

BADULLA

Development Plan

2021 - 2030



Urban Development Authority
Ministry of Urban Development and Housing

Badulla Development Plan



Urban Development Authority

2021-2030

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Website - www.uda.gov.lk

Email - info@uda.gov.lk

Telephone - +94112873637

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Badulla Development Plan 2021 - 2030 mainly consists of three parts as Part I, II and III. The Part I consists of the background study, preliminary studies, the need of the plan, the planning framework, the SWOT analysis and the plan. The Part II consists of the Planning and Building Guidelines and Zoning Guidelines pertaining to the planning boundary for the period of 2021 - 2030. The part III consists of the zoning boundaries with the coordinates and all the annexures.

Badulla Development Plan 2020 - 2030 has been prepared by the Uva Provincial Office

Supervision

Arch. Harshan De Silva, Chairman - UDA, Plnr. N.P.K.Ranaweera, Director General - UDA, Plnr. H.A.Dayananda, Additional Director General - UDA, Plnr. M.P.Ranatunga, Deputy Director General (Planning) - UDA, Attorney at Law C. Jayawardena, Consultant (Legal) - UDA, Plnr. Priyani Nawarathne, Director (Strategic Planning) - UDA

Planning Team:

Plnr. Sugath Premasiri, Acting Director (Uva Province) Plnr. Anura Medawela - Foremer Director (Uva Province), Plnr. Sisira Disanayake, Foremer Director (Uva province) Plnr. W.D.D. Chamila Mahathanthila - Former Deputy Director (Planning), Mr. Nishantha Kuruneru, Assistant Director (Badulla), Plnr. P.L.C.B.Liyanage - Town Planner, Mr. K.M.C. S. Kumara - Planning Officer, Mrs. W.K. Rangajeewani - Planning Officer, Mr. E.M. Indrasiri - Planning Officer, Mr. R.M.S. Rajapaksha - Planning Officer, Mr. S.J.K. Lelwala - Planning Officer, Mr. A.M.M.P. Kumara - Town Planner

Supportive divisions of the UDA

Strategic Planning Division - UDA (Supervision, monitoring and gazetting)

Environment and Landscape Division - UDA (Preparation of the PORS, DRR, Conservation, Cultural & Heritage Plans)

GIS Division - UDA (Providing Arc GIS Spatial data layer & technical assistants)

Research and Development Division - UDA (Conduct awareness programs to introduce new techniques)

Acknowledgement

Uva Provincial Office has taken the lead to provide the supervision for the preparation of the Badulla Development Plan 2021 - 2030. The objective of this plan is to create administrative and health Centre of the Uva Green Valley. Badulla Development Plan 2021 - 2030 is in line with the 'Vistas of Prosperity and splendour' the government policy direction of the His Excellency the President Gotabaya Rajapaksa.

It is our proud privilege to Honourable Mahinda Rajapaksa subject Minister of Urban Development & Housing for approving the Badulla Development Plan 2021 - 2030 under the provision of Urban Development Authority Act No. 41 of 1978 as amended by the Act No. 04 of 1982. Further, it is our privilege to Dr. Nalaka Godahewa, State Minister of Urban Development, Coast Conservation, Waste Disposal and Community Cleanliness and Mr. Sirinimal Perera, Secretary to Ministry of Urban Development & Housing for their guidance and supports in this process.

Special gratitude offered on behalf of the planning team and the UDA, to the Mayor, W.D. Priyantha, Badulla MC, members of the MC and the staff. Secretary Mr. D.M.L.H. Disanayake Badulla Divisional Secretariat and the staff for their generous support given for the successful completion of this development plan.

Also, special appreciation on behalf of the UDA offered to Road Development Authority, Central Environment Authority, Road Passenger Transport Authority National Water Supply and Drainage Board, Irrigation Department, Department of Agrarian Development, Land Use Policy Planning Department National Building Research Organization Zonal Education Office, Department of Archeology for giving data and directives required for the preparation of this plan. Further, special gratitude offered on behalf of UDA to Former Chairman of UDA Dr. Jagath Munsinghe, who has a new vision, especially with regard to the development plan preparation take into new directives.

Appreciatively thankful to Chairman of UDA Archt. Harshan De Silva, Director General of UDA Plnr. N.P.K. Ranaweera, Additional Director General of UDA Plnr. H.A. Dayananda, Deputy Director General (Planning) of UDA Plnr. M.P. Ranatunga, Director, Consultant (Legal) of UDA Attorney at Law C. Jayawardena, Director (Strategic Planning) of UDA Plnr. Priyani Nawarathne on behalf of the planning team for their incomparable courage, guidance and welcoming support.

In the end, Director - Environment & Landscape division L. Arct. C.K.E. Kalupahana and the staff of the division and Director - Geographical Information System & ITS Plnr. J.P.S. Somasekara and the staff of the division and the staff of the division, Plnr. Janak Ranaweera, Director Research and Development and the staff of the division and staff members of all divisions are gratefully appreciate on behalf of the planning team for their support to the successful completion of this task.

Hon. Minister's Foreword



The Urban Development Authority was established under the Urban Development Authority Act No. 41 of 1978, for the systematic planned urban development in the declared urban areas and continues to actively contribute towards it.

Steps have been taken to formulate comprehensive development plans for each urban development area, based on the efficient and effective use of physical space so that all areas of Sri Lanka make an equal contribution to the development process of the country.

The Badulla Town provide services to a large population. Accordingly, Badulla Municipal Council Planning Area has the potential to become a town that continues to provide residential and commercial services. This potential is further enhanced by the natural ecosystem of the surrounding area and the locations of archeological sites of value. These development plans aim to develop the Badulla town by utilizing the potential of the area.

For the realization of His Excellency the president's vision "Vistas of Prosperity" the new Re-urbanization Programme has been formulated in wide consultation with Professionals, Specialists, Stakeholders & communities with strategies having an excellent technological methodology and innovative approach.

Accordingly, I commend the Chairman of the Urban Development Authority, the Director General, the planning teams and all the officers of the Urban Development Authority who assisted in making this work a success. Further, I also appreciate and believe through the support and contribution of the relevant Local Government Institutions, Public and Private Sector Institutions and the general public, Badulla Development plan would be successfully implemented.

Hon. Mahinda Rajapaksa (M. P)

Minister of Urban Development & Housing

Hon. State Minister's Foreword



As a pioneer in Sri Lanka in achieving modern sustainable development goals, the Urban Development Authority has a great responsibility. Accordingly, it is essential to prepare development plans for the Urban Development Areas declared by the Hon. Minister in charge of the subject in terms of the Urban Development Authority Amendment Act No. 04 of 1982 (Part II, Section 8A (1)).

The development plans thus formulated are primarily aimed at building a productive citizen, a happy family, a dignified society and a prosperous nation, which are the core aspirations of the vistas of prosperity. I also believe that these development plans will go a long way in achieving the objectives of urban development and regulation through a formal re-urbanization plan that will bring economic stability to the urban population.

Therefore, I would like to express my heartfelt gratitude to the planning team and to all those who have played a very responsible role in preparing this plan and I hope that you will all contribute to the expectations of the vision of prosperity.

Dr. Nalaka Godahewa (M.P)

State Minister of Urban Development, Coast Conservation,
Waste Disposal and Community Cleanliness

Hon. Chairman's Foreword

Urban Development Authority



Throughout the last four decades, Urban Development Authority has been serving as the apex planning authority in Sri Lanka having the statutory powers to prepare and enforce urban development plans.

Urban Development Plans cover a number of fields including optimum, effective and efficient use of land and managing the quality of its environment. These development plans are prepared for the promotion and regulation of public well-being in urban areas and the people.

According to the present government's manifesto, it is compulsory to prepare development plans for areas which have been declared as urban development areas by the subject minister as per section 8 A (1) under part II of Urban Development Authority Act No. 04 of 1982 (Amendment).

The Development Plan for Badulla (Badulla Municipal Council) area has been prepared for the period 2020 - 2030 considering the physical, economic, social and environmental factors, while successfully overcoming the challenges in preparing the development plan through tools and methodologies with which the Urban Development Authority is equipped.

Therefore, I extend my heartfelt gratitude to the planning teams who dedicatedly worked for ensuring successful completion of this plan and to those who contributed in numerous ways. At the same time I also expect that all parties who contributed for the preparation of this plan will also effectively contribute in future as well for successful implementation of the plan.

Archt. Harshan De Silva

Chairman

Urban Development Authority

Honourable Mayor's Foreword- Badulla MC



The preparation of development Plan in urban area with compatible changes is difficult work. Therefore, it is indeed great pleasure and honour to deliver a message when publishing the 2021-2030 Badulla Development Plan.

My personal idea about the previous planning attempts on Badulla town is, though there are several plans informal living pattern and not having changes to the attitudes are reason to failure of those plans.

Though Badulla referred as administrative town of the Uva province so far, current resources and plans take us further with administrative, sport and green theme to the town. However Urban Development Authority has been prepared spatial plan for achieving this goal to the town. Therefore, they have done a great effort on behalf of the town development.

The responsibility of the Badulla Municipal council is upgraded the daily facilities and services as per the urbanization. Though there are several lands own by Badulla MC it is difficult task to plan individually on those lands and implement them. Consequently, implement such development plan is highly important for town development.

Anyhow, town development is not filled with only physical development. There should be an environment development as per the physical development. There are huge commuter population to the Badulla town and facilitating them in a convenient environment is Badulla MC responsibility.

This plan has been prepared by the Urban Development Authority with collaboration of the Badulla MC. Therefore, I expect great attention and pleasure on this plan from Badulla general public.

I offer my sincere gratitude to all the planning team who prepared this development plan and expect successful practical implementation of this development plan.

Let's join for create people centered planned town.

W.D. Priyantha Amarasiri

Mayor

Badulla

Preface

Badulla MC has been declared as Urban Development Area in Uva Province by the Gazette Extraordinary Notification No. 38/16 dated 1st June 1979. Accordingly, Badulla Development Plan prepared for a Municipal Council area by Gazette Extraordinary Notification No. 1645/22 dated 17th March 2010. However, UDA attention was drawn to prepare a new development plan for the Badulla MC area on the need of updating the Badulla Development Plan of 2010-2024.

Badulla Municipal Area is a Main City of Badulla District and Main Administrative City of Uva Province. In addition to administrative functions the town acts as a provincial health service provider. Accordingly, prime objective of this plan arranges required land use in order to strengthen administrative service and health services. The plan is enforcing duration of year 2021-2030. The plan was prepared by studying many sectors such as existing land use, commuting people to the city, residential density and nature of urban population, economic pattern, distribution of main roads with category, situation of health services, characters of institutional rhythm etc. Data was gathered during 2012- 2020 time period to prepare the Badulla Development plan

The vision of the development plan is “Administrative and health service town in Blue Green Valley of Uva”. Accordingly, it is expecting to achieve planned city development with improvement of existing infrastructure and commercial use in order to arrange aforesaid prime sectors, it’s administrative and health services. As well it is expecting to preserve environmental resources and sensitivity of environmental sensitive area with Blue Green Valley.

The development Plan consists of three parts, part I include the situational analysis and proposed plan of the Badulla. Part II consist Zoning and Zoning guidelines, guidelines on Building line and proposed road width. Part III is consisting annexures

Part One - Chapter 1 of the plan detailed out the meaning of the term development plan, its legal context, the stakeholders of the plan, its context and the planning process followed. Second and third chapter 2 & Chapter 3 of the part I respectively include the planning area, history of the area, boundary delineation of the area and need of the plan in detail. Chapter 4 consists of Vision, Goals and Objectives and Strategic Plans while Chapter 5 include the detailed description on the baseline SWOT analysis for each Goal. Further, Chapter 6 of the plan describe the conceptual plan and proposed land use development plan. Under that the main strategic plans of the Badulla Development Plan such as Social and physical infrastructure Development strategy, Road and Transport Development strategy, Sustainable Environment development strategy, Economic development strategy and implementation strategy has been detailed out as sub sections.

Similarly, Part Two - Chapter 7 of the Part II has been dedicated to describe zoning guidelines and in chapter 8 described the identified zones and zoning guidelines and Chapter 9 included proposed road width, building line and reservations. Part III consisting with annexures of the Part I and part II.

Minister's Approval

APPROVAL OF THE DEVELOPMENT PLAN FOR THE BADULLA MUNICIPAL COUNCIL AREA

I, Mahinda Rajapaksa, Minister of Urban Development and Housing do hereby approve the development plan for the Badulla Municipal Council area, having considered the recommendation made by the Board of Management of the Urban Development Authority on 24th September, 2020 by virtue of the powers vested in me under section 8 "F" of the Urban Development Authority (Amendment) Act No.4 of 1982.



Mahinda Rajapaksa (M.P)

Minister of Urban Development and Housing

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

Date: 15 April, 2021.

Gazette Notification



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The Gazette of the Democratic Socialist Republic of Sri Lanka

EXTRAORDINARY

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PART I : SECTION (I) — GENERAL

Government Notifications

APPROVAL OF THE DEVELOPMENT PLAN FOR THE BADULLA MUNICIPAL COUNCIL AREA

I, Mahinda Rajapaksa, Minister of Urban Development and Housing do hereby approve the development plan for the Badulla Municipal Council Area, having considered the recommendation made by the Board of Management of the Urban Development Authority on 24th September, 2020 by virtue of the powers vested in me under Section 8 “F” of the Urban Development Authority (Amendment) Act, No. 4 of 1982.

MAHINDA RAJAPAKSA (M. P.),
Minister of Urban Development and Housing.

Ministry of Urban Development and Housing,
17th and 18th Floors,
“Suhurupaya”,
Subhuthipura Road,
Battaramulla,
15th April, 2021.

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PART I: SEC. (I) - GAZETTE EXTRAORDINARY OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA - 13.07.2021

NOTICE OF APPROVAL OF THE DEVELOPMENT PLAN FOR THE MUNICIPAL COUNCIL LIMIT OF BADULLA

NOTICE is hereby given to the General Public of the Democratic Socialist Republic of Sri Lanka under Section 8 (G) of the Urban Development Authority Law No. 41 of 1978 as amended by the Act, No. 4 of 1982 that I, Mahinda Rajapaksa, the Minister in charge of the subject of Urban Development & Housing, by virtue of the powers vested in me under Section 8 (F) of the said Act, have approved the Development Plan for the Municipal Council Limit of Badulla, prepared under Section 8(A) of the said Act on the 15th day of April, 2021.

MAHINDA RAJAPAKSA (M. P.),
Minister of Urban Development & Housing.

Ministry of Urban Development & Housing,
17th and 18th Floors,
“Suhurupaya”,
Subhuthipura Road,
Battaramulla,
12th July, 2021.

07 - 537/2

APPROVAL OF THE DEVELOPMENT PLAN FOR THE MUNICIPAL COUNCIL LIMIT OF BADULLA

PUBLIC are hereby informed that the Development Plan prepared for the Municipal Council Limit of Badulla under Section 8 (A) of the Urban Development Authority Law No. 41 of 1978 as amended by the Act, No. 4 of 1982 has been approved on 15th April, 2021, by Hon. Mahinda Rajapaksa, Minister of Urban Development & Housing, by virtue of powers vested on him under Section 8 (F) of the said Act.

Archd. **HARSHAN DE SILVA,**
Chairman,
Urban Development Authority.

12th July, 2021.

07 - 537/3

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Badulla Development Plan

Part I

Chapter 01

Background of the Study

1.1. Introduction

The Urban Development Authority was established under the Urban Development Act No. 41 of 1978 in order to implementation of Integrated Development of Urban Development Areas declared for the time been. According to the Act and subsequent amendment for the same Identification and Declaration of Urban Development Areas. Preparation of Integrated Development Plans for the declared area and implementation of the same are basic activities of the Urban Development Authority.

Accordingly Badulla Municipal Council area was declared as 1st Urban Development Area in Uva Province by the Gazette Extraordinary Notification No. 38/16 dated 1st June 1979. As per Section II B 8 A (1) of Urban Development Authority Act No. 04 of 1982 (Amendment) power vested to Preparation of Development Plan and accordingly 1st Development Plan prepared for Badulla Municipal Council area declared by Gazette Extraordinary Notification No. 1645/22 dated 17th March 2010. The necessity has been arised to updating the same plan suit to present due to changes take place in economic and social context.

Accordingly, power vested with Section 8 H (1) of Urban Development Authority Act No. 04 of 1982 (Amendment) process was initiated to updating the Existing Development Plan.

New Development Plan of regional level is complete for Badulla Municipal Area for targeting year 2021-2030 in order to create city with better infrastructure for the resident population as well as for commuting population. The Development Plan envisages promotion of all physical, social, economic and environmental sectors. Comments propels and recommendation of government and private sector stake holders, service provident in the city resident and commuting population are accommodated in the development plan and proposal included in detailed in the development plan.

1.2. Stakeholders of the Plan

Main Stake holders participate for preparation of development plan (2021-2030).

- i. Uva Province Office of Urban Development Authority
- ii. Baulla Municipal Council

Government and Semi Government Institutions participation for consultancy discussion.

- i. District Secretariat Office, Badulla
- ii. Divisional Secretariat Office, Badulla
- iii. Agrarian Service Department
- iv. General Hospital, Badulla
- v. National Building Research Organization
- vi. National Water Supply and Drainage Board
- vii. Road Development Authority
- viii. Railway Department
- ix. Board of Investment Sri Lanka
- x. Archeological Department
- xi. Land Use Policy Planning Division
- xii. Badulla Prison
- xiii. Ceylon Electricity Board
- xiv. Provincial Sports Ministry
- xv. Badulla Pradeshiya Sabha

Other Stakeholders

- i. Three Wheeler Association, Badulla
- ii. Commercial Community of Badulla
- iii. Resident and Commuter to Badulla

The Uva Provincial Office, UDA was responsible for the preparation of this development plan.

1.3. Scope of the Development Plan

The scope of Badulla Development Plan consists several key areas such as, study of economic, social, environmental and physical potential of the city, identification of opportunities in relation to Local, Regional and National Level and required level of in preparation of development plan and which sectors to be covered by the plan etc.

Badulla is the main Capital City of Uva Province and it is the first municipal council of the province as well as first Urban Development Authority area. Further it is the main administrative center of Uva Province and where many local, district and provincial important administrative institutions were located and it is important local level too.

The Badulla City is located along main junction of Peradeniya - Chenkalady A5 Road, Bandarawela, Hali Ela, Mahiyanganaya and Passara are secondary main towns located around Badulla City. As Badulla is the destination of up-country railway line. Accordingly, Badulla acts as transport hub as well.

As per National Physical Plan 2030 Badulla falling within medium Environmentally Sensitive Zone (Map No. 1.1). Accordingly, there are not identified much large-scale development in Badulla. Therefore, the main development project identified in the Badulla are in Agricultural, Education and Tourism Sectors in relation to future development.

As per Draft National Physical Plan (2050) (Map No. 1.2) Badulla City falling within Medium Environmentally Sensitive Zone. Accordingly, it has been identified as existing population to be kept in the same level. The plan recommends that it should promote economic activities which not cause to increase of population on employment opportunities creating on same economic activities.

The vistas of prosperity and splendor new government policy framework have identified Badulla as National City. There are several strategies to achieve the economic development of the Sri Lanka. Under the physical development is under the new approach in spatial system has proposed to create facilities in every place to eliminate the regional economic disparities. Therefore, selecting Badulla as a National city may cause to regenerate the facilities to serve whole region. Further Badulla has identified as the connecting city of C shaped economic corridors in the policy framework. Therefore, this economic pressure also boosts the Badulla town development.

The goal of the Badulla Development Plan declared on 17th March 2010 was to develop the Badulla as main administrative city by continue that services in optimum level. Land Use Zoning Plan (Map No. 1.3), Floor Area Ratio, dimension of lots of the same plan is inadequate in relation to development taking place in commercial, residential and administrative sector at present. Since the axis of development trend has been changed, necessity has been arisen to update the present development plan in order to guide present physical development trend.

Since Badulla is falling within Medium Environmentally Sensitive Zone both National Physical Plans 2030 and 2050 (Draft) only activities related to tourism and agriculture sector which are affect minimal to the environment have been proposed within the area by plans. There are much services located Badulla since it is main administrative center in Uva Province and large improvement acquired by service sector residential and local services. Demand created by people engaged in service sector and resident people in the Badulla City should be considered by Development Plan necessarily. As well as proposed development aims to develop plain area within the City Centre with sustainable environmental conditions.

Population influxes to the Badulla City for residential purpose increase gradually due to natural hazards are minimum within the city compare with among other towns of Uva Province. But the issue is created to unnecessary environmental degradation trend due to filling of paddy field and subject of hill slopes for residential development demand. Therefore, it is envisaged minimizing environmental degradation and creating sustainable service city through this development plan.

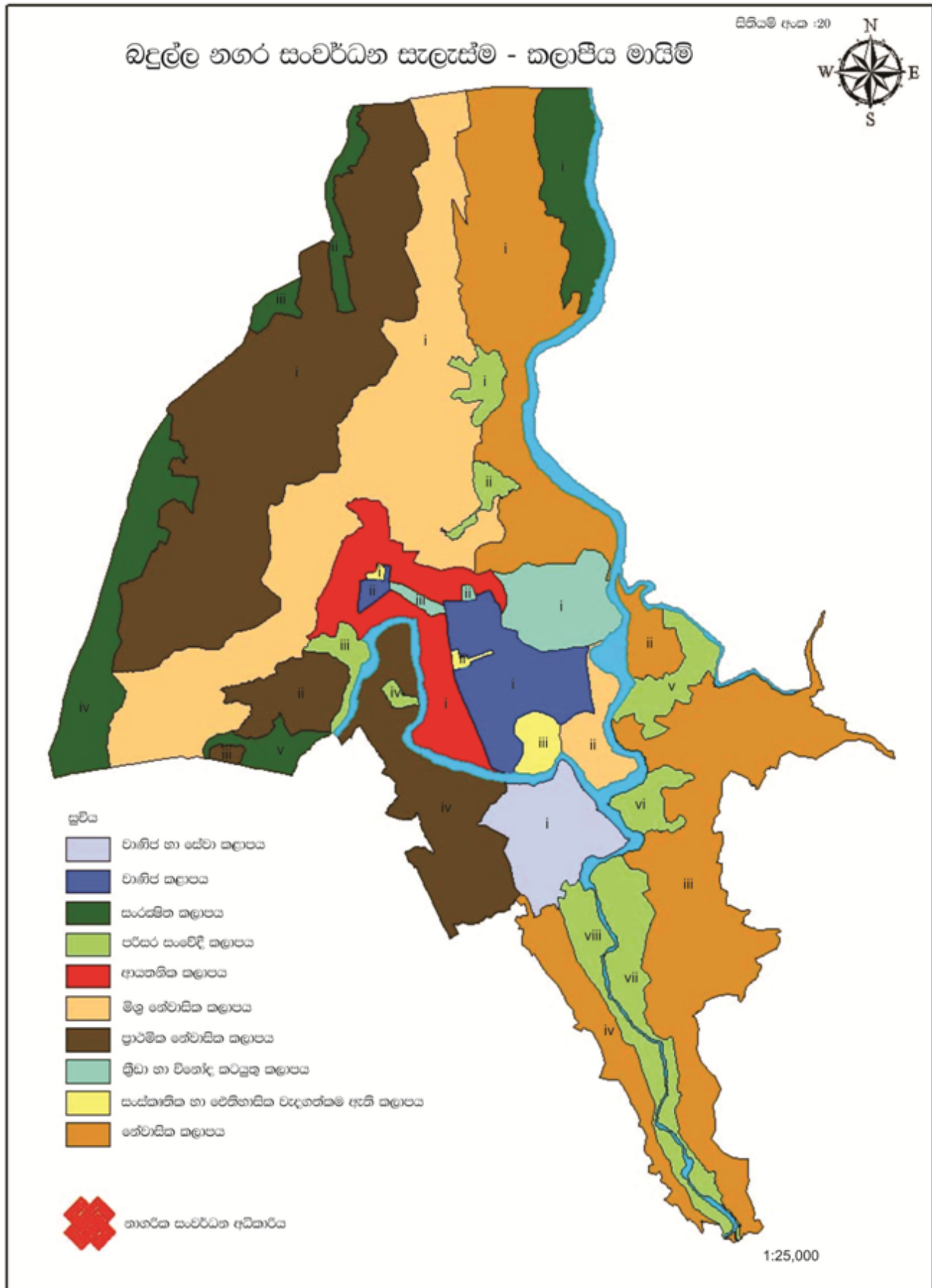
Although Badulla has opportunity to develop as tourist attraction base on environmental harmony of up-country hilly area only several tourist attractions located within it self due to limited land area within Badulla Municipal Limits. Except Muthiyangana Raja Maha Vihara Temple, Lindamulla Pattini Devalaya, Kataragama Devalaya grass

Legend

- District Capital
- Metro City
- Special Purpose City
- Sea Port
- Airport
- Power Plants
- Fishery Harbour
- Expressway
- Highway
- Railway Line
- Forest & Wild Life Reserves
- Metro Regions
- Central Environmental Sensitive Area
- Coastal Environmental Sensitive Area
- Rural Settlements, Commercial Agriculture & Plantations

0 24,500 49,000 98,000 Meters

Map No. 1.3: Badulla Zoning Plan 2010-2024



Source- Badulla Development Plan(2010-2024)

land in Medapathana has opportunity to develop as tourist attractions. But, situation in the field of tourism is minimal in Badulla Town due to existing land use pattern and social economic trends are concern. The city development already covered by base on service sector rather than tourism development. Due to that existing city structure to be developed with focusing trend on service sector and not focuses on tourism sector, since it has low priority.

