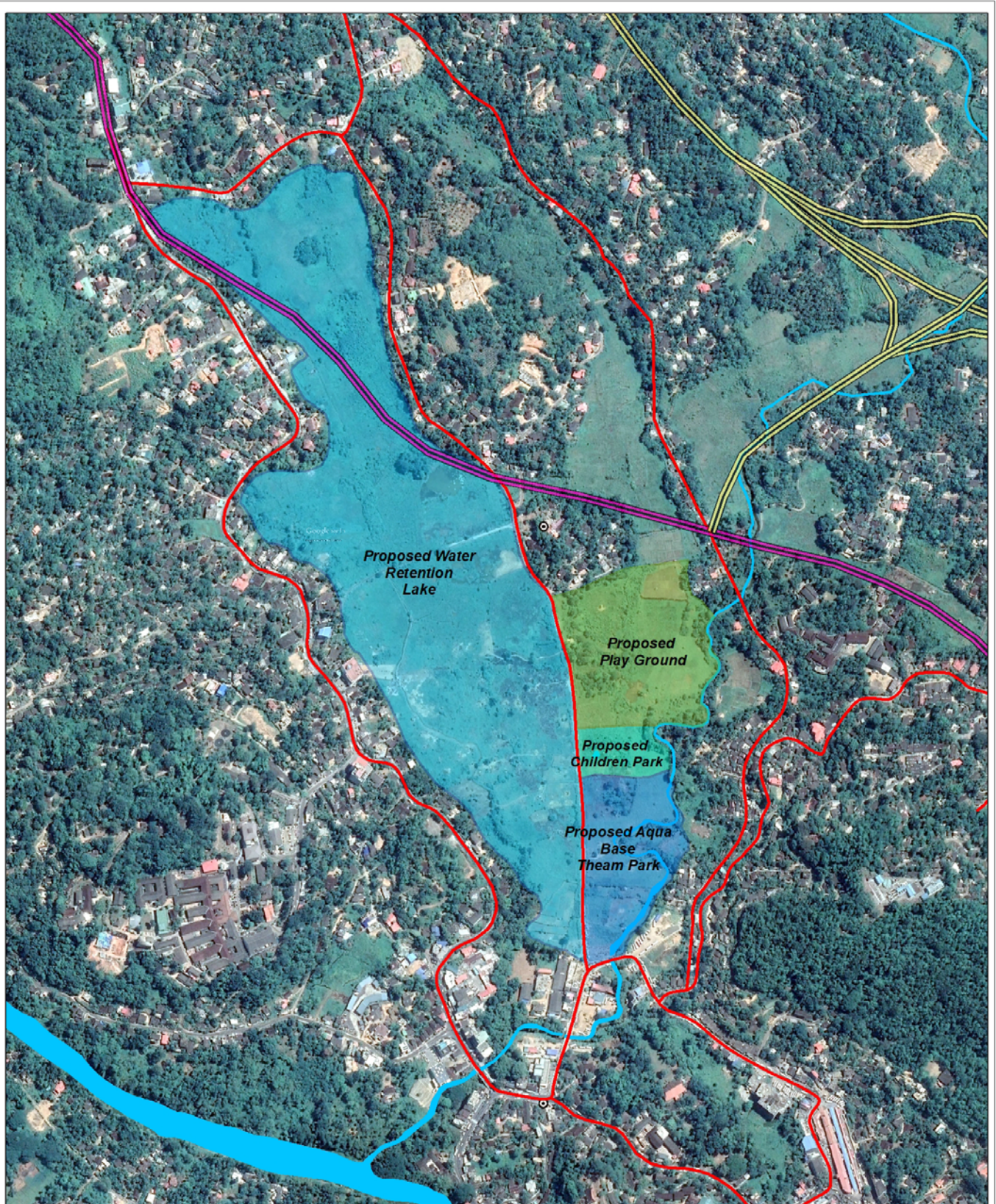
- *Strategy 02:*
Convert water retention areas into recreational spaces
 - Project 01: Construction of Water Retention Lake at Weralupa
 - Project 02: Construction of Play Ground at Weralupa
 - Project 03: Convert Lenthatiya Retention land as a wetland park
 - Project 04: River Front Development along the Kalu River Reservation Area (in selected areas)
 - Project 05: Flood Dike & River Front Development along the Kalu River Bank



Map No. 6.5.3 : Flood Affected Areas

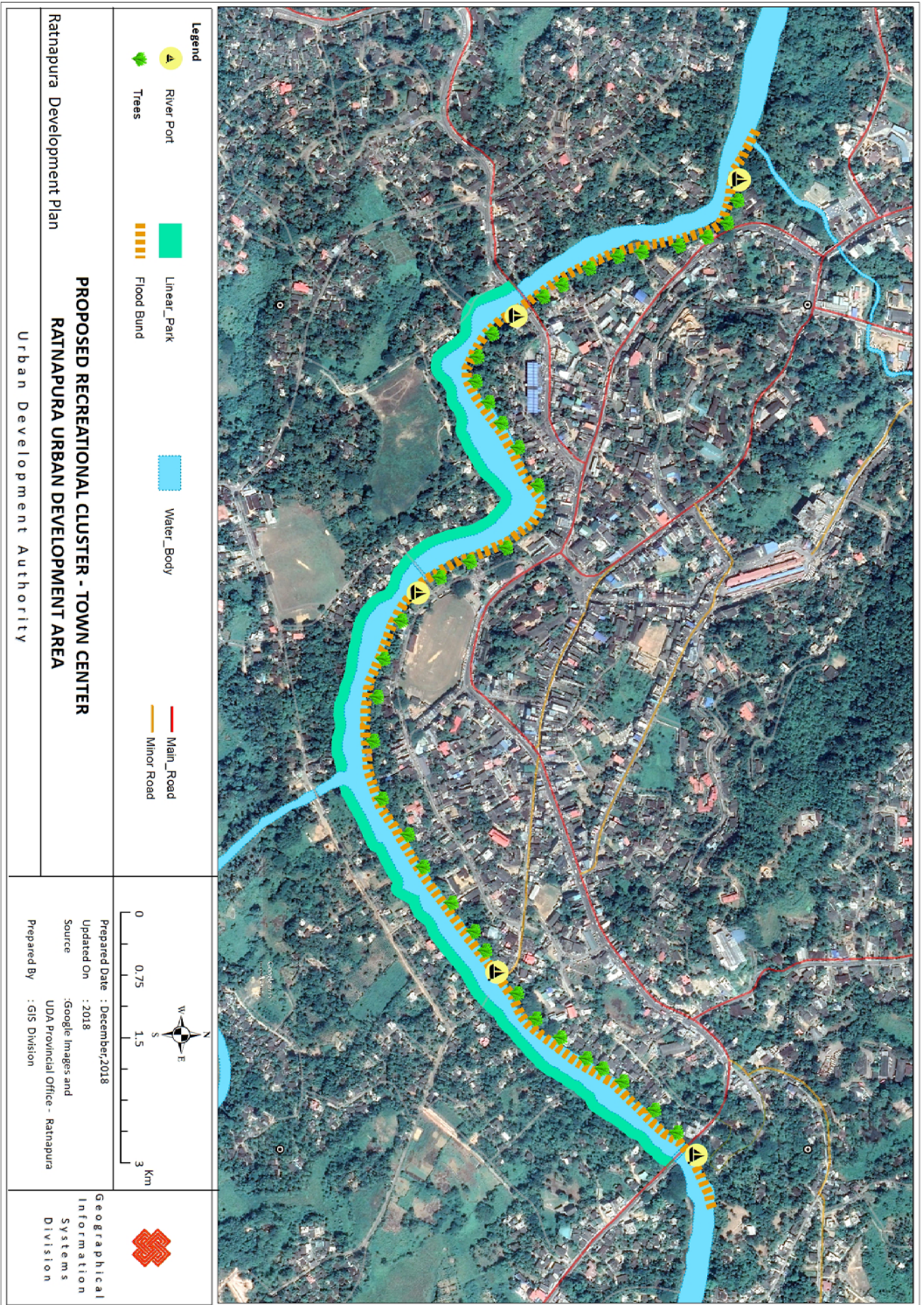


Map No. 6.5.4 : Sensitivity Analysis



Legend Proposed Water Retention Lake Proposed Play Ground Proposed Children Park Proposed Aqua Base them Park		Existing Road Bypass Road Ruwanpura Expressway			
PROPOSED RECREATIONAL CLUSTER - WERALUPA RATNAPURA URBAN DEVELOPMENT AREA				Prepared Date : April, 2019 Source : Google Images 2018 Prepared By : GIS Division	Geographical Information Systems Division
Urban Development Authority					

Map No. 6.5.5 : Weralupa Recreational Cluster



Map No. 6.5.6 : City Center Recreational Cluster

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- **Strategy 02**
Construction of Flood Dike

Dike is a barrier of stone or earth used to hold back water and prevent flooding. It is one of the greatest feats of hydraulic engineering ever executed, the water was eliminated and the land made useful. Thus, construction of flood dike from Warakatota bridge area to Ayurweda office area will be beneficial for protecting the town itself from the annual flood.

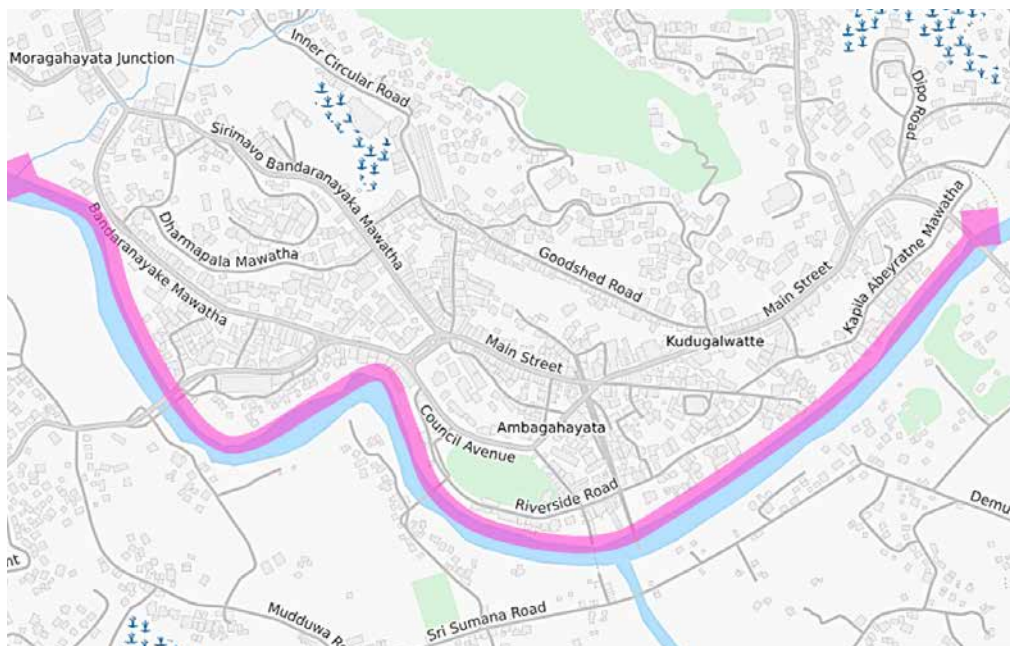


Figure No: 6.5.11 : Proposed Flood Dike

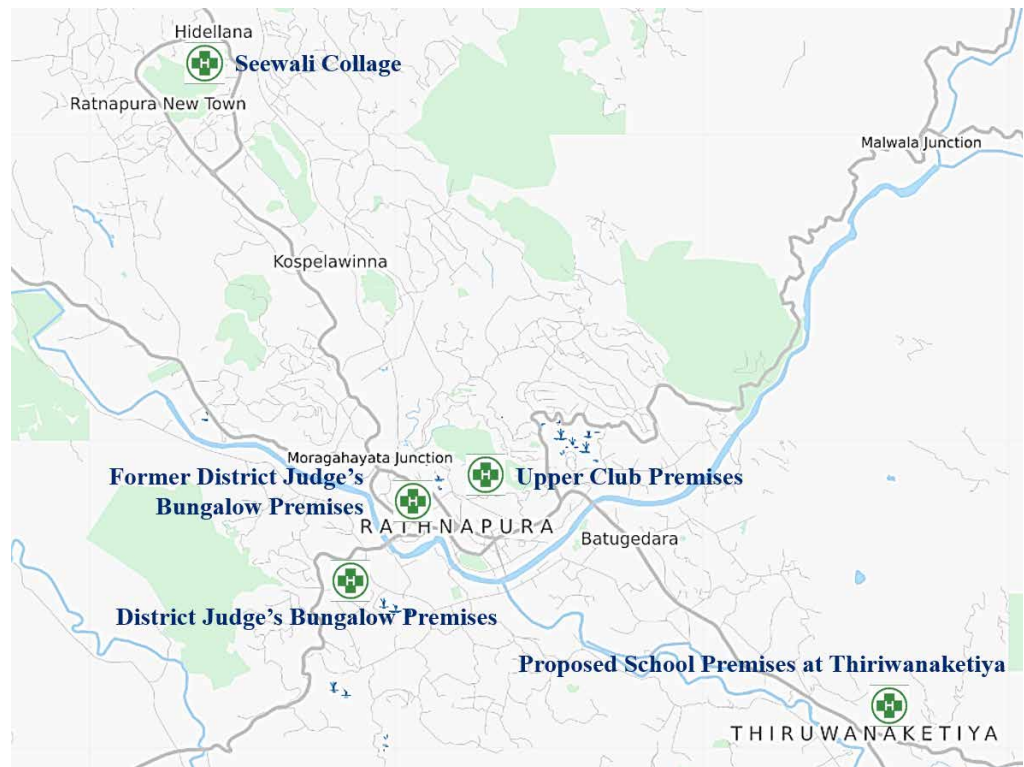
- **Strategy 03**
Improve slope stability
 - Application of Biotechnical stabilization and soil bioengineering stabilization (Soft – Engineering Solutions) in Ratnapura – Colombo road in front of the National museum
 - Use Mesh net technology to stabilize the slope and to prevent the slope slipping in the location of the upper terrain near the starting point of the off circular road Ratnapura
- **Strategy 04**
Facilitate Smooth Transportation Network in Disaster Period
 - Proposed Bypass Road – Weralupa Junction to Warakathota Bridge
 - Road Redevelopment – Ratnapura Base Hospital to New Town
 - Old railway re-development as a service road

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- **Strategy 05:**
Construct helipad locations for emergency services
 - Helipad Location 01 – Former District Judge's Bungalow
 - Helipad Location 02 – Upper Club Premises
 - Helipad Location 03 – Seewali Collage Ground Premises
 - Helipad Location 04 – District Judge's Bungalow (AthapattuWalawwa) Premises
 - Helipad Location 05 – Proposed Thiriwanaketiya School Premises



Figuer No: 6.5.12 : Proposed Helipad Locations

- **Strategy 06**
Facilitate to the Rescue Centers in advance
 - Batugedara – Shailathalarama Temple premises
 - Thiriwanaketiya Temple (Near Kovila) premises
 - Kospelawinna School premises
 - Muwagamakanda Temple premises
 - Ratnapura Convent School premises
 - Dutch Fort premises
 - St. Aloysius Church premises
 - Government Quarters premises in front of the Sumana Balika School
 - Kahangama School premises
 - Ferguson High School premises

- **Strategy 07**
Construct Overhead Bridges

- From Dharmapala Collage to Bus Terminal
- From YMBA Premises to Public Fair Premises

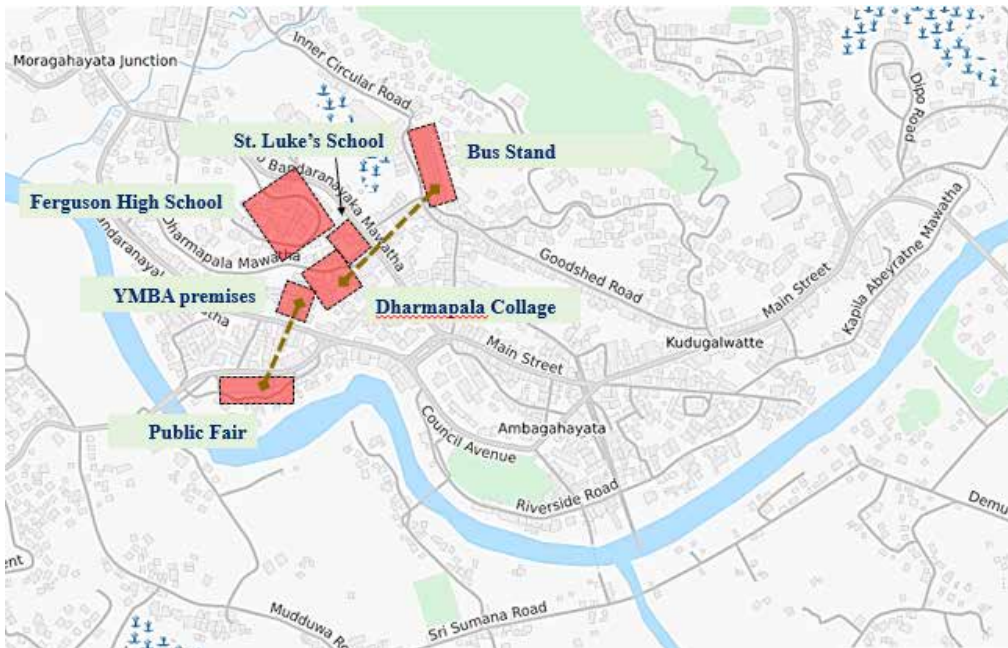


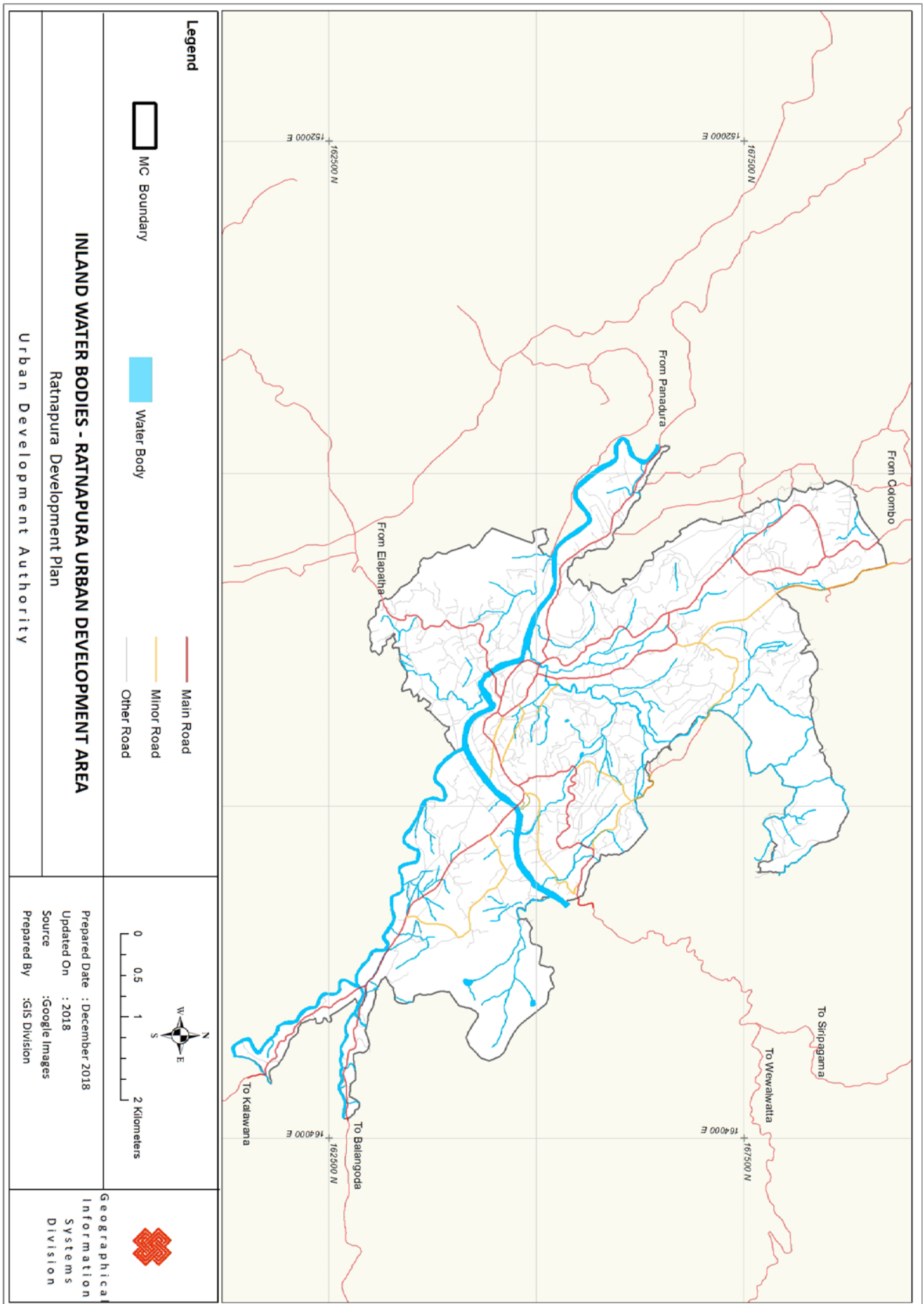
Figure No. 6.5.13 : Proposed Overhead Bridges

- **Strategy 08**
Remove the rock at Ellagawa which is destructing to the smooth natural flow of the Kalu river (Near Paththini Dewalaya along)
- **Strategy 09**
Drainage Plan
 - Revisit of the Existing Drainage Plan of Ratnapura Municipal Council and clear the channels

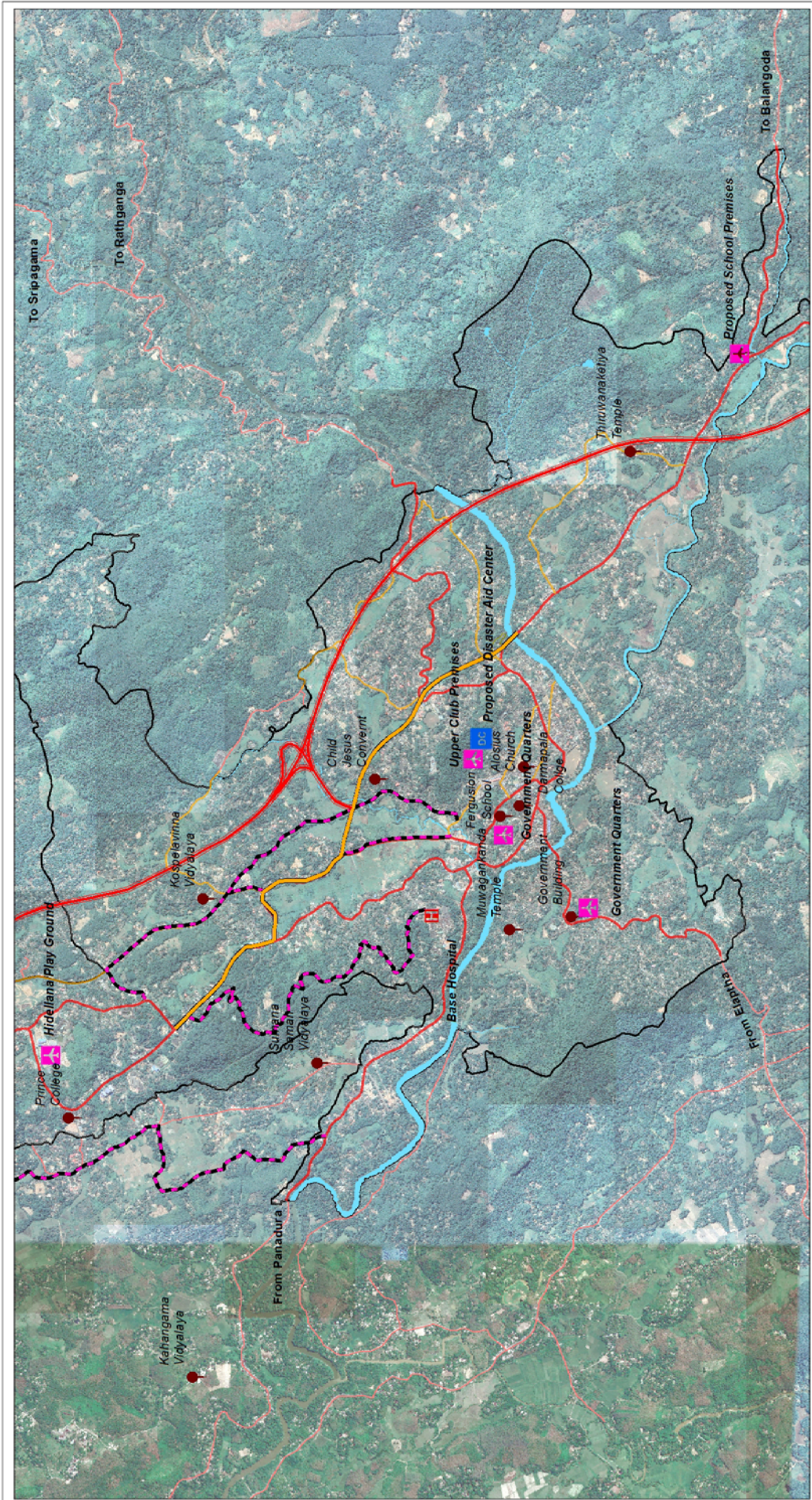
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Map No. 6.5.7 : Inland Waterbodies in Ratnapura



Legend Helipad Disaster Aid Center Hospital Rescue Places to be facilitated MC Boundary Bypass Road Road Development Ruwanpura Expressway	 0 0.75 1.5 3 Km	 Geographical Information Systems Division
DISASTER MANAGEMENT PLAN - RATNAPURA URBAN DEVELOPMENT AREA Ratnapura Development Plan Urban Development Authority		

Map No. 6.5.8 : Disaster Management Plan

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- **STRATEGY 3.2**
Reduce the Vulnerability of People

In an attempt on Disaster management, the first step is to analyze the level of vulnerability with the inputs of Hazard maps and the descriptions of elements at risk (Social, Economic, Physical and Environmental assets). Maps prepared to illustrate different vulnerability dimensions were further used in preparing strategies and strategic action projects to reduce the vulnerability while increasing resiliency to the disasters.