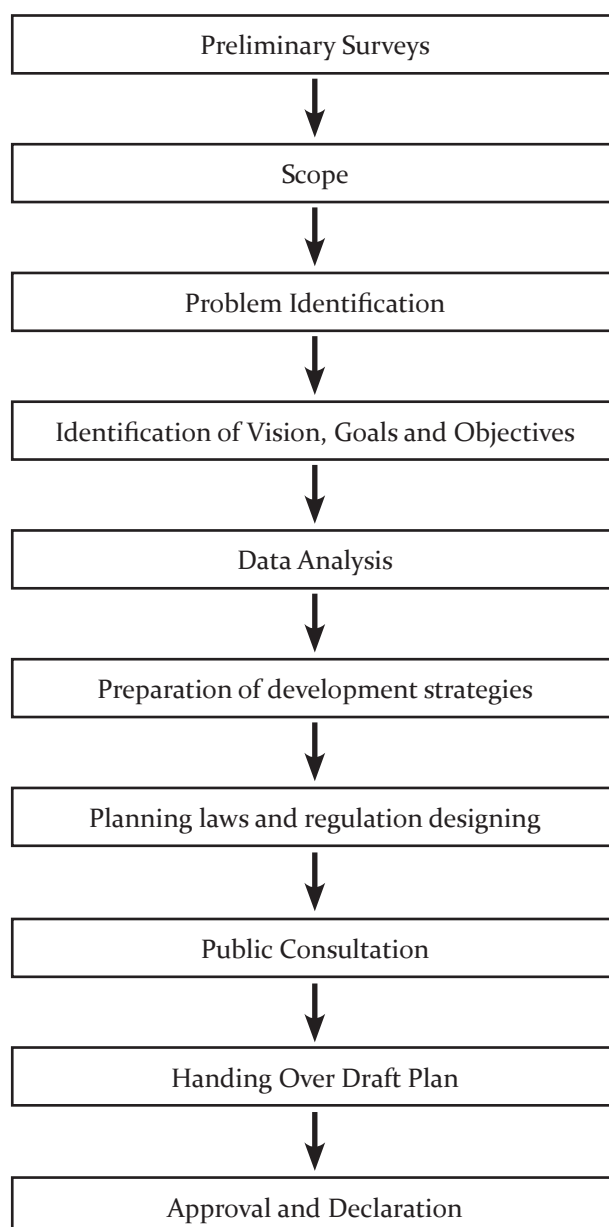
Therefore, Badulla Development Plan focuses on to develop as environmental Sensitivite area which was identified by the National Physical plan. Further, as Regional Capital it needs to create complete Infrastructure facilities to serve the area residents.

1.4 The Planning Process

The following planning methodology has been adapted in preparation of Badulla Development Plan.

I. Background Studies

The first attempt in preparation of Badulla Development Plan was collect primary and secondary data pertaining to physical, economic, social and environmental sectors of the city. Information and data collected from Badulla Municipal Council, Badulla Divisional Secretariat Office, General Hospital, Office of Medical Health, National Building Research Organization, Water Supply and Drainage Board, Ceylon



Electricity Board, Agrarian Department Office. These information and data were analyzed. Maps prepared on above and windscreen and field surveys were use for base studies.

II. Scope

The situation of Badulla City informs of regional and national context identified at this stage. Recommendation on development status given to Badulla Town falling within Central fragile area by National Physical Plan 2030, National Physical Plan 2050 (Draft). As well it is identified proposal for development projects through Uva Regional Plan of National Physical Planning Department. Further, Sri Lanka National policy framework Vistas of Prosperity and splendor has identified Badulla as national city. Therefore, explore the new potential developments through this policy. At the same time it is also identified proposed development projects by infrastructure development agencies with their concern and existing situation of same field also studied.

III. Problem Identification

In addition to problem identified in scoping session by analyzing primary and secondary data, to obtain public view on problem of town it was held stake holder meeting on 10th March 2017 with participation of government and semi government infrastructure provision agencies, administrative sector and various community organization of the city. As well public views obtained by having focus group meeting, field visits and informal meeting with resident and commuting population to the city.

IV. Formulation of Vision, goals and Objectives

In order to solve identified problems through development plan by considering identified potentials significant, context and magnitude of the problems and potentials were analyzed and vision, goals and objectives decided to achieve by the development plan during the period of 2020-2030.

V. Data Analysis

According to Vision and Mission place in Badulla Development Plan (2020-2030) the SWOT Analysis was done to identified Strength, Weaknesses, Opportunities and Threats. In addition to that Environmentally Sensitivity Analysis, Potential Analysis, Livability Analysis, Development Presser Analysis and Watershed Analysis also done.

VI. Preparation of development strategies

The Land Use Zoning Plan, Infrastructure Facilities Service Plan, Economic Plan, Sustainable Environmental Plan and Archeological and Heritage Conservation Plan and Strategic Plan and projects prepared according to identified vision, goals and objectives.

VII. Planning laws and regulation designing

Preparation of regulation pertaining to land use and construction of building were undertaken under this stage. Changes to non-implemented regulation of existing development plan, essential conditions to be considered in land use and construction in plains and slopes were analysis in detailed under this stage.

VIII. Public Consultation

Draft Development Plan open to public for comments and forum was conducted in order to convince stake holders who contributed to preparation of the plan.

IX. Handing Over Draft Development Plan

After public consultation, final Draft Development Plan directed to Main Planning Committee of Urban Development Authority with accommodating public views and comments.

X. Approval and Declaration

With the recommendation Main Planning Committee of UDA the plan to be submitted to approval of Hon. Minister and subsequently Gazette Notification to be issued published the plan.

Chapter 02

Background Study

2.1 The Planning Area

The Badulla Municipal Council Area which is Badulla District Main Town and Provincial Capital of Uva Province consist with 13 GramaNiladhari Division located in western part of Badulla Divisional Secretary Division. Badulla City located between 6.5 - 7.1 latitude and 81.2 - 81.4 longitude. It was bounded by Soranathota Pradeshiya Sabha in north, Badulla Pradeshiya Sabha in east and Hali Ela Pradeshiya Sabha in east and south.

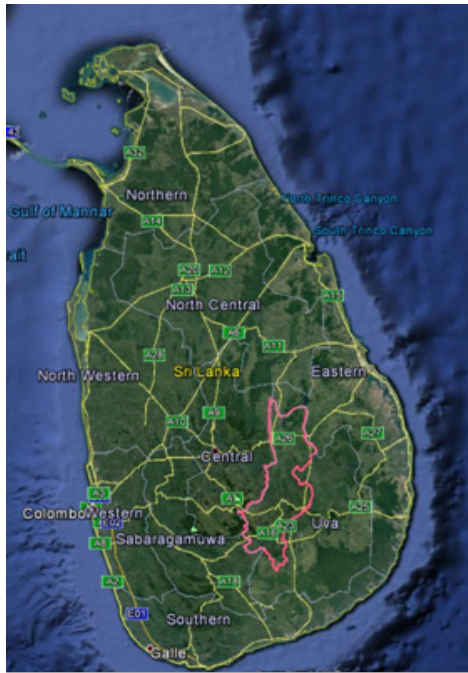
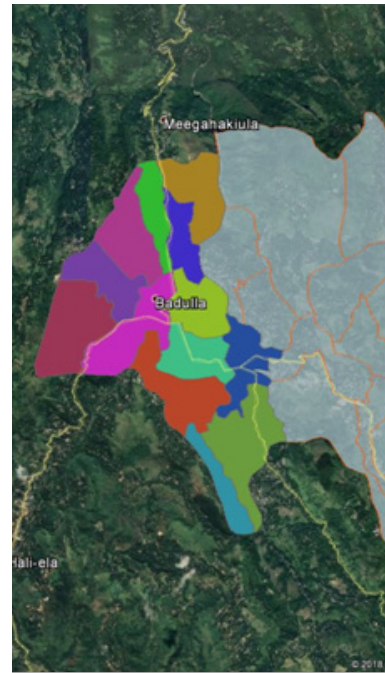
The Area of Badulla Municipal Council is 10.5 square kilometer and consists with 15 municipal wards.

2.2 Planning and Situational Context

Planning background centered with inter regional linkages and physical, economic, social and environmental situation discuss in this section.

As per the urban hierarchy identified in National Physical Plan 2030 Badulla is a third order provincial capital town which provide good and services. As per the Uva Regional Plan (2030) Badulla is a first order city within the region. By the National Physical Plan (2050 (Draft) Badulla has been identified as Provincial Capital. Further, new government policy framework has identified Badulla as National city of Sri Lanka under the

Therefore, Badulla development plan gazette in 17 March 2010 need to revise as per the social and economic changes in the area and national policy frame work, to create sustainable urban area.

Figure No. 2.1: Location of Badulla City**Badulla District****Badulla Divisional Secretariat****Badulla Municipal Council Area**

Source: Google Earth, 2017

Climate and Topography

Badulla belongs to Wet and Dry Intermediate Climatic Zone and Average Annual Temperature is about 24 Celsius. Average Annual Rainfall is about 1885 mm. It was like a shape of basin and middle area is in plain nature in topographically. The height is about 680m from the mean sea level and it is change to 800 m in hilly areas.

Historical Evaluation

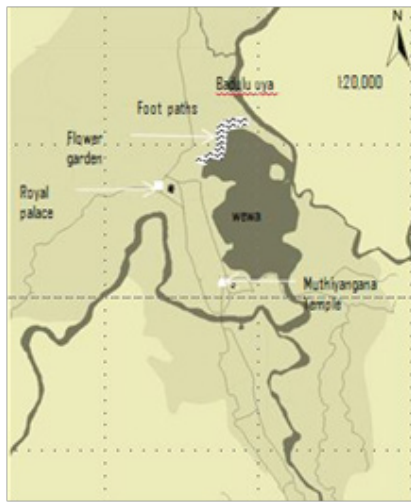
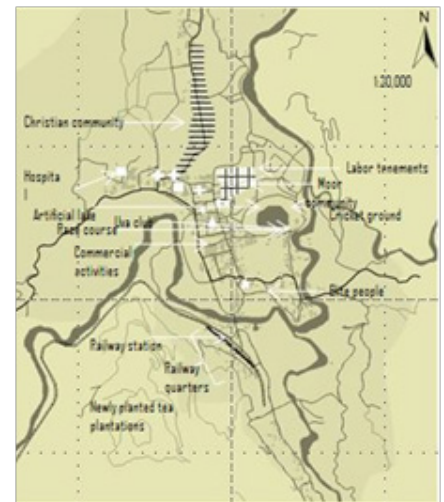
Historical evolution process witnesses information up to several centuries. 'Uva Wansa Storey' written on archeological evidence denotes that Badulla first mentioned during 3rd visit of Lord Buddha, Sri Lanka. Lord Buddha visited to Kelaniya on invitation by "Mani Akkitha Na Raju" in 18 Buddhist year also visited to Badulla by invitation of regional administrator called "Indika". It has mentioned Lord Buddha was stay at Present Muthiyangana Raja Maha Vihara premises.

According to "Uva Wansa" storey during between 227 Buddhist year - 207 B.C. Badulla during Kingdom of Devanampiyatissa King Badulla was considered as religious city. The regional administrator known as "Udayaraja" was administered that same time. As well lake connected to Badulu Oya flows around the town and present flower garden.

Badulla considered as second Capital City during Mahanuwara Kingdom. As per Uva Wansa Storey during 1604 - 1548 Buddhist year Regional Administrator King Wimaladharماسuriya was constructed the Kataragama Devalaya at Badulla. It also mention in Uva Wansa that there were population belong to 32 races were residence in Kottagoda Village close to city.

Although highland of the Sri Lanka not ruled by the Portuguese and Dutch, it affected activities in social and economic activities of the area. Christian people resided within the city during this era. Then they established their religious places close proximity to their residences.

British ruling period can be considered as specific time period which started rapid population growth within town limit of Badulla as service centre. Entire Sri Lanka comes under colonial states after 1815. After that Badulla has been growth as main administrative town and economic centre. Establishment of the Kachcheri, Courts Complex, Badulla General Hospital was taken place at that time and similarly economic activities also promoted.

Figure No. 2.2: Historical Evaluation**Before Colonial Period 1505****Portuguese and Dutch period (1505-1815)****English Period (1815-1948)****After Independence (1948-1977)****At present (After 1977)**

Source: Rathnayake, S., Correlation study between Urban Planning Structure and Social Physical sectors. 2000

The commencement of Badulla - Colombo railway line commenced for transport of Tea produce in Passara area this duration.

Further, Moor and Mo ethnic groups have made make contribution merchandise activities. They resided around Badulupitiya area. As well Christian people settled Mahiyangana road area and their religious place also origin in parallel.

The government institution which were located within city centre, dispersed to surrounding areas after independence. Missionary schools which originated during British period were converted to Buddhist school due to impact of resurrection of Buddhism. As well as, Hindu and Islamic schools also started at the same time.

The population of Badulla town decrease reasonably due to expatriate of state Tamils to return to India lives in the town as per Srma - Sasthri Agreement in (1967) afterward majority of employed personal of the government institution settled in the town. Meanwhile Mo and Islamic people settled at Badulupitiya. Christian community settled at either side of Mahiyangana road and Sinhalese community settled at Pinarawa, Kanupalella areas.

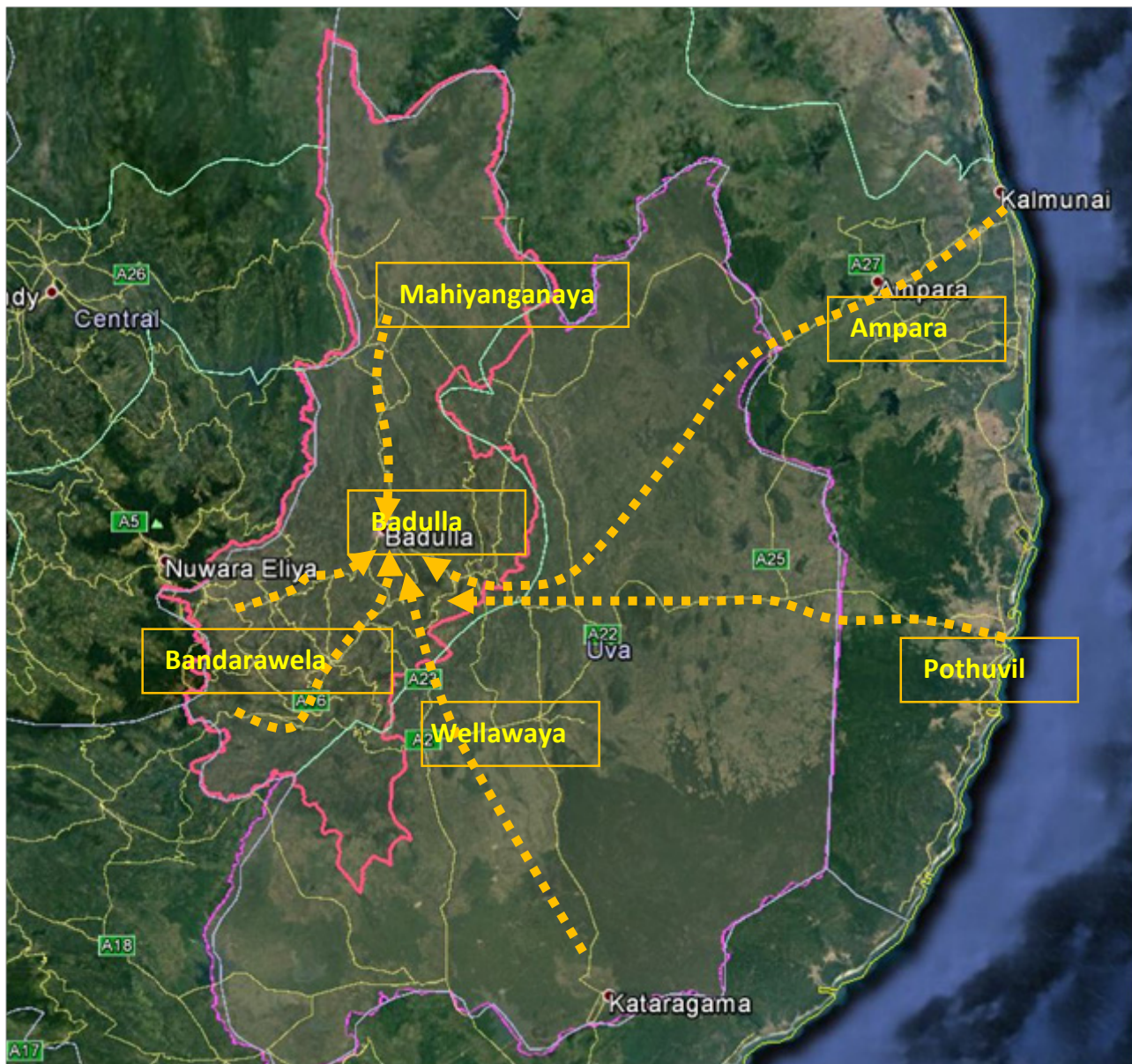
Inter and Intra Regional Linkages

Badulla City is located on Peradeniya - Badulla - Chenkalady A5 Main Road as a main junction. As well as Badulla is the destination of up country railway line. Accordingly both road and railway transport modes provide better opportunity for inter regional linkage with other regions and within Badulla. Four main roads are contributing in Intra-Regional Linkage with Badulla town. Those are,

- Badulla - Bandarawela Road (A5)
- Badulla - Wewelhinna Road
- Badulla - Passara Road (A5)
- Badulla - Mahiyangana Road (A36)

A large number of daily commuters come to the city for obtaining goods and services. Service threshold of Badulla stretches up to Batticaloa to the east and Balangoda to west for some services. Services of Badulla General Hospital are vital among those services.

Figure No. 2.3: Service Threshold of Badulla City



Source: Google Earth ,2017

Population

According to resource profile of Badulla Divisional Secretary Division 2018 total population of Badulla City was 48,641. Total area of Badulla City is 1,036 ha. Accordingly, the population density within Badulla City limit is 44 people per one square kilometre. According to the Department of Census and Statistics average annual population growth rate from 2001 to 2012 was 0.4%. But when compared to 2012-2018 Resource profile data average annual population growth rate is 1.25%. It reveals that there is an increase in migration to the city for permanent residency. There is intra-regional variation in population density of the city. But when considering the average annual population growth rate Grama Niladhari Division wise, Badulla East and Badulla Central divisions shows a negative growth. Since both divisions are in the center of the city, there is a tendency of changing residential units in to non-residential, institutional and commercial use.

At the same time when considering the population density (Resource profile 2018-Badulla Divisional Secretary office) highest population density in Badulla is recorded from Badulla North, Kanupelella and Badulupitiya Grama Niladhari Divisions. But there is a higher population density in Badulupitiya and Kailagoda Grama Niladhari Divisions due to location of labor quarters within small land plots. (Map no. 2.1)

According sex ratio, female population in 2018 was 25840, 53% to the total population and male population was 22301, 47% to the total population. When considering the employment, out of total labor force 81% are employed as 11% are in government sector, 13% are in private sector, 37% are in agriculture sector and 20% are in commercial activities. Accordingly a higher percentage of people are employed in agriculture and commercial sector.

Badulla is a multi-ethnic city, consists of Sinhalese, Ceylon Tamil, Indian Tamils, Burghers, Muslims and Moors etc. The majority is Sinhalese and it accounts 34,258, 70% of total population. Second highest is the Moors, it accounts 7,940, 16.32% of total population. Figures of Ceylon Tamils are 3,603 and Indian Tamils 2252, percentages are 7% and 4.6% respectively.

Housing

With the development of administration activities in Badulla city, residential population within Badulla MC Area has risen rapidly. At the same time, when compared to previous years, the number of houses within the MC area also has been increased. Department of Census and Statistics data in 1992, 2001 years and Resource profile of the 2018 shows the continuous increase of the housing.

Table no 2.1: Badulla housing and average size of the household

Year	No of Houses	No of People	Housing Ratio
1992	7316	39892	5.4
2001	9125	40920	4.9
2018	10298	48641	4.7

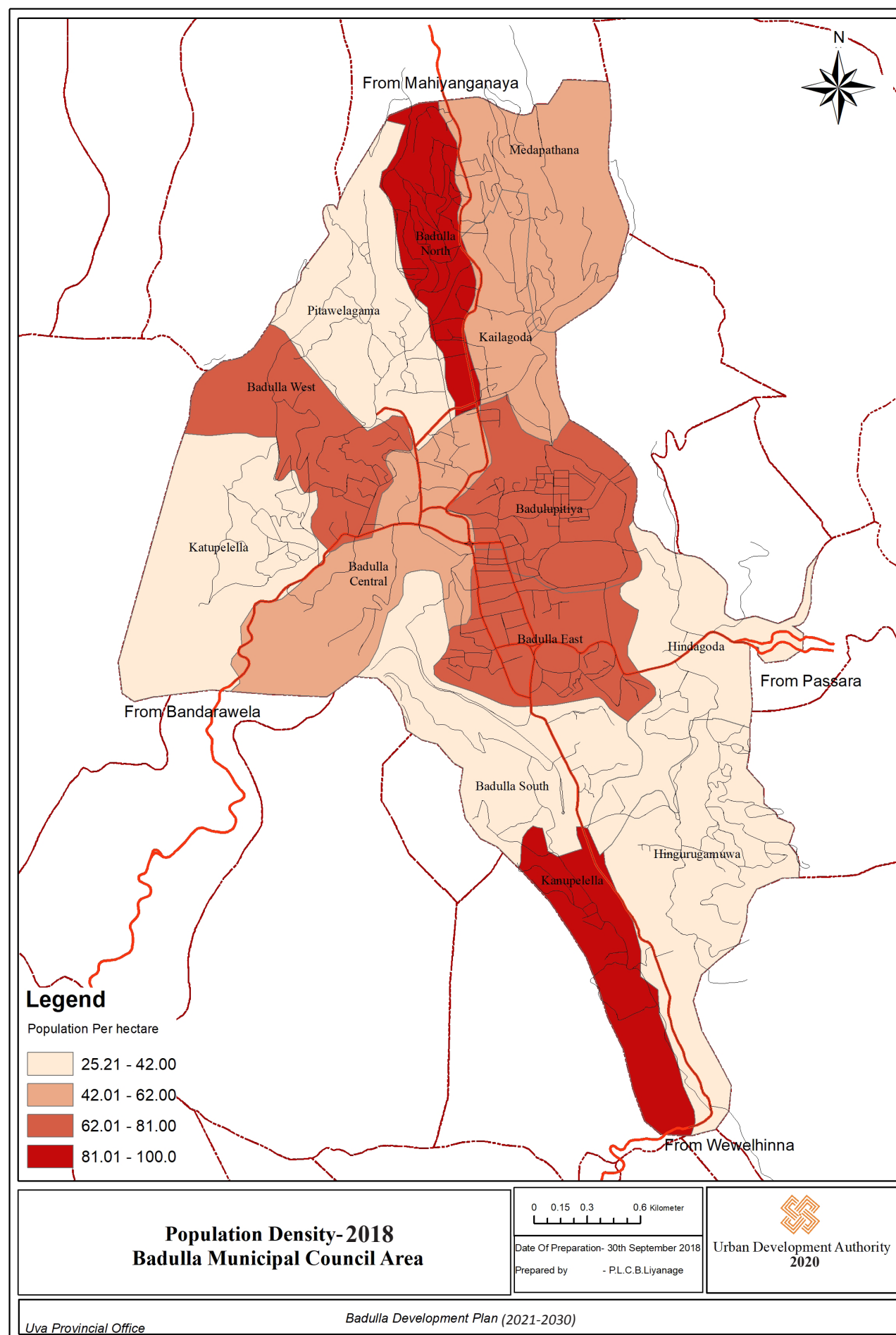
Source: Department of Census and Statistics and Resource Profile, Badulla Divisional Secretariat office

62% of the land within Badulla area is under residential use. Therefore, it can be considered as a residential city. This is mainly due to the employees who are working in the government and private sectors are willing to locate their residences within the MC area itself. However still there are under-utilized lands within the town center.

Housing Density

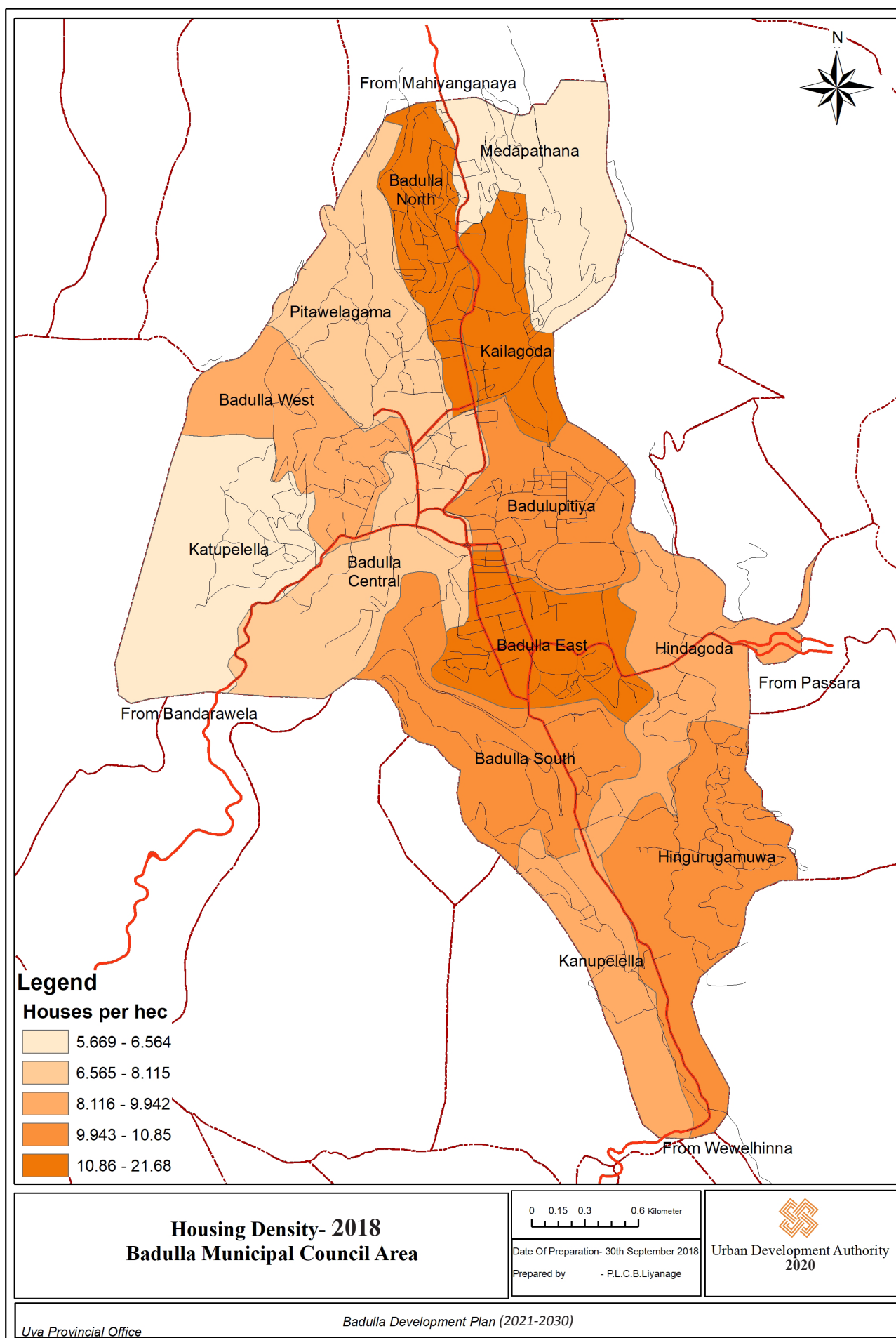
According to the average housing density Badulla MC area, there are 9 houses per hectare. Badulla North and Badulupitiya GN Divisions show a high housing density with 22 and 17 houses per hectare respectively. Other than that, Badulla West, Kailagoda, Kanupelella, Higurugamuwa GN Divisions show a moderate level of housing density which are considered as residential zones.

Map No 2.1: Badulla Population Density



Source : Urban Development Authority, 2018

Map No 2.2: Housing Density



Source : Urban Development Authority, 2018

Floating Population

According to the survey conduct by Uva Provincial Office of Urban Development Authority and Road Passenger Transport Authority in 2018, daily commuting people to the city is around

100,000. Daily commuters to the city, residents and the outsiders come to the city for three main services. (Table No. 2.2)

Table No. 2.2 Commuters to the City by Requirement

Serial No.	Service Sector	Percentage of Commuters
1	Education	22%
2	Health	18%
3	Institutional	8%

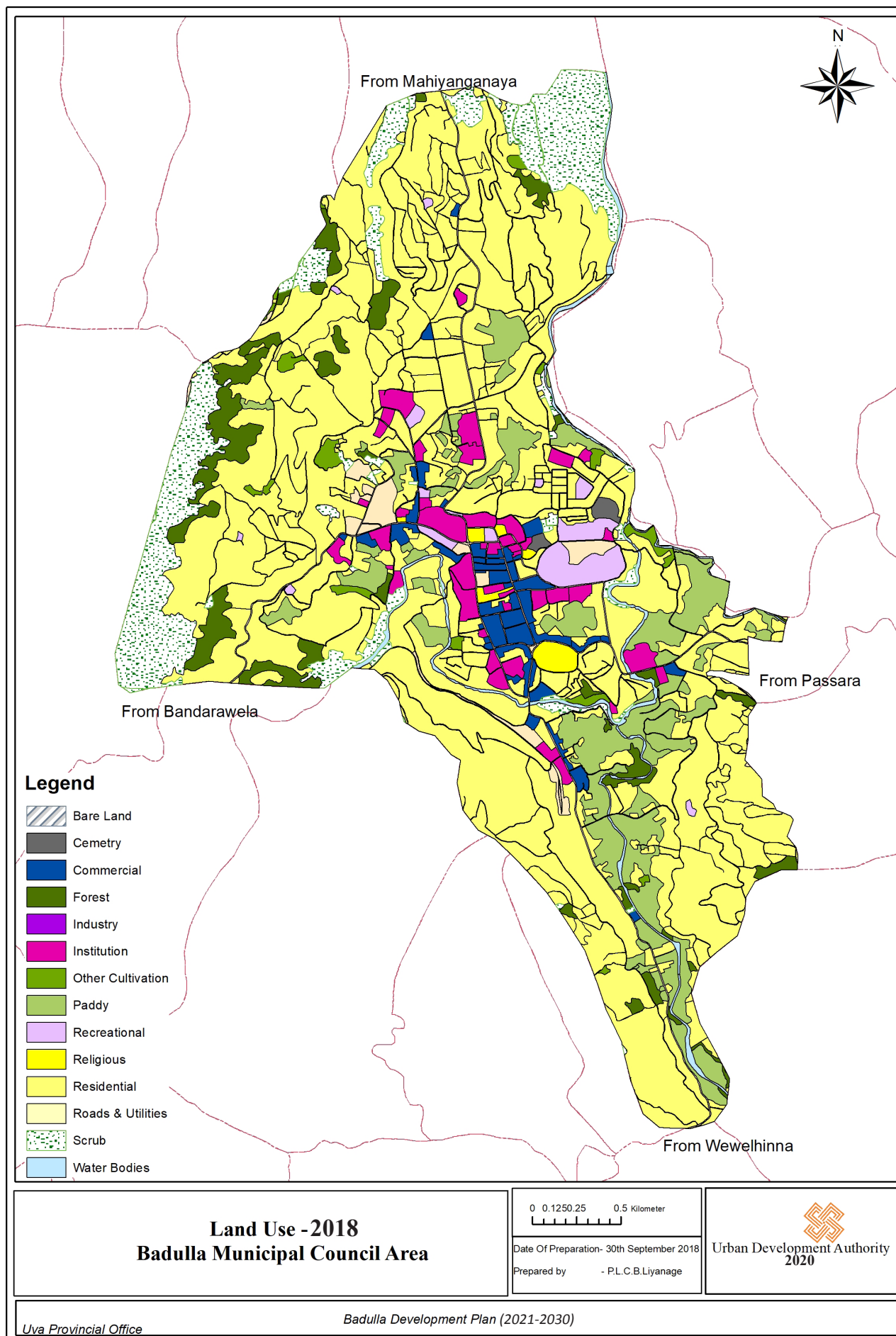
Source: Uva Provincial Office, UDA 2018

Land Use Pattern

Total land extent of Badulla City is 10.5 square kilometers. Out of that 62% is under residential use. The town centre lands devoted to Health, Institutional, Commercial and Recreational Uses. (Map No. 2.3)

Out of the total land extent within the town 1817 acres are in developed category. Another 278 acres, 10% of the total area is in developable category. Reasonable extent of developed land under the ownership of government and several land of them are under-developed.

Map No. 2.3 Existing Land Use, Badulla



Source : Urban Development Authority, 2018

Those under-developed lands are,

- (i) City center lands belong to Housing Development Authority
- (ii) Back portion of Governor's Office land
- (iii) Back portion of District Secretariat land
- (iv) Land own by Inland Revenue Department
- (v) City center land belong to Railway Department (Behind Prison, Kanupelella Road Quarters)
- (vi) Municipal officer quarters land at Badulupitiya Road
- (vii) Under-utilized lands which are categorized as Archeological Conservation land

Land Ownership

Land ownership pattern in Badulla town can be classified as follows. (Table no. 2.3)

Table No. 2.3 Land Ownership in Badulla Town

Institution	Percentage (%)
State	20%
Badulla Kataragama Devalaya	11%
Muthiyangana Raja MahaViharaya	0.1%
Private	62%
Others	7%

Source: Divisional Secretary Office, Badulla, 2017

One salient feature to be mentioned here is that 60% of the land within Badulla South Grama Niladhari Division is owned by Kataragama Devalaya.

Stream Network

Badulu Oya can be introduced as a special character in Badulla city limit. In addition, Kuda Oya and Rambukpotha Oya flow to Badulu Oya within Badulla town. There are several irrigation canal and natural water springs in Badulla connected to Badulu Oya. Although pipe born water is available within entire Badulla town there are lots of crowds using water of Badulu Oya for their daily needs. (Map No. 2.4)

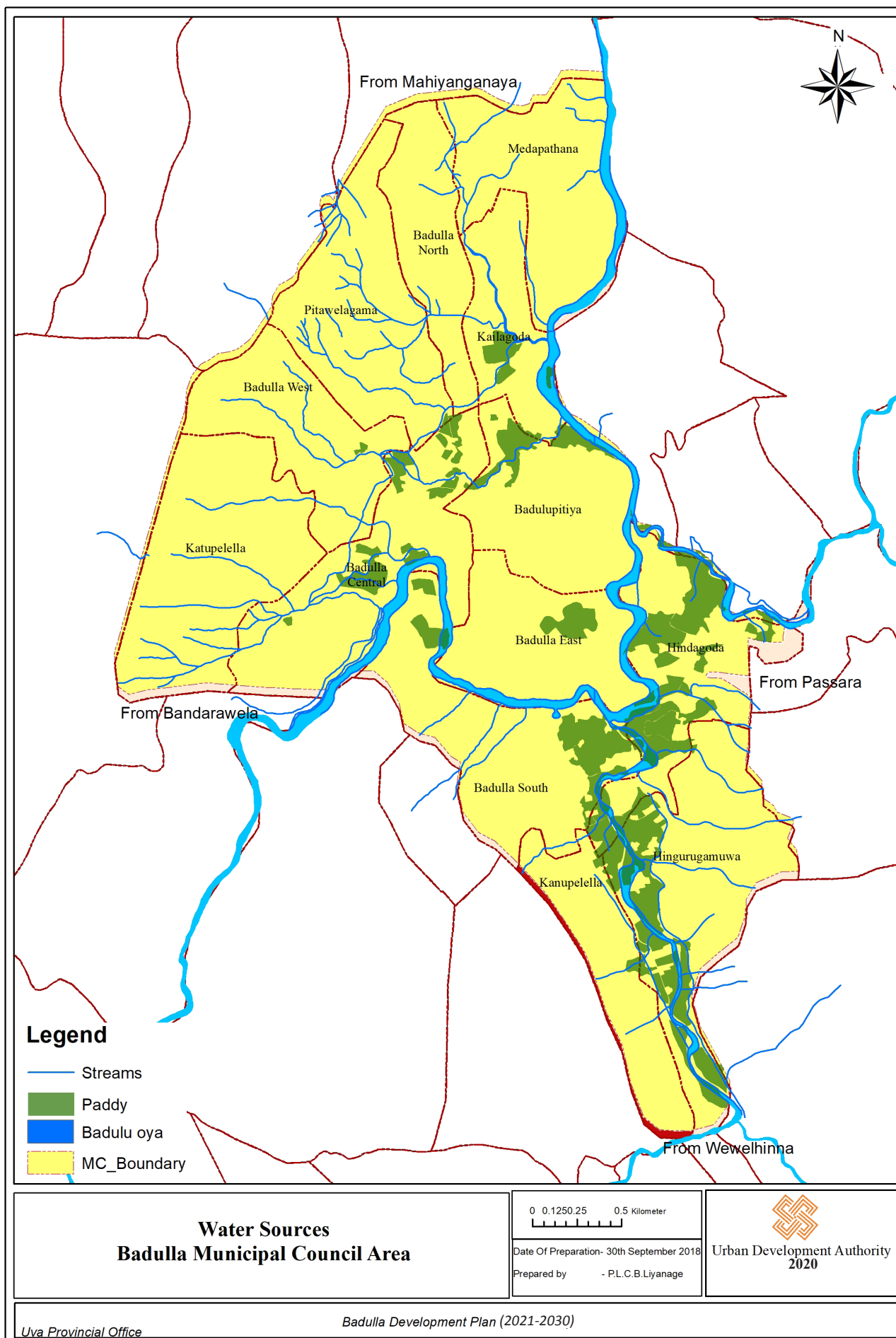
Economic Base of the Town

When considering about the historical evolution of Badulla, it was the centre of administration and service town. But the economy of Badulla was based on the agriculture in the past. According to the folk- tale of the Badulla, there was a tank in middle of the town. The city was self-sustain with the paddy cultivation. Due to diminishing of economic productivity of paddy land, labor force was drawn towards the service sector, administrative and health.

At the same time the economic productivity of the paddy fields within Badulla city limits was diminished. The main reasons were irregular water supply to the paddy fields, lack of lands for residential use. There is emerging trend of filling paddy lands rapidly. But out of total paddy land in Badulla Divisional Secretary Division 31.4% of the paddy lands are within Badulla Municipal area. However, tertiary sector service provision is prominent in Badulla surpassing agriculture sector at the present.

Although there are places which can get tourist attraction in Badulla area yet the city of tourism has not been established.

Map No 2.4: Badulla Stream Network



Source : Urban Development Authority, 2018

Road and Transport

There are three categories of roads within Badulla City. (Table No. 2.4).

Table No. 2.4 Roads in Badulla by Category

Category	No. of Roads	Length of Road (Km)
Road Development Authority	6	14.1 Km
Provincial Road Development Authority	3	5.4 Km
Badulla Municipal Council Road	129	84.7 Km

Source: Road Development Authority & Badulla Municipal Council, 2018

The special character in Municipal Roads within Badulla is that the majority of them are in the form of steps passages due to the topographical features. (Map No. 2.5) The number of buses arrive to the city and the number of buses depart from the city are as follows, according to the data from the Transportation Authority of Badulla and Sri Lanka Transport Board. (Table No. 2.5)

Table No. 2.5: Inbound - Outbound Commuter Passenger Busses

Direction	No. of Busses
Inbound	789
Outbound	810

**Source: Road Passenger Transport Authority, Uva Province
Sri Lanka Transport Board, Badulla 2016**

As destination of up-country railway line, 5 railway turns departure and 5 railways turns arrive at the Badulla Railway Station per day.

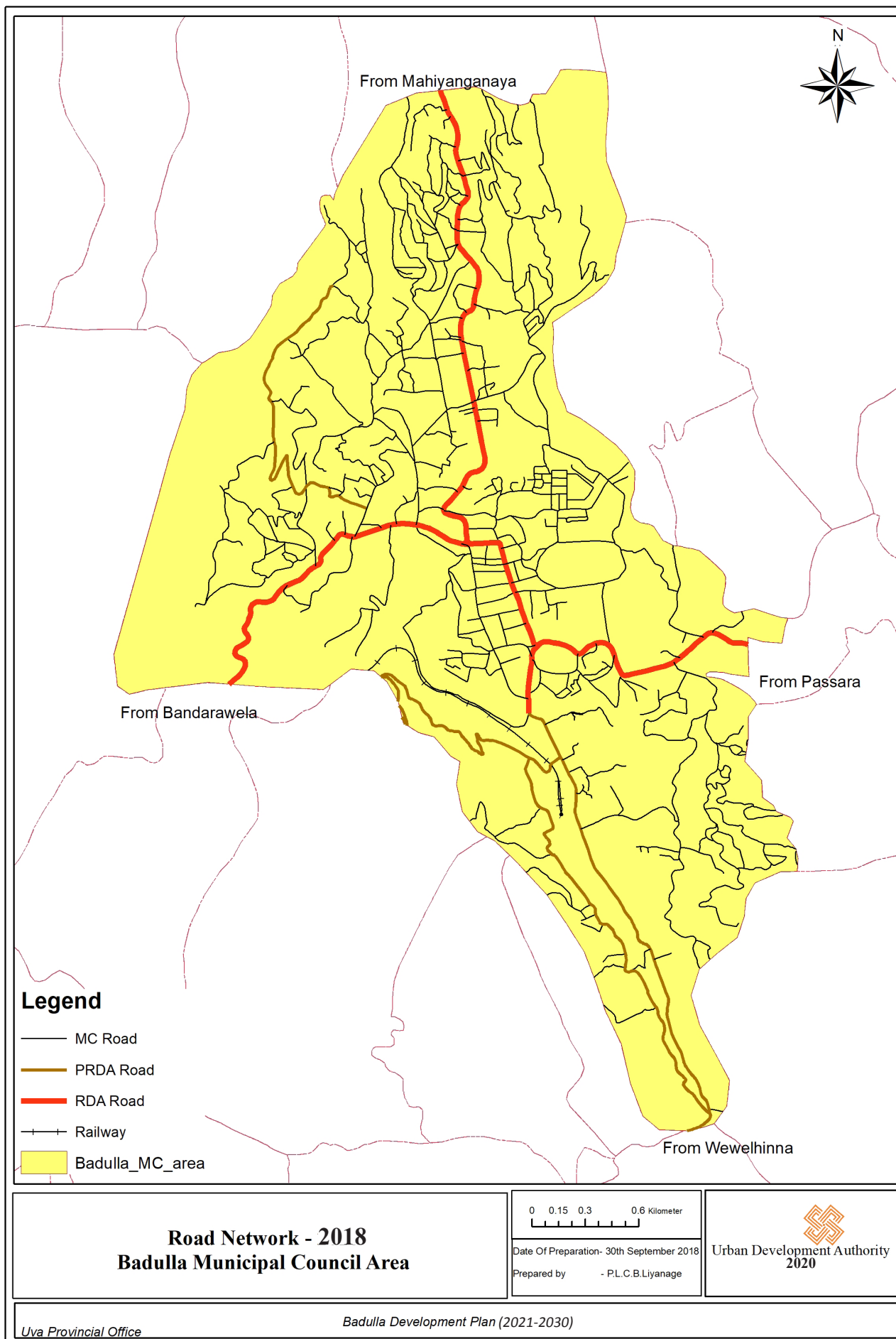
Water Supply

The main source of drinking water within the Badulla city limits is Badulu Oya while the main drinking water supplier is National Water Supply and Drainage Board. The total number of families living within the city is 12,452 out of them 11,891 families, 40% of total families are entitled for pipe born water supply. (Map no. 2.6)

Electricity Supply

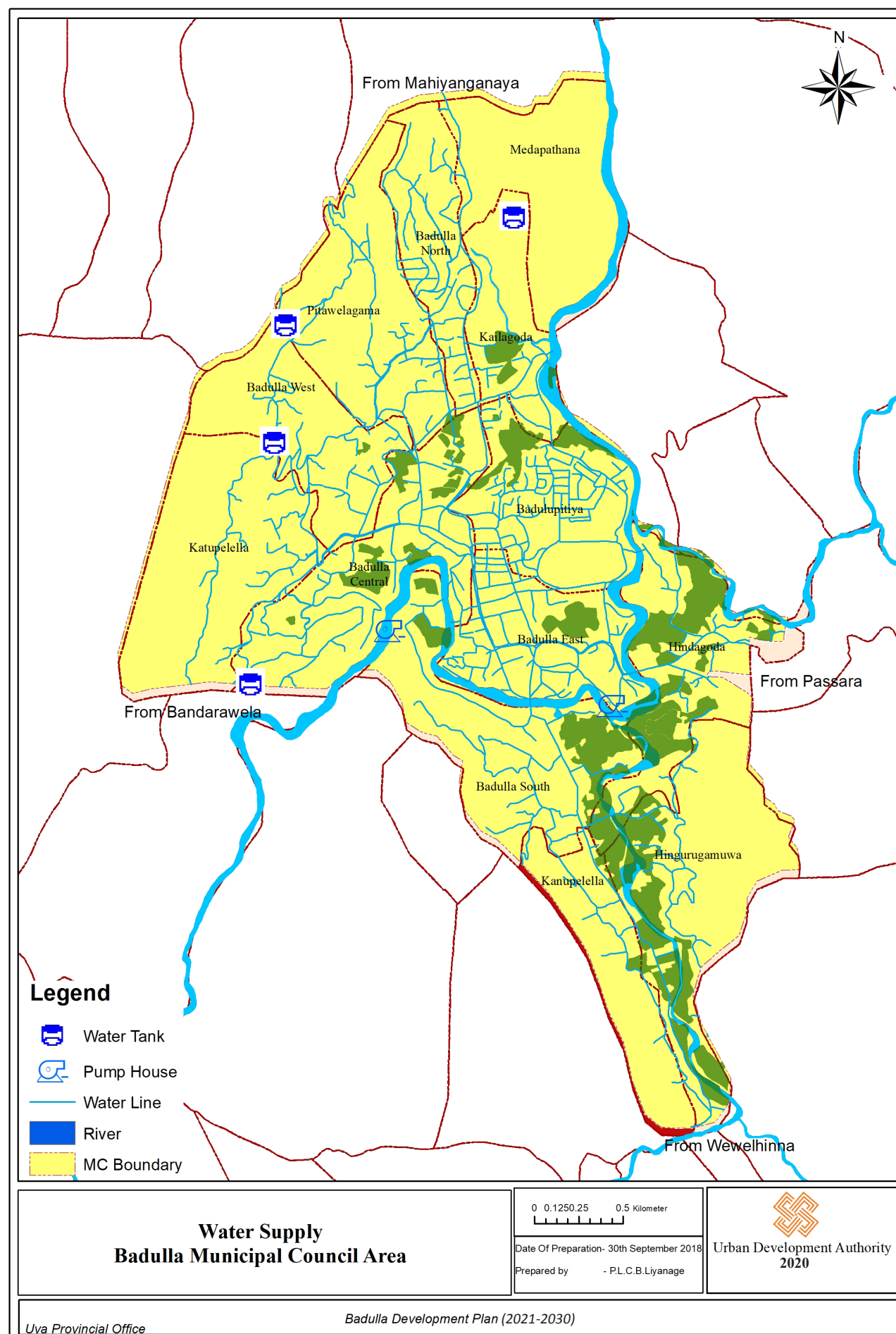
According to the data of Ceylon Electricity Board of Badulla, 99.5% is supplied with electricity within city limits. There are 51 transformers and one grid substation located in Badulla town. (Map No. 2.7)

Map No. 2.5: Road Network in Badulla



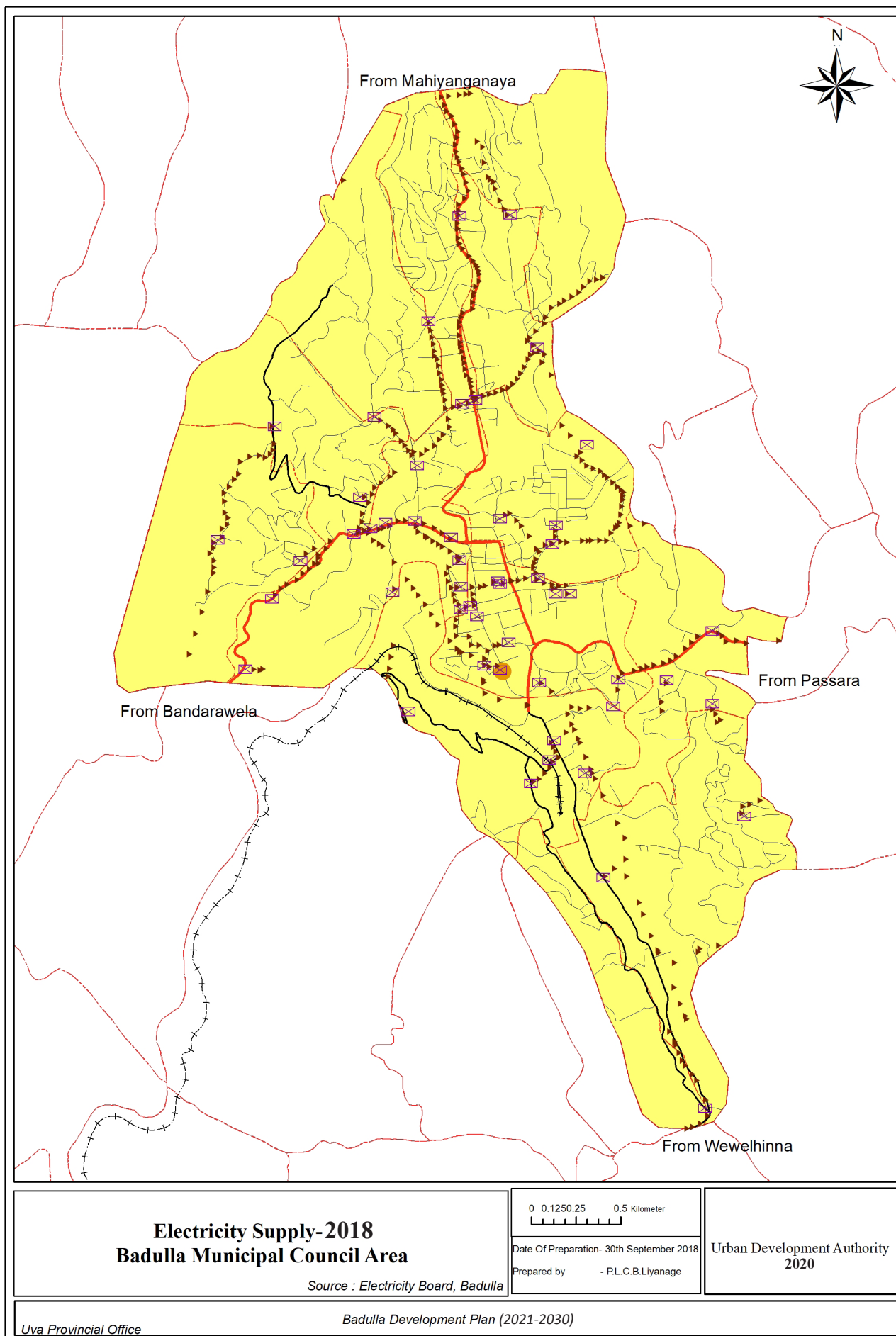
Source : Urban Development Authority, 2018