Figure No: 6.5.14 : Environmental Vulnerability

- **STRATEGY 3.2.1**
Pre Disaster Stage

Strategy 01: Introduce Mobile Early Warning System (MEWS) – DMC

Use mobile application of FLOOD for forecasting disaster situation make people aware,

- Before One Week
- Before 2 days
- During the disaster
- After the disaster (till 01 month)

Strategy 02: Introduce Early Warning System (EWS)

Link with Irrigation Department for forecasting disaster situation& make people aware through Divisional Secretariat

- Step I – Preparation for Response
- Step II- Observation & Monitoring
- Step III- Communication and Dissemination
- Step IV- Follow-up, Review & Sustainability (DMC with SL Navy)

- **Strategy 03**

Pre Disaster Review Meeting:

The overall objective of the meeting is for the parties who have a greater responsibility of the Disaster Management (DM) to revisit the plan in order to ensure that the disaster management system will function optimally for the forthcoming situation.

The following facts need to be discussed in the review meeting:

- Revisit overall plan, assessing whether the plan is sufficient for response
- Agree upon the roles and responsibilities of the parties involved in the Disaster Management
- Update important data focusing on the most vulnerable groups such as women, pregnant and lactating mothers, elderly, children and people with disabilities
- Clarify the communication and dissemination systems
- Repair and maintain equipment
- Making the community aware of the evacuation plans and signs and location of shelters / evacuation areas

- **STRATEGY 3.2.2**

During the Disaster

Strategy 01: Setting up a disaster aid network in city center during disaster periods
Disaster aiding through District Secretariat Office directly with the help of Police Station.

Strategy 02: Setting up a disaster aid network in an outside the city center (MC area) during disaster periods. The proposed helipad locations (03) which will be located outside of the city can be used to support this network.

Disaster aiding through Divisional Secretariat with the help of Sri Lanka Navy and Kuruwita Army Base. The proposed boat service (tourism Plan) can be used during these emergency situations.

- **STRATEGY 3.2.3**

Post Disaster Stage

Strategy 01: Short-term recovery activities

Disaster aiding team helps to the victims to cleanup, temporary housing, and setting up the supply chain (Access to food and water) again.

Strategy 02: Long-term recovery activities

Disaster aiding team helps to the victims through relocation, redevelopment loans and legal assistance.

Strategy 03: Post Disaster Review Meeting:

The overall objective of the meeting is to assess the effectiveness of the systems and the performance of the stakeholders at the time of a flood situation. The following facts

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need to be discussed in the review meeting

The following facts need to be discussed in the review meeting :

- Review positive experiences
- Document learning
- Refine the roles and the responsibilities of the various stakeholders.
- Update important data
- Analyze the areas for improvement of the early warning system
- Visit the flood affected areas and observation stations and check the condition of the equipment.
- Update the Early Warning System and share it with communities and stakeholders

6.5.4. Public Open Spaces Plan

Open space provides an array of social, health, economic and environmental benefits to individuals and to the community as a whole. In all its open space is an essential ingredient for enhancing the livability of an area and improving the quality of life of its residents. Increasing densities, population growth, and climate change and resource depletion will place further importance on the provision of quality open spaces. Easy access to well designed and diverse open spaces will assist in not only managing the impacts of these challenges, but also enhancing the benefits that open spaces provide. Thus, creation of more public spaces is needed in Ratnapura Development Plan.

Active Recreational Spaces Ratnapura MC Area

No	Type of Parks & Playground	Extent (ha)	Existing Use/Uses	GN Division
	Existing Pocket Parks (EPP)			
1	EPP ₁	0.1	Playground	Batugedara
2	EPP ₂	0.1	Playground	Mihindugama
3	EPP ₃	0.1	Playground	New Town
4	EPP ₄	0.1	Playground	Muwagama
	Sub Total	0.4		
	Existing Mini Parks (EMP)			
5	EPP ₁	0.3	Redeveloped	Rathnapura Town West
6	EPP ₂	0.4	Redeveloped	Rathnapura Town North
7	EPP ₃	0.6	Batugedara Playground	Batugedara
8	EPP ₄	0.3	Mihindugama Playground	Mihinduga, Godigamuwa
9	EPP ₅	0.3	Mahawela Ground	Mihindugama
10	EPP ₆	0.3	Godigamuwa Ground	Mihindugama
11	EPP ₇	0.2	Suriyan Ground	Meehitiya
12	EPP ₈	0.7		Meehitiya
13	EPP ₉	0.3		Weralupa, Kospelavinna
14	EPP ₁₀	0.2	Hidellana Kanda Ground	New Town
15	EPP ₁₁	0.5	Kudugalwatta Ground	Rathnapura Town North, Rathnapura Town, Godigamuwa
	Sub Total	3.6		
	Existing Local Parks (ELP)			
16	EPP ₁	1.8	Seewalee Playground	Rathnapura Town North
17	EPP ₂	2.9	Mudduwa Playground	Mudduwa East
	Total	4.7		

Table No: 6.5.2 : Existing Parks & Playground – 2018

According to the Urban Development Authority's standards, a minimum extent of 1.4 hectares per 1000 population must be allocated for common open space while preparing the development plan. Census statistic records indicate that the population within Ratnapura Municipal Council Area in 2011 was 49,083. According to the development plan's data analysis, it has predicted that the population by 2030 as 64,340. Accordingly, a minimum extent of 85.6 hectares has to be allocated as common open spaces by 2030. (Refer annexure 15)

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Active Recreational Spaces

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Active Recreational Spaces

- **STRATEGY 4.1**
Lakes and Ponds
 1. Construction of a Water Retention Lake at Weralupa water retention area
 2. Construction of a pond at Nagahamuttettuwa Premises
- **STRATEGY 4.2**
Play Grounds and Children's Parks to be redeveloped
 1. Redevelopment of Monarawila Ground
 2. Redevelopment of Mudduwa Ground
 3. Redevelopment of Seevali Ground
 4. Construction of Weralupa Ground
 5. Redevelopment of Children's Park at New Town
 6. Construction of Children's Park near Weralupa Ground
- **STRATEGY 4.3**
Aqua Base Theme Parks
 1. Construction of Aqua Base Theme Park near the Weralupa Ground Premises
- **STRATEGY 4.4**
Wetland Parks
 1. Construction of Wetland Park at Lenthadiya Premises
- **STRATEGY 4.5**
Urban Pocket Parks
 1. Renovate and redevelop the YMBA premises as a green public space
 2. Development of Nanamaladola Reserve as a urban pocket park
 3. Development of Nalanda Ellawala Urban Park
- **STRATEGY 4.6**
Forests and Urban Forests
 1. Development of Pompakele Urban Forest and Angamma Forest Reserve to facilitate bio-diversity investigation for school children and researchers
 2. Redevelopment of the natural swimming pool at Pompakelaya
- **STRATEGY 4.7**
Linear Parks
 1. One of the four main rivers called "Kalu Ganga" flows through the limits of Ratnapura Municipal Council. This plan proposed to develop the 66ft. Reservation area of the river as linear park under the concept of linear parks aiming to conserve the area as flood detention and it is suitable to create a walkway on the reservation.

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Spaces Plan

Active Recreational Spaces

2. One of the tributary of Kalu Ganga called "Way Ganga" also flows through this urban limits and the suitable places of the 15ft reservation of that is also suggested to develop under the concept of linear parks.
3. Katugasela Stream reservation and Canal reservations are also suggested to develop as walkways.
4. It is suggested to develop walkways around the proposed Weralupa water Retention Lake and Nagahamuttettuwa pond.

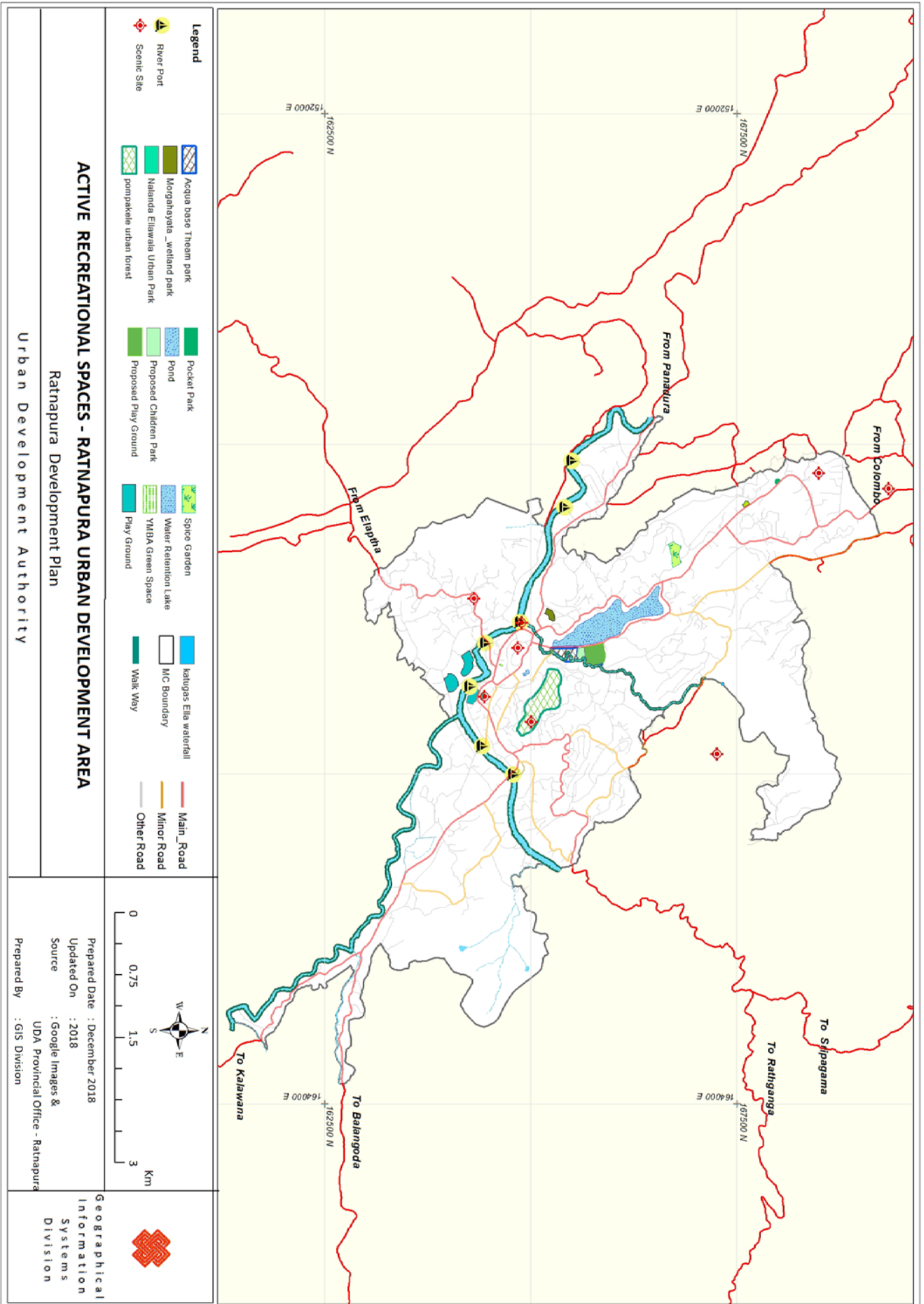
PROPOSED PUBLIC OUTDOOR RECREATION SPACE PLAN – 2030 (RATHNAPURA MC AREA)

No	Type of Parks	Extent (ha)
1	Pocket Parks (PPP)	0.2
2	Mini Parks (PMP)	1.4
3	Linear Parks (PLi.P)	76.4
4	Forest Park (PFP)	20.9
	Sub Total	98.9
5	Existing PORS	8.7
	Grand Total	107.6

Table No: 6.5.3 :
Proposed PORS for 2030

No	Park Category	Extent	Permitted Uses
1	Pocket Park	Less than 0.2 ha (0.5 acre)	<ul style="list-style-type: none"> • Scattered play spaces • Rest areas • Garden patches
2	Mini Park	0.2 –1.0ha (0.5- 2.5 A)	<ul style="list-style-type: none"> • Children's play area • Small grassed playground • Linear woodland park • Rest garden
3	Linear Park	Depend on the existing river/ Oya/Ela/Road/railway reservations	<ul style="list-style-type: none"> • Walking • Jogging • Cycling • Nature trails
4	Forest Park	Depend on the forest type	<ul style="list-style-type: none"> • Information Center • Nature trails • Canopy walkways • Walkways • Camping (Limited activities) • Research

Table No: 6.5.4 : Public Outdoor Recreational Space Plan – Permitted Activities



Map No. 6.5.9 : Active Recreational Spaces

Passive Recreational Spaces Ratnapura MC Area

- **STRATEGY 4.8**
Public Library

The existing libraries are located at the old town center and new town. Nonetheless the use of old town library does not compatible to that place and the space is not enough for the demand since it is the major library which has larger catchment in and around Ratnapura. It is suggested to shift the location of it and construct a new library with more space within a calm and quite environment.

- a. Facilitate to the library at New Town with proper landscape
- b. Proposed Library at Museum Premises, Ratnapura

- **STRATEGY 4.9**
Cinema Halls

- a. Jothi - Bandaranayake Mw (seating capacity - 200-250)
- b. Lakshmi - Kudugalwatta - (seating capacity - 200-250)
- c. Imperial - at Telecom - (seating capacity - 200-250)

- **STRATEGY 4.10**
Theaters and Art Galleries

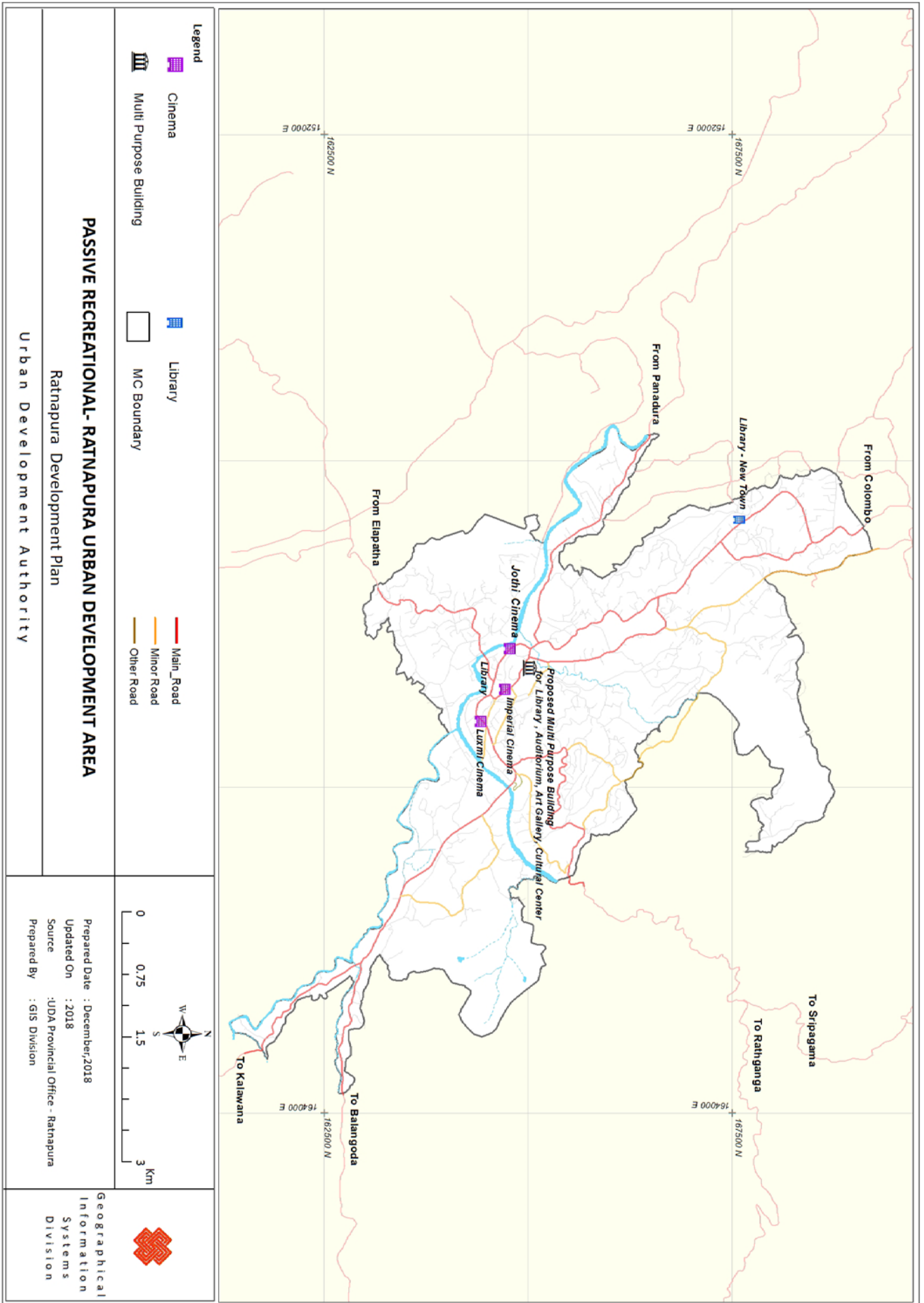
The existing city hall at Municipal Council building is used for exhibition of stage drama. Nearly 12000 school children studying within the heart of the city and 10% of it needs to use this space occasionally. Nonetheless the use of it does not compatible to that place and the space is not enough for the demand of school children at least. It is suggested to construct a new theater with seating 750 - 1000 seating capacity, close to the museum premises with an art gallery.

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Environment
Sustainable Strategies

Public Open
Spaces Plan

Passive Recreational Spaces



Map No. 6.5.10 : Passive Recreational Spaces

6.6. Culture and Heritage Management Strategies

6.6.1. Heritage Areas

Archeological sites, Cultural Sites & Religious places

While religious places, Archaeological buildings & sites also in Rathnapura Urban area must be conserved.

I. Maha Saman Dewalaya

Sabaragamuwa Maha Saman Dewalaya is the main religious place out of the four Saman Dewala places (religious place) located in four directions which has orientated from Sri Padaya (Adam's Peak). It is acted as a hotspot in Ratnapura due to the higher number of devotees which comes to the Dewalaya on daily basis. It can be recognized that the amount of devotees getting increased on two seasons specifically. Esala Perahera season and the Adam's peak pilgrimage season which is starting from December full moon day to May full moon day are those seasons. Thus, The Saman Dewalaya is archeological and cultural important place for Ratnapura.

II. Ehalepola Mansion

The place that Ehalepola Adhikaram used to live is known as the Ehalepola Walavva (Ehalepola Mansion) and has been developed as a museum later on. It was opened for the public on 13th May 1988. It has exhibition rooms which contain prehistoric archaeological inventions, natural heritage, geological, anthropological, zoological artifacts and models related to the Sabaragamuwa Province.

III. The Dutch Fort

The Portuguese had originally constructed a fort at Ratnapura in 1620 however was later captured and destroyed by Kirti Sri Raja Singha. By 1658 the Dutch had taken control over all the areas previously controlled by the Portuguese. The Dutch initially used the site of the Portuguese fort but subsequently built a new fort on a hill in the middle of the town. It is recognized that the design of the fort is similar to the fort at Kalutara. Nonetheless, the Dutch Fort of Ratnapura is a valued asset in Ratnapura which has to protect for the future.

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Culture and Heritage
 Management Strategies

Cultural Festivals
 (Saman Dewalaya Perahera)

Archeological
 Conservation Areas

6.6.2. Cultural Festivals (Saman Dewalaya Perahera)

The Maha Saman Devalaya Esala Perahera originates from the Sabaragamuwa district in Sri Lanka. Its purpose interweaves history, tradition and heritage that are unique to the island. Every year in September, the town of Ratnapura and the Devalaya lights up in festivities as the Maha Saman Devala Perahera parades through the streets while locals and tourists alike flock to see this sacred marvel that has been in practice for centuries.



Figure No. 6.6.1 : Saman Dewala Perahera
 Captured by : Fowzan Faws, 2016

6.6.3 Archeological Conservation Areas

Place	GND
Maha Saman Dewalaya	Dewalegawa
Ehelepola Walawwa	Ratnapura Town
Ehelepola Harem	Ratnapura Town
Dutch Fort	Ratnapura Town
Police Station Building	Ratnapura Town
Wey's Memorial Hall (Library)	Ratnapura Town
Survey Department Building (Old)	Ratnapura Town
St. Paul's Cathedral	Ratnapura Town
Ganegoda Wiharaya	Thiriwanaketiya
Jayasumanarama Maha Wiharaya	Thiriwanaketiya
Gallen Wiharaya	Weralupa

Table No: 6.5.1 :
 Archeological Conservation Area

Culture and Heritage Management Strategy

Cultural heritage management is about striking a balance between developing the tourism industry, generate revenue while still conserving the physical integrity of sites, promoting and celebrating their educational, historic and cultural values.

According to UNESCO, heritage is our legacy and cultural identity that we pass on to the next generation. Tangible features, such as monuments, groups of building, and both historic and natural sites, are considered as part of our heritage by UNESCO. However intangible features, such as oral traditions, folk music and dances also make up our cultural heritage.

Concisely, Ratnapura culture has based on God Sumana Saman, Saman Dewalaya and Gem Industry. The heritage of it has based on the Ehelepola era and colonial era. It is grasped in a nutshell that Ratnapura has a strong culture and heritage base which is yet to be adored through the urban development. Thus, a preservation of the culture and heritage while converting the value of the historical and cultural background to the upliftment of people who live in the town is the culture and heritage management strategy of Ratnapura Development Plan.



Figure No. 6.6.2 : Culture & Heritage Management Strategy

Concerning the vision of 2030, culture and heritage management strategy will facilitate to achieve the goals of "Create Ratnapura, 'A livable City' for the local community" and "Create Ratnapura, An attractive Destination for Visitors in Sri Lanka. Those will be achieved through the objectives of facilitating to attract 100,000 tourists for boosting the gem related eco-tourism and creating a vibrant city space with gem industry related economic opportunities to the local community.

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Culture and Heritage Management Strategies

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Culture and Heritage Management Strategies

- **STRATEGY 01**
Character Preservation

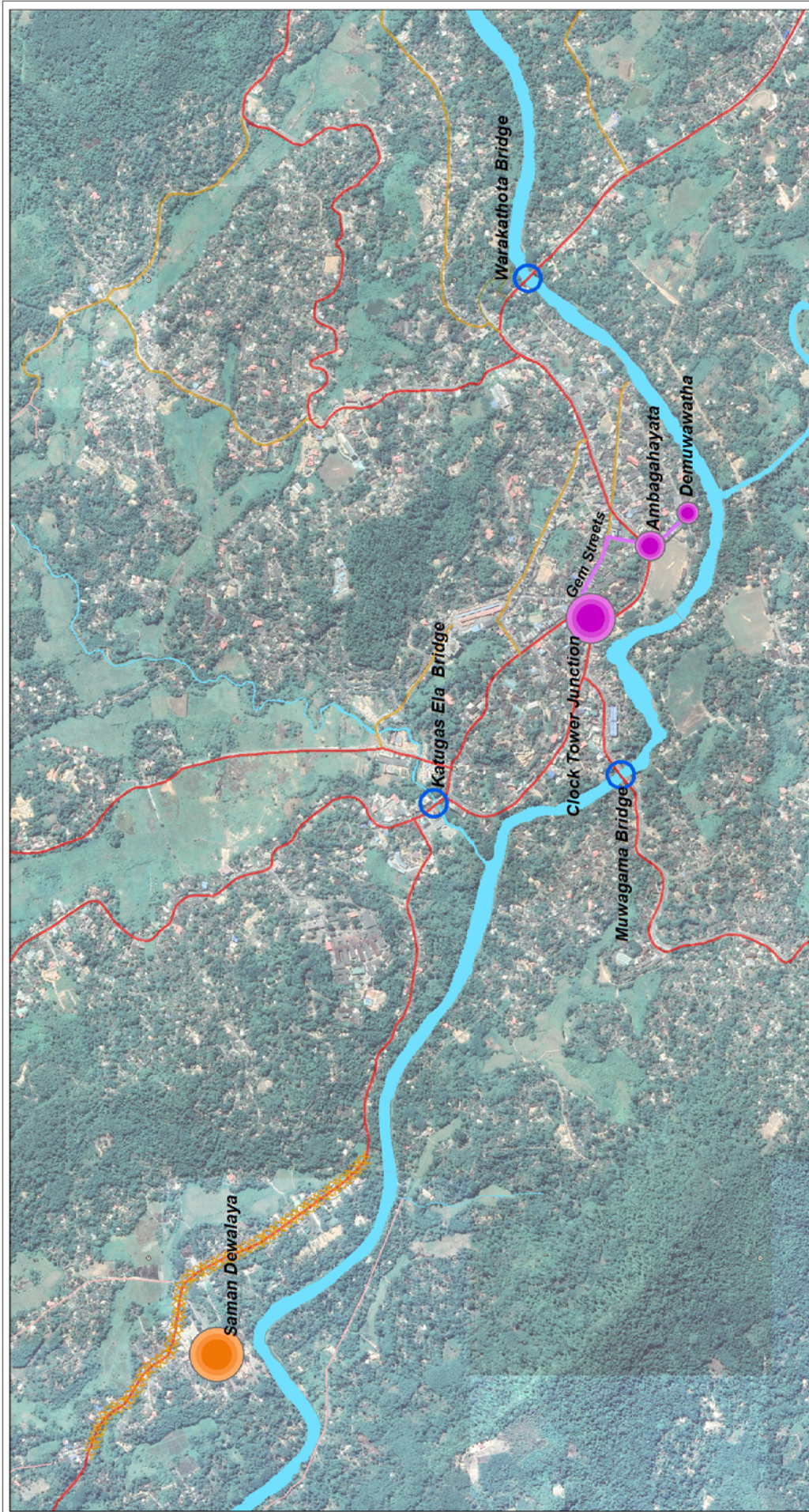
Saman Dewalaya area and Gem Streets have their own special character which has a historical value. Thus, it is needed to recognized, protected and enhanced while providing for the economic, physical and social wellbeing of the communities within the town.

- **STRATEGY 1.1**
Character Preservation of Gem Streets

1. Redevelopment of Main Street, Shaviya Mawatha and Demuwawatha Streets as Gem Streets and facilitate those streets with relevant streetscape with gem identity

- **STRATEGY 1.2**
Character Preservation of surrounding area of Saman Dewalaya

1. Redevelopment 500m distance along the Panadura road in each side from Saman Dewalaya with necessary guidelines to the buildings through zoning plan
2. Redevelopment of Panadura road from Saman Dewalaya to Kotambegawa as a Perahera Streets and facilitate it with relevant streetscape with Dewalaya identity
3. Construction of a Helabojunhala (refreshmet facilities) with adequate parking facility.