Map No. 2.6: Water Supply System in Badulla



Source :National Water Supply and Drainage Board, 2017

Map No. 2.7: Electricity Grid Network in Badulla



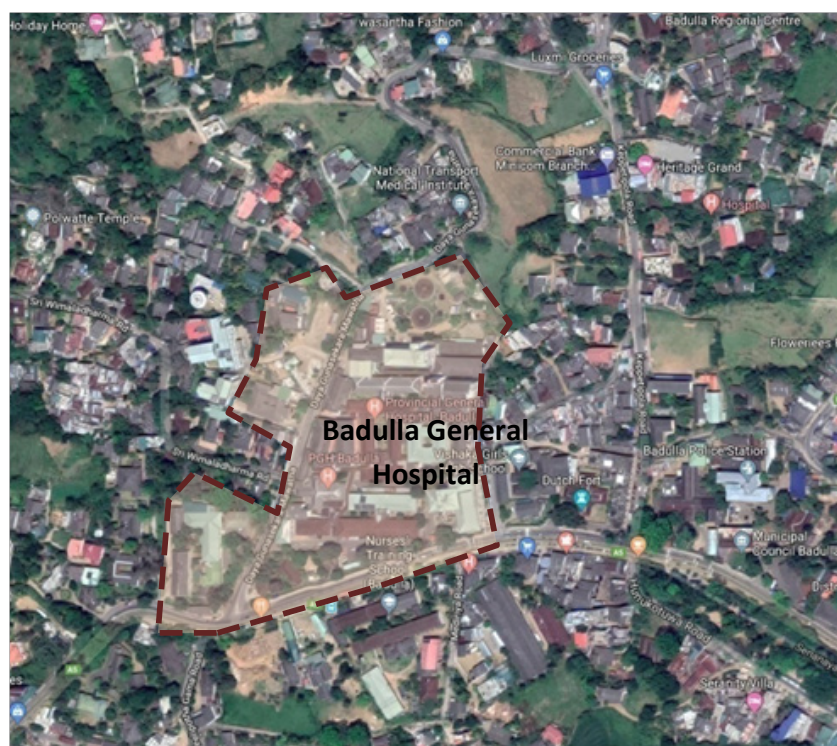
Source : Ceylon Electricity Board, 2018

Health Services

Provision of health service is considered as a most important service in the service sector of Badulla area. Badulla General Hospital, Medical Officer of Health and Ayurvedic Health Service of Municipal Council contribute to provision of health services as government sector agencies. In addition several private hospitals, laboratories, medical consultancy centers are located within the town and special character is most of them are located similar vicinity of Badulla General Hospital. (Map No. 2.8)

The commencement of Badulla General Hospital goes back to the 1891 of Colonial period. The 9 Acre land area is occupied by the General Hospital. Service threshold of General Hospital serve entire Uva Province and even to Batticaloa area.

Figure No. 2.4 Location of Badulla General Hospital



Source: Google Earth. 2017

22% of the daily commuters of the city belong to service recipient of Badulla General Hospital. It is equipped with large number of health crew including specialist doctors. (Table No. 2.6)

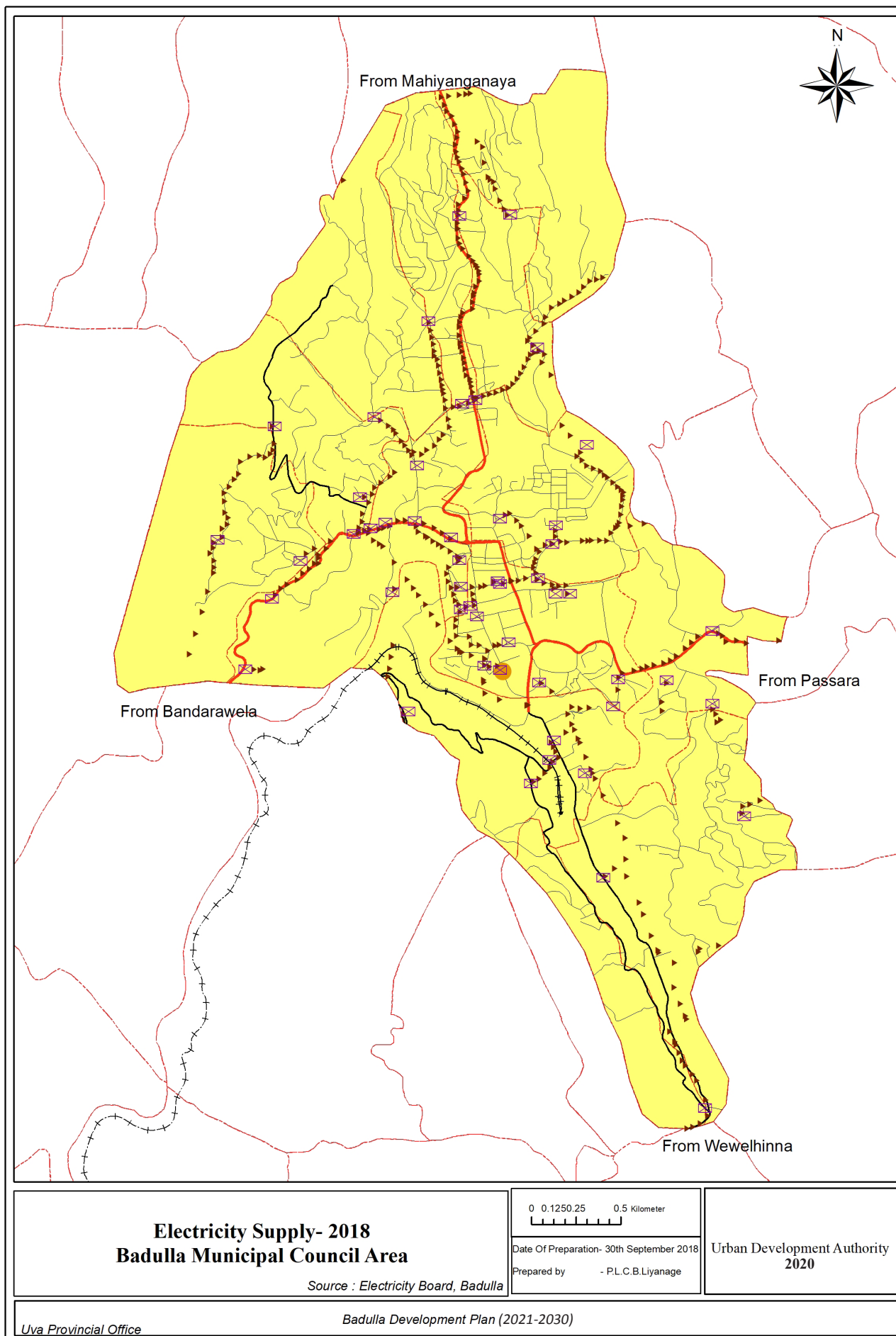
Table No. 2.6: Staff of Badulla General Hospital

Category	No.
Specialist Doctors	41
General Doctors	201
Nurses	604

Source: Badulla General Hospital 2020

Badulla General Hospital comprises with 42 wards and 1493 beds. General occupancy ratio is 82%. Even though ratio is fewer rates in annually, in seasons there no available beds for patients.

Map No. 2.8 Location of Health Service in Badulla



Source : Urban Development Authority, 2018

Solid and Liquid Waste Management

Badulla Municipal Council collects solid waste in about 70% of its total area. That means except municipal ward of Katupelella and part of Pitawelagama, out of the 15 divisions, solid waste is collected by the Municipal Council. The solid waste collected by the Municipality is dumped in low lying area adjacent to Race Course Ground, since 1964. The dumping ground is located in between Badulla Botanical Garden and Vincent Dias Stadium. Although waste is collected separately as degradable and non-degradable the system does not function systematically. According to statistics, waste generation in Badulla town is 25-28 tons per day. Residential sector is the main contributor to the waste generation. (Table No. 2.7)

Table No. 2.7 Categorization of Waste Generation per day by Source, in Badulla

Category of Source	Amount (Tons)
Residential	11
Commercial	10
Hospital (Degradable)	2
Industries	1
Others (Restaurant, Government Institution)	1
Total	25

Source: Badulla Municipal Council, 2020

There is no waste water management system within Badulla City. Although there is a liquid waste management system for waste discharge by Badulla General Hospital its capacity is inadequate in the present. Due to less water absorption capacity in soil within the town center, there is a tendency of collecting waste water directly to the Badulu Oya. Accordingly the land fragmentation with minimum standard aggravates which takes place rapidly in the city area causes issues in disposal of waste water in the town center.

As per report submitted by a survey conducted by researchers G. Kumarathilake, Y. Jayawardena, W. Dissanayake in waste water discharge in three hospitals in Sri Lanka to International Conference of Structural Engineering and Construction Management held in 2015, has revealed that waste water discharges by Badulla General Hospital has higher chemical and allergy level. Accordingly, the poor disposal of waste water collected from Badulla General Hospital in a surface drain without treatment has created a problematic situation.

Education

There are improved education institutors and schools located within town. Among them, there are four National Schools and 29 Provincial Level Schools. As well as Badulla is popular for private education institute and Piriven education system. Pupil Teacher ratio is 17%. In addition, Branch of Open University and Higher National Technical School, technical institute are as tertiary education category. Further, Uva - Wellassa University located immediate vicinity has promoted education sector in the area.

Commercial Activities

Several commercial zones located in Badulla in order to serve residents of Badulla as well commuter of the city. Out of total acreage of Badulla Municipality around 25 Acre are in commercial use.

The Lower Street, Bazaar Street, Southern Lane, Raja Mawatha, Kokowatte Road and railway station area are the main commercial zone in the town center. As well commercial zone at Welekade in the vicinity of Badulla General Hospital and Puwakgodamulla commercial zones are important location of commercial activities are concerned. These commercial centres fulfill necessity of residential population and commuter population satisfactory.

There are no large-scale commercial establishments which selling higher order goods in Badulla. Comparatively large, higher order commercial activities are more concentrated at Bandarawela than Badulla.

Figure 2.5 Commercial Activities at PahalaVeediya and Bazaar Street

Captured by: Uva Provincial Office, UDA , 2020

There is no industries distribution within town limits. There are two industrial establishment in Badulla either side of Wewelhinna Road, one tea factory and liquor production plant. As well as several distribution centers located in Badulla North Grama Niladhari Division.

Badulla Weekly Fair is located near Badulla Railway Station which is little far away from the town center. Due to this reason people tend to use fulfill their needs from common market in town center.

Town center commercial activities are located in mixed manner. Due to this, heavy traffic congestion occurred in day time at Lower street and Bazaar Street. Government and private sector bank and financial institution mostly concentrated along Kokowatte and Bank Road.

Government and Private Institutions

Institutes are Specific land use in Badulla. Especially, government sector administrative institutes. There are provincial, district and divisional level Government, semi government and private sector institutions withi the town. Among them, Provincial Council and District Secretariat are most important institutes.

Specific feature in Institutional Zone is that most government offices occupied in Archeologically Conservation Buildings. Badulla District Secretariat, Municipal Council and Archeology Office special in this regard. Spaces in their institutions are inadequate in relation to activities allied with same buildings.

Environmental Situation

In relation to environmental condition it can be identify both man-made and natural environmental situations. When considereing natural environment, it is need to consider natural harzard condition.

According to National Building Research Organization (NBRO), 30% of the land in Badulla town subject to landslides. 16 hot spots liable to flood have been identified adjacent to BaduluOya and KudaOya as per the Disaster management center, Badulla.

Among built environment there are Badulla Botanical Garden, Senanayake Garden and Stadium Scattered all over the town. The man-made recreational area at present is 16.3 hectare in the town.

2.3. Delineation of Planning Area

It was considered the Geographical Boundary, Functional Boundary and Administrative Boundary of the badulla town in preparation of Badulla Development Plan.

Geographical Boundary

Badulla City is in a specific geographical feature which can consider as basin. Badulu Oya flows crossing the city and surrounded by Namunukula mountain range and other few mountain ranges. Height of the town is around 680m from mean sea level and town center terrain is plain slightly, undulating nature. Existing topographical character limit the expansion of the city greatly. Due to that, developable lands in the town center are very limited and land prices are high. Since the land prices are very high people tend to developed unsuitable hilly slope for residential activities. Topographical nature seriously affected concentrates the city into the center.

Figure 2.6 Badulla City



Captured by: Uva Provincial Office, UDA, 2020

Functional Boundary

When considering the functional boundary most attention paid to health and administrative services provide by the town. Administrative function spread in all three-level provincial, district and local. Entire Uva Province is a threshold for services to commuters even service threshold extended Batticaloa and Ampara are some service are concern. Accordingly, Badulla city has measureless service threshold especially in relation to health service of the Badulla General Hospital. Therefore, functional boundary expand beyond the provincial limits.

Administrative Boundaries

Badulla Municipal Council consist with 13 Grama Niladhari Division located western side of Badulla Divisional Secretary Division. Those Gram Niladhari divisions are,

- | | |
|--------------------|-------------------|
| 1. Badulla North | 8. MadaPathana |
| 2. Badulla East | 9. Hindagoda |
| 3. Badulla West | 10. Badulupitiya |
| 4. Badulla Central | 11. Hingurugamuwa |
| 5. Badulla South | 12. Kanupelella |
| 6. Pitavelagama | 13. Kailagoda |
| 7. Katupelella | |

The square area of Municipality is 10.5 km² and the area was declared as an urban development area since 1979.

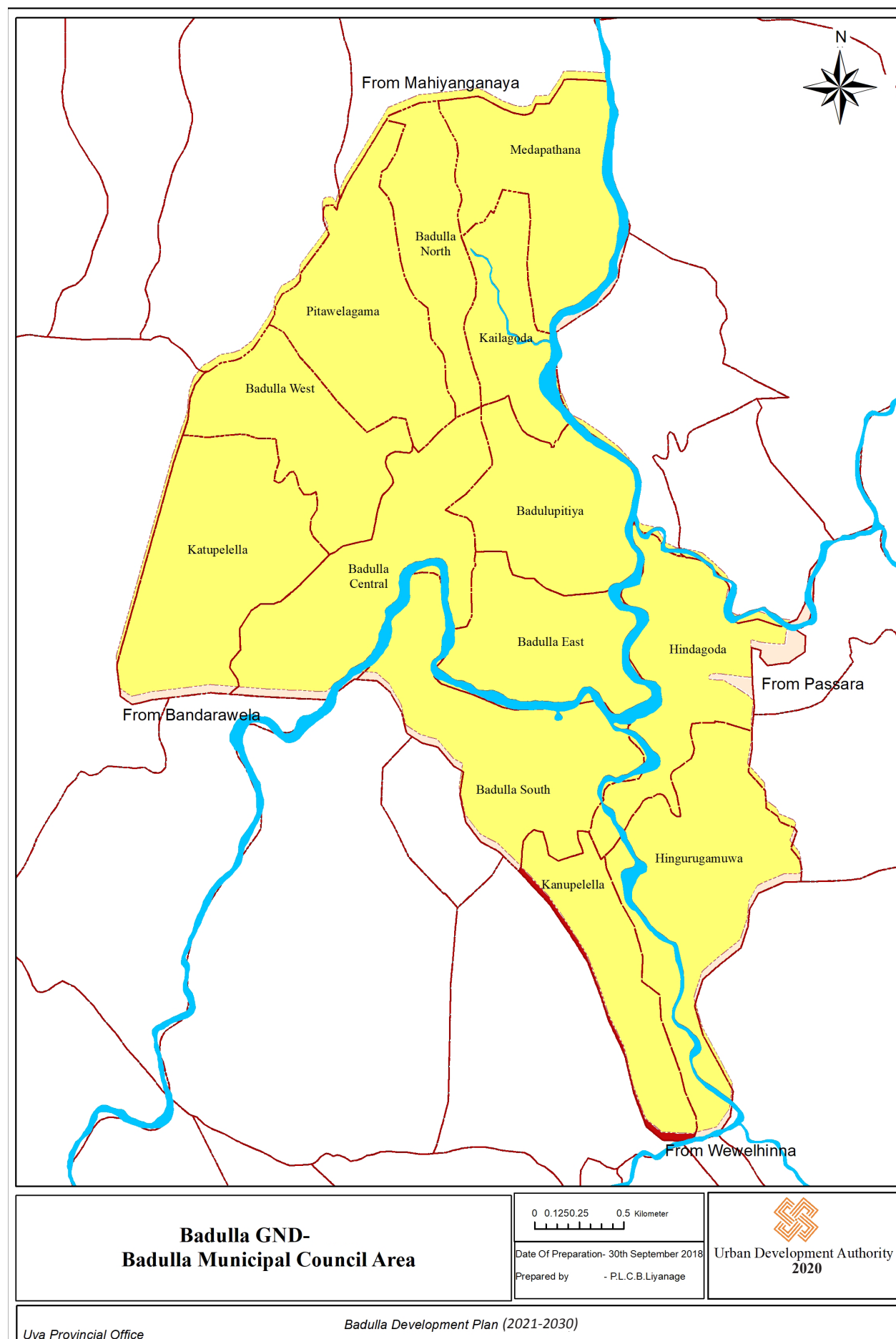
After study geographical, functional and administrative boundaries of Municipal area development pressure analysis and building density analysis were undertaken through Geographical Information System. Final recommendation arised on above analysis, revealed although Badulla city functional boundary stretched even beyond Uva Province development trend limited to geographical boundary and administrative boundary. Accordingly, administrative boundary of Badulla Municipal is select as planning area in the exercise of delineation of urban area.

Figure No. 2.7 Badulla Service catchment area



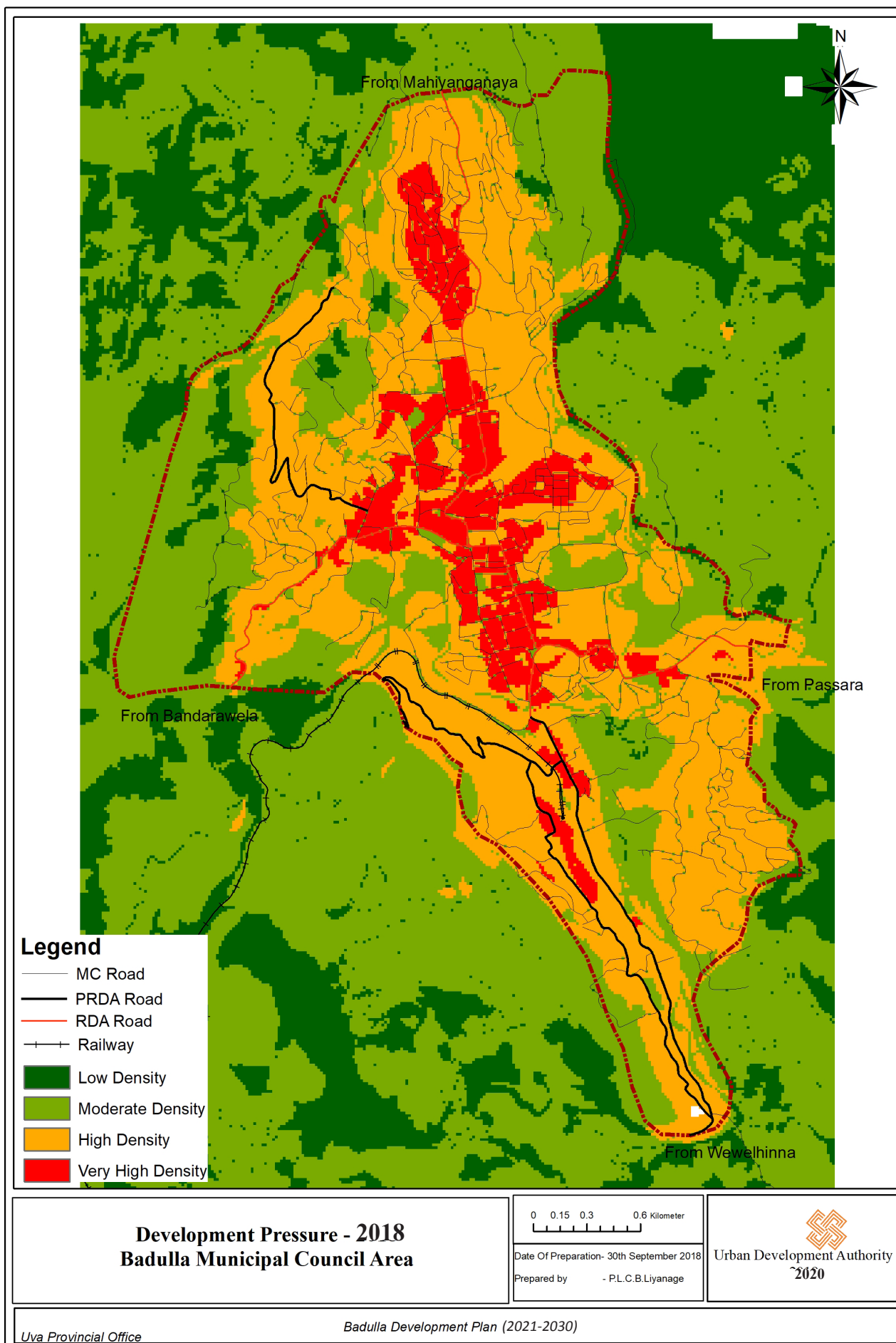
Source: Google Earth, 2017 (Compiled by Uva Province Office)

Map No 2.9: Badulla MC area



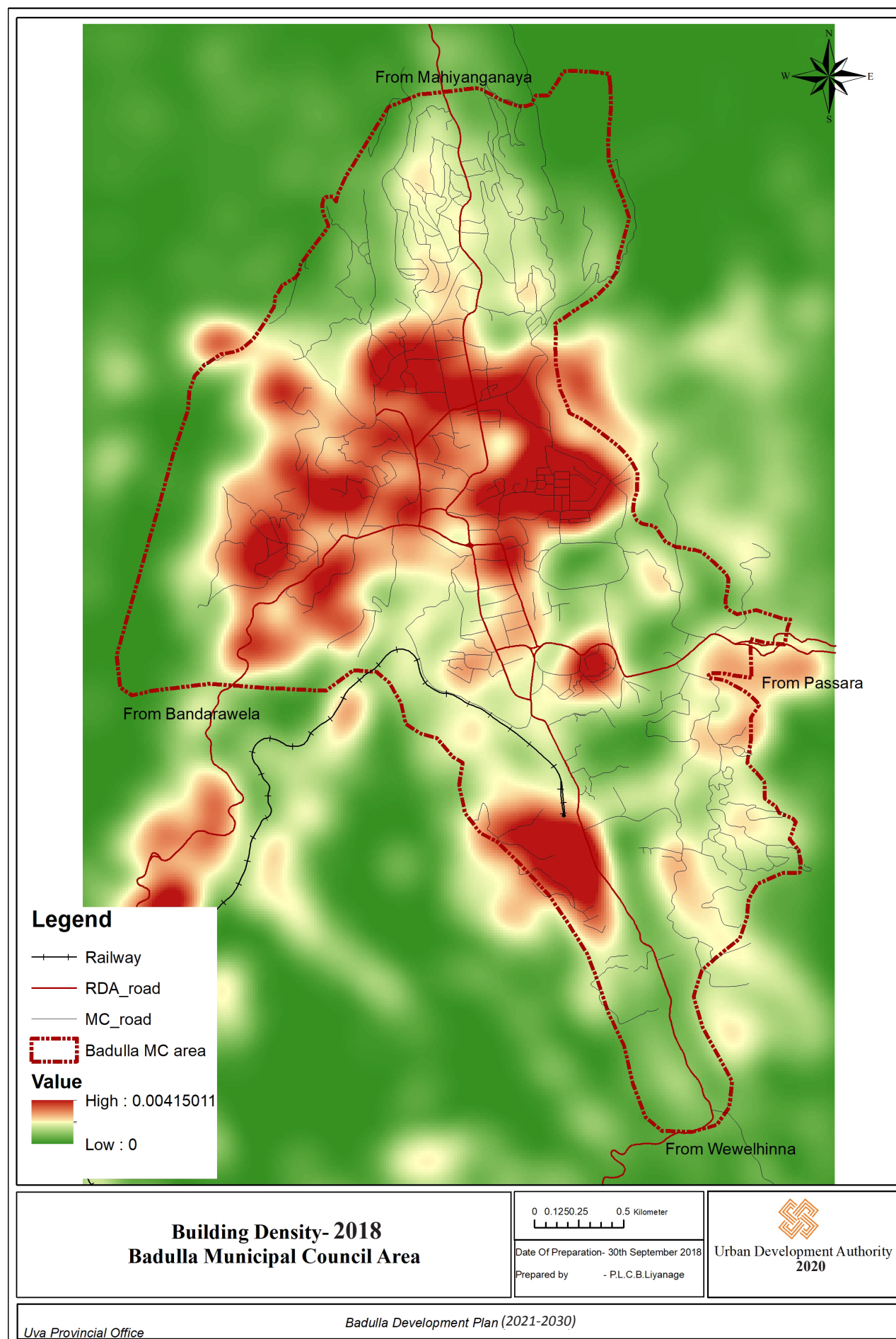
Source : Sri Lanka Survey Department, 2018

Map No. 2.10 Development Pressure Analysis



Source : Urban Development Authority, 2018

Map No. 2.11: Building Density Analysis



Source : Urban Development Authority, 2018

Chapter 03

The Need of the Plan

Badulla town physical, economic, social and environmental conditions were studied in deeply to identify the area. Through this studies, it was identified the potentials and mitigatory problems which can be develop the town area while mitigating the problems. Therefore, the need of the plan can be identified as flowing.

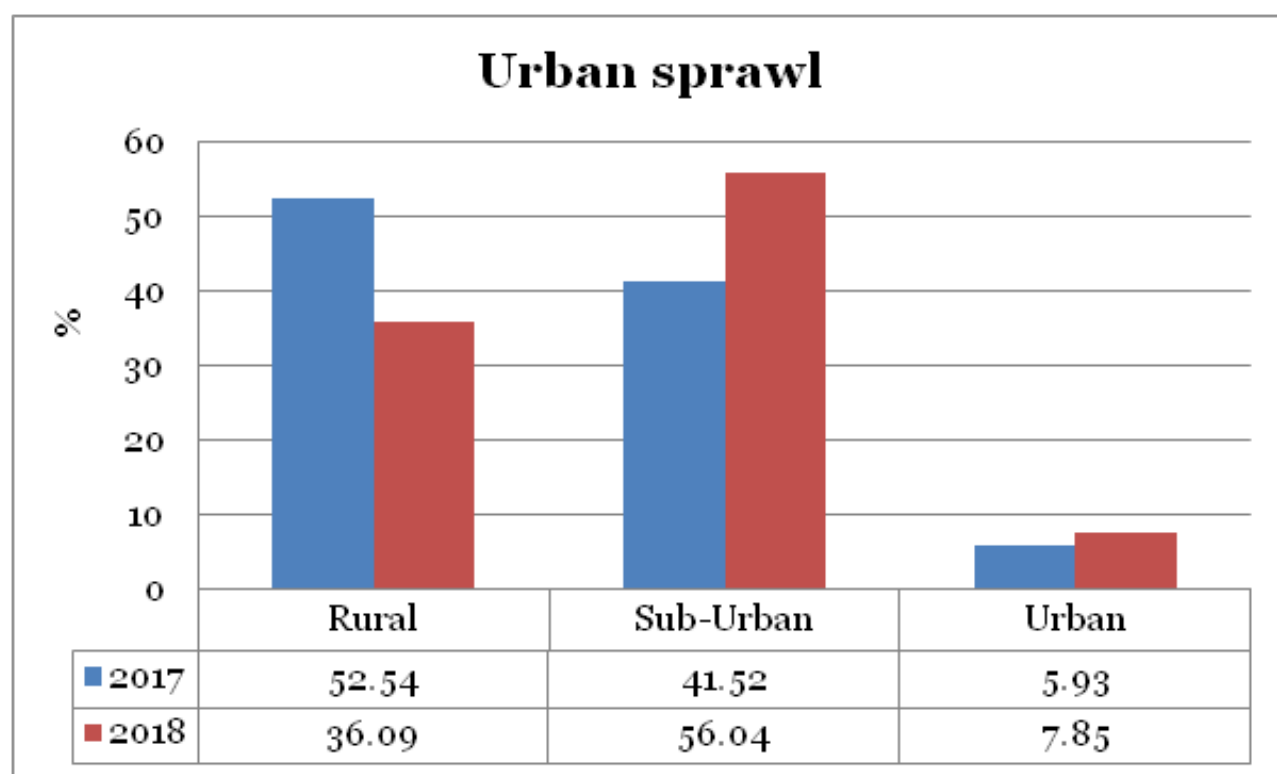
3.1. Rapid Population Growth Base on Employment

Daily commuting people to the city for employment, education, administrative health commercial and other services were around 100,000 people due to availability of provincial, district and local level institutions.

During the period of 2001-2012 average annual growth rate of urban population in Municipal area was 0.3%. Yet considering the period of 2012-2018 population growth rate has been increased up to 1.25%. Badulla District population growth rate is about 0.37% and compare to district growth rate Badulla town limit growth rate is high. It denotes population in migration to the city taking place significantly.

According to the Normalized Difference Built-Up area Index (NDBI) analysis done for the Badulla Municipal council limits showed that comparied to year 2017 there is 2% increase in the urban sector in year 2018 (Chart 3.1).

Chart 3.1 : Badulla Urban Sprawl



Source: Uva Provincial Office, UDA

Majority of in migrate to the city base on employment. They are in upper- and middle-class social level. Middle-class level population tends to settled in Nadukarakanda, Katupelella, Pin-Arawa, Badulla West and Hingurugamuwa areas. Accordingly, there are necessities of promote and develop education, health facilities and commercial services to suit demand created by these upper-and middle-class people. In addition to that middle income people tend to settled at Kanupelella and Hindagoda areas also. Labour community participating to commercial and health services tend to settled Badulupitiya and Kailagoda areas. However due to limit spaces within the city migrant middle level community settled all over the urban area.

There is a necessity to create city with complete infrastructure facilities in order to serve people comes for administrative and health services and employers of same sectors, resident population and commuters of the city.

Badulla Development Plan 2010-2024 no 1645/22 and gazette on 17th of March 2010, more concentrates on administrative service town. Yet, provision of health service also a main contributory factor of function of the city at present. Therefore, development plan of the city need to focus both administration and health service and other services sectors.

3.2. Informal Nature of Infrastructure in town

(a) Issues related to Solid Waste Liquid Waste Management

Solid waste management within the Badulla town is managed by Municipal Council. But there are several issues have being raised. 20% of solid wastes collected by Municipal council are collecting without separation as degradable or non-degradable. These waste directly dumping at the yard without separation.

Figure No. 3.1 Badulla Dumping Yard

Captured by: Uva Provincial Office, UDA, 2020

As well as there are collected residual which cannot be sold or separation from year 2014. This waste leads to creates malodor in the area. Since the dumping yard located adjacent to Vincent Dias Stadium which is only ground with necessary facilities to main sports activities in Badulla and Botanical Garden of Badulla caused to reduction of efficiency and productivity of these rare resources.

As already mentioned, there is not available methodology for waste water management in the city. This waste water directly flows to common drains, through these drains waste water flows to Badulu Oya. Due to this the Badulu Oya entitled to polluted waste water stream. This is issue to be considered critically, since the Badulu Oya is the main source of pipe born water to Badulla city and large number of crowd for their daily needs.

Figure No. 3.2 Waste Water Collect to BaduluOya

Captured by: Uva Provincial Office, UDA, 2020

(b) Issue related to Pedestrian Ways

Since Badulla is provincial and district capital there are many Government and Semi Government institute as well private institutes scattered in the town. Daily commuters to city around 100,000 people, majority of them comes to obtained administrative, health, education and commercial services from the town. Since most of commuters are using public transport services to get administrative services scattered in an over the town, there is a critical need to provide and improvement of pedestrian facilities and pedestrian friendly environment within the town.

3.3 Sub Optimal Use of Town Centre Land

Badulla City has long history which resulted to have more archeologically important sites. According to Archeological Office of Badulla, there are 30 archeologically important places located in Badulla town. Most of government institutions were located in these buildings. Some archeologically important buildings are dilapidating due to negligence. These dilapidating building also located in most valuable land in the town centre. Land ownership and archeological conditions avoid optimal development of these lands.

Figure No. 3.3 Archeological Sites with Sub-optimal Use in Badulla Town



ThaldenaWalawwa



KotalawalaWalawwa



Salusala Building



Welekade Fort

Captured by: Uva Provincial Office, UDA and Internet, 2020

In addition many government schools and private schools were located in the town centre. These sites are in sub optimal use, limited urban land use is concern. Badulupitiya labour quarters, railway land behind Prison, railway quarters in Kanupelella road, land near the swimming pool in Green Lane Drive and Badulla Rest House are some example for sub optimal land use.

3.4 Unauthorized Constructions in the City

There are several unauthorized constructions in Badulla city due out of practice of Development Plan which prepared for direct to City Development. Those unauthorized constructions cannot be regularizing according to plot dimensions of existing development plan. Higher demand for town centre land and ownership of lands with Mutiyangana Raja MahaViharaya and Kataragama Devalaya were main reasons behind un-reguler and unauthorized constructions. There are higher trend to blocking out of these lands less than minimum land extents stipulated in the development plan. Accordingly there is necessity of formal physical development plan with correct vision which capable to avoid root cause for unauthorized construction.

Chapter 04

The Planning Framework

4.1 Vision

Administrative and Health Center of the Uva Green Valley

4.2 Vision Statement

The capital city of the administrative and health services upgraded to become heart of the uva province by providing compatible infrastructure facilities while conserving the Environment and cultural identity of the Badulla.

Uva Green Valley

This means the plain terrain which takes the shape of basin makes by surrounding mountains and water bodies with having rich environmental sensitivity. In further it denotes the BaduluOya, Namunukula Mountain and other physical natural features of Badulla Town.

Administrative and Health City

This means the administrative, health services and livable environment of Badulla which are considered as the most important sectors of Badulla Town. These sectors are the base of functionality of the area. It includes the health services of Badulla Provincial hospital and administrative functions of Uva Province by government, semi government and private sectors. In further this means a good living environment with having proper infrastructure facilities for predicted residential population.

Badulla has developed as the administrative and health capital in Uva Province based on Administrative and Health services. Since this administrative and health services of Badulla Town area the demand for residential and commercial activities has increased rapidly. Since this rapid demand increase the environmental sustainability

has threaten by the developments. Considering these situations this planning intervention anticipate to create a quantitatively and qualitatively developed administrative and health city with having proper infrastructure facilities for expected population and by protecting the environmental sensitivity in sustainable manner in 2030.

4.3 Goals

Goal 01: Create the center for administrative and health services of the area

Goal 02: Facilitate the city by providing infrastructure facilities.

Goal 03: Create environmental sustainability with the development

Goal 04: Protect the heritage identity of the area.

4.4 Objectives

Goal 01: Create the center for administrative and health services of the area

- i. To enhance the connectivity among the institutions by developing two mixed development corridors for commercial and administrative uses from Welekade Junction to Badulupitiya and both sides of the Mahiyangana Road by 2030.
- ii. To emerge as the major service provider of the health facilities by creating health zone at the Badulla General hospital area, Keppetipola Road and Mediriya Road.
- iii. To agglomerate the development within town center by controlling the administrative services-based developments at high slope areas by 2030.
- iv. To establish the area of Rest House Junction to PahalaVeediya, Bank Road and Raja Veediya to a commercial center by 2030
- v. To a centering the educational, health and research-based activities towards the corridor of Badulupitiya to Welagedara - Dayagunasekara Mawatha
- vi. To create regional sport facility provider by 2030

Goal 02: Facilitate the city by providing infrastructure facilities

- i. To enhance the transportation connectivity among institutional, health, recreational and residential zones by providing road and street developments by 2025.
- ii. To increase the city beautification and pedestrian friendliness by developing a streetscape guideline along the Pahalaveediyacommercial road by 2025.
- iii. To enhance the pedestrian walkability by creating Green walkways along the roads from Rest House Junction to Raja Veediya post office road – Race course Road, Rest House Junction KosgasHandiya, Bank Road to KosgasHandiya by 2025.
- iv. To introduce an Urban Regeneration Programme for Badulupitiya Urban Residential Zone by 2025.
- v. To promote the Physical infrastructures of Waste water disposal system and Solid waste disposal system in 100% by 2022.
- vi. To develop the town center by changing the use of the archeological important places of Welekadeopen market, Salusala Building, Thaldenawalawwa, Kothalawalawalawwa to a proper use by 2025.
- vii. To promote an efficient transportation system by connecting the town and surrounding by 2025.
- viii. To regulate the infrastructure facilities by providing electricity and communication service lines near the A and B grade roads within the town by 2025.

Goal 03: Create environmental sustainability with the development

- i. To protect the BaduluOya and its catchment by preserving river reservation and paddy lands by 2025.
- ii. To preserve the landslide risk area by limiting and controlling the developments located in sloppy areas by 2030.
- iii. To enhance the recreational facilities of residents and commuters by increasing recreational facility need by 80% by 2025.

Goal 04: Protect the heritage identity of the area.

- i. To conserve the religious and cultural important places by 2030
- ii. To protect the identity of the Muthiyangana Raja MahaViharaya area by landscaping by 2030
- iii. To develop the identified archeological places by introducing change of uses by 2025.
 - Welekade old fortress
 - Salusala Building,
 - Thaldenawalawwa
 - Kothalawalawawwa

Chapter 05

SWOT Analysis

5.1 Summarized SWOT Analysis

Goal 01: Create center for administrative and health services of the area

Table 5.1: Goal 01 - SWOT Analysis

Strength	i. Being the capital city of Uva Province	Weaknesses	i. The distance between Government institutions.
	ii. Locating the administrative complexes		ii. Not having proper guidance about the institutional locations.
	iii. Having a residential population who are engaged with the service sector jobs		iii. Limited space for Badulla General Hospital.
	iv. Having Badulla General Hospital and many health institutions		iv. Absence of required rest places for patients and community people.
	v. Locating National Nursing Training Center.		v. Absence of integrated place to obtain necessary services to patients & people
	vi. Having Ayurveda Medical Centers.		
	vii. Locating developed commercial service centers.		
	viii. Having more spaces for extent the health service sector.		
	ix. Distribution of developable lands.		
	x. Educational institutions located in the Town.		
Opportunities	i. Government proposals for Badulla General Hospital develop as a Teaching hospital.	Threat	
	ii. Service sector immigration for exclusive and middle-class employment to settle with in Badulla.		

Strengths

i. Being the capital city of Uva Province

From the history, main administrative works of Uva Province was based on the Badulla town. Today also there are those historical places in Badulla Town. There are about 57 of Provincially, District and regionally important institutions Badulla Provincial Council, District Secretariat Office, Urban Development Authority, Geological Survey & Mines Bureau, National Building Research Organization and Central Environment Authority are important among them.

Figure 5.1: Main Administrative complexes



Uva Provincial Council

Source: From internet, 2020

The administrative works are adding functionality to the Badulla to function as a town. The daily commuter population of this town is about 100,000 and 30% out of that is the people who came to get the administrative services. Due to these reasons the functionality as an administrative capital of Uva Province is strength to develop the area.

The main and famous schools of this area are locating within this town and those are also adding a value. Sinhala medium schools like Badulla Central College, Darmadutha Boys School, Viharamahadevi Girls School and Tamil Girls School, Sarasvathi Tamil School, Al Adan Central College as Tamil medium schools are special.

ii. Locating the Administrative Complexes

Most of the administrative institutions of this administrative capital is locates as institutional complexes. As an examples Uva Provincial Council two complexes and Badulla Kachcheriya as a complex can be mentioned. Other than those provincial, district and regional service departments are located as one complex combining all the features in Badulla. As examples Agrarian Department - Uva Povince, Post Office Complex, Medical Health Office, Water Supply and Drainage Board can be mentioned.

Figure 5.2: Some of Administrative Complexes in Town**Postal Office Complexes****National Water Supply & Drainage Board**

Source: From Internet, 2020

iii. Having a residential population who are engaged with the service sector jobs

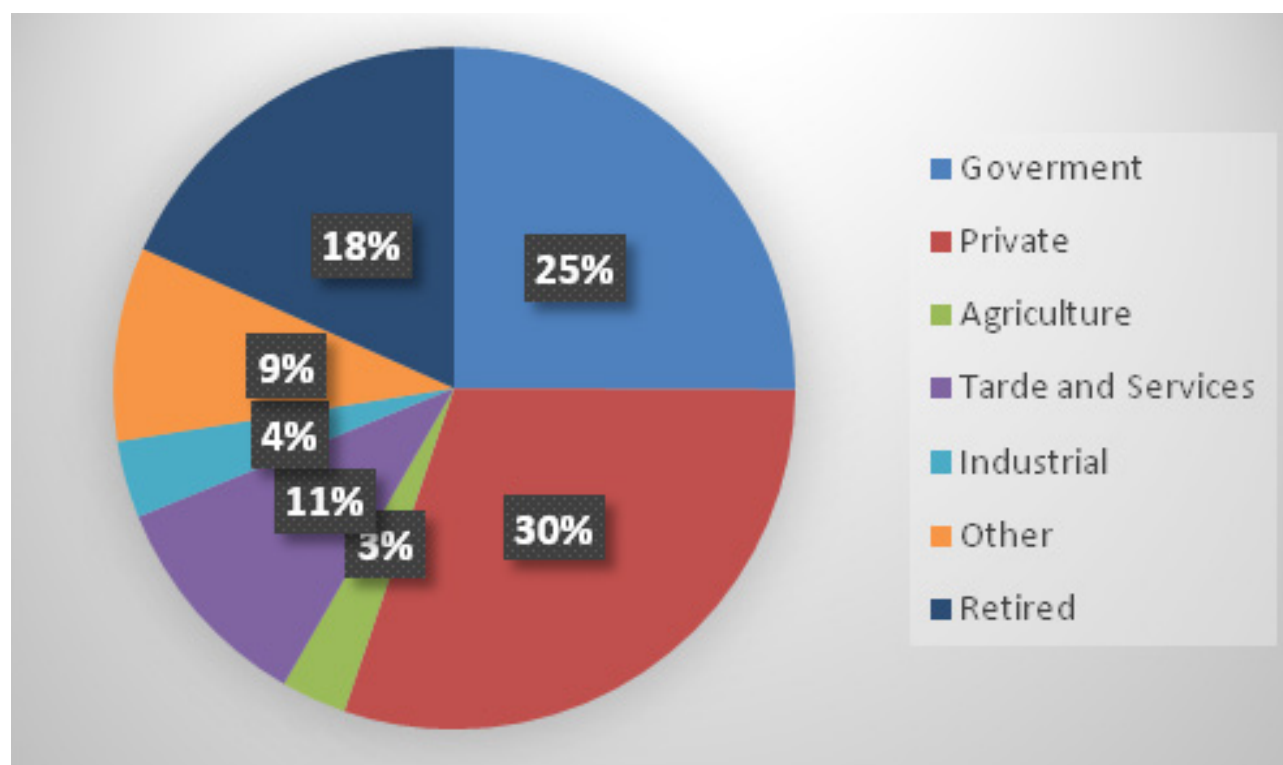
According to the Sampath Pethikada – 2017 the residential population within city limits is 48,641. Out of the total population around 40% of people are engaging with any occupation. Accordingly, the GN Division wise resident's occupations are as following table 5.2.

Table No: 5.2: G.N Division wise Employment categorization

No	GN Division	Government	Private	Agricultural	Trade and Services	Production factories	Other	Retired
1	Badulla South	906	405	10	18	5	0	207
2	Badulla North	546	160	49	219	0	830	364
3	Badulla East	858	734	12	80	71	0	277
4	Badulla West	81	300	15	183	35	88	299
5	Badulla Central	253	460	105	118	183	141	297
6	Higurugamuwa	692	855	86	550	106	0	398
7	Kanupelella	142	302	77	98	66	71	319
8	Kailagoda	283	670	62	277	57	0	314
9	Katupelella	160	514	73	285	121	0	270
10	Badulupitiya	546	697	50	181	1	553	214
11	Hindagoda	358	187	30	39	6	272	241
12	Pitawelagama	169	743	23	61	24	0	391
13	Medapathana	335	385	66	129	100	0	300
		5329	6412	658	2238	775	1955	3891

Source: Badulla Sampath Pethikada. Badulla DS office 2018

Accordingly, the employment sector wise percentages are shown in following graph no 5.1

Chart No 5.1: Percentage classification of the population by occupation type

Source: Badulla Sampath Pethikada. Badulla DS office 2018

According to the graph 50% of employees out of the total are engaging with service sector employments. It proves that the highest numbers of people of Badulla are the people who are doing jobs with engaging government and private sector institutions.

iv. Having Badulla Provincial Hospital and many health institutions.

The number of beds of Badulla General Hospital is about 1493 according to the 2018 data of Badulla General Hospital. There are 42 wards in this hospital and the rate of bed occupancy is around 82%.

Table No 5.3: Patients details (Yearly)

	2011	2012	2013	2014	2015	2016	2017
External Patients	307,888	292,087	319,732	335,383	363,128	323,006	295,076
Clinic Patients	349,802	369,616	357,882	358,352	423,338	424,024	405,459
Attendance of patients	78%	78%	80%	96%	71%	73%	70%

Source: Badulla General Hospital, 2018

Table No 5.4: Patients details (Daily)

No of External Patients (Daily)	799
No of Normal Clinic Patients (Daily)	1161
No of Dental Patients (Daily)	85

Source: Badulla General Hospital – 2018

Badulla Regional Health Service Directors' Office and Health Division of Badulla Municipal Council can be considered as the main functional bodies for disease prevention within the city limit. Following programs are handling to prevent the diseases within the city limit.

Antenatal and Child Clinic Center

- Katupelella - MOH office
- Pinarawa - MOH office
- Mailagasthenna - Community Hall
- Suvineethagama - Community Hall
- Rockhill - Community Hall
- Badulupitiya - Community Hall
- Kailagoda - Community Hall

There are two clinics per month for antenatal mothers and children below 5 years old to prevent their health. Other than that, the following programs also launching to prevent the diseases.

- Family Planning Clinic
- Health Education Program
- Food Health Program
- Diseases Prevention Program

v. Locating National Nursing Training Center.

The National Nursing Training Center of Badulla under the Badulla General Hospital is an especial opportunity to the town. The number of trainees under this training center is about 300.

vi. Location of Indigenous Medical Centers.

The Ayurvedic Medical Center which is locating in town center is providing service for large no of people who living in and surrounding of the Badulla. Ayurvedic Pharmacies and Private Ayurveda Medical Centers are adding strength for the Badulla development.

vii. Locating of Improved Commercial Service Centers.

Commercial places of the city located as complementary services to Provincial General Hospital & administrative institutions which attract people to the town. These commercial services fulfill daily goods and services of the residential people. Accordingly, there are adequate facilities for government and private banking facilities as well. But Bandarawela has the facilities on textile industries than the Badulla.

Figure 5.3: Commercial Places in South Lane & Bazar Street



Captured by: Uva Provincial Office, UDA, 2020

There are number of commercial service places, agglomerating based on the Badulla General Hospital. As example there are pharmacies, laboratories, private clinics, private hospitals and specialist medical services. Those places are locating based on the Badulla - Bandarawela Main Road, Daya Gunasekara Mawatha, Madiriya Road and Welekade Trade Complex. And also, there is a trend to change the use of residential to commercial at Mediriya Road and its surrounding.

Figure No 5.4: Commercial activities in Daya Gunasekara Road



Captured by: Internet and UDA uva provincial Office, 2020

viii. Having more spaces for extension of the health service sector.

Although the town area spread within limited spaces still there are considerable extents of developable lands available. Especially the residential area surrounding the Badulla General Hospital and paddy fields can be identified. Residential lands are converting to health uses in this area and the paddy lands are underutilized. Accordingly, there are adequate developable lands to develop to match with the needs of commuters and residents who are getting health facilities.

ix. Distribution of developable lands.

Badulla town is a town with unique geographical location. The central area is with plain terrain nature & it's surrounded by mountain range including Namunukula.

Therefore, lands in city center have higher development potential. The elevation of town area is about 680m and it is very low compared to other hill towns. So, there is a potential for vertical development in city center.

The livability analysis and its summary which is done by using land use pattern, employment distribution, environment sensitivity is as following map no 5.1 and table no 5.5.