<p>Legend</p> <ul style="list-style-type: none">  Gem Character Preservation  Samn Dewalaya Character Preservation  Main_Road  Minor Road 	<p style="text-align: center;">CHARACTER PRESERVATION - RATNAPURA URBAN AREA</p> <p style="text-align: center;">Ratnapura Development Plan</p> <p style="text-align: center;">Urban Development Authority</p>	<p style="text-align: center;">Geographical Information Systems Division</p>

Map No. 6.6.1 : Character Preservation

Chapter 06 The Plan

Culture and Heritage Management Strategies

- **STRATEGY 02**
Conservation

Conserving urban heritage – historical buildings, festivals, art forms, dance, music and lot more fall under conservation. Nonetheless, effective conservation of heritage resources helps in revitalizing local economy and bringing about the sense of identity, pride and belonging to the residents.

- **STRATEGY 2.1**

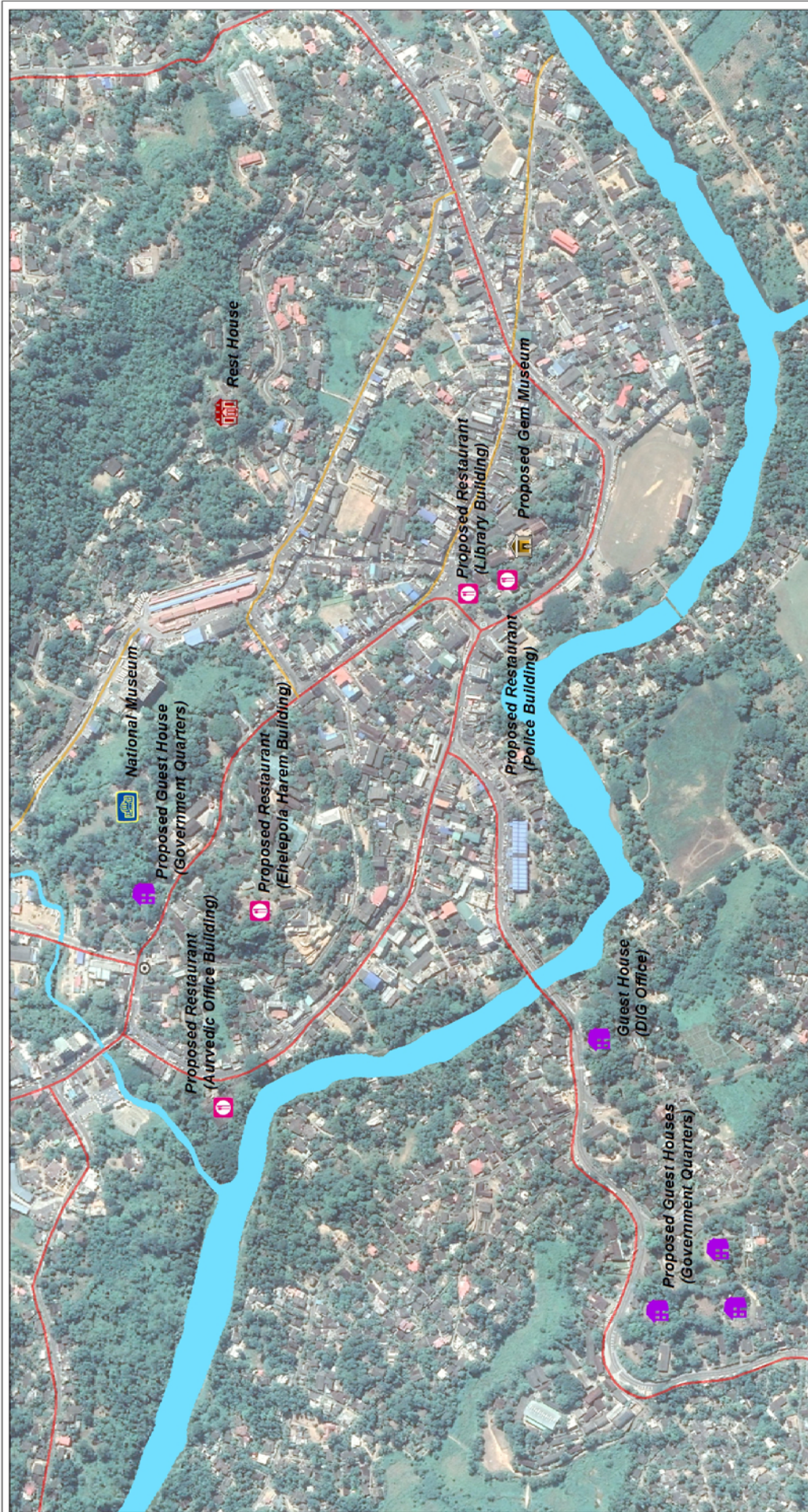
Conservation of cultural, historical and archeological sites according to the archeological policies & regulations. (List has been attached to the annexures)

- **STRATEGY 03**
Adaptive Reuse

Ratnapura has around 15 number of historical buildings which is able to reuse for the purpose other than it was designed. Typically, it is closely related to historic preservation and conservation around cities with rich history.

- **STRATEGY 3.1**
Adaptive Reuse of the Identified Historic Buildings

1. Renovation of Dutch Fort and change use as the National Gem Museum with conference halls and auction facilities
2. Renovation of Library building and change use as a restaurant
3. Renovation of Police buildings and change use as a restaurant
4. Renovation of Ayurweda office building and change use as a restaurant
5. Renovation of Health Director's Bungalow as a guest house
6. Renovation of DIG office building at Muwagama and change use as a guest house
7. Renovation of District Judge's Bungalow and change use as a guest house
8. Renovation of Former Chief Minister's Bungalow and change use as a guest house
9. Renovation of District Engineer's bungalow and change use as a guest house
10. Renovation of Ehelepola Harem and change use as a restaurant.



 <p>Geographical Information Systems Division</p>	  <p>0 0.75 1.5 3 Km</p>	<p>HISTORICAL BUILDINGS - ADAPTIVE REUSE RATNAPURA URBAN DEVELOPMENT AREA</p> <p>Urban Development Authority</p>
<p>Prepared Date : December, 2018 Updated On : 2018 Source : Archeological Department, Google Images & Ratnapura Provincial Office - UDA Prepared By : GIS Division</p>		<p>Ratnapura Development Plan</p>
<p>Legend</p> <ul style="list-style-type: none">  Guest House  Restaurant  Rest House  Gem Museum  National Museum  Water Body  Main Road  Minor Road 		

Map No. 6.6.2 : Historic Buildings – Adaptive Reuse

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6.7. Implementation Strategy

6.7.1. Strategic Action Projects

Short Term Projects

NO:	PROJECT	LOCATION	RESPONSIBLE INTUITION (OPERATION)	RESPONSIBLE INTUITION (MAINTENANCE)
1.	Luxmi Cinema Complex commercial project	Luxmi Cinema Hall premises	Ratnapura Municipal Council	Ratnapura Municipal Council
2.	Pompakele Urban Forest Development Project	Ratnapura Town	Urban Development Authority	Ratnapura Municipal Council
3.	River Port Construction Project - Phase 1	Existing Children's Park space behind the Seevali ground Land near hanging bridge close to Saman Dewalaya	Urban Development Authority	Ratnapura Municipal Council
4.	Church Road Development Project	Ratnapura Town	Urban Development Authority	Ratnapura Municipal Council
5.	Public Fair Redevelopment Project	Ratnapura Town	Urban Development Authority	Ratnapura Municipal Council
6.	Alleyway Improvement Project	Ratnapura Town	Urban Development Authority	Ratnapura Municipal Council
7.	Nagahamuttettuwa Development Project	Ratnapura Town	Urban Development Authority	Urban Development Authority
8.	Mudduwa Ground Redevelopment Project	Ratnapura Town	Ratnapura Municipal Council	Ratnapura Municipal Council
9.	Seewali Ground Redevelopment Project	Ratnapura Town	Ratnapura Municipal Council	Ratnapura Municipal Council
10.	Children's Park Redevelopment Project - New Town	Ratnapura New Town	Ratnapura Municipal Council	Ratnapura Municipal Council
11.	Nanamaladola Urban Park Development Project	Ratnapura New Town	Urban Development Authority	Ratnapura Municipal Council
12.	Nalanda Ellawala Urban Park Redevelopment Project	Ratnapura Town	Urban Development Authority	Ratnapura Municipal Council

13.	Redevelopment of the road from Batugedara Junction to Karapincha Road	Ratnapura Town	Road Development Authority	Road Development Authority
14.	Redevelopment of the road from Senanayaka Mawatha to Kudugalwatta Proposed Port	Ratnapura Town	Road Development Authority	Road Development Authority
15.	Redevelopment of the road from Hospital to New Town (Saman Pedesa)	Saman Pedesa	Road Development Authority	Road Development Authority
16.	River edge road Improvement Project	Ratnapura Town	Road Development Authority	Road Development Authority
17.	Outer Circular Road Improvement Project	Ratnapura Town	Road Development Authority	Road Development Authority
18.	Inner Circular road Improvement Project	Ratnapura Town	Road Development Authority	Road Development Authority
19.	Redevelopment of the Bridge near Seewali Ground	Ratnapura Town	Road Development Authority	Road Development Authority
20.	Construction of underpass near Indika Hotel at Old Town	Ratnapura Town	Road Development Authority	Road Development Authority
21.	Construction of overpass at Pulingupitiya Junction	Pulingupitiya	Road Development Authority	Road Development Authority
22.	Development of the Main Bus Terminal at the Old Town	Ratnapura Town	Urban Development Authority, Road Development Authority	Urban Development Authority, Road Development Authority
23.	Development of Overflow Parking Place for Main Bus Terminal at OLD Town	Ratnapura Town	Urban Development Authority, Road Development Authority	Urban Development Authority, Road Development Authority
24.	New Bus Terminal Construction Project – New Town	Ratnapura New Town	Urban Development Authority, Road Development Authority	Urban Development Authority, Road Development Authority
25.	Sanitary Facilities Development Project of old city center	Ratnapura Town	Urban Development Authority, Road Development Authority	Urban Development Authority, Ratnapura Municipal Council
26.	Ketandola Water Supply Project	Kanadola	Water Supply & Drainage Board	Water Supply & Drainage Board

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Mid Term Projects

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NO	PROJECT	LOCATION	RESPONSIBLE INTUITION (OPERATION)	RESPONSIBLE INTUITION (MAINTENANCE)
1.	Gem Square Development Project	Ratnapura Town	Urban Development Authority, Gem & Jewellery Authority	Gem & Jewellery Authority
2.	Weralupa Water Retention Lake	Weralupa	Urban Development Authority	Ratnapura Municipal Council
3.	Weralupa Ground Construction Project	Weralupa	Urban Development Authority	Ratnapura Municipal Council
4.	Wetland Park Construction Project	Lenthadiya	Urban Development Authority	Ratnapura Municipal Council
5.	River Port Construction Project - Phase 2 & Phase 3	Near Warakathota Bridge, Kudugalwatta, Ayurweda Junction and Kotambegawa	Urban Development Authority, Ratnapura Municipal Council	Ratnapura Municipal Council
6.	Scenic Site Development Project	Ratnapura Town & New Town	Urban Development Authority, Ratnapura Municipal Council	Ratnapura Municipal Council
7.	Helipad Construction Project - Phase 1	<ul style="list-style-type: none"> Former District Judge's Bungalow Upper Club Premises 	Urban Development Authority, Ratnapura Municipal Council	Ratnapura Municipal Council
8.	Disaster Aid Center Construction Project	Ratnapura Town	Urban Development Authority, Ratnapura Municipal Council	Ratnapura Municipal Council, District Secretariat Division
9.	Monarawila Ground Redevelopment Project	Ratnapura Town	Ratnapura Municipal Council	Ratnapura Municipal Council
10.	YMBA premises Redevelopment Project	Ratnapura Town	Urban Development Authority, Archaeological Department	Archaeological Department
11.	Galkaduwatta Middle Income Housing Project	Ratnapura New Town	Urban Development Authority	Urban Development Authority
12.	Muwagama Middle Income Housing Project	Ratnapura Town	Urban Development Authority	District Secretariat Division
13.	Rental Basis Apartment Complex for Officers in New Town	Ratnapura New Town	Urban Development Authority	Urban Development Authority
14.	Kahangama Low Income Housing Project	Kahangama	Urban Development Authority	District Secretariat Division

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15.	<i>Bypass road Construction Project</i>	<i>Ratnapura Town</i>	<i>Road Development Authority</i>	<i>Road Development Authority</i>
16.	<i>Godawela Road Redevelopment Project</i>	<i>Ratnapura Town</i>	<i>Road Development Authority</i>	<i>Road Development Authority</i>
17.	<i>Balibathgoda bridge Construction Project</i>	<i>Ratnapura Town</i>	<i>Road Development Authority</i>	<i>Road Development Authority</i>
18.	<i>Kudugalwatta bridge Construction Project</i>	<i>Ratnapura Town</i>	<i>Road Development Authority</i>	<i>Road Development Authority</i>
19.	<i>Redevelopment of the existing bridges at entering points to the city</i>	<i>Ratnapura Town</i>	<i>Road Development Authority</i>	<i>Road Development Authority</i>
20.	<i>Parking facilities Development Project</i>	<i>Ratnapura Town</i>	<i>Urban Development Authority, Ratnapura Municipal Council</i>	<i>Ratnapura Municipal Council</i>
21.	<i>Helabojunhala with Parking Space Construction Project</i>	<i>Saman Devalaya Premises</i>	<i>Urban Development Authority, Ratnapura Municipal Council</i>	<i>Ratnapura Municipal Council</i>

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NO	PROJECT	LOCATION	RESPONSIBLE INTUITION (OPERATION)	RESPONSIBLE INTUITION (MAINTENANCE)
1.	Ruwanpura Expressway Construction Project	Colombo - Pelmadulla	Road Development Authority	Road Development Authority
2.	Gem Streets Redevelopment Project	Main Street, Shaviya Mawatha and Demu-wawatha Streets	Gem & Jewellery Authority, Urban Development Authority	Gem & Jewellery Authority, Urban Development Authority
3.	Jewellery Street Development Project	Frank Hettiarachchi Mawatha	Gem & Jewellery Authority, Urban Development Authority	Gem & Jewellery Authority, Urban Development Authority
4.	Dutch Fort Renovation Project	National Gem Museum	Urban Development Authority, Archaeological Department	Urban Development Authority, Archaeological Department
5.	Historic Building Renovation Project as Guest Houses	<ul style="list-style-type: none"> • DIG office building at Muwagama • District Judge's Bungalow at Muwagama • Former Chief Minister's Bungalow at Muwagama • District Engineer's bungalow at Muwagama 	Urban Development Authority, Archaeological Department	Urban Development Authority, Archaeological Department
6.	Historic Building Renovation Project as Restaurants	<ul style="list-style-type: none"> • Police Building at Ratnapura Town • Library Building at Ratnapura Town • Health Director's Bungalow at Ratnapura Town • Ayurveda office building at Ratnapura Town 	Urban Development Authority, Archaeological Department	Urban Development Authority, Archaeological Department
7.	Aqua Base Theme Park Construction Project	Weralupa	Urban Development Authority, Ratnapura Municipal Council	Ratnapura Municipal Council
8.	Gem Tower Construction Project	Post Office Premises, Ratnapura Town	Urban Development Authority	Urban Development Authority
9.	Commercial Complex Project - Polhunuwa Premises	Ratnapura Town	Urban Development Authority	Urban Development Authority

NO	PROJECT	LOCATION	RESPONSIBLE INTUITION (OPERATION)	RESPONSIBLE INTUITION (MAINTENANCE)
10.	Helabojunhala Construction Project	Nagahamuttettuwa Prem-ises	Urban Development Authority	Urban Development Authority
11.	Ehelepola Museum Redevelopment Project	Ratnapura Town	Department of National Museums, Archaeological Department	Department of National Museums, Archaeological Department
12.	Diversion of kalu River to Udawalawe Reservoir	Ratnapura Town	Irrigation Department	Irrigation Department
13	Flood Dike Construction Project		Irrigation Department	Irrigation Department
14.	Helipad Construction Project - Phase 2	<ul style="list-style-type: none"> • Seevali Collage Ground Premises • District Judge's Bungalow (AthapattuWalawwa) Premises • Proposed Thiriwanaketiya School Premises 	Urban Development Authority , Ratnapura Municipal Council	Urban Development Au-thority , Ratnapura Mu-nicipal Council
15.	Overhead Bridge Construction Project	Ratnapura Town	Road Development Authority	Road Development Authority
16.	Children's Park Construction Project	Weralupa	Urban Development Authority , Ratnapura Municipal Council	Urban Development Authority , Ratnapura Municipal Council
17.	New Administration Complex Construction Project	Ratnapura New Town	Urban Development Authority	Urban Development Au-thority
18.	Multi-Purpose Building Construction Project for Recreational Facilities	Museum Premises	Urban Development Authority	Urban Development Authority
19.	Mahawalawatta High Income Housing Project	Mahawalawatta	Urban Development Authority	Urban Development Au-thority
20	Thiriwanaketiya Proposed School Project	Thiriwanaketiya	Education Department	Education Department
21.	New Town Proposed School Project	New Town	Education Department	Education Department
22.	Mahawalawatta Proposed School Project	Mahawalawatta	Education Department	Education Department

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Priority Projects

6.7.2. Priority Projects

Priority projects have been identified through a project matrix. Prioritization given to the Vision but the separate matrix systems considered social acceptability and economic viability. To end with, 27 projects were selected as the priority projects among 70 projects and project briefs were written for those projects.

- Jewellery Street Development Project in Frank Hettiarachchi Mawatha.
- Dutch Fort Renovation Project as the National Gem Museum.
- Library Building Renovation Project as a Restaurant.
- Historic Building Renovation Project as Guest Houses.
- Ayurveda Office Building Renovation Project as a Restaurant.
- Ehelepola Harem Building Renovation Project as a Restaurant
- Weralupa Recreational Cluster Development Project.
- Pompakele Urban Forest Development Project.
- Nalanda Ellawala Urban Park Redevelopment Project.
- Gem Square Development Project at Food City Premises.
- Gem Streets Development Project in Main Street, Shaviya Mawatha and Demuwawatha Road.
- Gem Tower Construction Project at Post Office Premises.
- YMBA premises Renovation and Redevelopment Project as a green public space.
- Ehelepola Museum Premises Redevelopment Project as the Central Park of the City.
- Nagahamuttettuwa Premises Development Project with Helabojunhala and Pond.
- Scenic Site Development Project.
- Multi-Purpose Building Construction Project at Museum Premises for Library, Auditorium and Art Gallery.
- Church Road Development Project as a vehicular free shopping street.
- Alleyway Improvement Project in Old Town.
- Disaster Aid Center Construction Project with helipad at Upper Club Premises.
- Helipad Construction Project at Former District Judge's Bungalow Premises.
- Main Bus Terminal Development Project at the Old Town.
- Godawela Road Redevelopment Project.
- Optional Road Redevelopment Project from Hospital to New Town (Saman Pedesa).
- Parking Facilities Development Project at the identified places in Old Town.
- Sanitary Facilities Development Project of Old Town.
- Administration Complex Project.

Jewellery Street Development Project Under Ratnapura Town Development Plan

01

- Sector - Urban Development
- Project Name - Jewellery Street Development Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura Town	Old Town

- Rational of the Project

The Economy of Ratnapura is based on the Gem Industry and it has owned a bigger place in Ratnapura economy since pre-colonial period. It is in the 5th place of the export economy in the Sri Lanka according to the statistics of Central Bank Latest reports. 3% of contribution is given to the national economy by Gem industry at present. But gem related jewellery industry hasn't been famous yet

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in Ratnapura. At present, 25 % of the Ratnapura people engaged with gem trading industry and there is a high possibility for them to gain the benefit of value added gem industry. It is expected that forecasted tourism population will create more direct and indirect economic opportunities through jewellery industry.

Moreover, Gem Culture has been established already in Ratnapura with the places and processes but for generating more income, it is needed to have an identical, attractive streetscape which facilitate to the jewellery market and gem culture. For that, Jewellery Street Development Project in Frank Hettiarachchi Mawatha will serve the purpose.

- Following benefits are taken from the project
 - Specialized street for jewellery industry
 - Identical streetscape with unique architectural value
 - An arcade structure for supporting commercial activities
 - Luxurious boutique spaces for jewellery
 - Customized products, spaces for local entrepreneurs to exhibit their businesses
 - Identical sign boards for national and international business people
 - Suitable paving and lighting system for the selected area
 - Drainage System
- Financing Plan

<i>Components</i>	<i>(Rs. Mn)</i>
<i>Jewellery Streets Development Project</i>	<i>200 Mnm</i>

- Project Operation & Maintenance

The lands which are located beside the Frank Hettiarachchi Mawatha belongs to the private parties. Thus, a separate committee will be appointed with the collaboration of those private parties and Municipal Council, Ratnapura. Most of the premises are rented out by lawyers in this road and those lawyers will be relocated in the proposed lawyers complex in New Town before the project take place. Facilitating to create the physical environment in compliance with Jewellery Street Development on Frank Hettiarachchi Mawatha will be done by Municipal Council, Ratnapura with the consultation of Urban Development Authority. The land owners will be advised to convert their spaces to be Jewellery shops later on. The developed Jewellery Street will be maintained by private parties.

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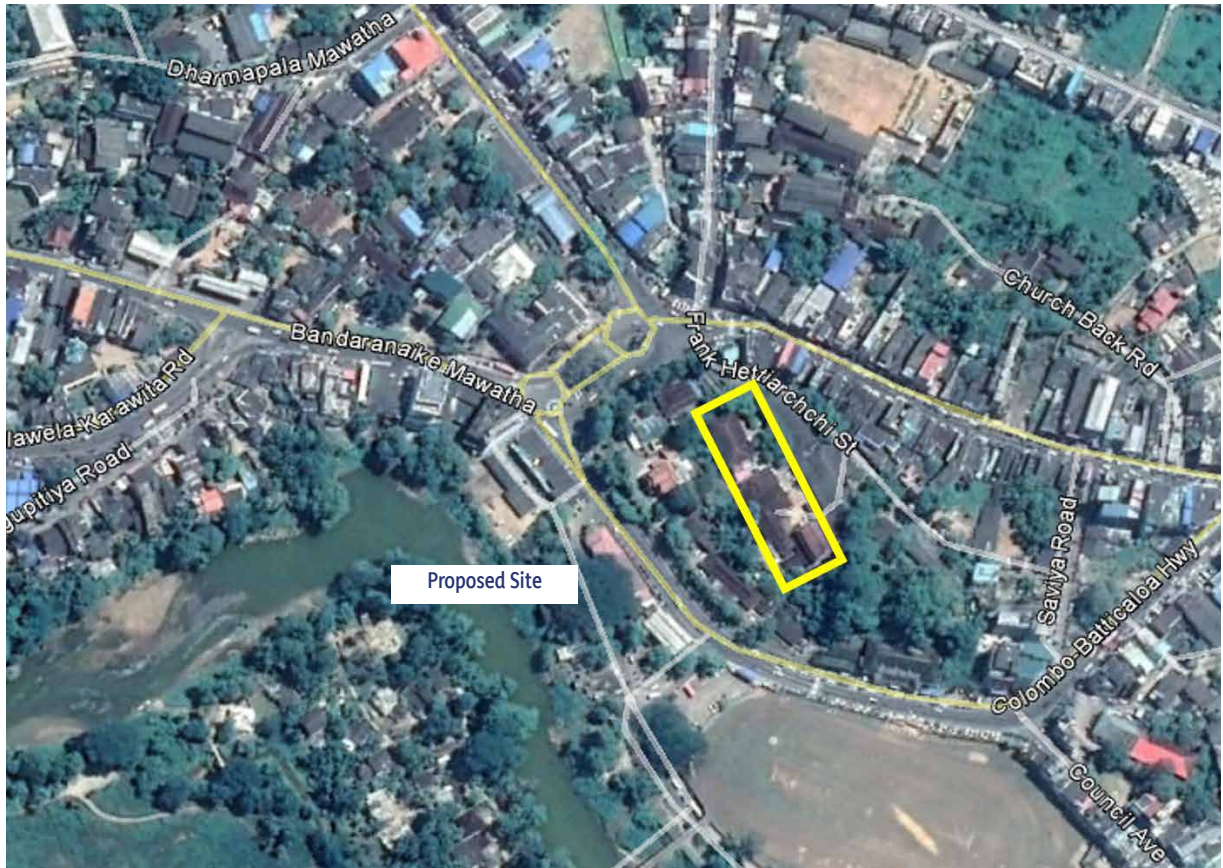
Implementation
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Priority Projects

Dutch Fort Renovation Project Under Ratnapura Town Development Plan

02

- Sector - Urban Development
- Project Name - Dutch Fort Renovation Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Town center

- The Total Area of Land required for the project – 1 Acre
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Dutch fort is a significant place in Ratnapura town since colonial era. The fort is located at the small hilltop in the town center. It was used for the security purposes and administration activities before and is it is used as the official space of Gem and Jewellery Authority at present. Since this space is surrounded by gem related activities and located in a safe location for disasters, it has identified as the most suitable place for establishing the National Gem Museum. Thus, renovating this space and converting it into a gem museum is needed for preserving the historic and cultural heritage of the town in order to serve the economic development of it.

The expected Gem Museum project will offer its guests an insight into the structure and stratification of various crystals and gem stones. It will hold some unique gem stones and rare specimens of precious stones; while also featuring some old equipment used to source the gem stones and create handmade jewelry. Thus, it is expected that the project will help boosting the Ratnapura tourism and more than 5,000 people will indirectly benefit from this project. Also, it will address the young generations of Ratnapura so they know about their cultural roots and to raise awareness about heritage among all different ages in Ratnapura.

- Following benefits are taken from the project

- Exhibition galleries
- Conference hall
- Auction Center
- Small retail outlet
- Customized products, spaces for local entrepreneurs to exhibit their businesses
- Parking facilities

- Financing Plan

Components	(Rs. Mn)
Gem Museum Project	100 Mnm

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Priority Projects

- Project Operation & Maintenance

Police Department activities will be relocated into the allocated Police Department premises at New Town. Also, Gem and Jewellery Department will be given a space within the renovated Dutch Fort. Joint venture method will be applied for this project among Urban Development Authority, Archeological Department and Gem and Jewellery Authority. The renovation will be done by Urban Development Authority and consultation, designing and project management parts will be included for it apart from the renovation. Maintenance will be done by Gem and Jewellery Authority.

Library Building Renovation Project Under Ratnapura Town Development Plan

03

- Sector - Urban Development
- Project Name - Library Building Renovation Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Town center

- The Total Area of Land required for the project – 40 Perch
- The cost of land if it is being perched – Not Applicable

Chapter 06 The Plan

Implementation Strategy

Priority Projects

- Rational of the Project

Library building was known as a Wey's Memorial Hall in colonial era and it is located at the heart of the city which is close to Dutch Fort Entrance. Presently the building used for the library. Since this space is surrounded by gem related activities and located in a safe location for disasters, it has identified as the most suitable place for establishing a restaurant for targeting the gem businessmen and the people who loves to have a luxury experience in a gem related environment. Thus, renovating this space and converting it into a restaurant is needed for preserving the historic and cultural heritage of the town in order to serve the economic development of it.