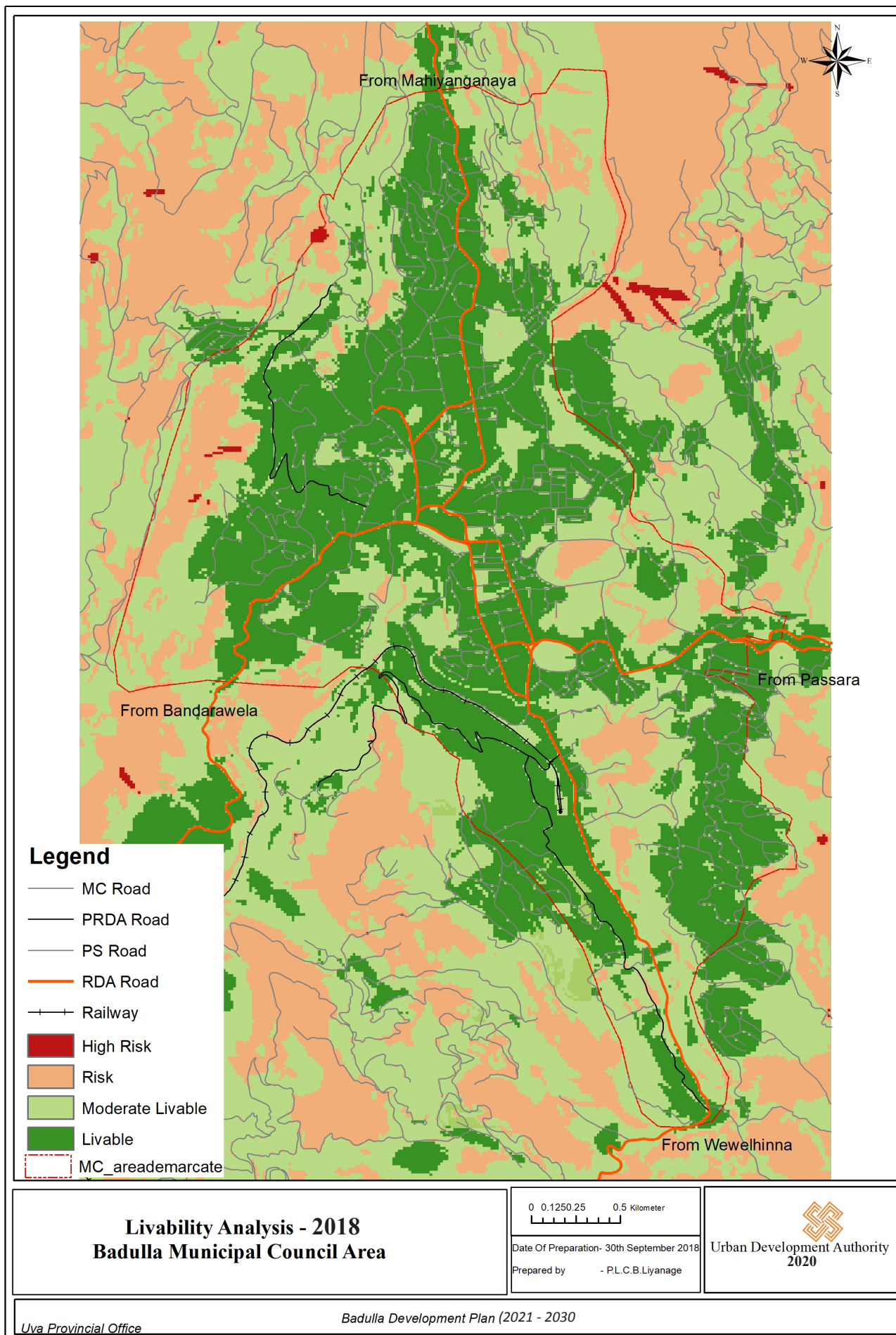
Table No 5.5: Livability Analysis Map summary of Badulla Town

Category	Land Extent (km ²)	Details
i	0.0111	Very Critical zone
ii	0.9995	Critical Zone
iii	3.9556	Safe for Living zone
iv	5.6249	Very Safe for Living zone
Total	10.56	

Source: Uva Provincial Office, UDA, 2018

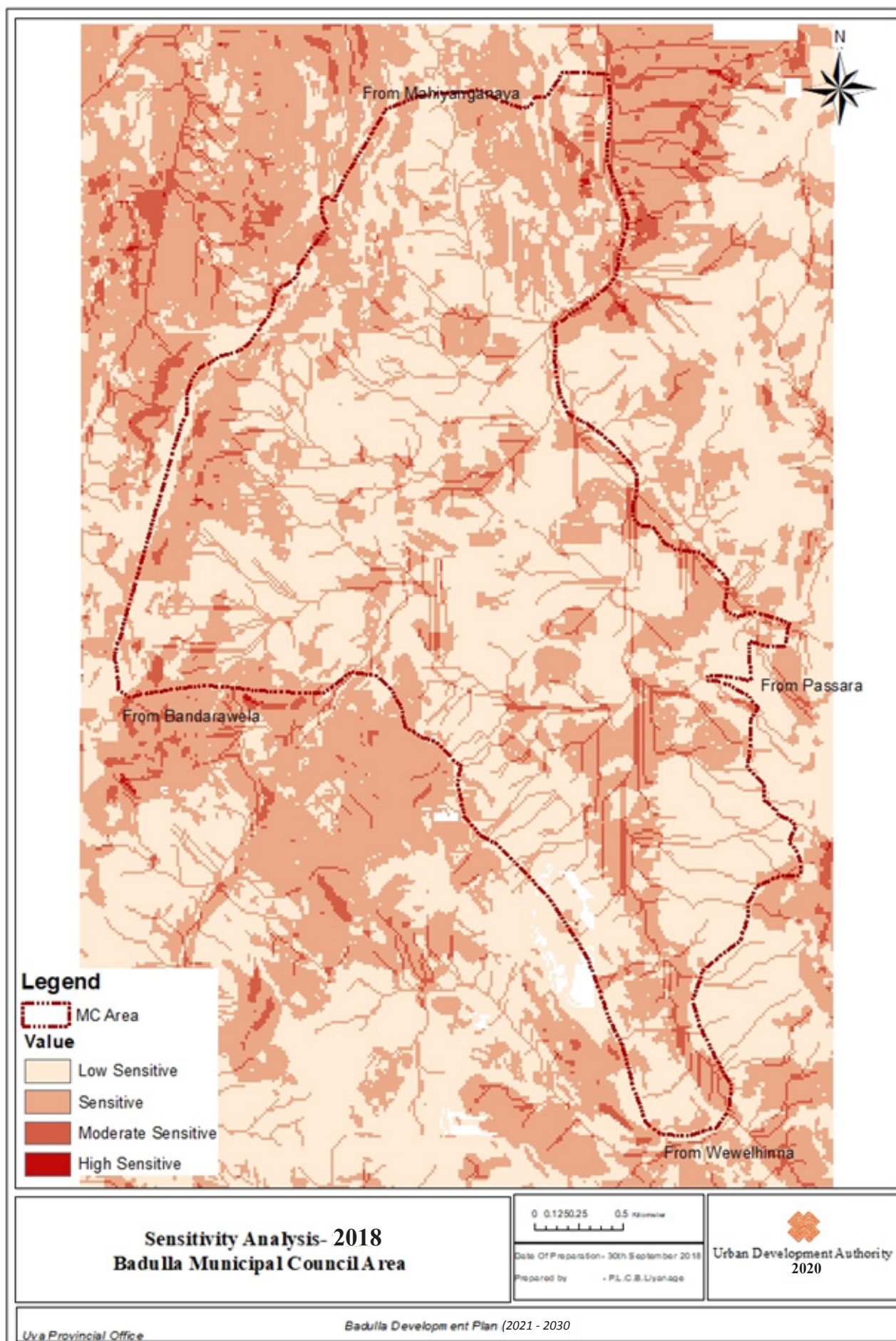
According to the above analysis high amount about 9km² out of total land extent is suitable to live. The sensitivity analysis and its summary which is done by using land use pattern and Environmental Sensitivity Zones is as following map no 5.2 and table no 5.6.

Map No 5.1: Livability Analysis – Badulla Municipal Council Area



Source : Urban Development Authority, 2020

Map No 5.2: Sensitivity Analysis – Badulla Municipal Council Area



Source : Urban Development Authority, 2020

Table No 5.6: Sensitivity Analysis Map summary of Badulla Town

Category	Land Extent (km ²)	Details
1	6.016	Very less sensitive Zones
2	4.157	Less sensitive Zones
3	0.409	Medium Sensitive Zones
4	0.002	Very Sensitive Zones
Total	10.56	

Source: Uva Provincial Office, UDA, 2018

The summary of sensitivity analysis also proves that the high number of land extent out of total land extent is suitable for development. And also, in further it proves by the existing 62% of residential distribution.

x. Educational Institutions located in the Town.

There are several categories of educational institutions locate in Badulla Municipal Council area. The institutions of primary education, secondary education and technical education can be further categorized as follows.

- I. 43 of preschools registered under the Education Ministry and Uva Provincial Education Ministry.
- II. 33 of Sinhala, Muslim and Tamil Secondary Schools belong to the Uva Provincial Council.

Table No 5.7: Secondary Educational Institutions

Medium	Grade			Total	No of Teachers	No of Students
	1-13	1-11	1-5			
Sinhala	8	3		11	932	15742
Tamil	2		1	3	132	2854
Muslim	1		2	3	86	1200
Total				33	1150	19796

Source: Badulla Sampath Pethikada. Badulla DS office 2018

III. Higher Education Institutions

Table No 5.8: Higher Education Institutions within Badulla city limit

Institution	No of Students
Open University	700
National Apprentice and Industrial Training Authority	814
Technical College	700
Higher Technology Institution	750

Source: Badulla Sampath Pethikada. Badulla DS office 2018

- i. Educational programs conducting by National Youth Council and employment training programs conduct by religious centers.
- ii. Religious Educational Institutions - Piriwena
- iii. Private Educational Institutions

The secondary educational student population within city limit is 11,935 and about 9,249 students are coming from outside for the secondary educational facilities. 1:17 is the ratio between teachers and pupil of secondary education in Badulla. Accordingly, the educational facilities of Badulla are in good condition to provide facilities for the children of employees and residents.

- xi. Existence of Badulla Vincent Dias Playground complex

Currently Badulla Municipal Council Area include 14 Playgrounds, 2 swimming pools and one Jogging track. Vincent Dias playground complex is main service provider of the regional sport activities.

Figure 5.5: Badulla swimming pool and Playground



Source: From Internet, 2018

Weaknesses

- I. The distance between Government Institutions.

Although the Badulla function as administrative capital of Uva Province, the distance between government and private institutions is far and due to that people have to walk about 1 - 1.5km to get administrative services from several institutions. Other way the existing roads are not pedestrian friendly and it is a weakness for the development of Badulla.

- II. Not having proper guidance about the institutional locations.

Since the distance between administrative institutions is far there is a need for guide for people who are coming to get services from Badulla. But due to not having that kind of guidance people have to spend more to find the locations.

- III. Limited space for Badulla General Hospital.

The land extent of Badulla General Hospital is not adequate for all services although it spreads in about 9 acres. Main reason for this is necessity of present service receivers & future expansion of requirement of the hospital.

Since there are archeologically important building at center of the land there is minimum ability to change the other buildings. The percentage of average admitting patients is 80% and the spaces for them at wards are limited. And also, there is a limitation to incorporate the government proposal to develop this area as a Teaching hospital due to the limited existing land extent.

IV. Absence of required rest places for patients and community people.

Other infrastructure facilities & leisure infrastructure facilities of Badulla town not suitably located in order to cater entire population of Uva Province and people comes from Badulla to get the services of Badulla General Hospital.

The daily commuters for health facilities is about 18,000 and it is 18% out of the total commuters. These people can be categorized as OPD patients, visitors for admitted patients, patients for clinics. But the facilities for parking and resting are less. Because of that people are using both sides of the streets near the hospital for their parking and it is a disturbance for the pedestrians.

There are no at least basic facilities around the hospital for patients who came from long distance to get clinic facilities although they have to stay night time also. Some visitors come to visit the admitted patients are waiting full day to visit twice their relations and there is no any resting place for them.

V. Absence of integrated place to obtain necessary services to patients & people.

Even though the laboratory facilities spread the within the town no any collective facility center for patients and visitors to get laboratory services. People have to seek each and every facility all over the town. Also the retail and other shops to get day to day goods for admitted patients is also limited and existence are located in pedestrian paths and it makes disturbances for the pedestrians.

Figure 5.5: The way of improper establishment of Hospital Based Service Centers in both sides of Bandarawela Road.

Captured by: Uva Provincial Office, UDA, 2020

People have to walk here and there for laboratory facilities based on the needs and it is not easy for the people.

VI. Lack of infrastructure facilities in Vincent Dias Playground Premises

Currently Vincent Dias playground premises compromising football playground, Basket ball playground, swimming pool etc. But this premises do not facilitate minimum level of sanitary facilities. Also, there are several under utilized building around this premises which are currently dilapidated. The premises is located adjacent to the Badulla Solid dumping yard which resulted to create bad odor around the area. Therefore, athletics can not do their training activities properly.

Figure 5.7: Under utilized lands around the Playground complex

Source: Urban Development Authority, 2018

Opportunities

i. Government proposals for Badulla General Hospital develop as a Teaching Hospital.

Badulla Hospital has developed as Provincial Hospital which is opened on 1891 and considering the need of services there is a government proposal to future develop it as a Teaching Hospital, the project proposed to combine the hospital with proposed medical facilities of Uva Wellassa University. According to that existing Nursing Training Center will be become as a special place in Badulla.

- ii. Service sector immigration for exclusive and middle-class employment to settle with in Badulla.

The labor force of Badulla (Population between ages 18 - 60) is about 43% and out of that 63% of employees is engaging with the service sector employments.

Most of the new settlers of this area have immigrated due to the job and for that the areas of Katupelella, Badulla West, and Hingurugamuwa are important.

Goal 02: Facilitate the city by providing infrastructure facilities.

Table No 5.9: Goal No 2 SWOT Analysis

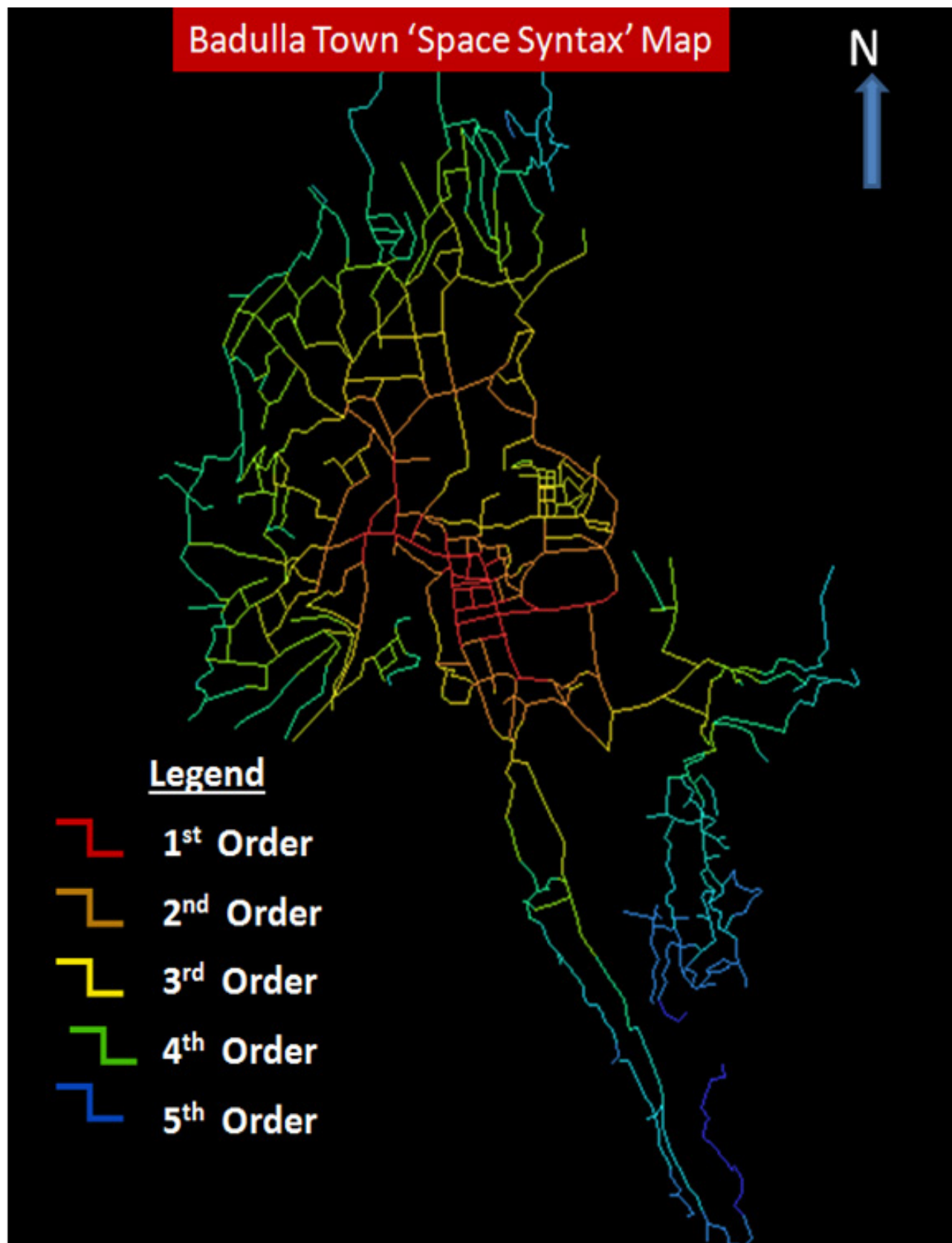
Strengths	<ul style="list-style-type: none"> i. High road connectivity at town center ii. Being the main transportation hub of the region iii. 96% of urban residential population based on pipe bone water iv. Having water sources v. Being 100% electricity occupied town 	Weaknesses	<ul style="list-style-type: none"> i. Problem regarding the solid waste management ii. Not having a method to waste water disposal iii. Trend for vehicular congestion iv. Under developed lands in town center v. Water pollution of Badulu Oya vi. Under developed archeologically important buildings in town center vii. Improper development at town
Opportunities	<ul style="list-style-type: none"> i. Badulla, Haliela and Ella Intergrated water supply project ii. Proposed waste water collecting and cleaning project for urban area iii. Existence of the Uva Wellassa University iv. Locating tourism attraction places surrounding the town. 	Threats	<ul style="list-style-type: none"> i. Difficulties to provide facilities for hilly and lowline lands due to the terrain.

Strengths

- i. High road connectivity at town center

The road network of Badulla City Center has arranged as a grid pattern and it is an especial character. All the roads connected as a grid from the in front of Badulla Divisional Secretariat Office to Bank Road. The road connectivity has improved in Badulupitiya Residential Zone due to the well connections. Following Space Syntax Analysis map shows the pattern of road connection (Map No: 5.3)

Map No 5.3: Space Syntax Analysis



Source : Urban Development Authority, 2018

ii. Being the main transportation hub of the region

The bus transportation and railway transportation connect the other towns with Badulla. According to the Uva provincial Transport Authority 2017 data about 720 – 750 number of buses are coming to the city and about 800 – 820 number of buses are traveling outside from the Badulla City.

Other than this the railway transportation also transports the passengers and goods to the city. Since this is the end station of the hill country 5 of turns start and 5 turns end at this railway station per day. When consider the history there are evidences to confirm that this railway station has used for tea transportation to the areas of Passara, Madolsima.

iii. 96% of urban residential population based on pipe bone water

Number of families who are living within city limit is about 12452. 96% of families (11891) out of the total population are using the pipe born water. Pipe born water provided by Water Supply and Drainage Board of Badulla is as follows.

Table No 5.10: Pipe water connections within Badulla Municipal Council limit

1.	Residential	13010
2.	Commercial	1034
	Total	14405

Source: National Water Supply and Drainage Board, Badulla, 2017

Present daily water consumption is about 8409m³, but about 8688m³ is the daily demand of this area. Accordingly, the deficiency of pipe born water is about 278 m³. The water capacity and the data about water supply places of the BaduluOya pumping stations are as follows.

Table No 5.11: Water pumping stations and capacities (Badulla city limits)

	Water Pumping Stations	Water Pumping Place
01	9000m ³	Kumarasinghe Mawatha
		Mediriya
		Wes Molan
02	4000m ³	Kumarasinghe Mawatha
		Wes Molan

Source: National Water Supply and Drainage Board, Badulla, 2017

iv. Having water sources

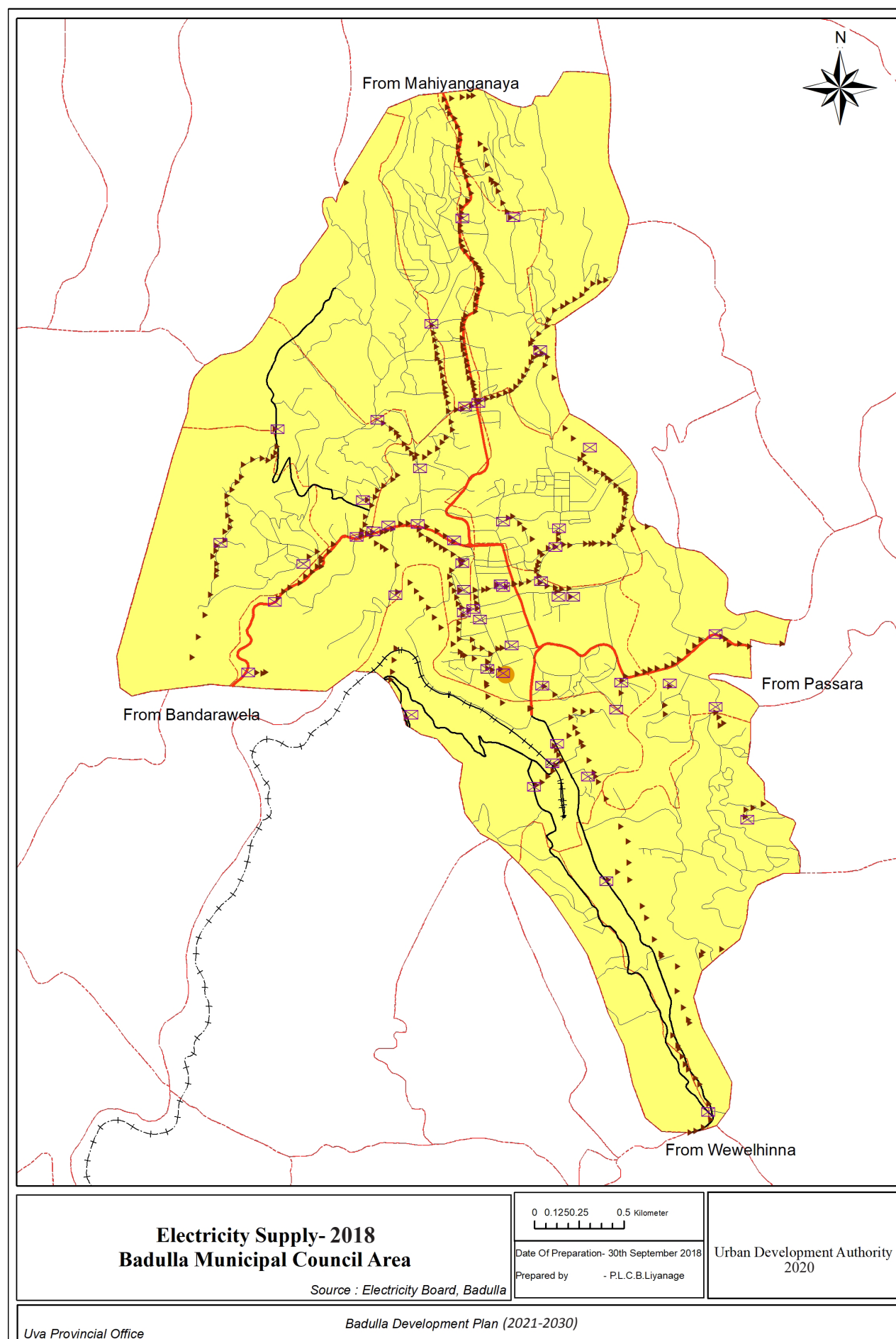
Badulu Oya is the main water source for Badulla city limit. Other than this Rambukpotha Oya, Kuda Oya, Badulupitiya Ela, Aluth Ela and Agare Kandura provide water for paddy fields and agriculture lands within city limits.

v. Being 100% electricity occupied town

The total population of electricity consumers in Badulla Municipal Council area is about 12,385. Badulla includes to the third division of electricity supply in Sri Lanka.