It is expected that the project will help boosting the Ratnapura tourism and the people who comes to the Gem Museum will be facilitated through this project.

- Following benefits are taken from the project

- Refreshment Facilities
- Sanitary facilities

- Financing Plan

Components	(Rs. Mn)
Library Building Renovation Project	50 Mn

- Project Operation & Maintenance

The existing library will be relocated within the Multi-Purpose building which is going to be constructed at Ehelepola Museum Premises. It will be included to the building together with an Auditorium and Art Gallery. Joint venture method will be applied for this project between Urban Development Authority and Archeological Department. The renovation will be done by Urban Development Authority complies with the conditions of Archeological Department. Maintenance will be done by Urban Development Authority later on.

Historic Building Renovation Project as Guest Houses Under Ratnapura Town Development Plan

04

- Sector - Urban Development
- Project Name -Historic Building Renovation Project as Guest Houses
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Muwagama

- The Total Area of Land required for the project – 4 Acres
- The cost of land if it is being perched – Not Applicable

Chapter 06 The Plan

Implementation Strategy

Priority Projects

- Rational of the Project

Ratnapura has insufficient accommodation facilities for the local and foreign tourists and businessmen by now. Two third of the existing guest houses are not having enough space and Ratnapura identity together with nice views. Those who having such views are located bit far from the city center cause to avoiding Ratnapura as a place to accommodate by foreign and local tourists.

These particular buildings are constructed according to the British architecture and now used as government quarters and offices like DIG office. All are located in small hilltops which have calm and quite environment with nice views together of Kalu river and Sri padaya. Moreover, these places are being situated close to the town center and have easy access through Muwagama Road. One of the proposed helipad location is going to be established here and it will be a plus point on grabbing the tourism attraction indirectly simultaneously. Thus, renovating these buildings and converting those into guest houses are needed for preserving the architecture character and boosting the city economy while serving the need of accommodating guests of Ratnapura.

It is expected that the people who comes to the Gem related activities and tourism activities will be facilitated through this project.

- Following benefits are taken from the project

- Accommodation Facilities
- Refreshment Facilities
- Entertainment Facilities
- Sanitary Facilities
- Parking facilities
- Scenic Site Development

- Financing Plan

Components	(Rs. Mn)
Historic Building Renovation Project as Guest Houses	200Mn

- Project Operation & Maintenance

Relocation will be needed in prior to this project and DIG office will be relocated at the given location to the Police department by Urban Development Authority. Other quarters will be relocated within the UDA lands in New Town.

Joint venture method will be applied for this project between Urban Development Authority and Archeological Department. The renovation and maintenance will be done by Urban Development Authority complies with the conditions of archeological department.

Chapter 06 The Plan

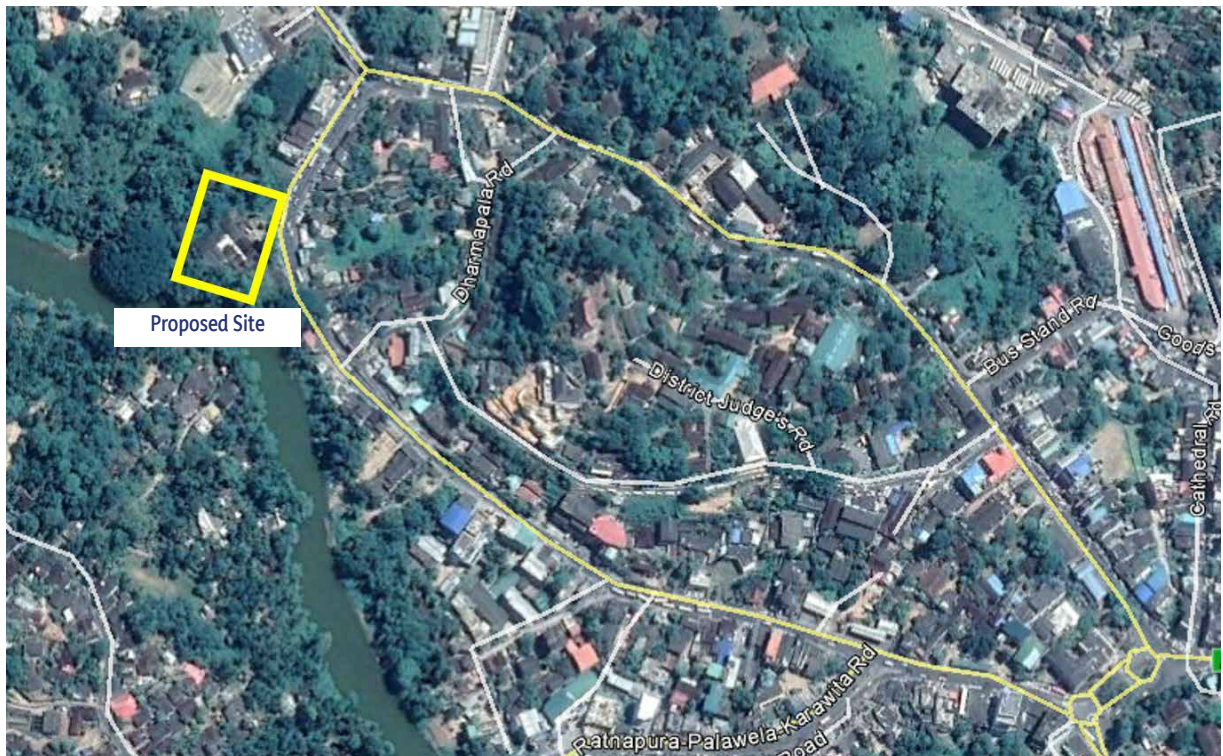
Implementation
Strategy

Priority Projects

Ayurveda Office Building Renovation Project Under Ratnapura Town Development Plan

05

- Sector- Urban Development
- Project Name - Ayurveda Office Building Renovation Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Town center

- The Total Area of Land required for the project – 1 Acre
- The cost of land if it is being perched – Not Applicable
- Rational of the Project

Ratnapura has insufficient refreshment facilities for the local and foreign tourists and businessmen by now. Two third of the existing restaurants are not having enough space and Ratnapura identity together with nice views. Those who having such views are located bit far from the city center cause to avoiding Ratnapura as a place to get refreshed by foreign and local tourists.

This particular building is constructed according to the British architecture and now it is being used for the Ayurveda Office in Ratnapura. The place is located at the bank of Kalu river with a nice view together and it had been used as a pub in British era according to the folk stories. This place is located at the edge of town center and has easy access from anywhere of the town. Also, the proposed river port at this place will grab the tourist attraction indirectly. Thus, renovating this space and converting it into a restaurant is needed for preserving the architecture character and boosting the city economy through serving the need of refreshing guests of Ratnapura.

It is expected that the project will help boosting the Ratnapura tourism and the people who comes to the Gem related activities will be facilitated through this project

- Following benefits are taken from the project

- Refreshment Facilities
- Entertainment Facilities
- Sanitary Facilities
- Parking facilities
- Scenic site development

- Financing Plan

Components	(Rs. Mn)
Ayurveda Office Building Renovation Project	50 Mn

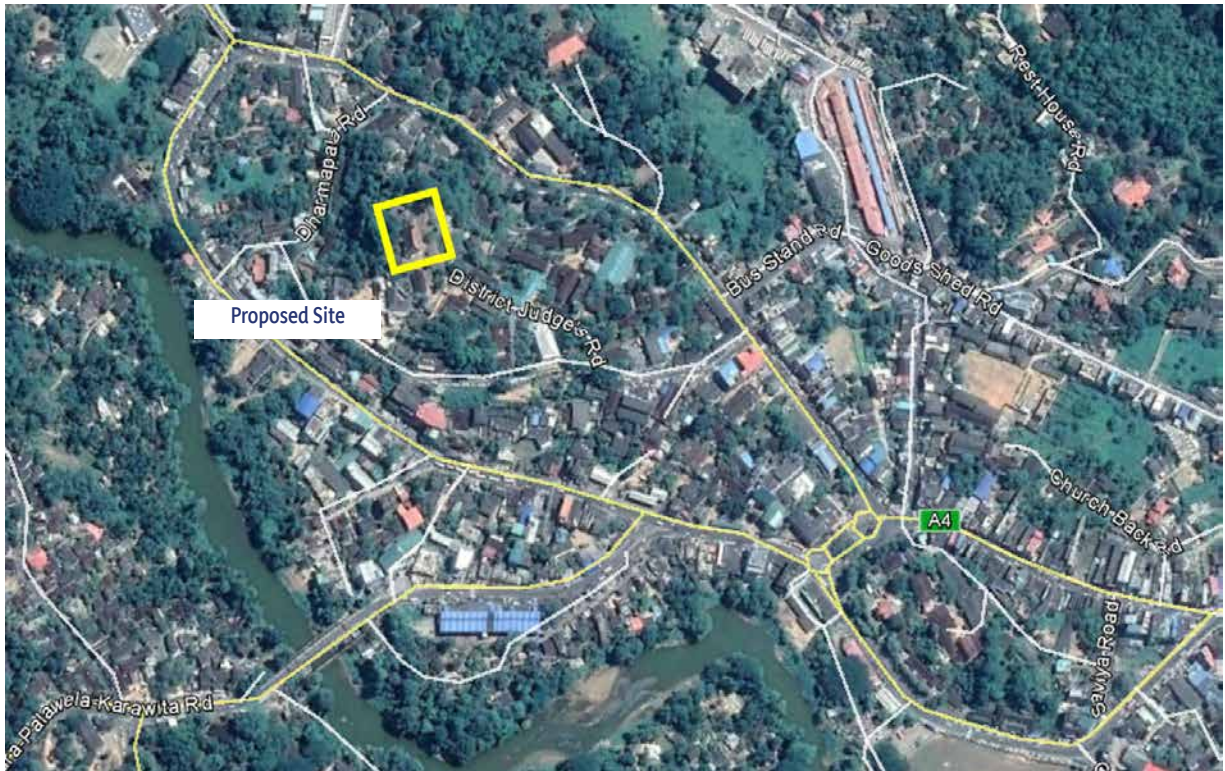
- Project Operation & Maintenance

The activities of the Ayurveda office will be relocated to the proposed administration complex at the New Town and joint venture method will be applied for this project between Urban Development Authority and Archeological Department. The renovation will be done by Urban Development Authority complies with the conditions of Archeological Department and 6% of the fund will be taking for consultation, designing and project management of the given project. Maintenance will be done by Urban Development Authority later on.

Ehelepola Harem Building Renovation Project Under Ratnapura Town Development Plan

06

- Sector - Urban Development
- Project Name - Ehelepola Harem Building Renovation Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Town Center

- The Total Area of Land required for the project – 80 Perch
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Ehelepola Harem building is one of those hidden wealth to the town due to the appearance and location. The building itself has characters in three different eras called Ehelepola, Dutch and British. The building had been constructed according to the Kandian architecture at first and used as a harem in Ehelepola era according to the historical reports. Later on, the Dutch and British architecture was mixed in it and used as a bungalow of British rulers. Moreover, it is located at the small hilltop which is in the heart of the city and has a unique scenic view. Presently, it is being used by Archeological Department as the district office.

Since this space is located in an attractive place with free of disasters and the historical and cultural importance in it, it has identified as one of the most suitable place for establishing mini conference hall with necessary facilities for targeting the local and foreign business people. Since, Ratnapura acts as a provincial capital, there is an emerging need of having conferences among smaller groups. Thus, catering the targeted crowd with necessary facilities is proposed with this project. Also, one of the proposed helipad location is going to be established adjacent to this premises and it will be act as a heli-longue in disaster free seasons, adding a plus point to the above necessity and the whole project will give a royal experience in a historic environment to the people who comes.

Renovating this space and converting it into a mini conference hall with a restaurant is needed for preserving the historic and cultural heritage of the town in order to serve the economic development of it. The entrance for this space will be given from the "Malrenu Mawatha" and the abandoned labour department premises will be used for the parking space. At the same time, the entrance to the harem from the Ferguson High School direction will be blocked to avoid future issues. Moreover, it is expected that the people who comes to the tourism and recreational purposes will be facilitated through this project.

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Priority Projects

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Priority Projects

- Following benefits are taken from the project
 - Mini conference hall for smaller business groups and public, private institutional meetings
 - Refreshment Facilities
 - Luxury Accommodation facilities
 - Entertainment Facilities
 - Sanitary Facilities
 - Parking facilities
 - Scenic site development

- Financing Plan

<i>Components</i>	<i>(Rs. Mn)</i>
<i>Ehelepola Harem Building Renovation Project</i>	<i>150 Mn</i>

- Project Operation & Maintenance

Archeological office will be shifted to the proposed administration complex at the New Town and joint venture method will be applied for this project between Urban Development Authority and Archeological Department. The renovation and maintenance will be done by Urban Development Authority.

Weralupa Recreational Cluster Development Project Under Ratnapura Town Development Plan

07

- Sector - Urban Development
- Project Name - Weralupa Recreational Cluster Development Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Weralupa

- The Total Area of Land required for the project – 10 Acres
- The cost of land if it is being perched – **Not Applicable**

Chapter 06 The Plan

Implementation Strategy

Priority Projects

- Rational of the Project

Ratnapura is famous for aquatic resource since kingdom era due to the topographic situation in it. Also, 80% of the planning area consist with inland water resources including Kalu River, Wey River, waterfalls and several other streams. Thus, the richness of underground and surface water table has a hidden potential of using it for creating a livable city for 2030. Weralupa Water Retention Lake and Aqua Base Theme Park have been proposed to grab the local and foreign tourism attraction by using the richness of underground and surface water table. It is expected that these projects will re-establish the aquatic culture and create more direct and indirect economic opportunities to the Ratnapura citizens through boosting the tourism industry.

Considering the spatial arrangement of Ratnapura town, five major schools have been located at the heart of the city and about 12,000 of school children studies in those schools. It is around 30% of total no of school children in the schools of planning area. Due to the land scarcity of the town, it is hard to allowing each school having their own playground for the students and children's park for kids. Thus, the proposed Weralupa Ground and Children's Park will solve the suitable land scarcity for these children.

Moreover, the New Town is located around 5 km away from Ratnapura town and these two towns are developing isolated as dual cities by now. There can't be seen any visible link between those other than the A004 road which crossing both towns and there isn't any possibility of a corridor development due to the natural barriers. Thus, creating a visual link through an aquatic recreational area between Ratnapura town and new town is another purpose if this project.

- Proposed Elements

- Water Retention Lake
- Aqua Base Theme Park
- Play Ground
- Children's Park

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Implementation
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Priority Projects

- Following benefits are taken from the project

- Sea Plane Destination
- Jogging tracks
- Walking paths
- Swan boats
- Floating restaurants
- Water base activities
- Refreshment Facilities
- Entertainment Facilities
- Sanitary Facilities
- Parking facilities

- Financing Plan

<i>Components</i>	<i>(Rs. Mn)</i>
<i>Weralupa Recreational Cluster Development Project</i>	<i>1500 Mn</i>

- Project Operation & Maintenance

Land acquisition will be needed in prior due to the selected lands are abundant paddy fields which belongs to the private owners at present. Additionally, Irrigation Department will be consulted during this project. The construction and maintenance will be done by Municipal Council, Ratnapura.

Pompakele Tourism Development Project Under Ratnapura Town Development Plan

- Sector- Urban Development
- Project Name - Pompakele Tourism Development Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Town center

- The Total Area of Land required for the project – 15 Acres
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Ratnapura is located in the central fragile area under the National Physical Plan – 2050. Pompakele Urban forest is one of the precious gift to Ratnapura from nature since it is rare to see a naturally grown urban forest within an urban limit at present. It is kind of a mini rain forest and famous for bird watchers and researchers for years. Currently, the forest itself working as a green lung for the Ratnapura town and rich in bio diversity. Moreover, the attractiveness of tourism in an urban environment depends more on the variety the city has to offer and not based on one individual elements. Pompakele premises has a natural swimming pool to accommodate visitors and the richness of bio diversity within a small premises has a hidden potential of attracting the attention of local and foreign tourists in that scenario. Thus, Pompakele Tourism Development Project has been proposed for use this opportunity to create more direct and indirect economic opportunities to the Ratnapura citizens through boosting the tourism industry.

A large amount of benefits will be taken through this project as follows. Recreation area within a reasonable walking distance, a balanced ecosystem which encourages a healthy environment, academic space for environmental researches, school children and bird watchers, reduce stress and improve physical health, the presence of trees, parks, and green spaces make Ratnapura more enjoyable place to live, work, and play. Moreover, this project will increase the residential property value in surrounded area and create direct and indirect economic opportunities.

- Following benefits are taken from the project

- Swimming Pool development
- Facilitate for Nature Trails
- Observation / Viewing Decks
- Canopy Walks
- Pathway and steps development
- Discussion Space
- Seating Facilities
- Refreshment Facilities
- Sanitary Facilities
- Parking facilities

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Priority Projects

- Financing Plan

<i>Components</i>	<i>(Rs. Mn)</i>
<i>Pompakele Tourism Development Project</i>	<i>100 Mn</i>

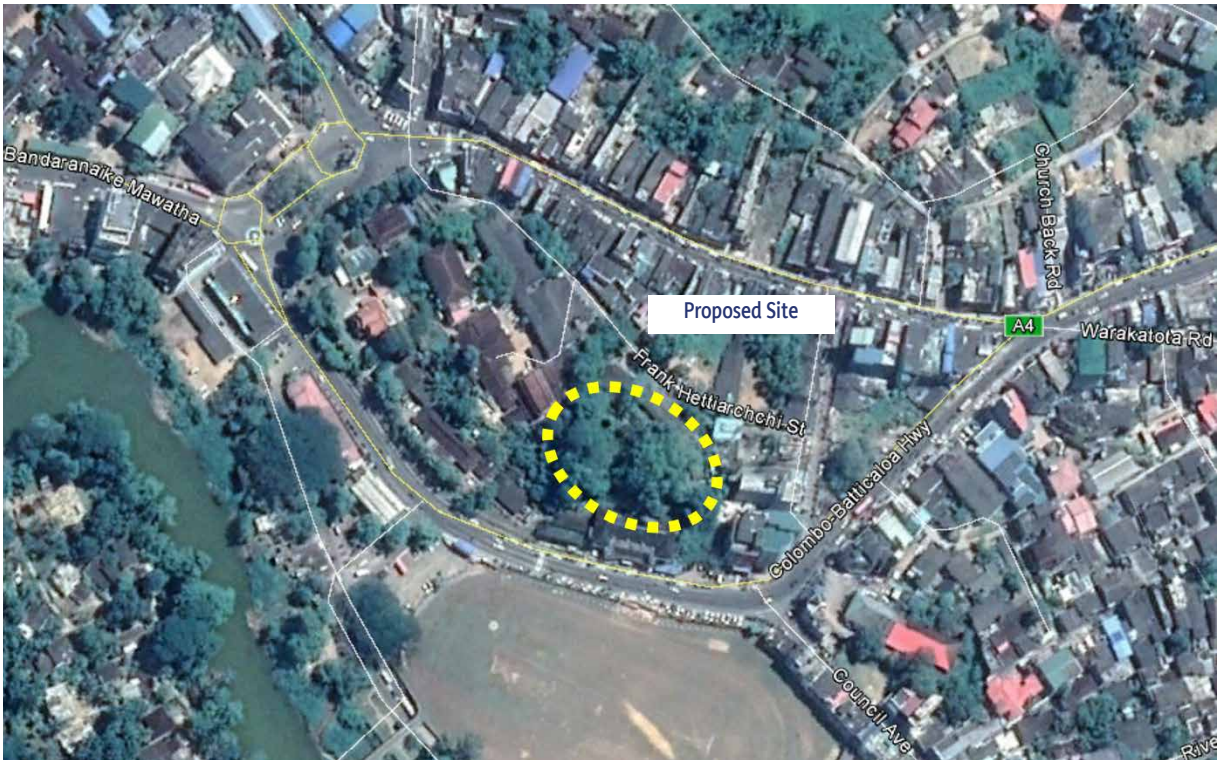
- Project Operation & Maintenance

Joint venture method will be applied for this project between Urban Development Authority and Municipal Council, Ratnapura. Physical development activities will be done by Urban Development Authority and consultation, designing, project management and construction phases will be included for it. Maintenance will be done by Municipal Council, Ratnapura.

Nalanda Ellawala Urban Park Redevelopment Project Under Ratnapura Town Development Plan

09

- Sector - Urban Development
- Project Name - Nalanda Ellawala Urban Park Redevelopment Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura

- The Total Area of Land required for the project – 80 Perch
- The cost of land if it is being perched – Not Applicable

Chapter 06 The Plan

Implementation Strategy

Priority Projects

- Rational of the Project

Ratnapura has insufficient open spaces for the inhabitants and visitors due to haphazard development activities. Nalanda Ellawala Urban Park is an existing park which was established few decades ago. The place was used as a view point of soldiers in colonial period and still it has some evidences regarding that. Since Nalanda Ellawala Urban Park is located at one of the main hilltops within the heart of the city with a nice scenic view, there is a possibility of developing it as an urban space. It is expected that the people who comes to the tourism activities and inhabitant's live styles will be facilitated through this project.

- Following benefits are taken from the project

- Seating Facilities
- Refreshment Facilities
- Sanitary Facilities

- Financing Plan

Components	(Rs. Mn)
Nalanda Ellawala Urban Park Redevelopment Project	70 Mn

- Project Operation & Maintenance

Joint venture method will be applied for this project among Urban Development Authority, Archeological Department and Municipal Council, Ratnapura. The redevelopment will be done by Urban Development Authority complies with the conditions of archeological department. Consultation, designing and project management of the given project will be done by Urban Development Authority. Maintenance will be done by Municipal Council, Ratnapura.

Gem Square Development Project Under Ratnapura Town Development Plan

10

- Sector - Urban Development
- Project Name - Gem Square Development Project
- Project Location - Old Town – Food City Premises, Ratnapura



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura Town	Old Town

- The Total Area of Land required for the project – 40 Perch
- The cost of land if it is being perched – **Not Applicable**

Chapter 06 The Plan

Implementation Strategy

Priority Projects

- Rational of the Project

Ratnapura city has only one major open space area for gem trading and it is Ambagahyata premises. According to the current situation, that existing space is not enough and the city highly requires another space for gem trading. It will attract more local and foreign gem traders by extending the market space. Moreover, Gem Culture has been established already in Ratnapura with the places and processes but for generating more income, it is needed to extend the market space related with Gem culture. For that, Gem Square Development Project at Food City Premises will serve the purpose. This is one of the economic development priorities as convenience to gem industry.

- Following benefits are taken from the project

- Market space for local gem community
- Refreshment places for the businessmen with sanitary facilities
- Gathering spaces
- Rating space for the congested market
- Extended market space

- Financing Plan

<i>Components</i>	<i>(Rs. Mn)</i>
<i>Gem Square Development Project</i>	<i>70 Mn</i>

- Project Operation & Maintenance

This land belongs to the Municipal council, Ratnapura. Thus, the land acquisition will not be needed. Additionally, National Gem & Jewellery Authority will be consulted during this project. The construction will be done by Urban Development Authority and maintenance will be done by Municipal Council, Ratnapura.

Gem Streets Development Project Under Ratnapura Town Development Plan

11

- Sector - Urban Development
- Project Name - Gem Streets Development Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura Town	Town Centre

- Rational of the Project

According to the Development Plan of 2030, it focuses a 7% contribution to the GDP through the Gem industry. Thus, using this base resource to thrive the economy is highly needed and facilitating it through the physical development is required. Gem Culture has been established already in Ratnapura with the

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Priority Projects

places and processes but for generating more income, it is needed to have an identical, attractive streetscape which facilitates to the gem market and gem culture by developing existing streets. These streets are closed to the proposed Gem Square, Gem tower and Jewellery street. For that, Gem Street Development Project in Main Street, Shaviya Mawatha and Demuwawatha Road will serve the purpose of Gem Industry Promotion.

- Following benefits are taken from the project
 - Specialized streets for gem trading
 - Identical streetscapes with sign boards for national and international business people
 - Arcades for boosting commercial activities
 - Suitable paving and lighting for the selected area
 - Suitable seating facilities
 - Sufficient refreshment places
 - Sanitary facilities
 - Luxurious boutique spaces
 - High end local gem shops
 - Customized products, spaces for local entrepreneurs to exhibit their businesses
 - Gem cutting and demonstration spaces (traditional/international)

- Financing Plan

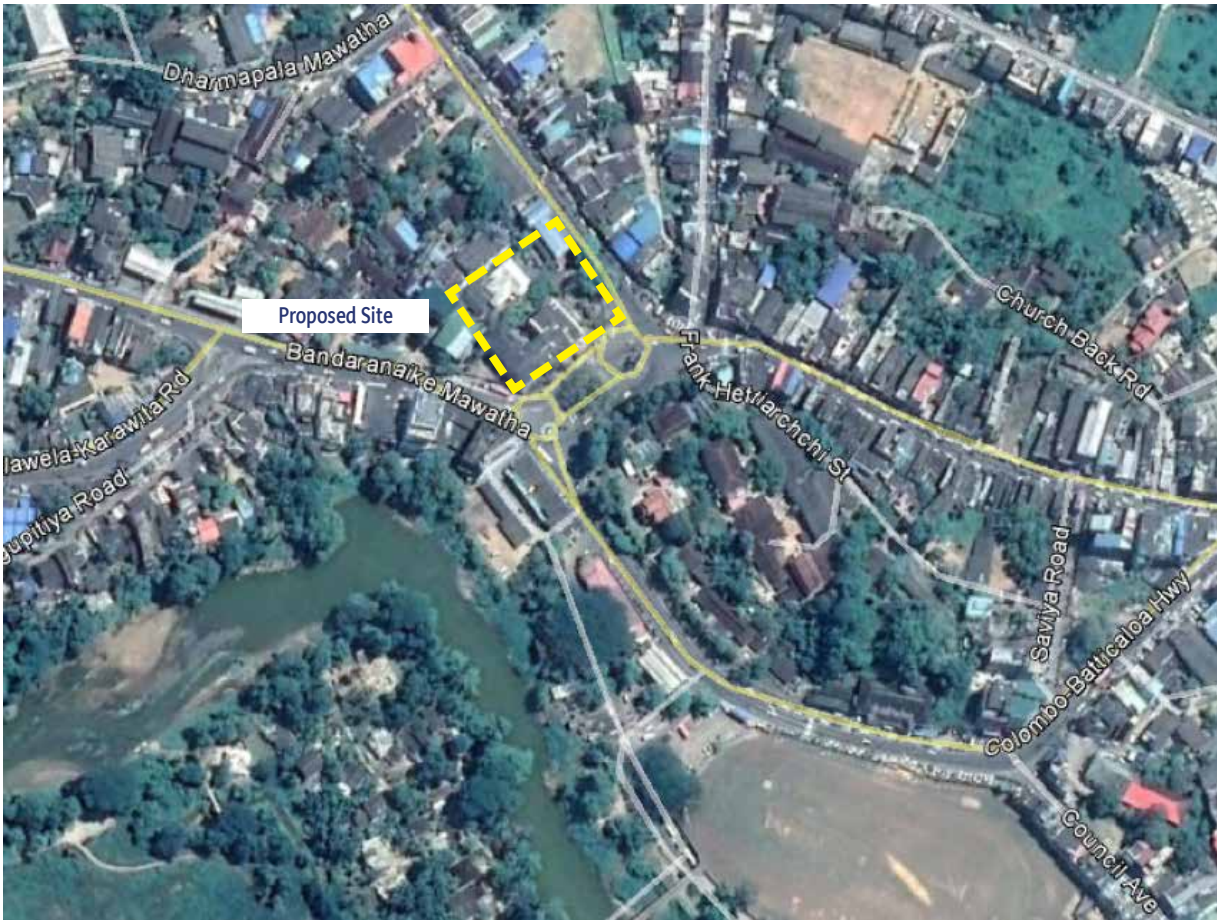
<i>Components</i>	<i>(Rs. Mn)</i>
<i>Gem Streets Development Project</i>	<i>170 Mn</i>

- Project Operation & Maintenance

The construction will be done by Urban Development Authority and National Gem & Jewellery Authority will be consulted during this project. Maintenance will be done by Municipal Council, Ratnapura.