According to the 2016 Sampath Pethikada of Badulla Divisional Secretariat office, about 99.5% of residential and commercial units are eletrified. Within the city limit there is a grid substation having 132kw and 51 transformers having 33kw. The electricity line distribution with in city is shown in Map No: 5.4

Map No 5.4: Electricity line distribution in Badulla Town



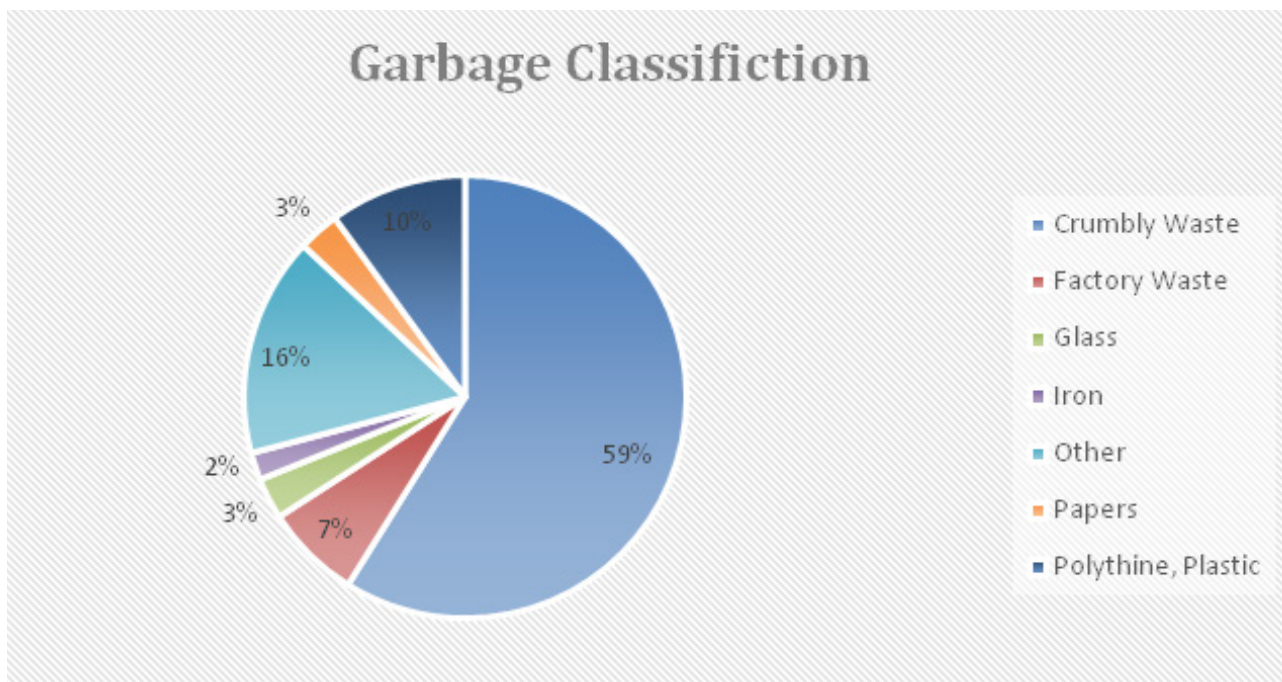
Source : Urban Development Authority, 2020

Weaknesses

i. Problem regarding the solid waste management

The sources of solid waste of Badulla can be categorized as domestic, commercial, shops, slaughter houses, industries and others. These sources are generating about 25 – 28 tons and 50% out of it generate by the domestics. Urban solid waste contents are as following Chart no 5.2:

Chart No 5.2: Solid Waste Classification of the city



Source: Badulla Municipal Council, 2017

Solid waste collection of Municipal Council is covering the area of 70%, except the Katupelella and Pitawelagama. Bazar Street and Raja Veediya are the areas where generate huge amount of solid waste. Solid waste collects after the sorting to crumbling and non-crumbling at two turns per day. Collected solid wastes are dumping to the Municipal Council dumping site.

The collected non- crumbling solid waste again sorted into two as recyclable and non- recyclable. The crumbling solid wastes are using to make compost according to the method of open dumping. After the stacking of crumbling solid waste roll those once per week and continued this process within six weeks. Then packing the compost and sell to the market. About 40,000 kg issuing to the market per month and recyclable waste are selling for the private partners at the site. Non-recyclable and non-crumbling waste heaped at the site.

Figure No 5.6: Current Waste Yard

Captured by: Uva Provincial Office, UDA, 2020

The increasing of methane of residual waste was the reason for fire at Badulla solid waste dumping site on 2016. Since that this residual waste has become a problem for town and the residents of the area. Following issues can be seen at this solid waste dumping site.

- 20% of wastes out of the total are collecting without the sorting.
- Non-crumbling waste heaped at the site from 2014 due to the unable to sell
- Spreading bad smell around the area
- Leachate waste water from waste dumping ground.

ii. Not having a method for waste water disposal

There is no sewerage system in Badulla Municipal Council area. Most of toilets in town center are overflowing due to less of water absorbing level. Badulla General Hospital, Sennanayake Ground, Bus Terminal, South Lane, Muthiyangana Temple, near the Railway Station and Welekade Shopping Complex are the places where having public toilets.

Although there is a sewerage treatment plant at Badulla General Hospital it is also in old condition.

The bio gas systems are not in better use although those introduced with combining the existing toilet systems at following places as a solution for environmental issues of Badulla sewage system.

- Bio gas systems in Senanayake Ground.
- Bio gas system in Badulupitiya Slaughter House Area.
- Bio gas system in Badulla Waste Collection Yard.
- Bio gas system in Town Hall Premises.
- Bio gas system in Badulla Fair Premises.

In this area has to use a gulley to make soakage pits empty due to the less of water absorbing level and it is the main issue of sewage transportation in Badulla. Collected sewages are dumping to the bio gas systems and it is not adequate at some periods of the year.

A problematic situation has emerged due to the people turned their sewage systems to public drainages.

Figure No 5.7: Polluted Public Drainages

Captured by: Uva Provincial Office, UDA, 2020

iii. Trend for traffic congestion

Though the vehicular congestion not hugely effect for the functions of the area currently, there is a possibility for largely effecting vehicular congestion in the near future. It is due to the space limitation of the town. Since this limitation of parking, people are using both sides of the streets for vehicle parking.

Badulla commercial center parking and Senanayake underground parking area are the two places allocated for vehicle parking at town center. Due most of the people are visit town for getting administrative services there are high traffic congestion. And also, some vehicles are parking during the morning to evening.

But the allocated parking spaces and spaces at administrative offices are not adequate for the demand. And also, people are using the both sides of the Pahala Raja Veediya, Badulla Bandarawela Road, Mediriya Road and Bazaar Road for their parking needs. Though the Pahala Raja Veediya is a one-way road due to the parking and loading and unloading of goods for commercial places there is a high vehicular congestion. Accordingly, the vehicle speeds at identified roads are as following table no 5.12

Table No 5.12: Speed limits in identified road sections

Road Section	Distance (m)	Speed (km/ph)
From General Hospital to Rest house Junction	500	10
From Prison Junction to Viharagoda Junction.	650	10

Source: Uva Provincial Office, UDA 2017

There are only several roads have pedestrian ways. Since the administrative offices are not in walking distance and roads are not pedestrian friendly people are using private vehicles to fulfill their service needs. It is due to the undeveloped public transportation system. People are mostly using three wheels. Three wheels are creating traffic congestion although they provide service with their special package at Rs. 25. It also cause for the trend of traffic congestion.

The route which connects the other towns and residential areas is running through the town center and it increase vehicular congestion.

iv. Under developed lands in town center

Although the space of town is limited, most of the lands are underutilized. Government institutions lands, government quarter's lands, common buildings are including in underutilize category.

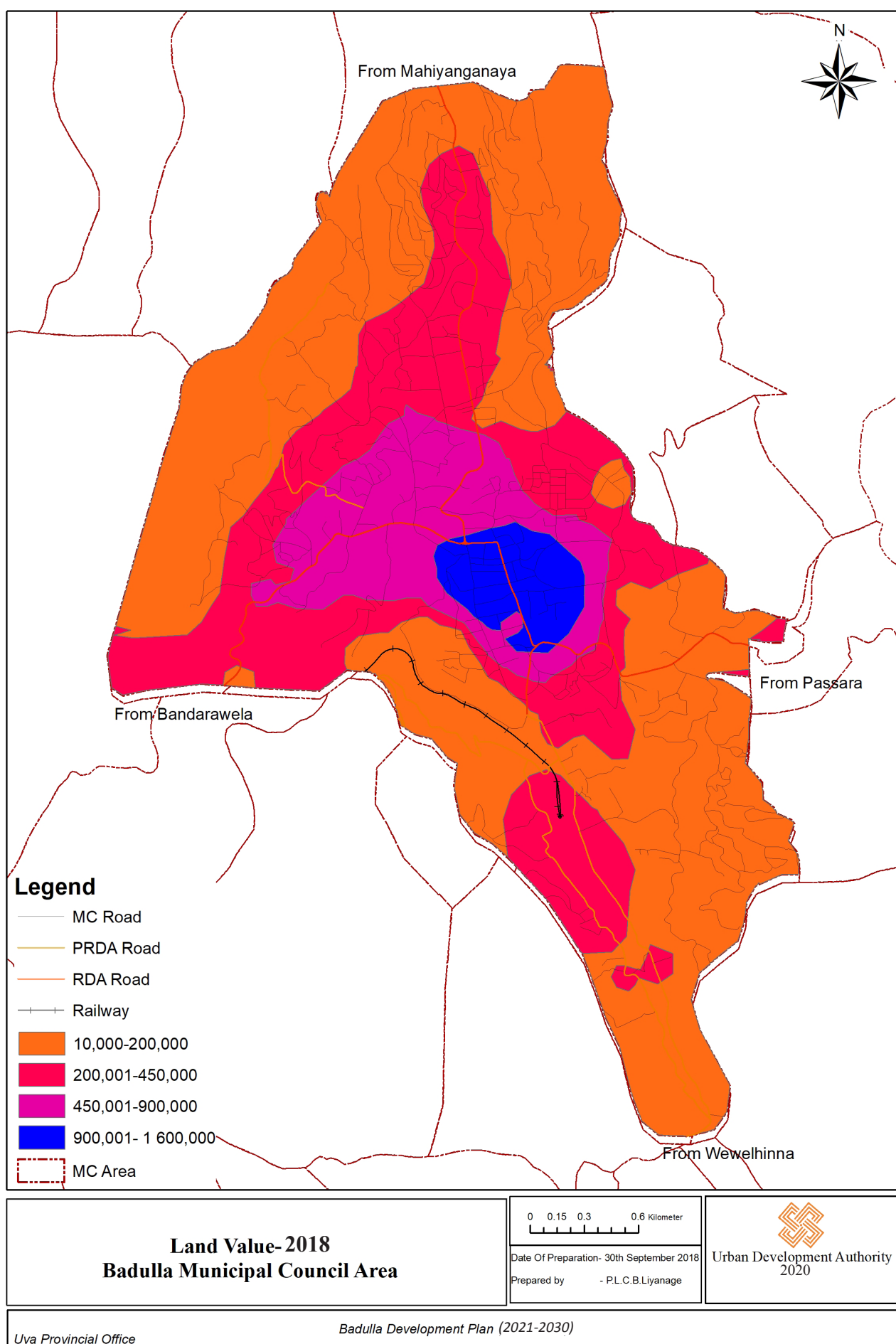
According to land prices in Badulla Town (map no 5.5), when consider the land values of underutilized lands in city center, all those are falling under the high land value category. There is a potential for vertical development at town center. According to following can be mention as an underutilized land.

1. The land behind the Governor's Office
2. The land near the National Housing Development Authority
3. The land behind Kachcheri.
4. The land of Railway Department quarters

To achieve the vision of well-planned Administrative and Health services there is a restriction of congestion due to not having best use according to the land value. Places where not having proper uses as follow.

1. Badulla Prison
2. Schools (Badulla Vishaka Girls High School, Al Adhan School, Sarasvati primary Tamil School)
The space for the schools is limited and because of that there are inadequate facilities of sport and laboratory

Map No 5.5: Land Values in Badulla Town



Source : Urban Development Authority, 2018

v. Water pollution of BaduluOya

Water pollution of BaduluOya is an issue since it is the main water source of the area. This is not badly effect for the drinking water treatment plants at Mediriya, Wesmolan and KumarasinghaMawatha. But since most of the residents of this area are using BadulubOya for their washing purposes it has become as an issue.

National Water Supply & Drainage Board measures the treatment level of water according to the appearance, chemical condition, and Micro activity. Water from Badulu Oya is in normal condition only at the Mediriya which is the origin place. But when test the water samples from several places like Kumarasignga Mawatha and Andeniya Bridge water is in polluted condition.

Figure No 5.8: Polluted drainages connecting with Baduluoya



Captured by: Uva Provincial Office, UDA, 2020

vi. Under developed archeologically important buildings in town center

Archeologically important buildings are not regenerate and conserve in proper way and it is a weakness for the development of Badulla Town. The private ownership of archeological buildings is the main reason for this situation. Especially the Thaldena Walwwa, Salusala Building and Kothalawala Walawwa are in abandoned situation. Due to the private ownership Archeology office of Badulla Region also cannot be intervening for this situation

Figure No 5.9: Underutilize archeologically monuments in city center.



Welekade Fortress



Thaldena Walawwa



Salusala Building



Kothalawala Walawwa

Captured by: Uva Provincial Office, UDA & Internet, 2020

The buildings other than said archeological buildings are also not adding a beauty for the city. Due to the rich of historical evaluation there are numbers of archeologically important buildings spreading at the town.

vii. Improper development at town

Town area is not in proper built form although it spreads within small area.

- Spreading unauthorized buildings

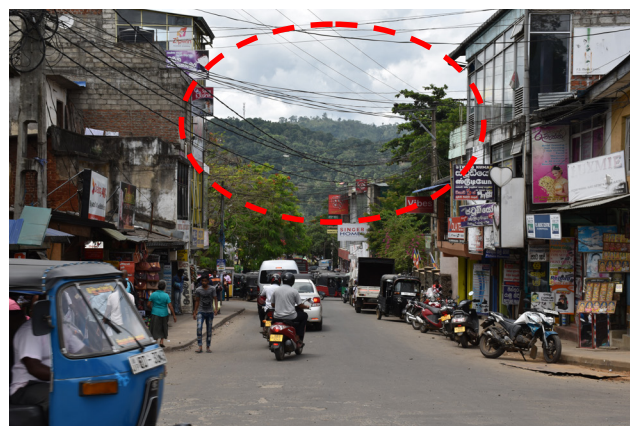
Most of the buildings in town are unauthorized constructions. The renovations and amendments for old buildings are the reason for this. The constructions at road and river reservations are general seen at this area.

- Haphazard Infrastructure developments

Communication lines and electricity lines are not distributing in a proper way within the town area. These improper developments have destructed the vistas towards the mountain sceneries to the town.

Most of the maintenance and renovation works of drainages and waterlines are doing with disturbing the pedestrian movements. There is a need to do those works with creating the pedestrian friendliness.

Figure No: 5.10: Improper electricity lines and telecommunication cables



Captured by: Uva Provincial Office- UDA, 2020

viii. Not combining the railway transportation and bus transportation

Figure No: 5.11: Maintenance and renovation works of drainages and waterlines



Captured by: Uva Provincial Office- UDA, 2018



Source : Google Earth, 2018

Even though Badulla town facilitated by the rail and bus transport services, Badulla railway Station and main bus terminal are located with 1.5km gap. Therefore, rail transportation is not using by the dialy commuters of the town. Further it resulted to promote thereweeler services within the town to fill this gap.

ix. Lack of infrastructure to tourism development

Even though Badulla located withing tourism region, there are few tousit attraction sites are available within the Badulla Town. Therefore, most of the tourists are neglet these sites from their tourism route. Muthiynaganaya Raja maha Viharaya, Badulla Kathragama and paththini Devalya, Badulla Botnical garden are some of them. As well as, even though Badulla is the last railway staion of the Up - Country railway line tourist terminate their jouney from Ella. Reasons behind these situations are fewer considerations to saisdd archeological monuments and not promoting them as tourist sites. These locations have less infrastructure faciliities as well.

Opportunities

i. Badulla, Haliela and Ella intergarted Water Supply Project

This project has established in Demodara, where about 14km far from Badulla town towards the Bandarawela. The volume of this project is about 15,000m³. This project provides about 8,500m³ of water for the area of Badulla town and towards the town. Further this project proposed to drive polyethylene pipes for town area. Accordingly, this project has the capacity to provide water for present and expected total population.

ii. Proposed waste water collecting and treatment project for urban area

This project covers the area of Badulla Central, Badulla east and Badulupitiya GN Divisions. The project is in planning stage and it has identified locations for waste water collection, pumping and disposal. As per the National water Supply and Drainage Board the treatment center will be established at the place Hindagoda and 11 of pumping stations will be established based the above GN Divisions

Accordingly, the lengths of proposed waste water collecting pipes are about 26,902m and the lengths of pumping pipes are 5315m. The daily capacity of treatment plant is about 4000m³.

iii. Location of the Uva Wellassa University

The University of Uva Wellassa is a good oportunity for the town area though it is locting about 5km far from the town towards the Passara. After the establishment of this Uva Wellassa University on 2005 the development pressure has spreads towards the Passara Road. And there are number of private education agencies at bothside of the Passara Road due to the impact of university.

There are three education facilities in Uva Wellasa University.

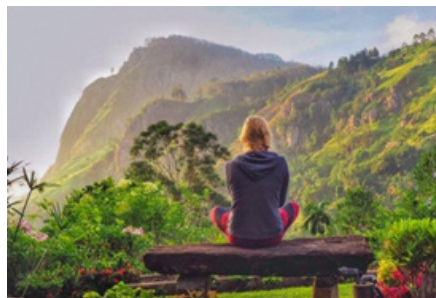
1. Animal Science and Export Agriculture
2. Management
3. Science and Technllogy

At present there are external educational centers other than this three faculties. The total number of students of this university is 1911. Therefore, it is good opportunity to the area pupils to uplift therir education qualifications.

iv. Tourism attraction places surrounding the town.

There are number of tourist attraction places around the town like Bogoda Bridge, Ella, Demodara Bridge, Lipton Seat, Dunhida Waterfall, and Rawana Cage. Most of the tourists who visit these places are travelling via the Badulla town. And the star hotels at town area are also adding economic value for the development.

Figure No: 5.11: Tourism attraction places surrounding the town



Source: From internet, 2018

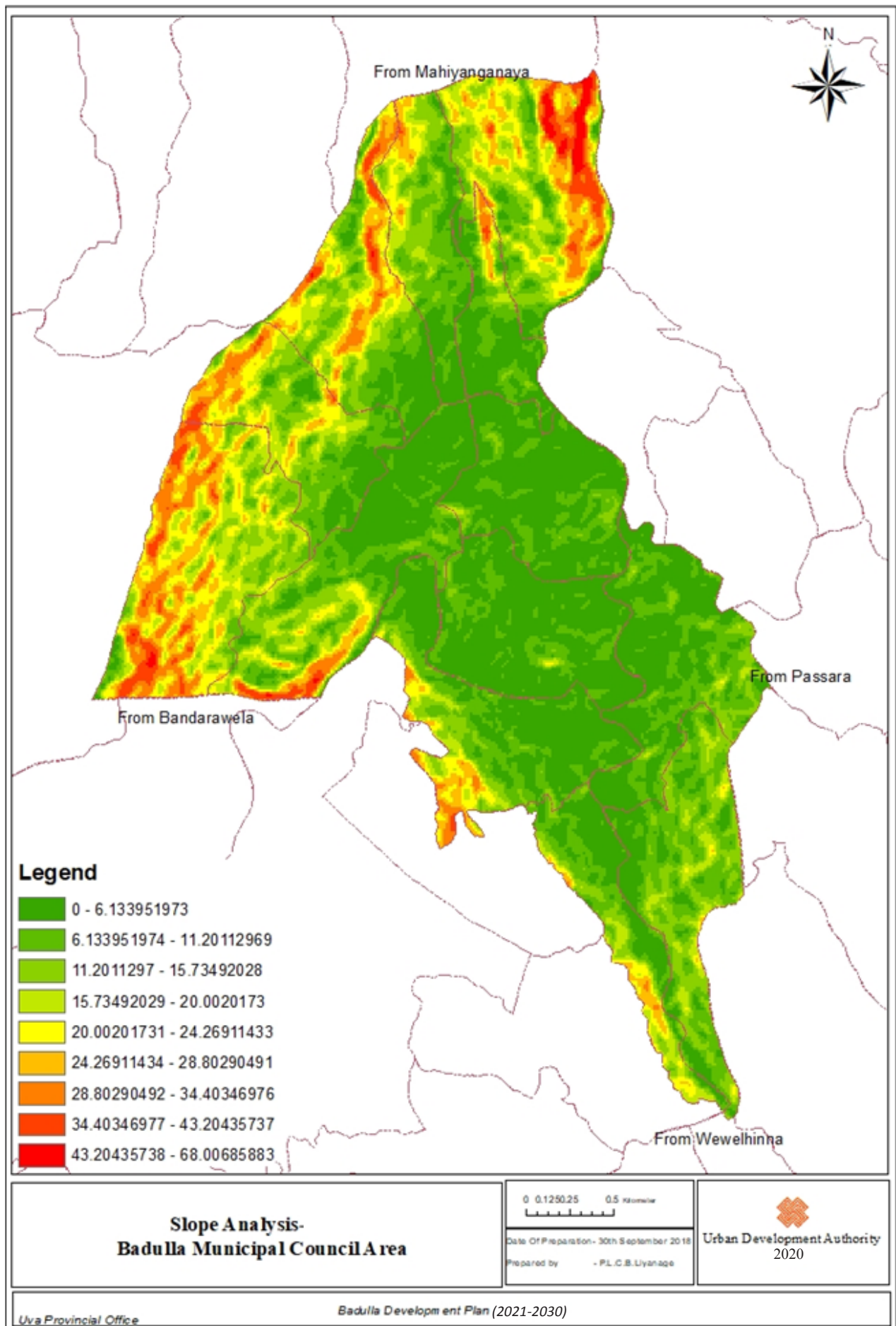
Threats

- I. Difficulties to provide facilities for hilly and lowline lands due to the terrain.

There are difficulties of provide facilities for hilly and low land area since the basin terrain of town area.

Due to that road developments are not at least minimum width. Most of the residential roads are about 2-3m wide roads. The low land area hasn't the mobile communication facilities like Dialog and Mobitel as well. The map of low land zones is shown in map no 5.6

Map No 5.6: Analysis of sloping areas of Badulla Town.



Source : Urban Development Authority, 2020

Goal 03: Create environmental sustainability with the development

Table 5.13: Goal 03 - SWOT Analysis

Strengths	i. Having water bodies like Badulu Oya and Kuda Oya running through the town	Weaknesses	i. Rapid reclamation of paddy lands
	ii. Having water retention places		ii. Polluting water sources such as Badulu Oya
Opportunities	iii. Existence of natural forests and scrub lands top of mountain areas	Threats	iii. few rest areas and leisure places for passengers
	i. Having a government special announcement against reclamation of paddy lands		iv. Increasing demand for residential use in sloppy areas
			i. The low amount of water absorbing level in city center

Strengths

- i. Having water bodies like Badulu Oya and Kuda Oya running across the town

The water bodies running through the town are adding a beauty for the area apart from the acting as the main water sources. Accordingly, there are three water pumping station based on the Badulu Oya.

Figure No 5.13: BaduluOya



Captured by: Uva Provincial Office, UDA 2020

- ii. Having water retention places

The runoff water speed within basin shape of Badulla town center is slow. Due to this reason a flood situation can be seen at some places of town at heavy rainy seasons. But daily activities of Badulla town not disturbed due to location of water retention areas as Alikumbura.

- iii. Existence of natural forests and scrub lands at top of the mountain

Natural forests and scrubs can be seen at top of mountain. This forests and scrubs protect the area from landslide risk. Land extents of forests and scrub are shown in table no 5.14.

Table no 5.14: Land extent of forest & pathana in city limit

Use	Land extent (Acres)
Forests	128
Scrub	256

Source: Agricultural Development Department, Badulla - 2017

Weaknesses

i. Trend of rapid reclamation of paddy lands.

Judges' Hill forest reservation, Alugolla forest reservation, Badulu Oya and paddy lands are the sensitive areas within town limit. Since the shape of basin type of the area all water bodies are connected to the Badulu Oya. But due to the plain terrain of the town center paddy fields work as water storage or retention areas.

However, the economic productivity of Badulla paddy lands is decreasing with the development as administrative capital. And the service allocation for paddy-based development has decreased. In other hand the demand for residential development is increasing.