Gem Tower Construction Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - Gem Tower Construction Project
- Project Location - Post Office Premises – Town Center



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Town Center

- The Total Area of Land required for the project – 80 Perches
- The cost of land if it is being perched – Not Applicable

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Implementation Strategy

Priority Projects

- Rational of the Project

The City of Ratnapura is located 100 km away from South east of Colombo and it is the Capital of Sabaragamuwa Province. The Economy of Ratnapura is based on the Gem Industry and it has owned a bigger place in Ratnapura economy since pre-colonial period. The gem culture has been established already in Ratnapura with the places and processes but for generating more income, it is needed to attract more business people and affordable people for luxury items. Thus it is needed to convert this value of gem culture into income generating sources by facilitating more commercial spaces which related with gem culture. Also, Ratnapura will be the trading hub when it gets facilitated with the necessary physical infrastructure for gem trading in a long run.

This Gem Tower will provide a unique identity to the Gem city and sky line of the city will be based on this Gem Tower.

Since this city is located in a valley which is close to the Kalu river, there is an emerging need of making people getting ready for having high-rise experience by 2030. The Gem Tower Construction Project at Post Office Premises will be a 15 story tower with sky view restaurant experience for the Ratnapura people as it will be located at the heart of the city. This tower will be a communication center and a tourist information center. The upper floors of the Gem tower will be an apartment complex. The lower floors will be composed with a police point and the immediate activities of shifted post office. The ground floor will be a parking complex. Thus, the gem tower project is highly needed for the economic development of the town in order to serve the luxury commercial needs together with luxury accommodation facilities. This tower also provides the public sanitary facilities.

- Following benefits are taken from the project

- Refreshment places with sky view experience
- Luxury accommodation facilities for the international and national businessmen
- Gathering spaces
- Luxurious boutique spaces
- High end local gem shops
- Supporting structure for telecommunication purposes

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- Customized products, spaces for local entrepreneurs to exhibit their businesses
- Parking facilities
- Sanitary facilities
- Tourist information center

- Financing Plan

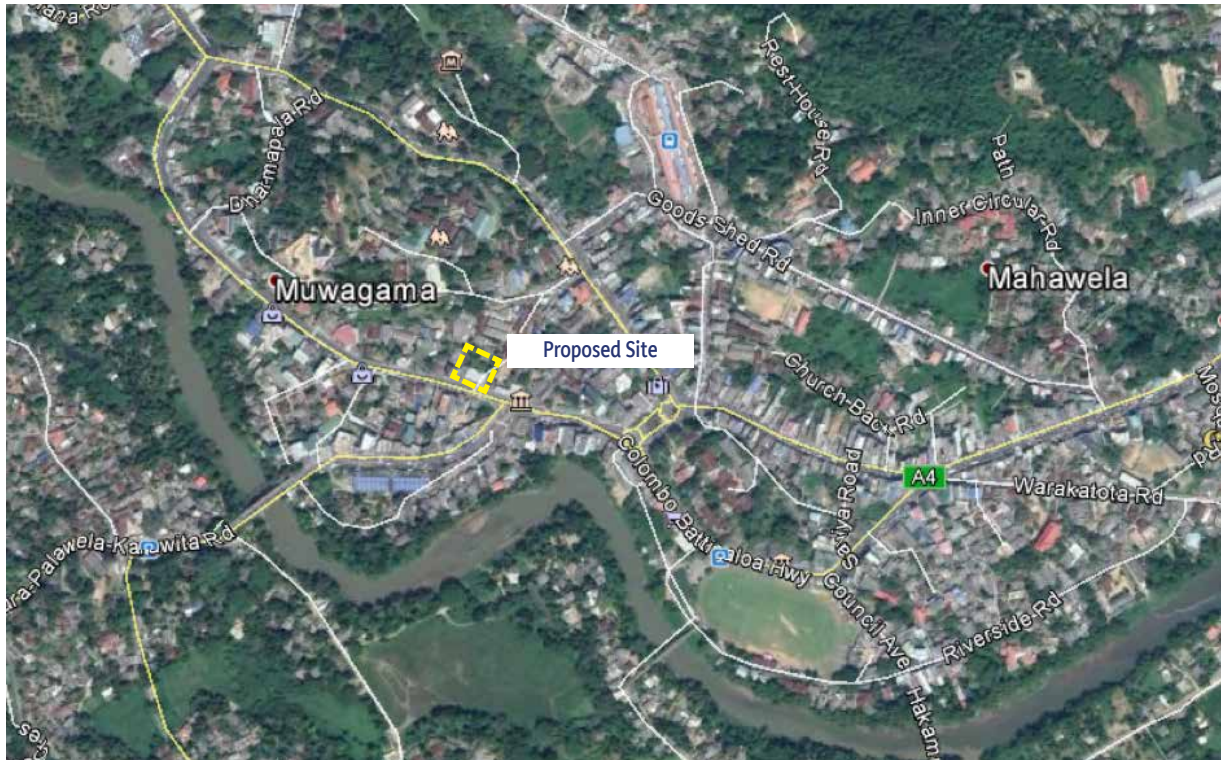
<i>Components</i>	<i>(Rs. Mn)</i>
<i>Gem Tower Construction Project</i>	<i>500 Mn</i>

- Project Operation & Maintenance

Land sharing method will be applied for this project and post office will be shifted to the administration complex which is planned to construct in New Town by UDA to release the land. The construction and maintenance will be done by Urban Development Authority.

YMBA Premises Renovation and Redevelopment Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - YMBA Premises Renovation and Redevelopment Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura Town

- The Total Area of Land required for the project – 50 Perches
- The cost of land if it is being perched – Not Applicable

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Priority Projects

- Rational of the Project

Ratnapura has insufficient green spaces due to built up areas. This is an area of grass and trees which is to be created to provide a breathable space within the urban environment. There is no enough safe space for the school children in nearby schools to wait after school time when they have tuition classes to go. So the main objective of this project is facilitating a green space for the school children as well as the visitors. This green space will be facilitated with sanitary facilities. This free and breathable green space will be preserved through this development project. For that, YMBA Premises Renovation and Redevelopment Project as a green public space will serve the purpose.

- Following benefits are taken from the project

- A breathable green space within the urban environment
- Gathering spaces
- Seating Facilities
- Sanitary Facilities
- Nice scenic view within the urban environment

- Financing Plan

Components	(Rs. Mn)
YMBA Premises Renovation and Redevelopment Project as a green public space	20 Mn

- Project Operation & Maintenance

Joint venture method will be applied for this project among Urban Development Authority and Archaeological Department. The redevelopment and renovation will be done by Urban Development Authority complies with the conditions of Archeological Department. Maintenance will be done by Municipal Council, Ratnapura.

Ehelepola Museum Premises Redevelopment Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - Ehelepola Museum Premises Redevelopment Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura town

- The Total Area of Land required for the project – 5 Acres
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Ratnapura has insufficient open spaces for the inhabitants and visitors due to haphazard development activities. This may be the central park of Ratnapura city with a unique landscape and a calm and quite environment. This urban space will be survived as an undisturbed and unpolluted area through this redevelopment project. According to the Development Plan of 2030, Ratnapura city will be developed to cater the trend of seeking weekend destinations by local tourists. This proposed central park will reduce the urban congestion within Ratnpura city and will give the experience of freedom to the urban dwellers as well as local and foreign tourists. It is expected that the people who comes to the tourism activities and inhabitant's live styles will be facilitated through this project.

The proposed Nagahamuttettuwa Premises Development Project is located adjacent to this central park and these to development projects will be mutually supportive to each other and will look like a joint premises. The proposed multi-purpose building at museum premises with an auditorium, a library and an art gallery will provide an economical and aesthetic value to this Central Park.

- Following benefits are taken from the project
 - A breathable environment within the city
 - A nice scenic view
 - Seating facilities
 - Conservation of retention land
 - Recreational activities
 - Urban Habitat for Wildlife

- Financing Plan

Components	(Rs. Mn)
Ehelepola Museum Premises Redevelopment Project	70 Mn

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Priority Projects

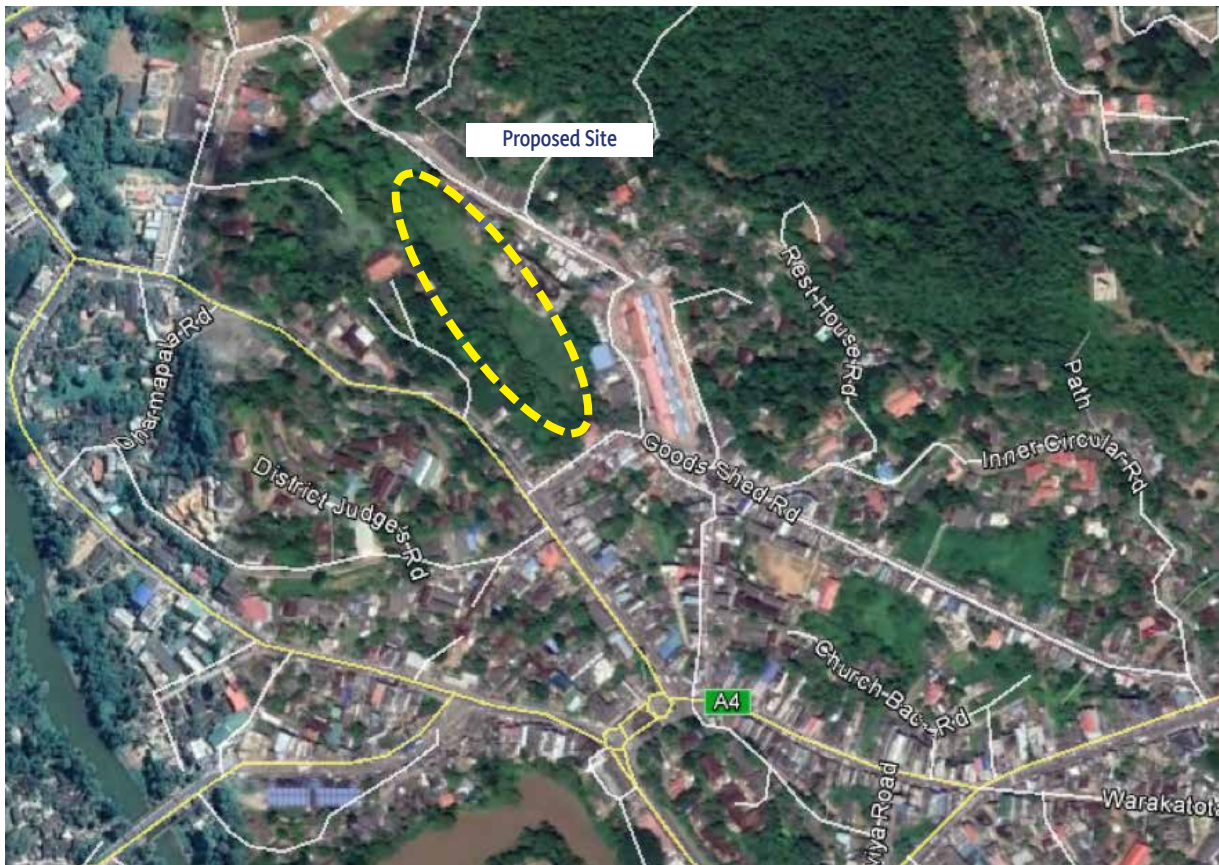
- Project Operation & Maintenance

Land acquisition will not be needed in prior due to the selected land belongs to the National Museum Department. Additionally, Archeological Department will be consulted during this project. Joint venture method will be applied for this project among Department of National Museums and Archaeological Department. Maintenance will be done by National Museum Department.

Nagahamuttettuwa Premises Development Project Under Ratnapura Town Development Plan

15

- Sector - Urban Development
- Project Name - Nagahamuttettuwa Premises Development Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura

- The Total Area of Land required for the project – 3 Acres
- The cost of land if it is being perched – Not Applicable

Chapter 06 The Plan

Implementation Strategy

Priority Projects

- Rational of the Project

Ratnapura has insufficient open spaces for the inhabitants and visitors due to haphazard development activities. Since Nagahamuttettuwa Premises is located adjacent to the Ehelepola Museum Premises with proposed Central park within the heart of the city with a nice scenic view, there is a possibility of developing it as an urban space. This Nagahamuttettuwa Premises will be a Central Park with a pond. It is also composed with a Helabojunhala and it will enhance the unique food culture of Ratnapura. The refreshment facilities, jogging paths, seating facilities and the nice scenic view will be attracted more and more local and foreign tourists to the city.

It is expected that the people who comes for the tourism purpose and the people who live in this town area will be facilitated through this project.

- Following benefits are taken from the project

- Seating Facilities
- Refreshment Facilities (Helabojunhala)
- Well-arranged jogging paths
- Sanitary Facilities
- Recreational Facilities

- Financing Plan

<i>Components</i>	<i>(Rs. Mn)</i>
<i>Nagahamuttettuwa Premises Development Project</i>	<i>70 Mn</i>

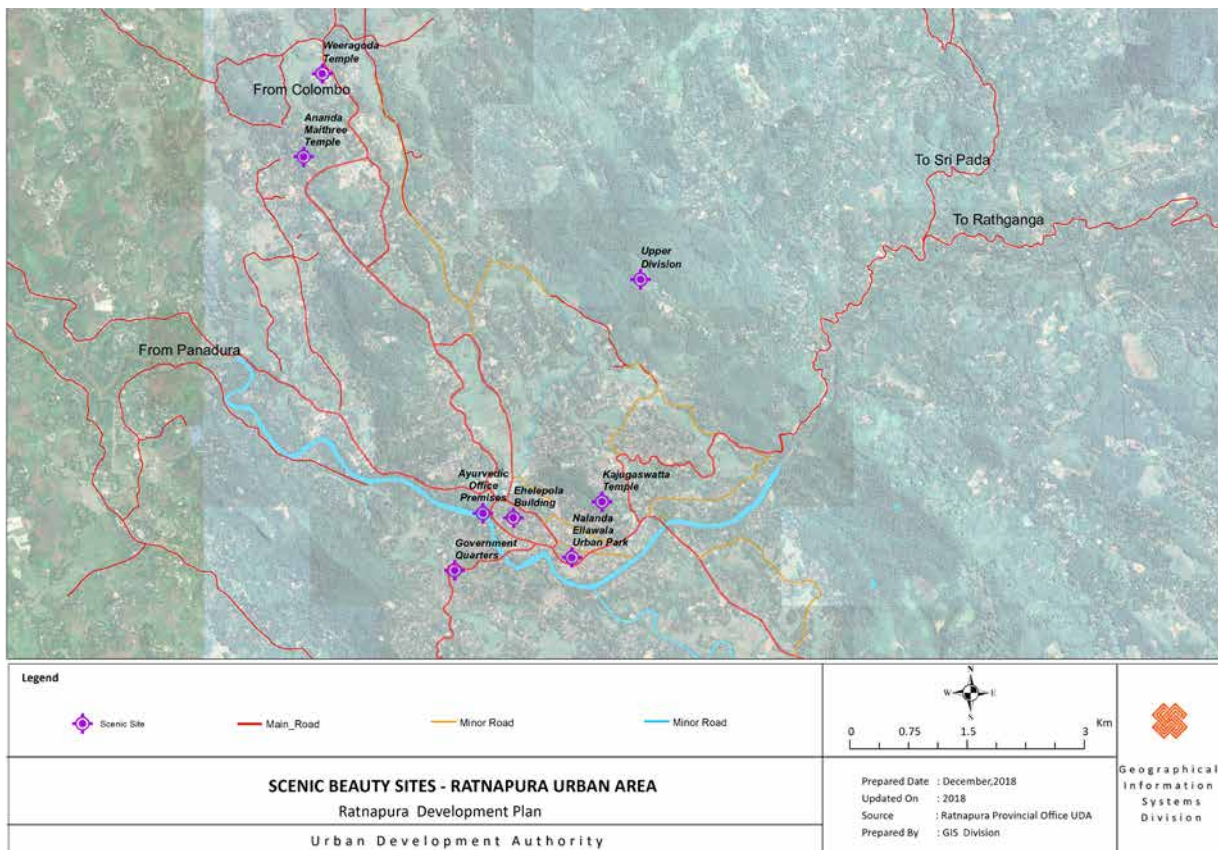
- Project Operation & Maintenance

Land acquisition will be needed in prior due to the selected lands are abundant paddy fields which belongs to the private owners at present. The construction will be done by Urban Development Authority and maintenance will be done by Urban Development Authority.

Scenic Site Development Project Under Ratnapura Town Development Plan

16

- Sector - Urban Development
- Project Name - Scenic Site Development Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura Town and New Town

- The Total Area of Land required for the project – 1 Acre
- The cost of land if it is being perched – Not Applicable

Chapter 06 The Plan

Implementation Strategy

Priority Projects

- Rational of the Project

According to the Development Plan of 2030, it has been expected 100,000 of local and foreign tourists per year for Ratnapura city. It can be achieved this goal by developing famous scenic sites as well as hidden and unknown beautiful scenic sites in Ratnapura.

Most of the scenic sites are located on small hill tops in the city area and have nice scenic views of Sri Padaya, Kalu River and Ratnapura city. It can be attracted more and more local and foreign tourists to Ratnapura city by awareing people about these nice scenic sites through this development project. Most of these scenic sites have unique and identical landscape structure. Thus, it can be added an economical value and an environmental value to these scenic sites and can be increased the land value of the surrounded lands of the scenic sites. It is expected that the people who comes to the tourism activities will be facilitated through this project.

- Following benefits are taken from the project

- Recreational activities
- Religious activities
- Photographic activities
- Nice scenic view within the urban environment

- Project Inputs

<i>Name of Scenic Site</i>	<i>Main Attractions or Activities</i>	<i>Development of Promotion</i>	<i>Relevant Institution</i>
<i>Ananda Maithree Temple premises</i>	<i>Hilltop</i>	<i>Preservation of scenic areas and view sheds</i>	<i>Ananda Maithree temple, UDA, RMC</i>
<i>Kajugaswatta Temple Premises</i>	<i>Giant Buddha Statue, Hilltop</i>	<i>Preservation of scenic areas and view sheds</i>	<i>Kajugaswatta temple, UDA, RMC</i>
<i>Weeragoda Temple Premises</i>	<i>Giant Buddha Statue</i>	<i>Preservation of scenic areas and view sheds</i>	<i>Weeragoda temple, UDA, RMC</i>
<i>Nalanda Ellawala Urban Park</i>	<i>Urban Scenery</i>	<i>Additional artwork and landscaped gardens could contribute to the scenic quality of the site.</i>	<i>UDA, RMC</i>
<i>Upper Division of Mahawalawatta</i>	<i>Hilltop</i>	<i>Additional artwork and landscaped gardens could contribute to the scenic quality of the site.</i>	<i>Plantation Company, UDA</i>

- Financing Plan

<i>Components</i>	<i>(Rs. Mn)</i>
<i>Scenic Site Development Project</i>	<i>Mn. 70</i>

- Project Operation & Maintenance

Joint venture or Tri-party agreement will be applied for this project among Urban Development Authority, Municipal Council, Ratnapura and relevant institution according to the situation. Designing and project management of the given project will be done by Urban Development Authority whereas construction will be done by Municipal Council, Ratnapura. Municipal Council, Ratnapura or relevant institution will be responsible for the maintenance work.

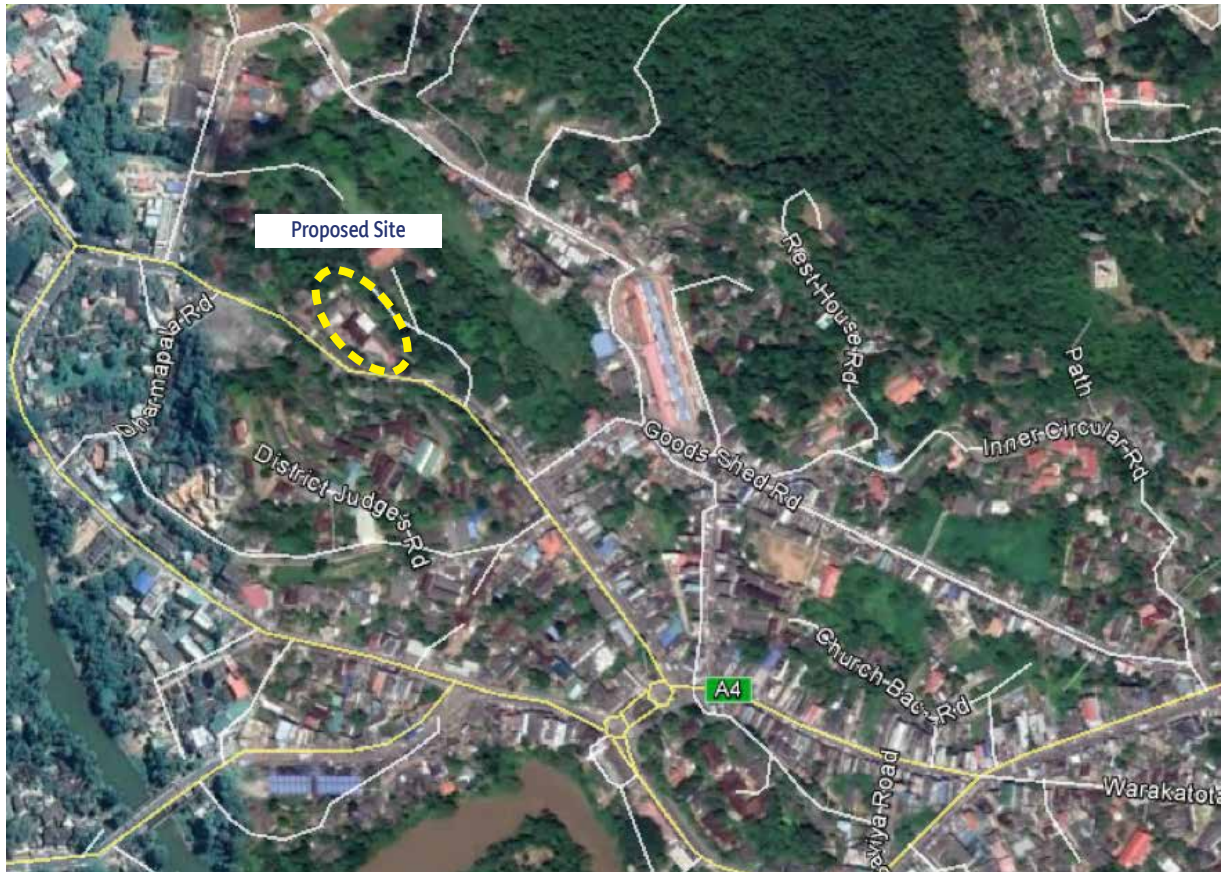
Chapter 06 The Plan

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Multi-Purpose Building Construction Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - Multi-Purpose Building Construction Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Museum Premises

- The Total Area of Land required for the project – 1 Acre
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Even though Ratnapura is the provincial capital of Sabaragamuwa Province, it has no auditorium with sufficient seating facilities. There are about 12000 of school children in the schools within the city center and the existing auditorium located within the Town Hall, fails to provide enough seating facilities simultaneously for a large amount of school children. According to the Development Plan of 2030, it is required an art gallery in Ratnapura city to hold art exhibitions and it may helpful to make a livable community. Since the existing public library building in the city is to be converted in to a restaurant, the library has to be shifted in to a suitable environment as suggested by the development plan. Thus, it is better to gather all these three needs in one premises by building up a multi-purpose building, as there is no sufficient space to build up these three buildings in three different spaces within the city and as it is required a calm and quite environment for all three needs.

It is highly required a larger parking area within the city and this project will provide parking facilities. As this multi-purpose building is closed to the proposed Central Park in Ehelepola Museum Premises and Nagahamuttettuwa Premises, it will facilitate refreshment and sanitary facilities to the visitors.

- Proposed Components

- Library
- Auditorium (750 - 1000 seating capacity)
- Art Gallery
- Cafeteria
- Parking Facilities
- Sanitary Facilities

- Financing Plan

Components	(Rs. Mn)
Multi-Purpose Building Construction Project at Museum Premises for Library, Auditorium and Art Gallery	Mn. 200

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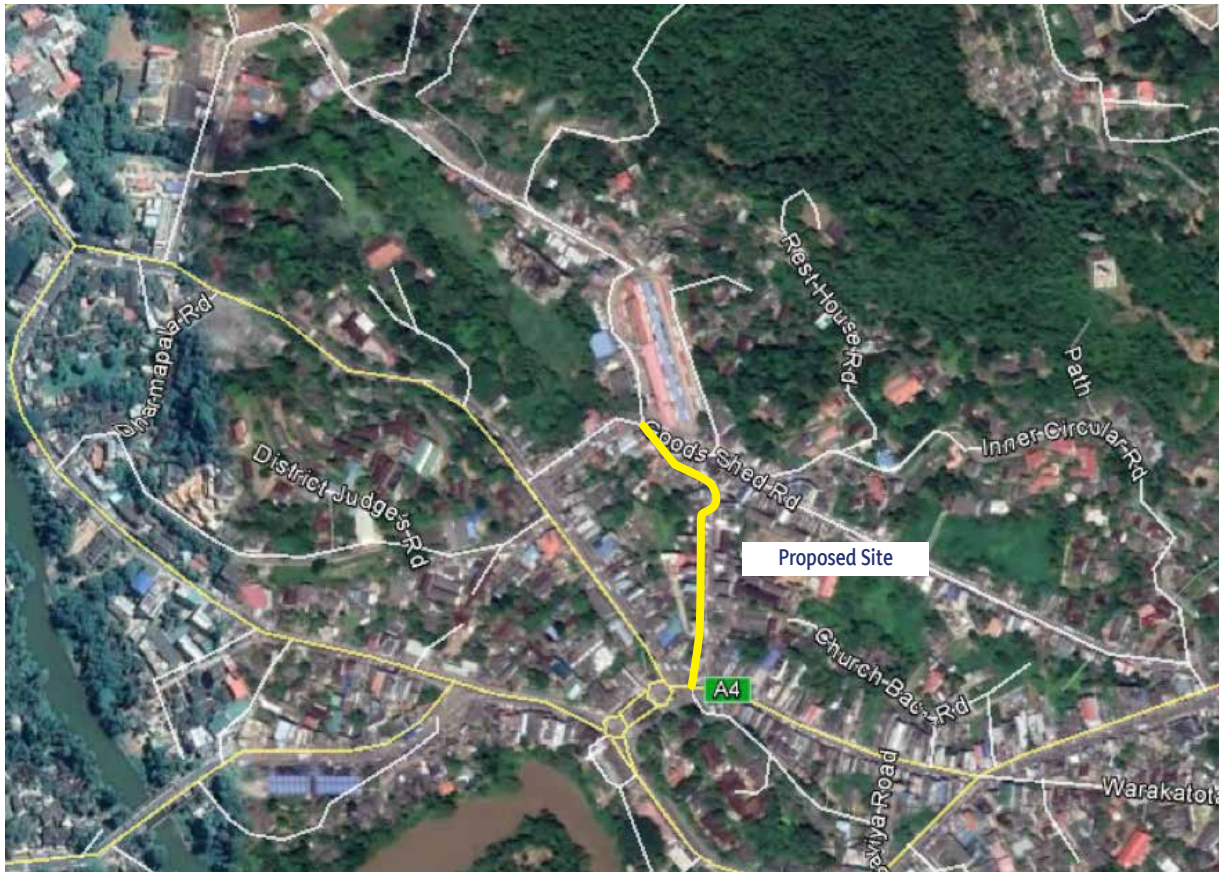
- Project Operation & Maintenance

Land acquisition will be needed in prior due to the selected lands are belongs to the museum premises. Additionally, National Museum Department will be consulted during this project. Proposed school premises at Mahawalawatta area and Thiriwanaketiya area can be used for the relocation of Mihindu Vidyalaya if needed. The construction and maintenance will be done by Urban Development Authority.

Shopping Street Development Project (Church Road) Under Ratnapura Town Development Plan

18

- Sector - Urban Development
- Project Name - Shopping Street Development Project (Church Road)
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura Town

- The Total Area of Land required for the project – 500 m (road length)
- The cost of land if it is being perched – Not Applicable

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- Rational of the Project

In Western countries, 'road' is used for vehicle travelling, while 'streets' are public ways which have buildings on either side and used for other human activities except vehicle travelling. But in Sri Lanka, roads are used for vehicle travelling as well as for other human activities. Among those human activities, street vending is a special characteristic. This special characteristic can be seen in Church Road in Ratnapura. It is located in the heart of the city and highly accessible as it is located in between the bus stand and the town center. Church Road is popular for street shopping and it facilitates all the needs up to the low income people. But this rare characteristic is disturbed by the vehicles. This rare characteristic will be preserved through the Shopping Street Development Project.

According to this Shopping Street Development Project, it has been planned to convert this road into a vehicular free shopping street with the experience of new identical streetscape. It will be added new street lighting system and suitable paving.

- Following benefits are taken from the project

- The experience of undisturbed street shopping
- Identical and unique streetscape
- Street lightings
- Suitable paving

- Financing Plan

Components	(Rs. Mn)
Shopping Street Development Project (Church Road)	50 Mn

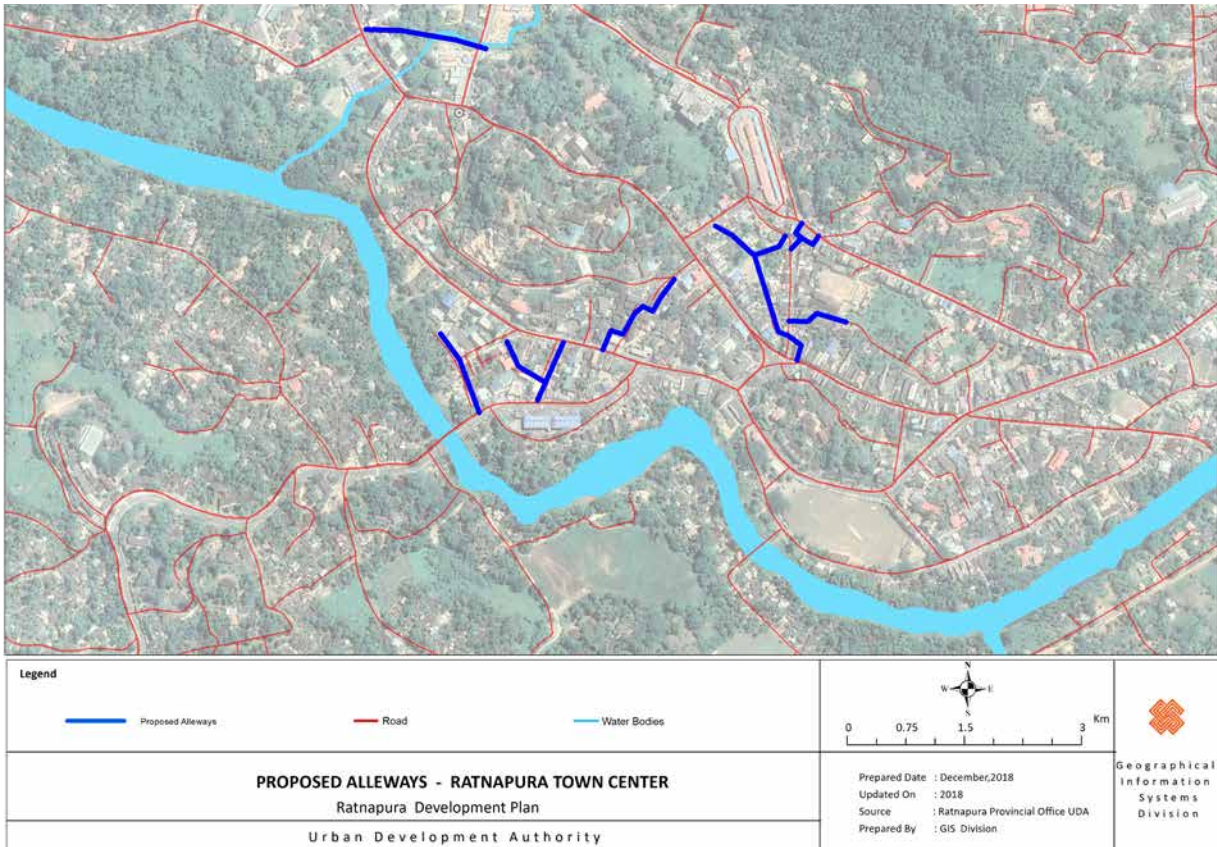
- Project Operation & Maintenance

The redevelopment process will be done by the Urban Development Authority and the maintenance will be done by the Municipal Council Ratnapura.

Alleyways Improvement Project Under Ratnapura Town Development Plan

19

- Sector - Urban Development
- Project Name - Alleyways Improvement Project
- Project Location



1. Entering from Lee Maduwa premises near Moragahayata – exit at KeleKade restaurant
2. Entering from world trade premises – exit at Nawathena restaurant
3. Entering from Dharmapala Collage premises – exit at IOC (Bandaranayaka Mawatha)
4. Entering from Good Shed Road (Palitha Stors) – exit at Church Road and in front of Aloka Hospital
5. Entering in front of Indika Hotel premises – exit at Church Road
6. Entering from public fair premises – exit in front of DFCC bank
7. Entering from Shan premises – exit in front of the public fair premises

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- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura

- The Total Area of Land required for the project – Not Applicable
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Alleyways are the narrow pathways between buildings. It improves the walkability of the inhabitants as well as commuters of the towns. It reduces the trip generation of vehicles since people use those short paths for their work. According to the road network of Ratnapura, it is consisted with number of alleyways. But, most of them are unknown to the strangers and do not support for improving the walkability of people.

It is planned to improve these urban alleyways in Ratnapura by facilitating lightings, street arts, pavements without reducing the identity of the city. It will be increased the safety of these alleyways through this Alleyways Improvement Project. Also, it will be reduced the unnecessary tips of the pedestrians and will be improved social and economical needs of people.

- Following benefits are taken from the project
 - High security
 - Lighting facilities
 - Attractive street arts
 - Well-arranged paving
 - Improving walkability

- Financing Plan

<i>Components</i>	<i>(Rs. Mn)</i>
<i>Alleyways Improvement Project</i>	<i>20 Mn</i>

- Project Operation & Maintenance

Project operation process will be done by Urban Development Authority and the maintenance will be done by Municipal Council, Ratnapura.

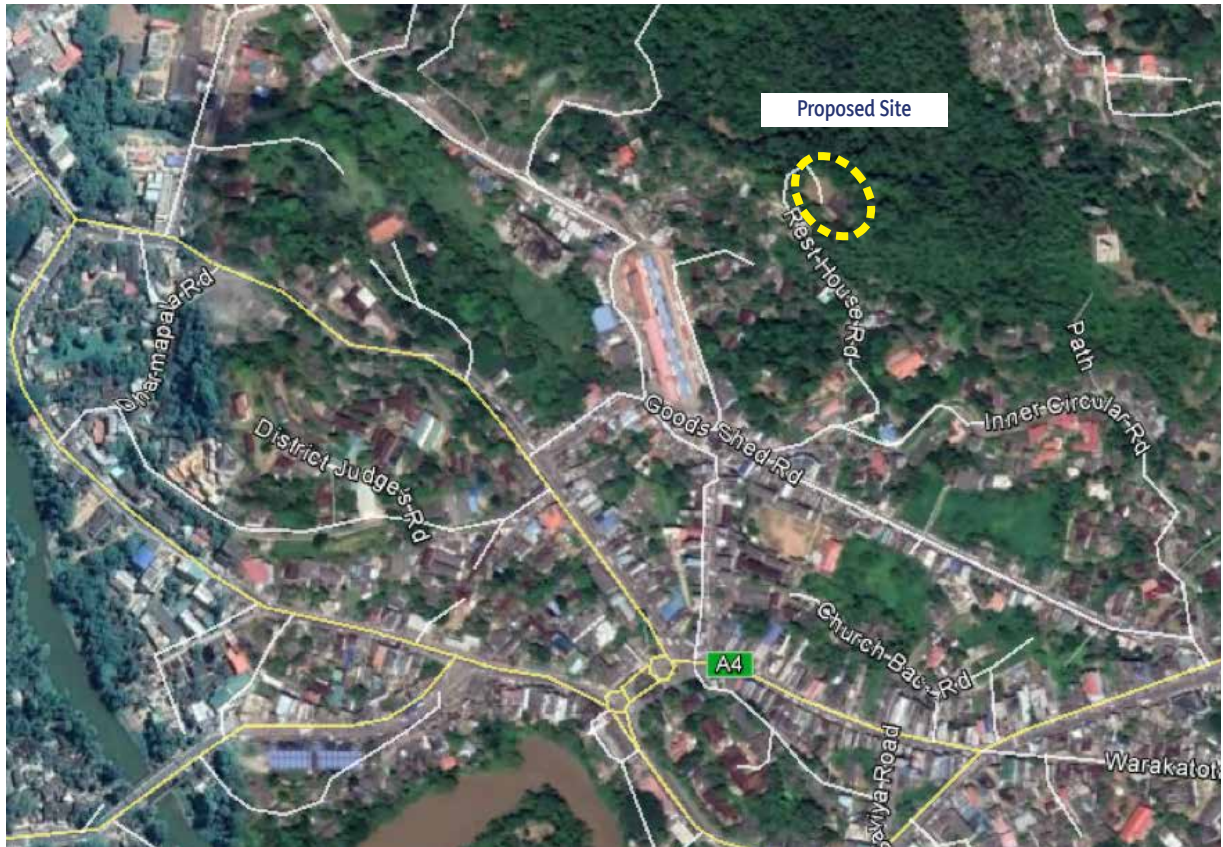
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Disaster Aid Center Construction Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - Disaster Aid Center Construction Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura

- The Total Area of Land required for the project – 40 Perches
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

It has been planned to construct a Disaster Aid Center with a Helipad at Upper Club Premises as there is no any Disaster Aid Center within the city center and the Upper Club Premises is a small hill top that is not affected by flood. Ratnapura city is belonged to wet zone and it is surrounded by Kalu river. It is a city that affected by flood annually and the old city is affected highly. All the administration institutes are located in New Town and it is difficult to transfer disaster aids from New Town to Old Town as the city center is caused flooding. Thus, it is better to have a disaster aid center in an accessible place within the Old Town for fast aiding.

This Disaster Aid Center can be used to store and distribute disaster aids immediately to flood affected areas in the city as the supply chain of the city can be broken up easily due to these disasters. According to this project it has been planned to construct a helipad in the roof top of this Disaster Aid Center and it is useful to respond immediately in an emergency.

- Following benefits are taken from the project

- Storing facilities
- Helipad facilities
- Fast disaster aiding

- Financing Plan

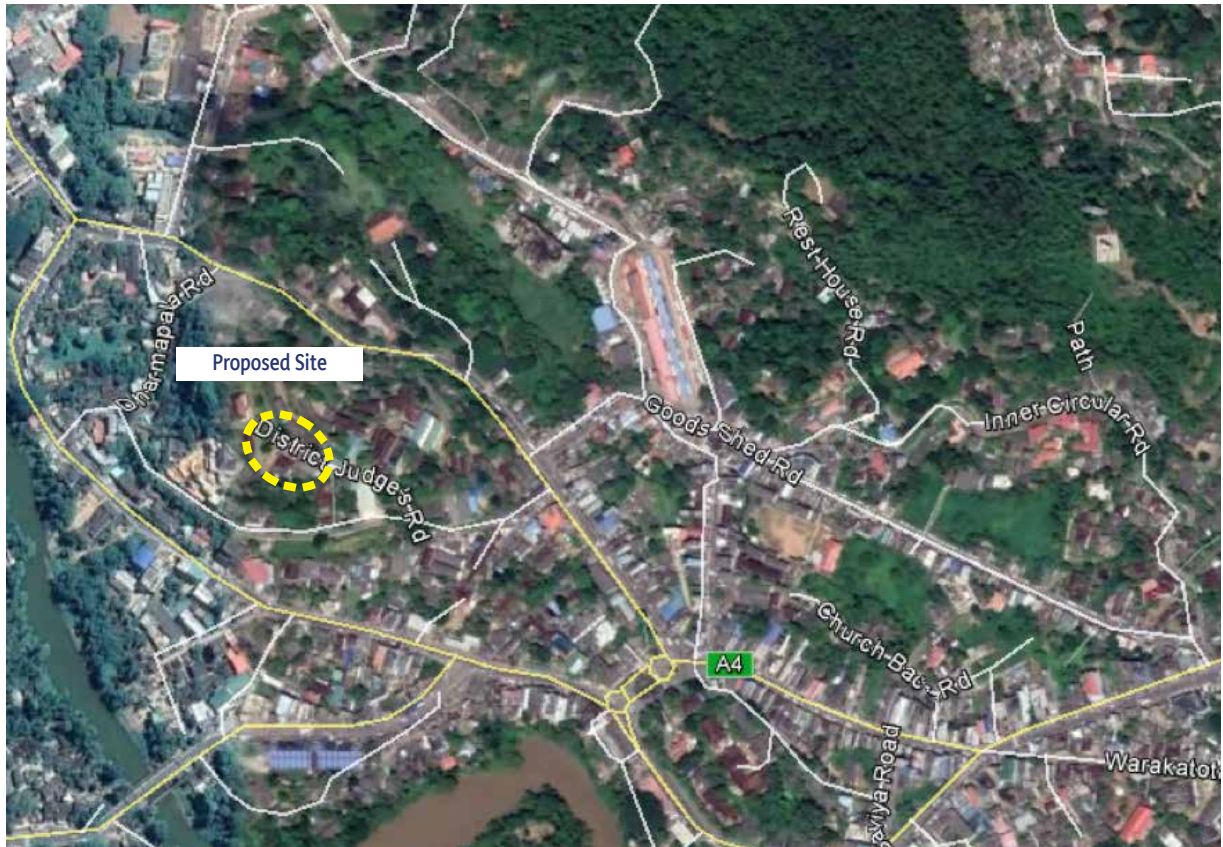
Components	(Rs. Mn)
Disaster Aid Center Construction Project	150 Mn

- Project Operation & Maintenance

Project operation and construction will be done by Urban Development Authority and Ratnapura Municipal Council under the consultancy of Disaster Management Center. The maintenance process will be done by Ratnapura Municipal Council and District Secretariat Division.

Helipad Construction Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - Helipad Construction Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Former District Judge's Bungalow

- The Total Area of Land required for the project – 20 Perches
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

It has been proposed five helipads in Ratnapura. The Helipad Construction at Former District Judge's Bungalow Premises is one of them. This Former District Judge's Bungalow Premises is located in a small hill top in the town center adjacent to the Ferguson High School. This helipad will be very supportive during the flood which can be occurred annually. This can be used to distribute disaster aids easily for victims. It has been identified, Ferguson High School Premises as a safe area during the flood period and it is also closed to this proposed Helipad. The proposed overhead bridges from Dharmapala Vidyalaya to Bus Stand and Public Fair will be supportive to this Helipad during flood season.

This Helipad can be used as a heli-lounge or an open air cafe during the disaster free months of the year. The proposed restaurant in Ehelepola Harem building is located adjacent to this heli-lounge and it can be used as an extinction of that proposed Restaurant.

- Following benefits are taken from the project
 - Helipad facilities
 - Fast disaster aiding
 - New experience of a heli-lounge with a nice scenic view

- Financing Plan

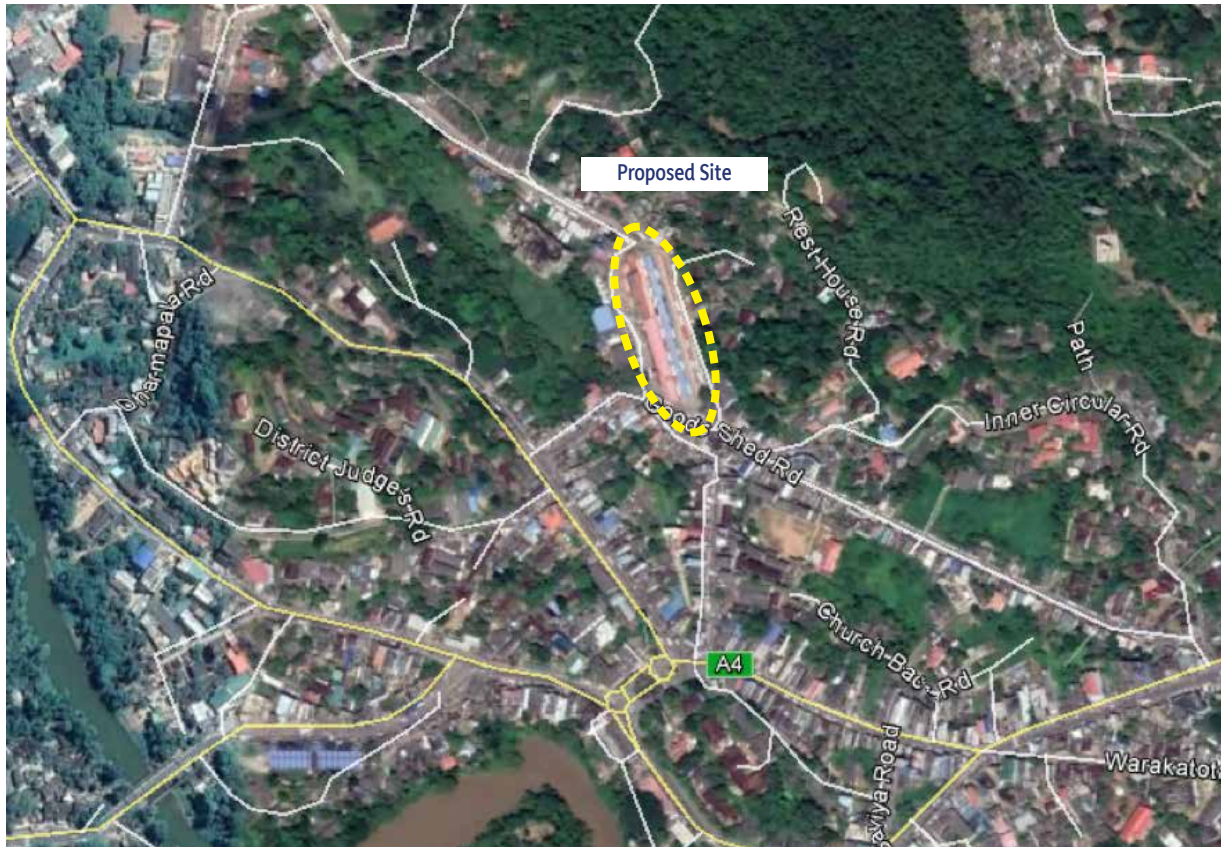
Components	(Rs. Mn)
Helipad Construction Project	70 Mn

- Project Operation & Maintenance

Project operation and construction will be done as a joint project of Urban Development Authority and Ratnapura Municipal Council. Maintenance will be done by Municipal Council, Ratnapura.

Main Bus Terminal Development Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - Main Bus Terminal Development Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura

- The Total Area of Land required for the project – 2 Acres
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Ratnapura is the provincial capital of Sabaragamuwa province. Most of the bus routes run via Ratnapura city and it has a larger area of catchment as it is the provincial capital and as Ratnapura district is surrounded by nine other districts of Sri Lanka. But still it is being used the old railway station as the main bus terminal of Ratnapura. Thus, this existing bus terminal fails to provide enough space relative to the number of buses and passengers.

According to the Development Plan of 2030, it has been expected about 150,000 of daily commuting people and 100,000 tourists per annum. Thus, it is needed to expand this existing bus terminal in to a large bus stand relative to the expected commuting people and tourists. It has been planned to redeveloped this bus terminal with public sanitary facilities and enough seating facilities. It is expected that the commuting people will be facilitated through this project.

- Following benefits are taken from the project
 - Well managed public transportation facilities
 - Public sanitary facilities
 - Seating facilities
 - Refreshment facilities

- Financing Plan

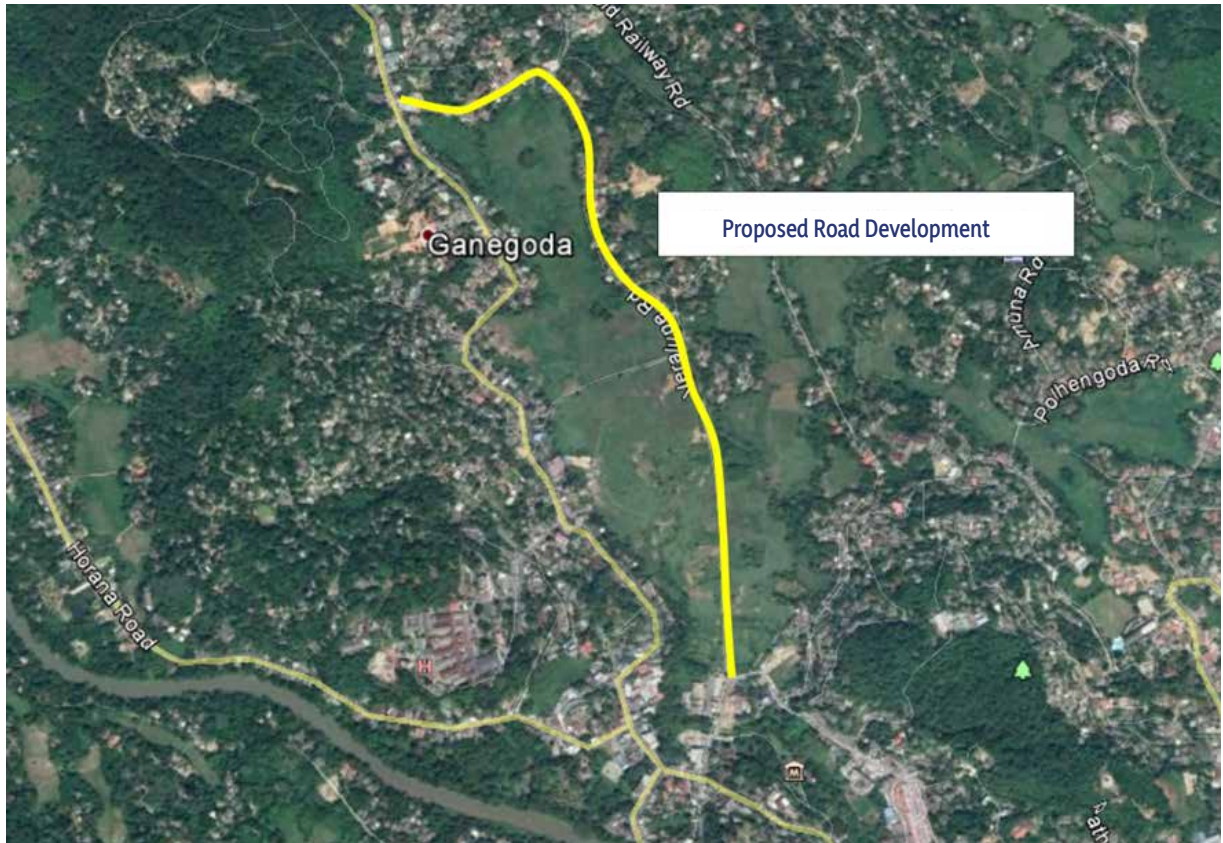
Components	(Rs. Mn)
Main Bus Terminal Development Project	70 Mn

- Project Operation & Maintenance

Treasury funds will be used for doing this project. Designing and project management will be done by Urban Development Authority. The construction will be done by Urban Development Authority and Road Development Authority as partners. Maintenance will be done by Municipal Council, Ratnapura ever since the land ownership belongs to them.

Godawela Road Redevelopment Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - Godawela Road Redevelopment Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura

- The Total Area of Land required for the project – 4 km (road length)
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Ratnapura city is highly congested by vehicles. As the existing main road cannot be expanded due to the geographical landscape, it is better to use alternative roads to access to the city. If it can be redeveloped in to a flood resistant road, it has been identified Godawela road as a good solution for traffic congestion. It can be expanded further as it is located in a plain area. This Godawela road is the access road for the proposed Weralupa Recreational Cluster. Redevelopment of this road provides number of benefits to the people.

- Following benefits are taken from the project

- Ease of access to the city
- Reduce the traffic congestion in the city center
- Save the time
- Access for the Weralupa Recreational Cluster

- Financing Plan

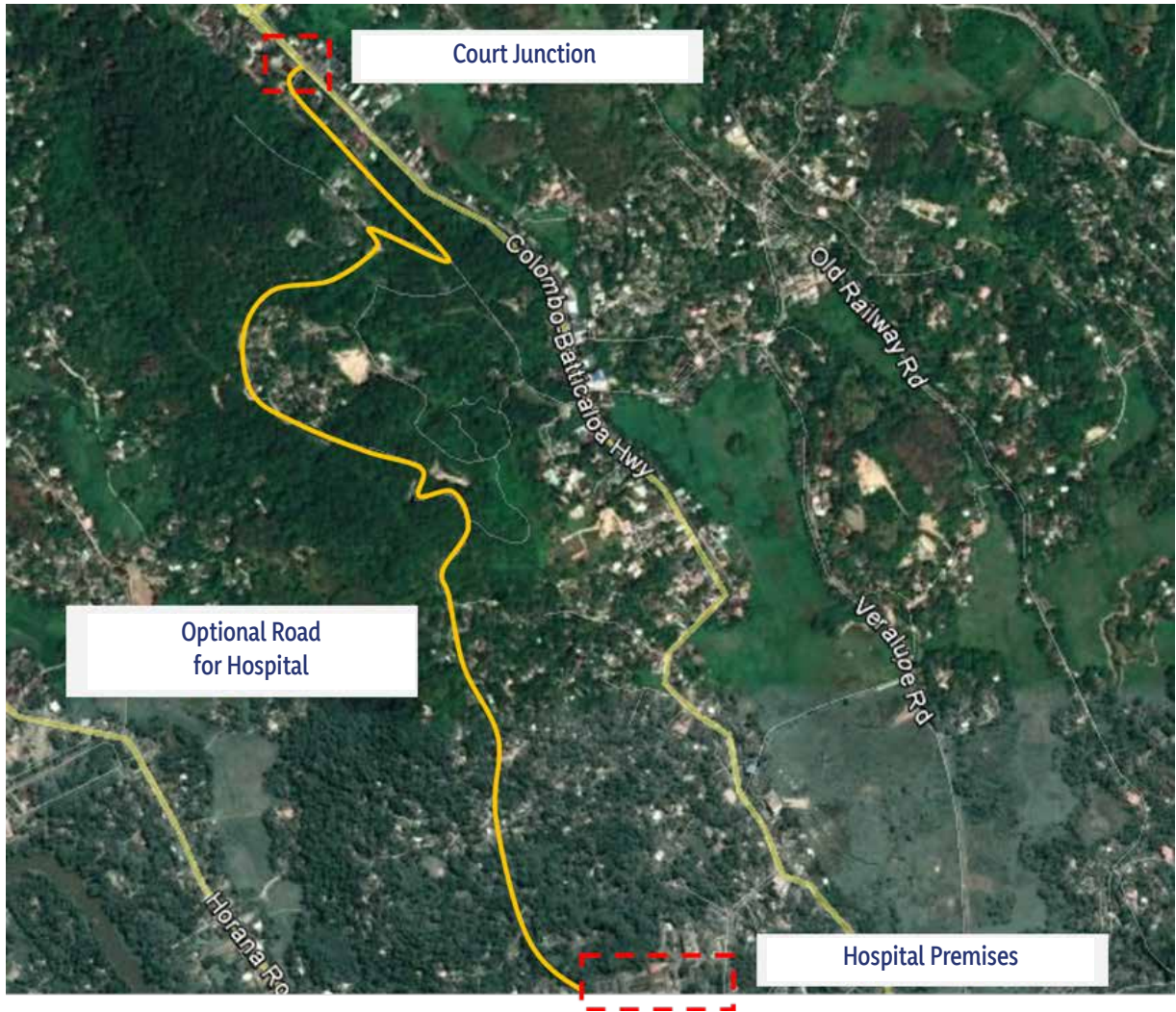
<i>Components</i>	<i>(Rs. Mn)</i>
<i>Godawela Road Redevelopment Project</i>	<i>70 Mn</i>

- Project Operation & Maintenance

The ownership of Godawela road belongs to the Municipal Council, Ratnapura at present. Since this is an essential bypass road, it is proposed that the Godawela Road should be hand over to the Road Development Authority for further developments. The construction and the maintenance of this road will be done by Road Development Authority afterwards.

Optional Road Redevelopment Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - Optional Road Redevelopment Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Saman Pedesa

- The Total Area of Land required for the project – 3 km (road length)
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Ratnapura city is belonged to wet zone and it is surrounded by Kalu river. Ratnapura is a city that affected by flood annually and the old city is affected highly. It is difficult to access to the Base Hospital Ratnapura from the city center during flood season. It has been identified an optional road to the Base Hospital from New Town to overcome this problem. At present, this base hospital has converted into a teaching hospital with the establishment of new medical faculty in University of Sabaragamuwa. Thus, this optional road (Saman Pedesa) will be an access road to this new medical faculty also. It has been planned to redevelop this optional road from hospital to New Town to provide more benefits to the people.

- Following benefits are taken from the project

- Ease of access to the hospital
- Well-developed road network between the Teaching Hospital Ratnapura and Medical Faculty

- Financing Plan

<i>Components</i>	<i>(Rs. Mn)</i>
<i>Optional Road Redevelopment Project</i>	<i>50 Mn</i>

- Project Operation & Maintenance

The construction and maintenance of this project will be done by Municipal Council, Ratnapura.

Parking Facilities Development Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - Parking Facilities Development Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura

- The Total Area of Land required for the project – Not Applicable
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Ratnapura is the provincial capital of Sabaragamuwa Province and according to the Development Plan of 2030, it has been expected about 150,000 of commuting people to the city. But, the existing structure of the city fails to provide large scale parking facilities to the expected number of commuting people due to the lack of space. According to the Development Plan, it has been proposed to provide parking spaces within functional clusters. Thus, the plan has ensured each cluster has one parking lot at least. The parking facilities can be provided to each of these clusters separately according to the Parking Facilities Development Project with necessary facilities like public sanitary facilities. It is expected that the people who come to the tourism activities and inhabitant's live styles will be facilitated through this project.

- Following benefits are taken from the project

- Well managed parking facilities
- Public sanitary facilities

- Financing Plan

Components	(Rs. Mn)
Parking Facilities Development Project	70 Mn

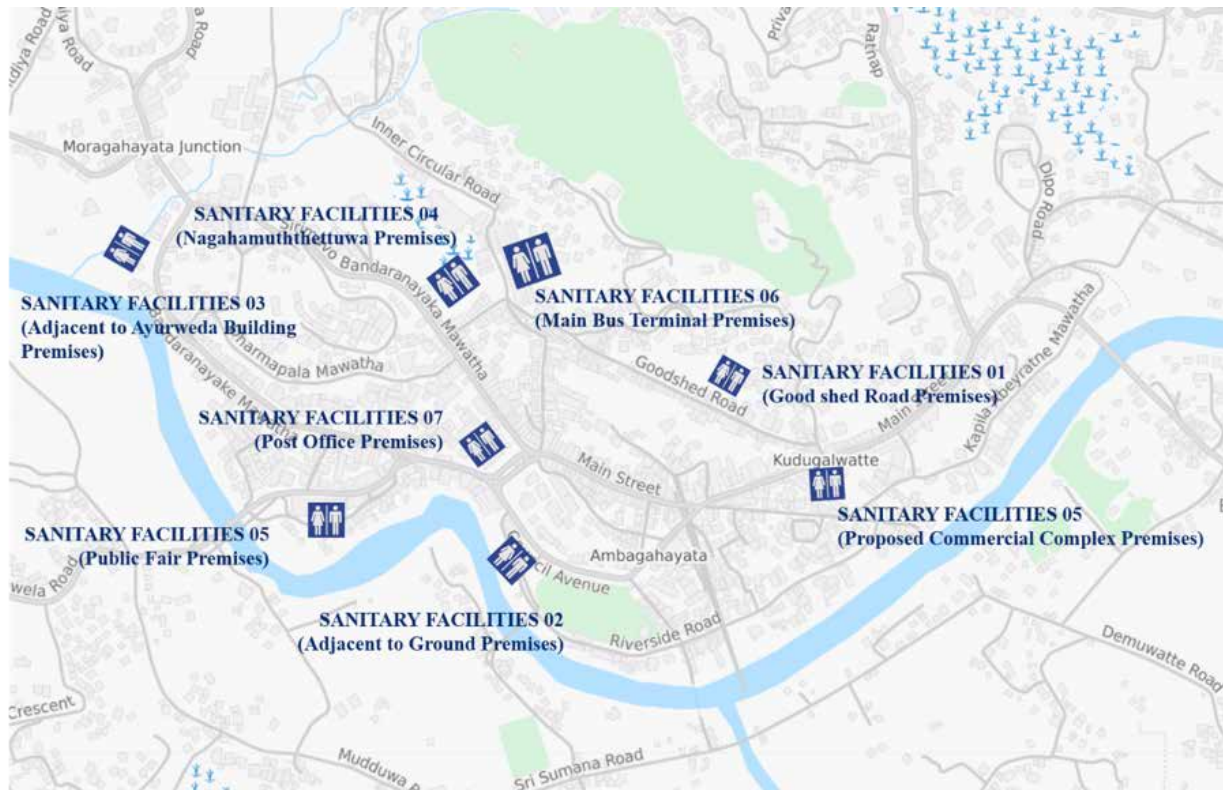
- Project Operation & Maintenance

Project operation and development will be done by Urban Development Authority and Ratnapura Municipal Council as a joint venture project. The maintenance activities will be done by Ratnapura Municipal Council.

Sanitary Facilities Development Project Under Ratnapura Town Development Plan

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- Sector - Urban Development
- Project Name - Sanitary Facilities Development Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	Ratnapura

1. Polhunuwe premises, Good shed Road
 2. Municipal Council Park, Adjacent to ground premises
 3. Adjacent to Ayurweda Building premises
 4. Nagahamuttettuwa Premises
 5. Proposed commercial complex premises (Luxmi Hall)
 6. Main Bus Terminal premises
 7. Post Office Premises
- The Total Area of Land required for the project – Not Applicable
 - The cost of land if it is being perched – Not Applicable

- Rational of the Project

Ratnapura is the provincial capital of Sabaragamuwa Province and according to the Development Plan of 2030, it has been expected about 150,000 of commuting people to the city. But, the existing structure of the city fails to provide comfortable sanitary facilities to the expected number of commuting people due to lack of space. According to the Development Plan, it has been proposed to provide sanitary facilities within functional clusters in compliance with parking facilities. Thus, the plan has ensured each cluster has one sanitary facility space at least. It is expected that the people who come to the tourism activities and inhabitants' live styles will be facilitated through this project.

- Following benefits are taken from the project

- Comfortable sanitary facilities
- Parking facilities
- Shopping or Refreshment facilities

- Financing Plan

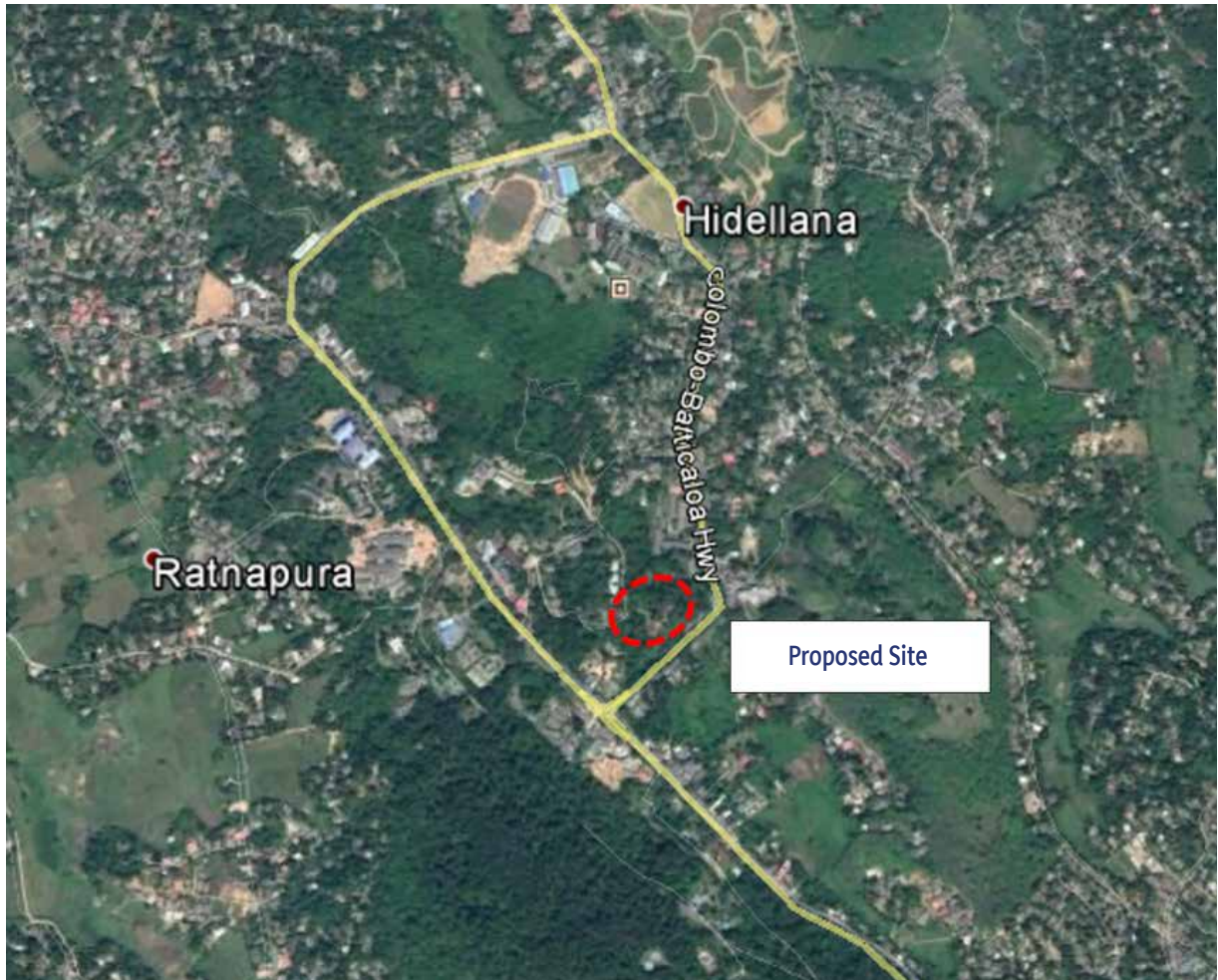
<i>Components</i>	<i>(Rs. Mn)</i>
<i>Sanitary Facilities Development Project</i>	<i>70 Mn</i>

- Project Operation & Maintenance

Project operation and development will be done by Urban Development Authority and Ratnapura Municipal Council as a joint venture project. The maintenance activities will be done by Ratnapura Municipal Council.

Administration Complex Project Under Ratnapura Town Development Plan

- Sector - Urban Development
- Project Name - Administration Complex Project
- Project Location



- Specify the Project Location

Site	Province	District	Division	Location
01	Sabaragamuwa	Ratnapura	Ratnapura	New Town

- The Total Area of Land required for the project – 2 Acre
- The cost of land if it is being perched – Not Applicable

- Rational of the Project

Some of the administration institutes of Ratnapura are located in historic buildings. According to the Development Plan of 2030, it has been planned to renovate those historic buildings and change the use as restaurants and guest houses. Thus, it has been planned to build up an Administration Complex in New Town and shift all the existing administration institutes into that premises. Since there is no enough space to build up each and every government office separately, this Administration Complex Project will provide the best solution and it will ease the works of all government officers and the citizens. It is easy to provide all the facilities to every institute simultaneously through this Administration Complex Project.

- Following benefits are taken from the project

- Ease the work
- Economically feasible
- Well managed government offices
- Easy to provide all the facilities to every institute simultaneously

- Financing Plan

Components	(Rs. Mn)
Administration Complex Project	200 Mn

- Project Operation & Maintenance

The construction and maintenance of this project will be done by Urban Development Authority.



Annexures



Annexure 01 : Population Distribution – 2017

GND	GND Number	Population	Area (Hec-tares)	Gross Population Density per 1 Hectare
Angamma	181C	2154	103.87	21
Batugedara	180	1835	90.39	20
Devalegoda	151A	1950	74.42	26
Godigamuwa	152	2854	122.77	23
Koladagala	181A	222	132.24	2
Kospenavinne	153A	5076	450.28	11
Mahawala	152C	1346	38.20	35
Mihindigama	152D	6006	54.45	110
Mudduwa	182A	164	5.49	27
Mudduwa East	182A	3950	102.66	38
Muwagama	182	2208	105.49	21
New Town	153A	3521	311.59	11
Ratnapura Town	152	1641	29.01	57
Ratnapura Town - North	152E	4596	86.20	53
Ratnapura Town – West	152F	1283	51.12	25
Samangipura	182C	3002	75.64	40
Thiriwanakeriya	180B	2442	174.22	14
Weralupa	153A	4833	210.00	23
Total (18)		49083	2218	557

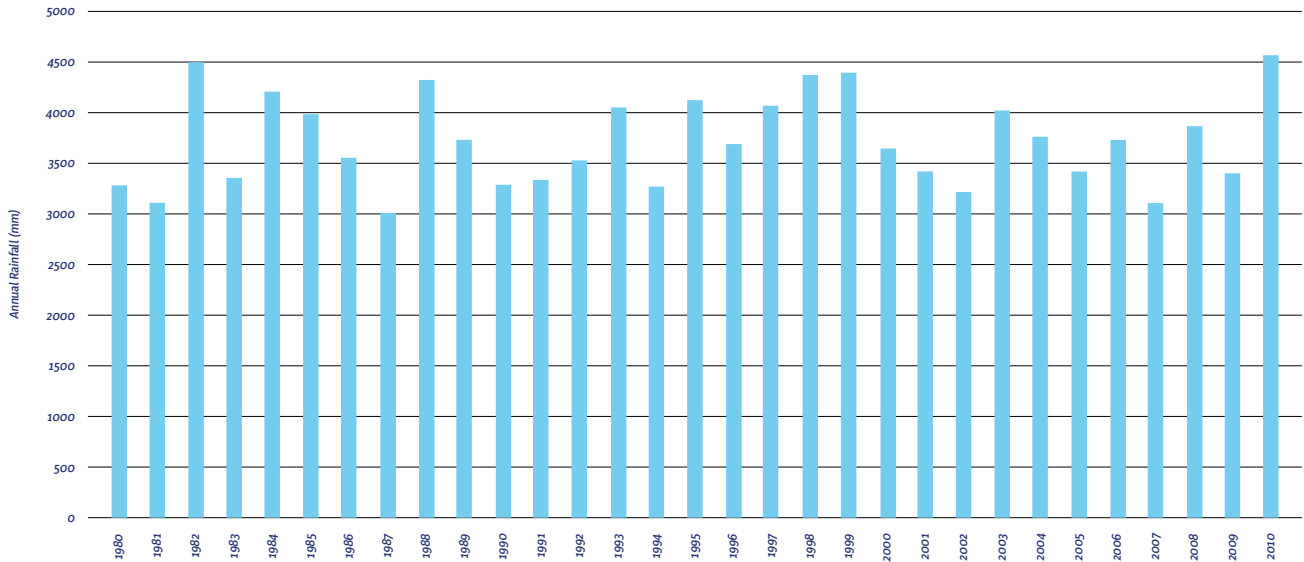
Source : Based on 2011 data of Census and Statistics Department
*Population according to Grama Niladhari Division

Annexure 02 : The Existing Land Use Pattern – 2017

<i>Utilization</i>	<i>Land Extent (Hec-tares)</i>	<i>Percentage from the whole Land</i>
<i>Residential</i>	951.2	42.90
<i>Commercial</i>	46.57	2.10
<i>Industries</i>	0.22	0.01
<i>Administrative Institutions</i>	88.72	4.00
<i>Highways</i>	117.55	5.30
<i>Playgrounds, parks and open lands</i>	22.18	1.00
<i>Religious</i>	4.43	0.20
<i>Urban forests / scrubs</i>	307.85	13.88
<i>Cemeteries</i>	0.22	0.01
<i>Paddy lands</i>	252.85	11.40
<i>Garden plantations (Tea/Rubber/Coconut)</i>	312.73	14.10
<i>Mixed crops / garden plantations</i>	26.61	1.20
<i>Wetlands</i>	11.99	0.50
<i>Water ways</i>	66.54	3.00
<i>Blank lands</i>	8.02	0.40
Total	2218	100.00

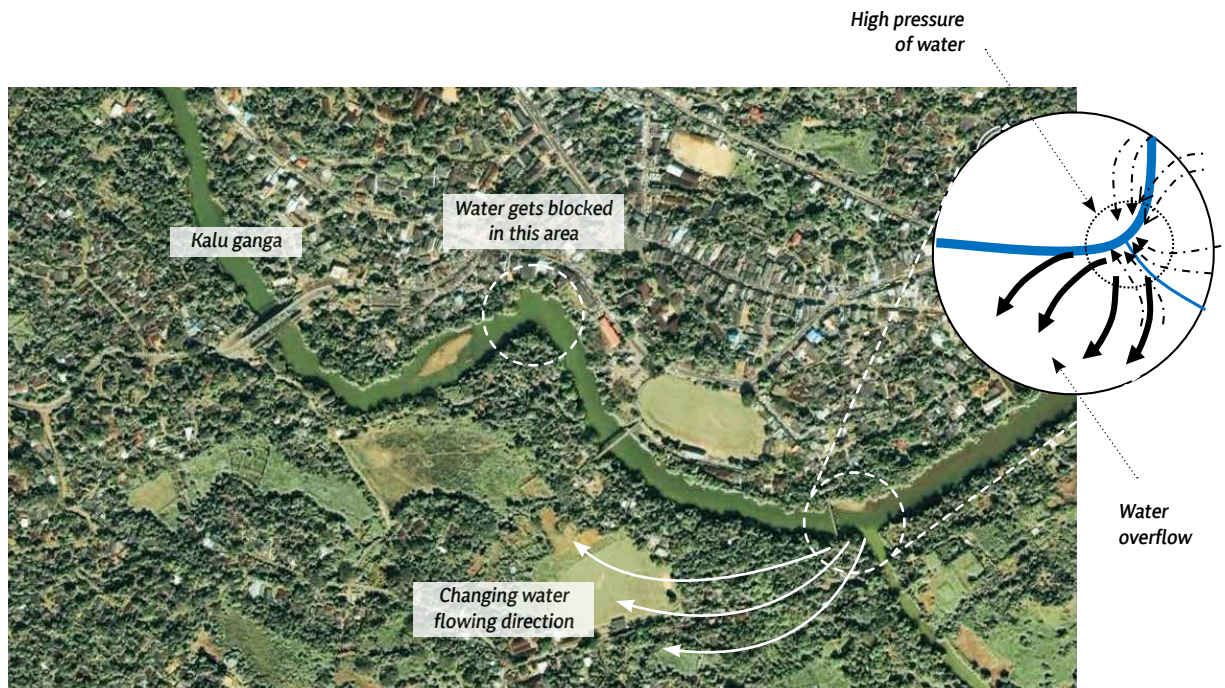
Source : Field surveys 2017 – Urban Development Authority

Annexure 03 : Annual Rainfall Pattern



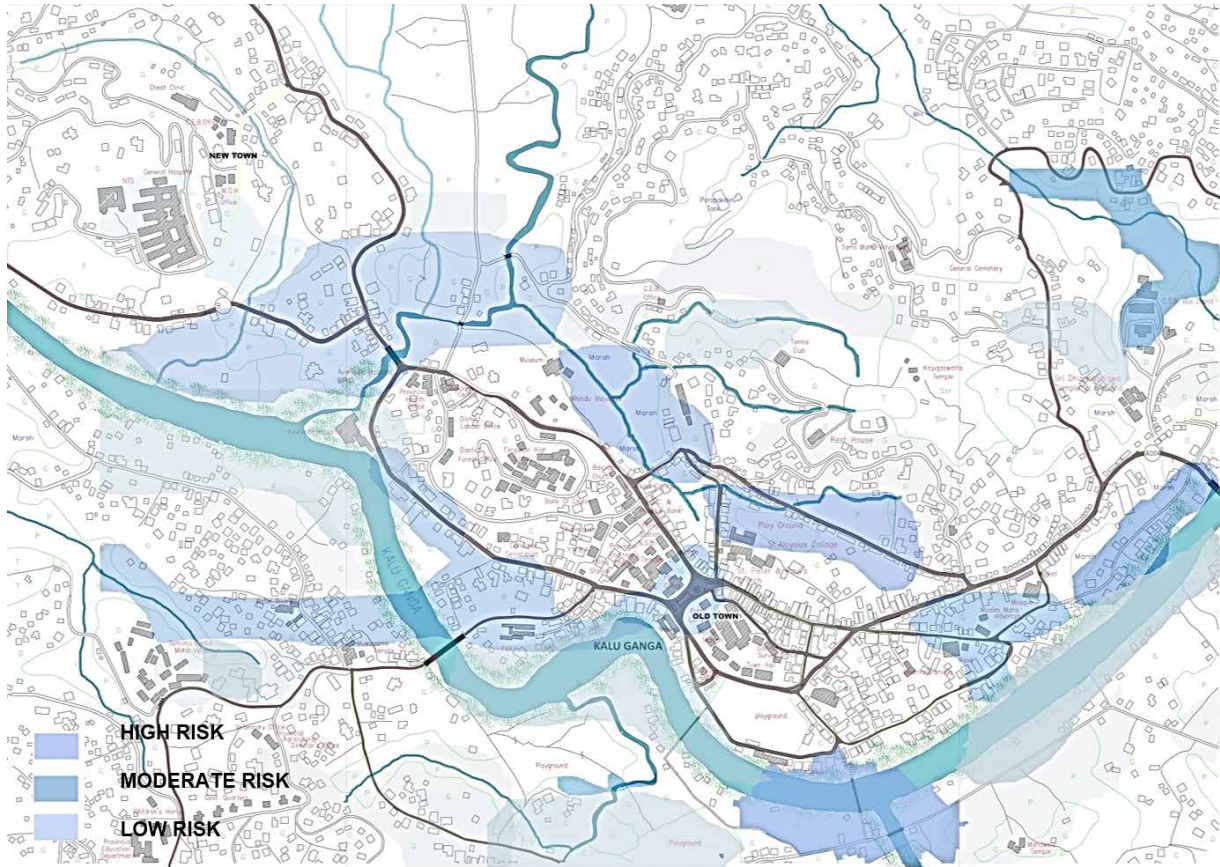
Source : Irrigation Department – Ratnapura

Annexure 04 : Reasons for Flooding



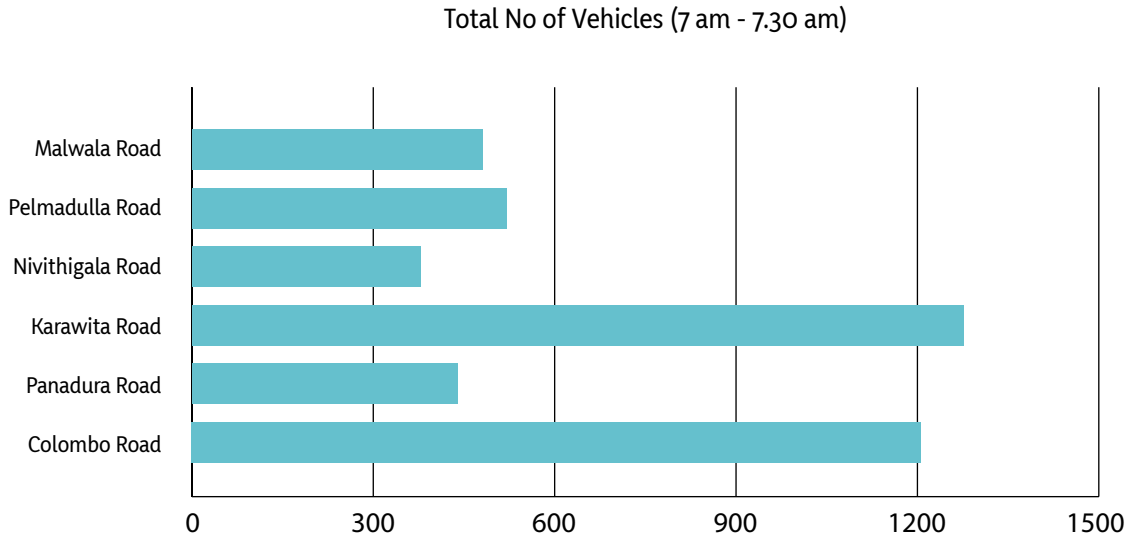
Source : Regional Study (2006/10) – Department of Town & Country Planning, University of Moratuwa

Annexure 05 : Flooding Area within the City Center



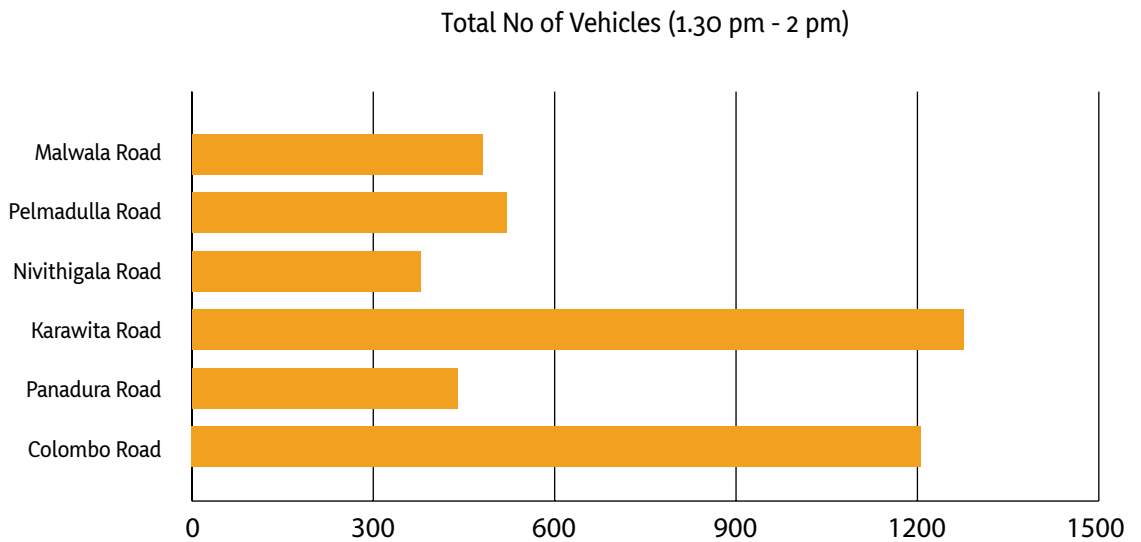
Source : Studio 5 (2017/18) – City School of Architecture, Colombo

Annexure 06 : Traffic Congestion in the Morning



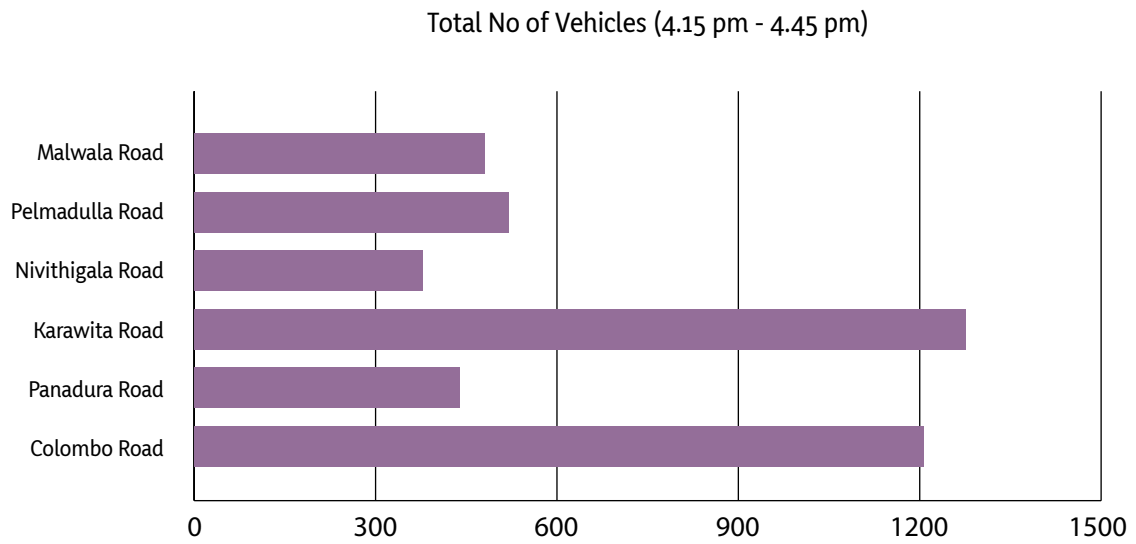
Source : Field surveys 2017 – Urban Development Authority

Annexure 07 : Traffic Congestion at Noon



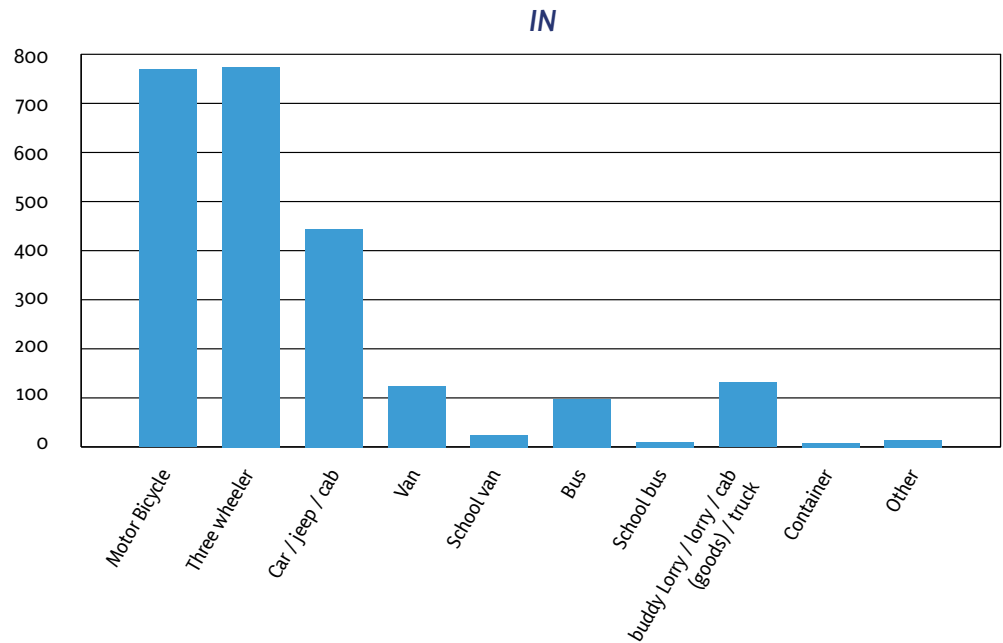
Source : Field surveys 2017 – Urban Development Authority

Annexure 08 : Traffic Congestion in the Evening



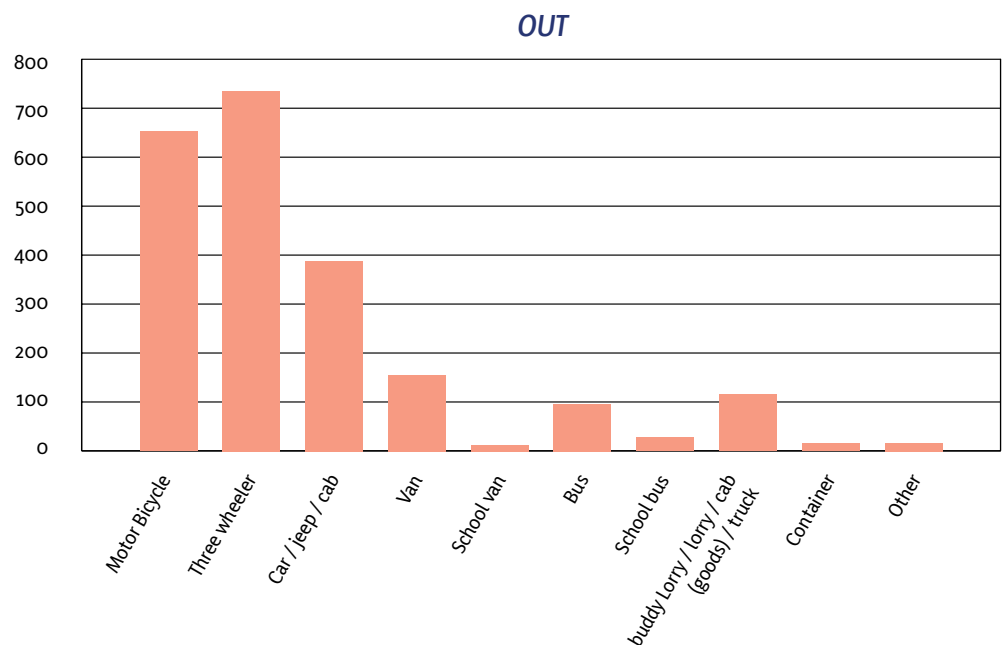
Source : Field surveys 2017 – Urban Development Authority

Annexure 09 : Traffic Congestion according to the Vehicular Flow (Entering to the City)



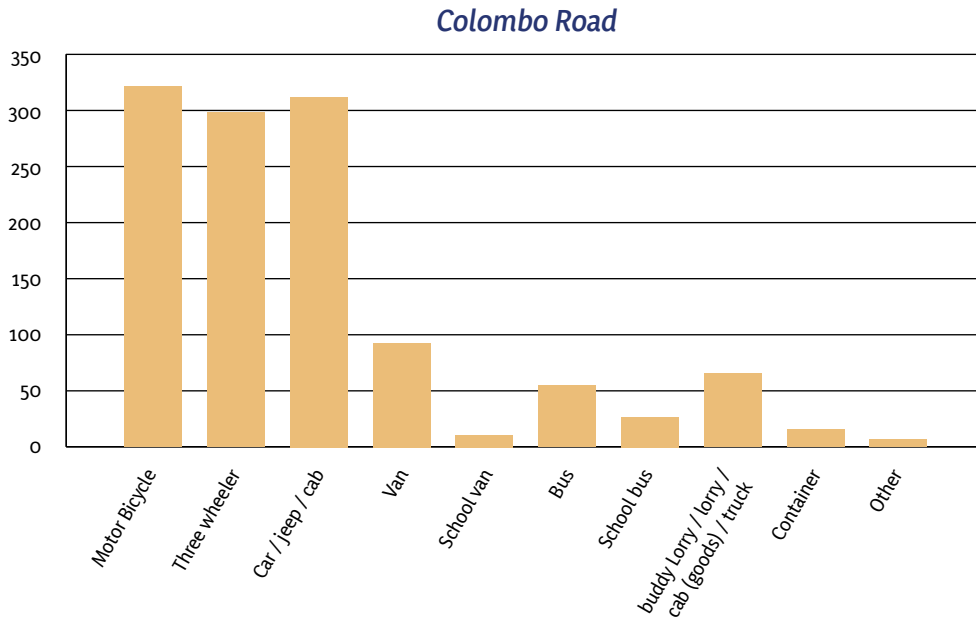
Source : Field surveys 2017 – Urban Development Authority

Annexure 10 : Traffic Congestion according to the Vehicular Flow (Exit from the City)



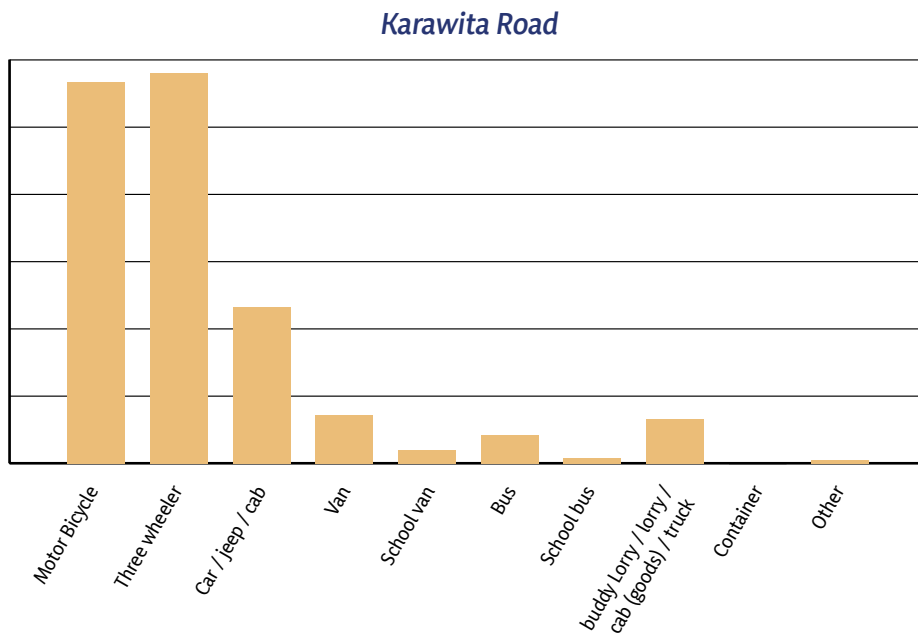
Source : Field surveys 2017 – Urban Development Authority

Annexure 11 : Traffic Congestion within Colombo Road according to the Vehicular Types



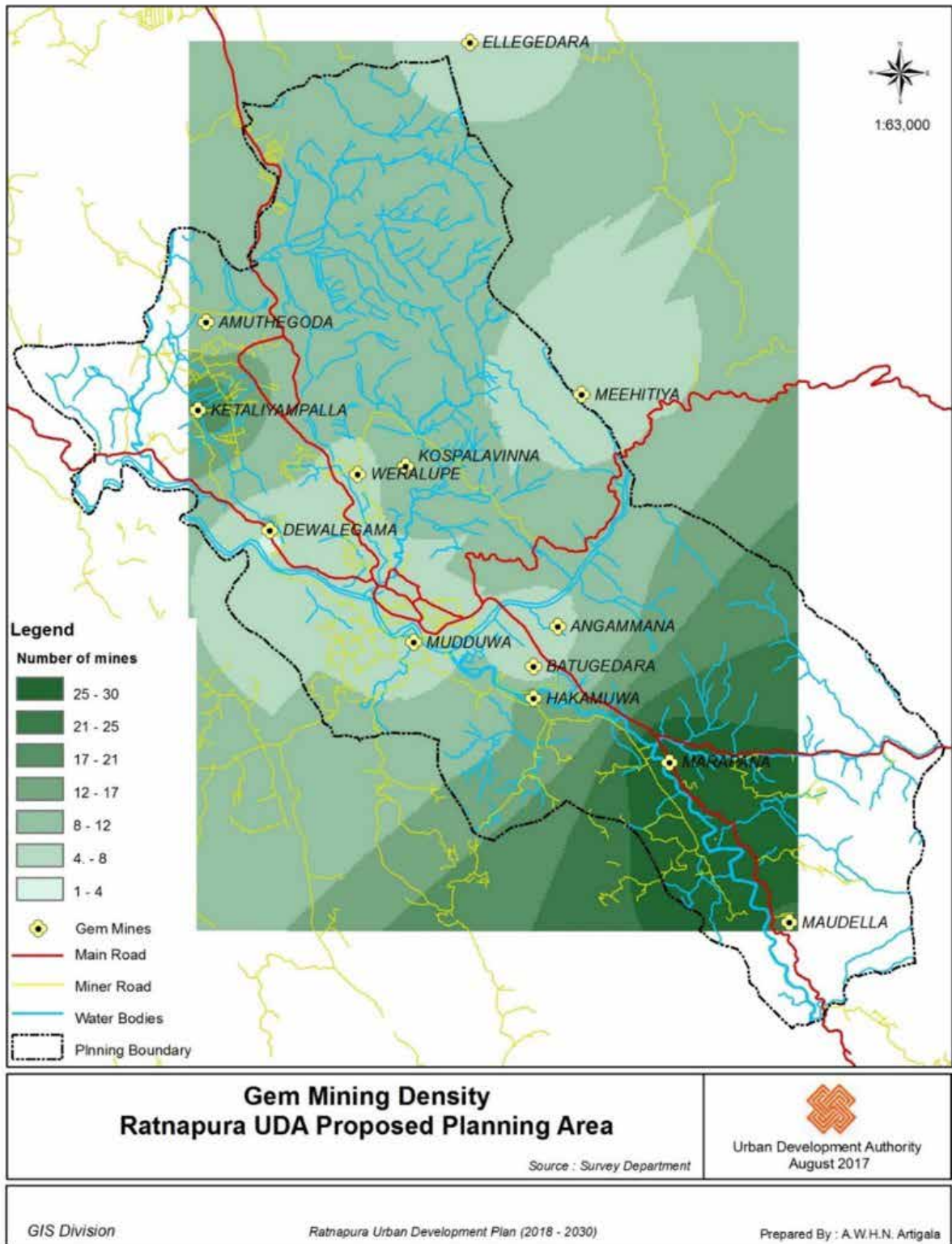
Source : Field surveys 2017 – Urban Development Authority

Annexure 12 : Traffic Congestion within Karawita Road according to the Vehicular Types

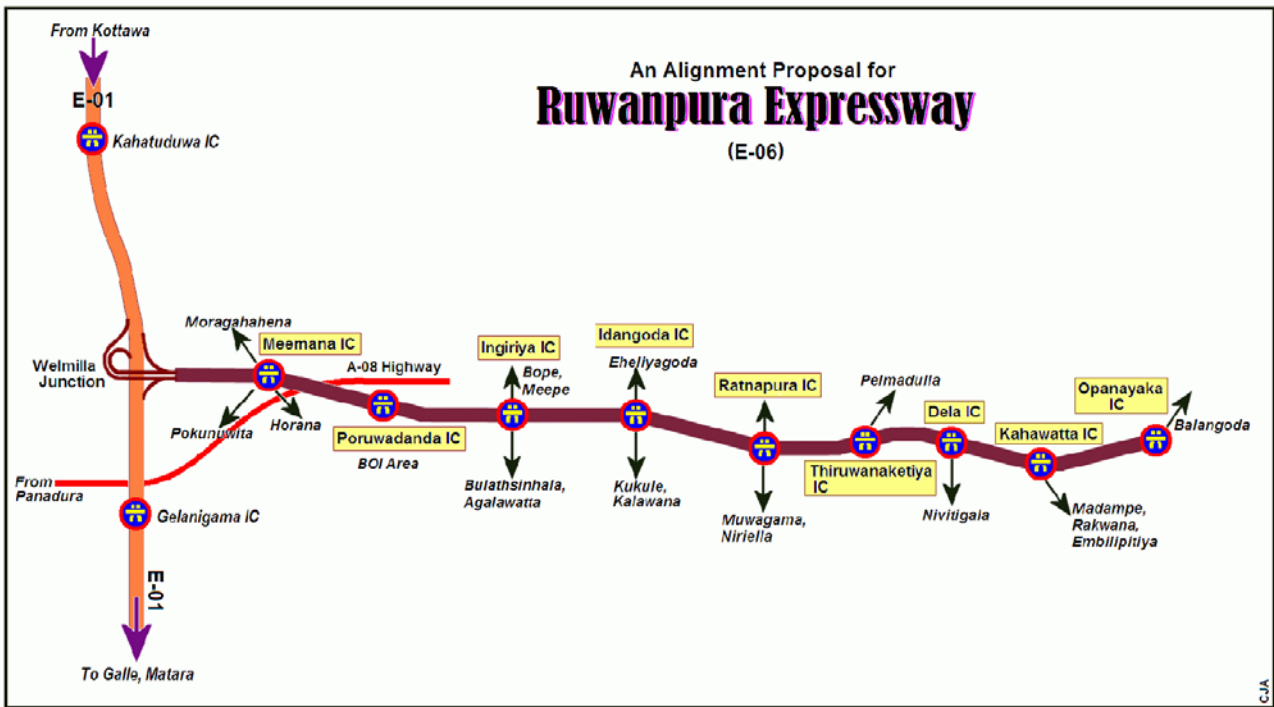


Source : Field surveys 2017 – Urban Development Authority

Annexure 13 : Mining Areas of the Planning Area

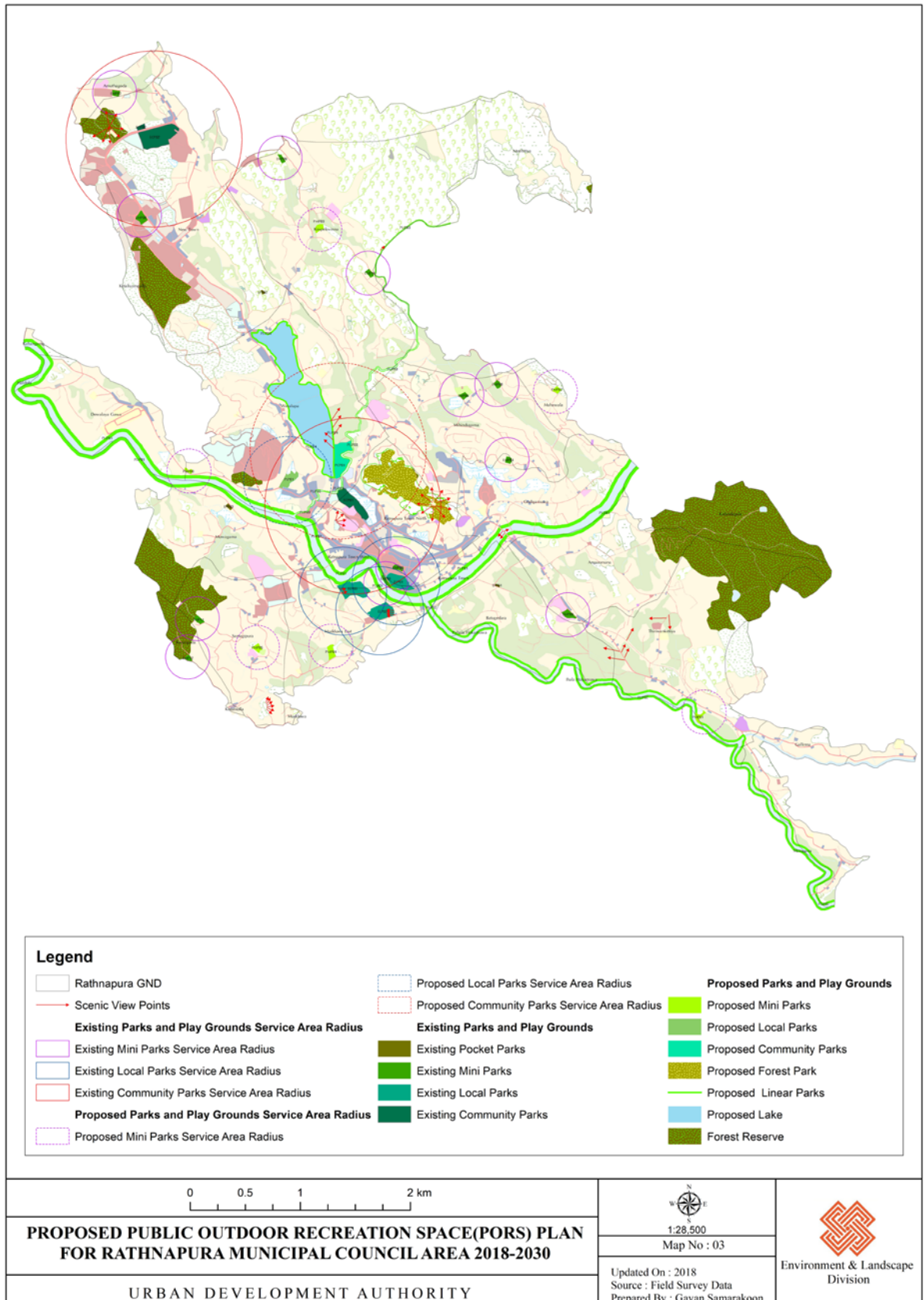


Annexure 14 : Ruwanpura Expressway



Source : Road Development Authority

Annexure 15 : Public Open Recreational Space (PORS) Plan





Sabaragamuwa Provincial Office – Urban Development Authority
Ministry of Megapolis & Western Development