Due to these reasons the paddy lands are reclaiming and converting to residential and commercial uses. The paddy land extent is 247 Acres, 18 Perch at the present and the details are shown in following table no 5.15

ii. Polluting water sources such as Badulu oya

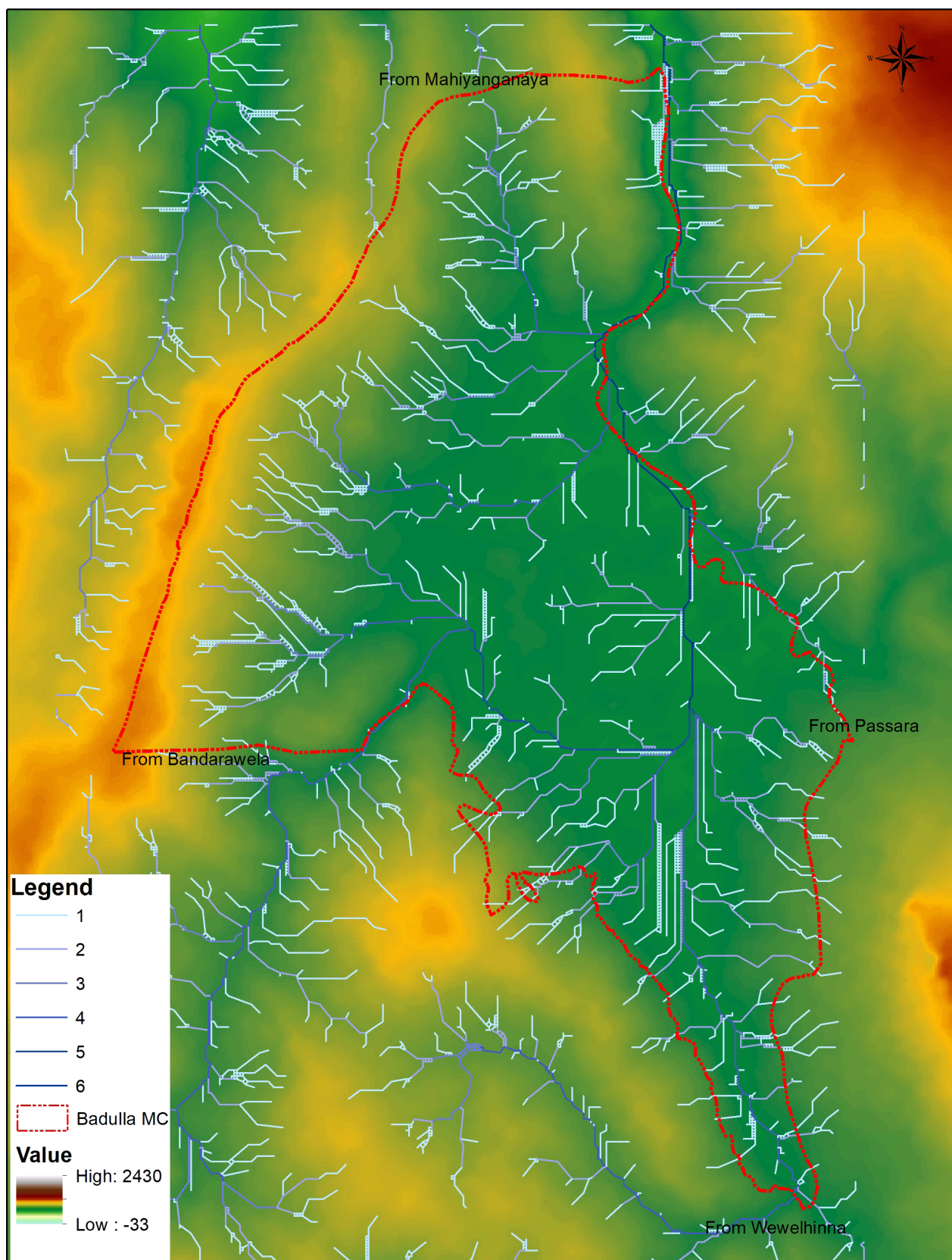
Table no 5.15: Current paddy land extent & uses

Category		A	R	P
Cultivated Paddy Lands		158	0	0
Non-Cultivated Paddy Lands		63	0	24
	Cultivable	42	2	
	No cultivable	20	2	24

Source: Agricultural Development Department, Badulla-2017

The water pollution of water sources is a huge problem for Badulla. The waste water directly connecting to water sources due to not having proper management system. The generation of the waste water continuously increasing due to increasing the residents and commuters to the area. And also, the water connections to paddy lands has polluted due to the combination of rain water and waste waters. Reason behind that is waste water from hospitals, dwellings, institutions and commercial places flowing to the paddy fields. Natural water flow within city limit is shown in map no 5.7 and the drainage system is shown in map no 5.8

Map No 5.7: Natural water flow in Badulla Town



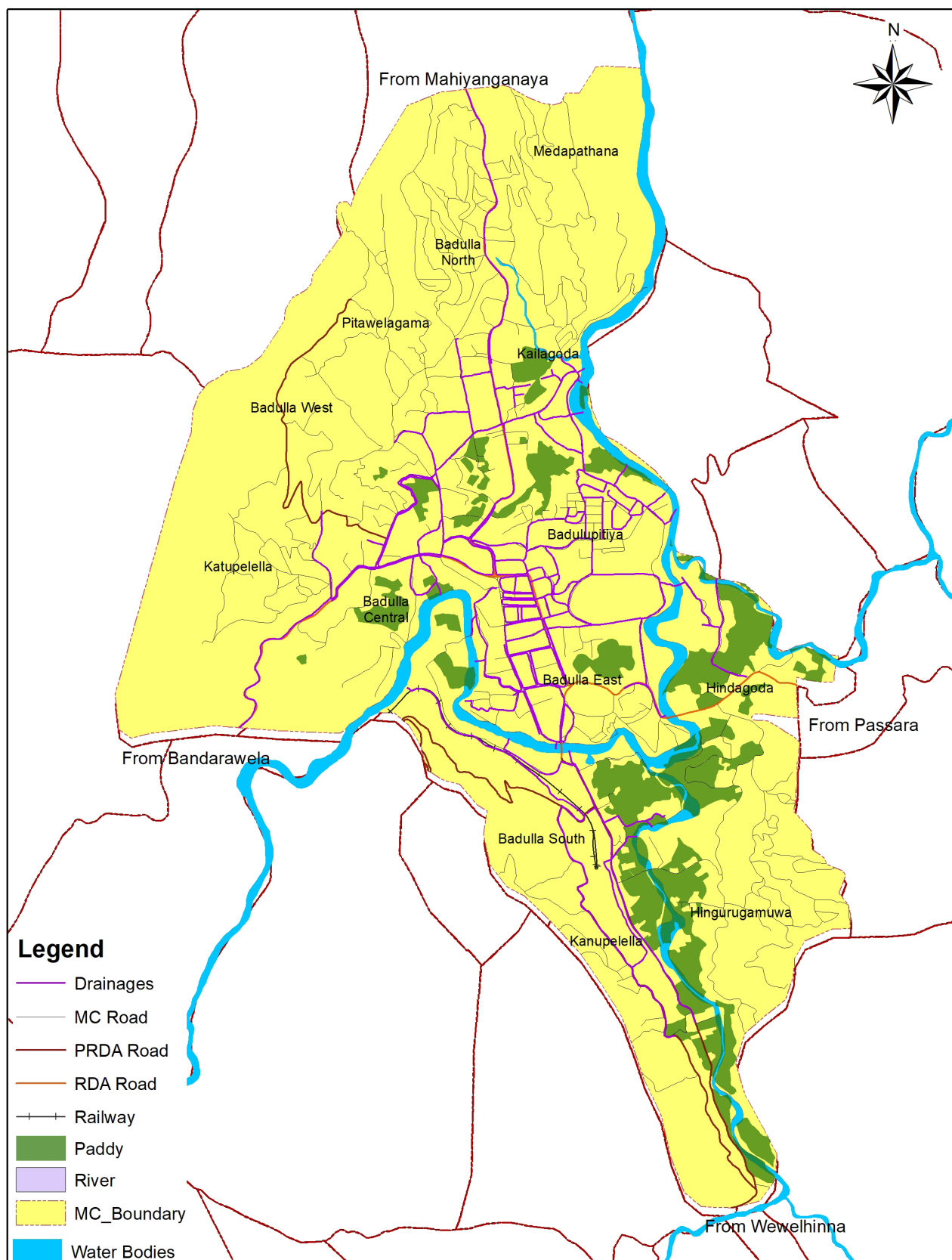
**Water Flow Analysis-
Badulla Municipal Council Area**

0 0.1250.25 0.5 Kilometer

Date Of Preparation- 30th September 2018
Prepared by - P.L.C.B.Liyanage


Urban Development Authority
2020

Map No 5.8: Main Drainage System in Badulla Town



Drainage System 2018
Badulla Municipal Council Area

0 0.1250.25 0.5 Kilometer

Date Of Preparation- 30th September 2018
 Prepared by - P.L.C.B.Liyanage


 Urban Development Authority
 2020

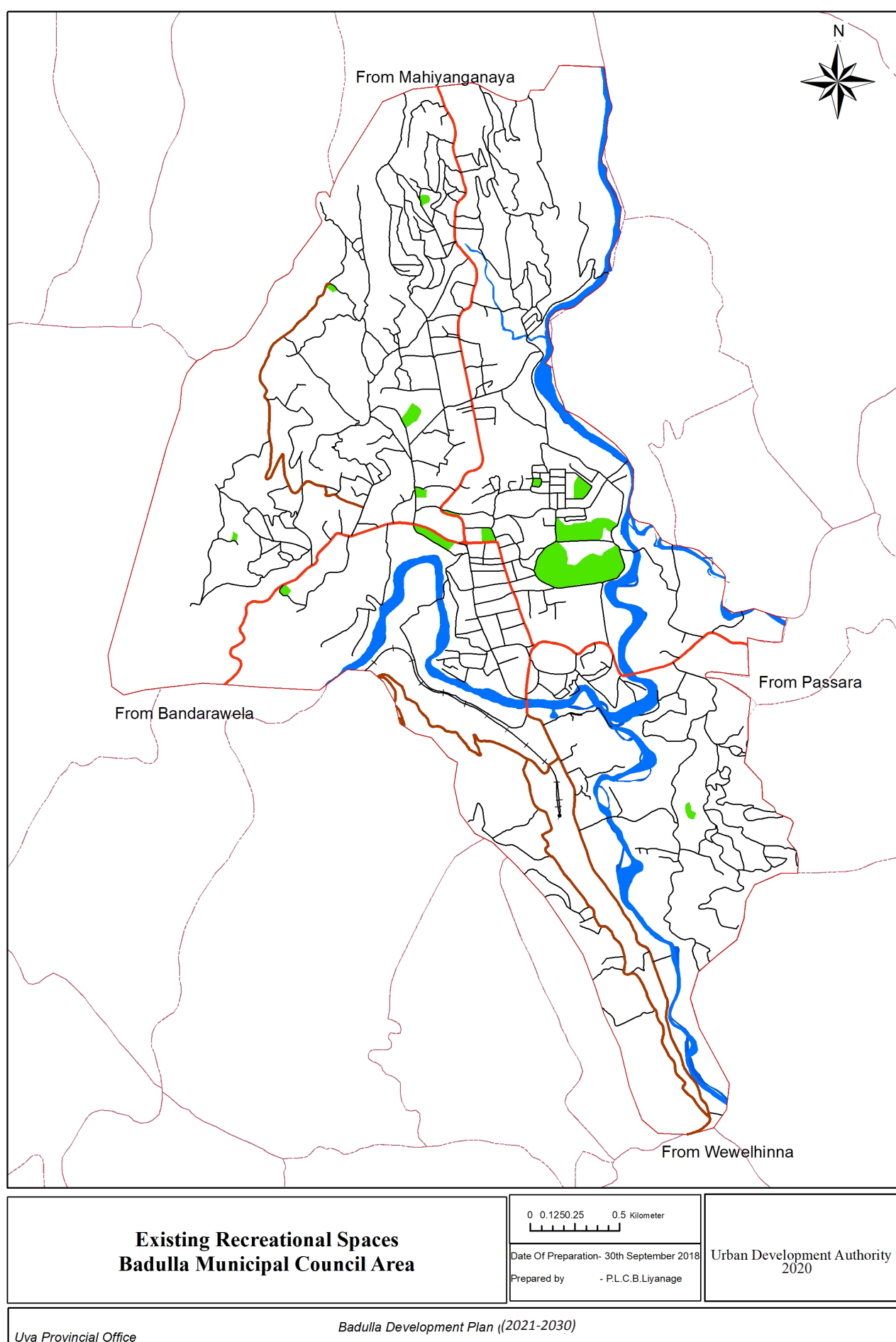
iii. Availability of less rest areas and leisure places for commuters.

The rest areas and leisure places are inadequate to fulfil the need of about 100,000 people who came to get services daily. Accordingly, the existing open spaces are shown in the map no 5.9. It is only 16.9 hectares out of total land extent has allocated for open spaces.

But most of the commuters are coming for the hospital and administrative services. Therefore, most are elders and there are no facilities with accordance to their needs. Badulla Botanical Garden is mostly based on the young generation. Further, due to solid waste side near to this garden decrease the visitors for this garden as well.

The standard for the open space is 1.4 hectares per 1000 population. But when considering the total population of this area the existing extent open spaces are inadequate to fulfil the requirement. And also, the walking tracks for service sector residents of the town area are also inadequate.

Map No 5.9: Existing leisure & public open spaces in Badulla Town



Source : Urban Development Authority, 2020

iv. High demand for residential use in sloppy areas

People are moving to the hilly areas for residential purpose due to the limited land extent of town area and high land value. There are huge demand at present to residential units in Katupella, Medapathana. Accordingly, the risk for landslides has increasing. The landslide risk areas according to the National Building Research Organization (NBRO) is shown in map no 5.10

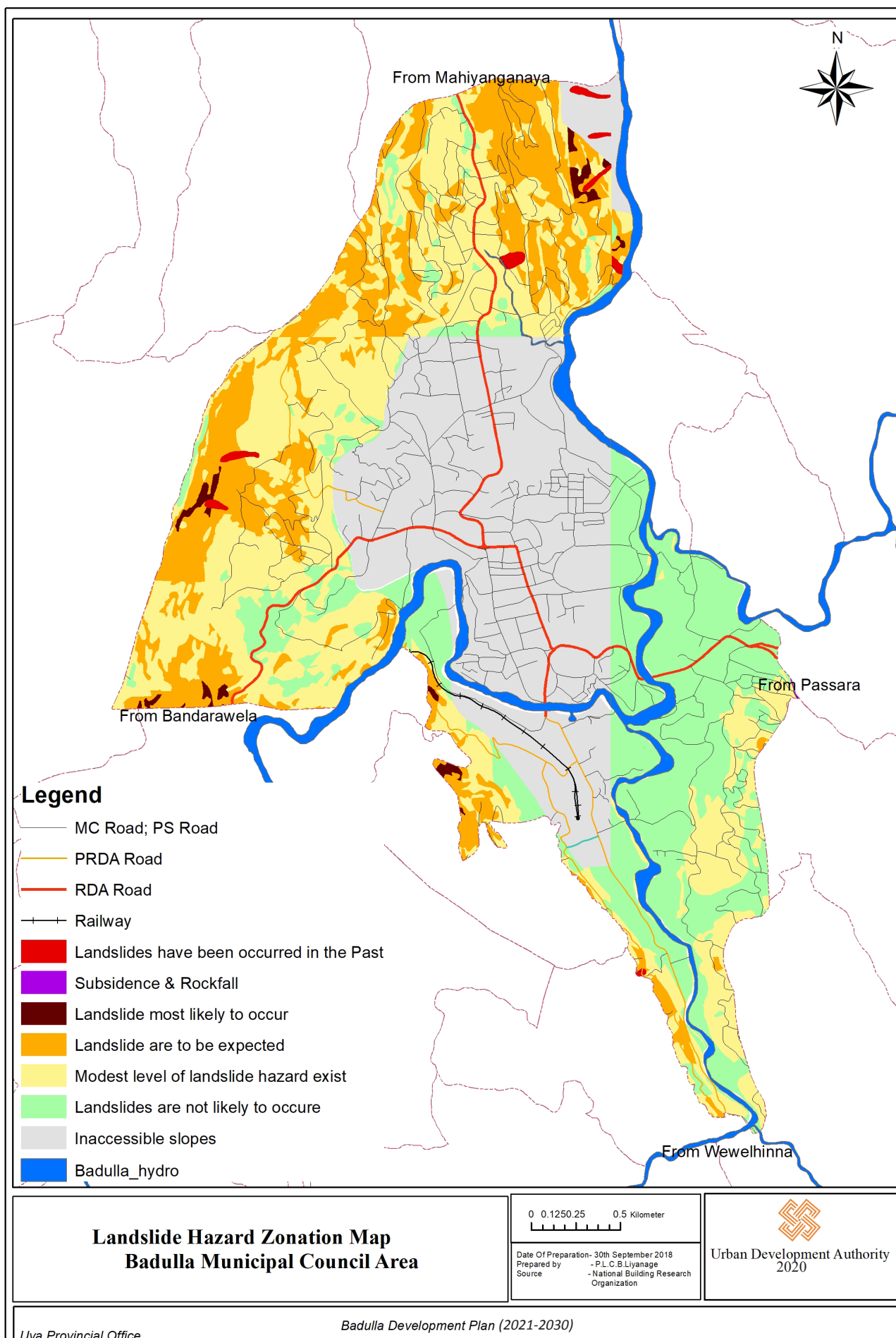
According to the land cover zone percentage result of NDBI study the urban sprawl has increased in sloping areas. (Map no 5.11 and 5.12)

Figure No 5.14: Residential uses in hill areas



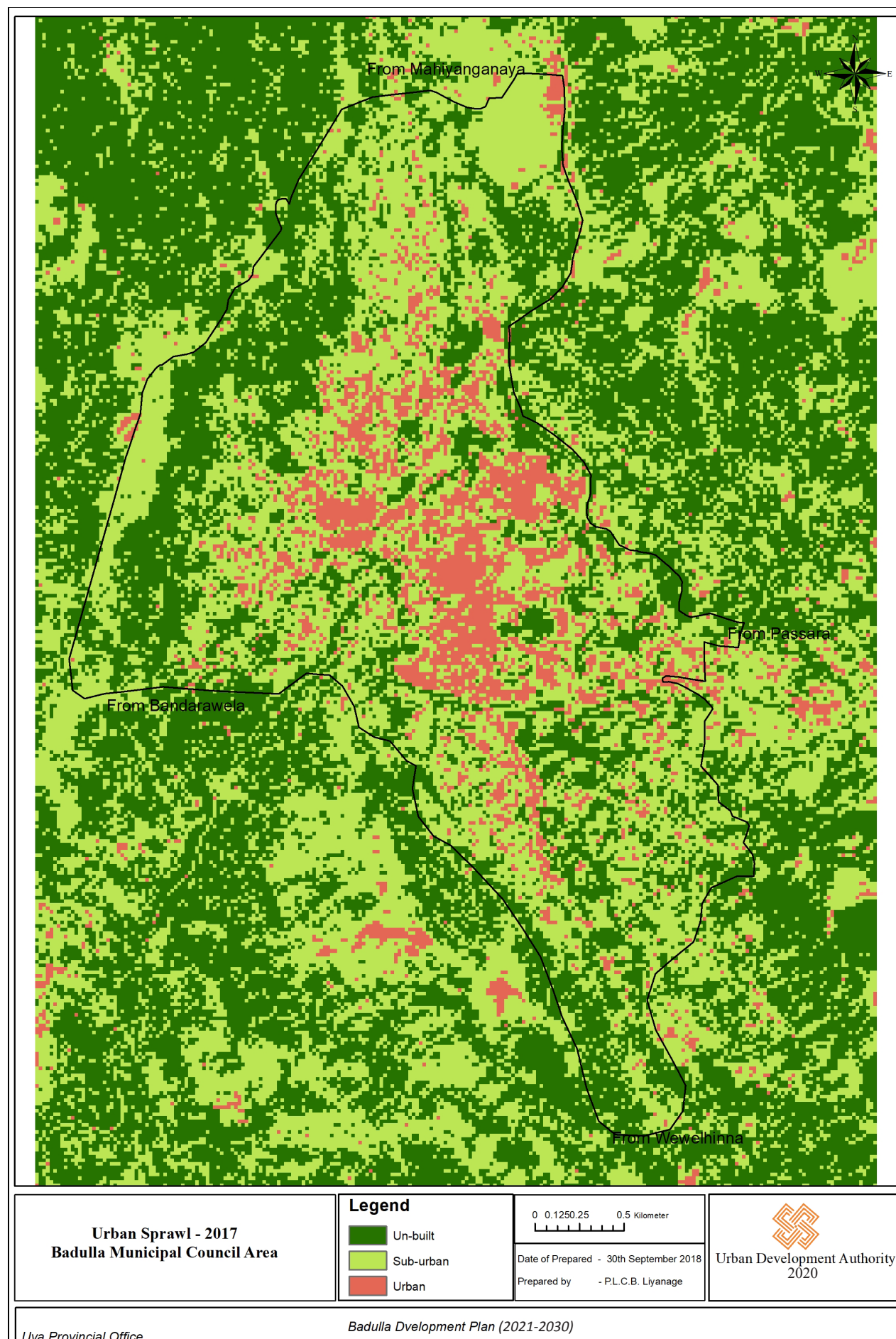
Captured by: Uva Provincial Office, UDA. 2020

Map No 5.10: Landslide Hazard Zones in Badulla Town



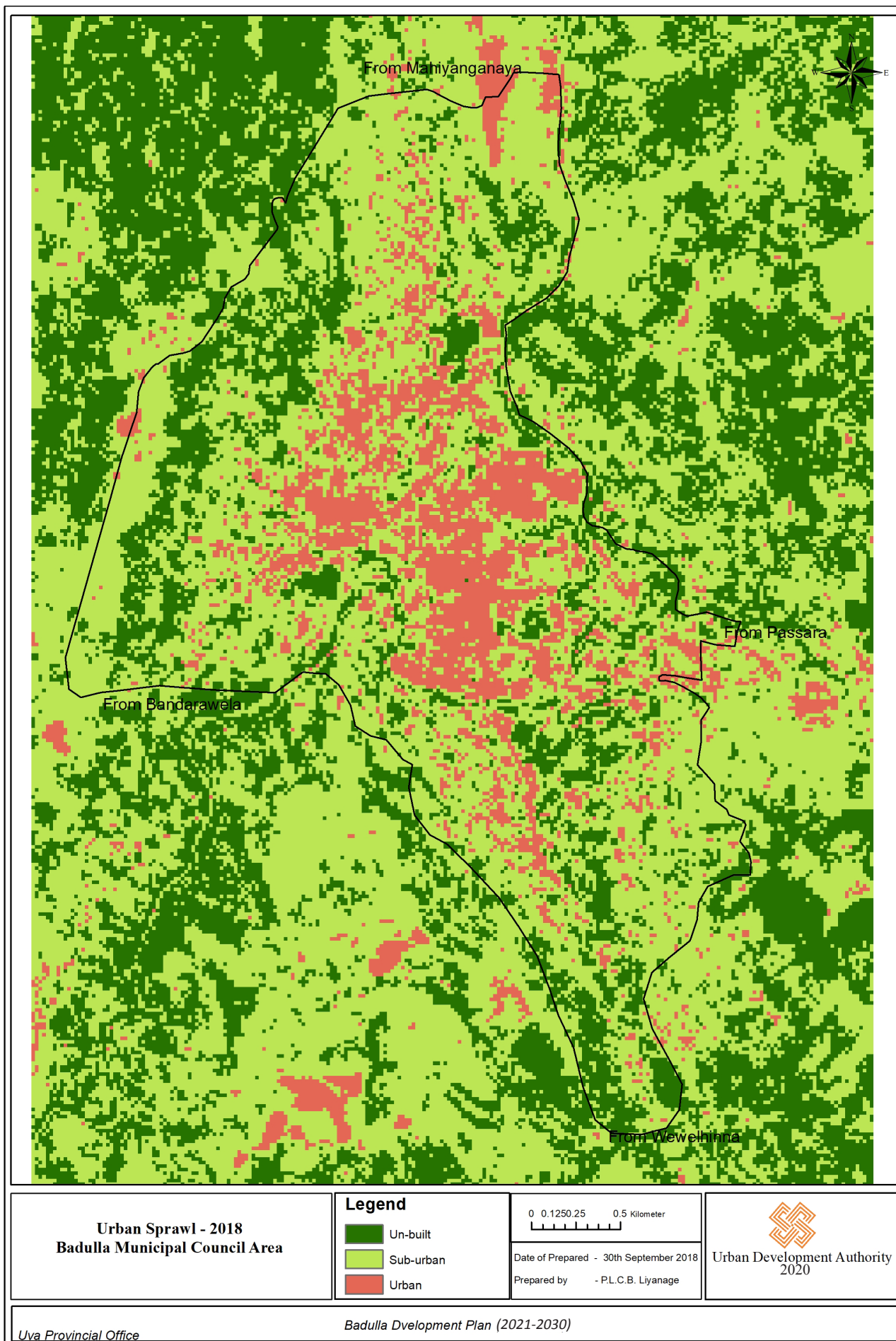
Source: National Building Research Organization, 2018

Map No 5.11: Badulla Urban Sprawl - 2017



Source : Urban Development Authority, 2020

Map No 5.12: Badulla Urban Sprawl - 2018



Source : Urban Development Authority, 2020

Opportunities

- i. Special announcement of the government against reclamation of paddy lands.

Most of the vacant lands in Badulla are paddy lands. Therefore, there is a trend to convert the use of open spaces and paddy lands to other uses.

The reclamation of paddy lands of Badulla town has limited according to the notice sent by commissioner of Agriculture Department to District Deputy Commissioner regarding the discontinuance of paddy land reclamation.

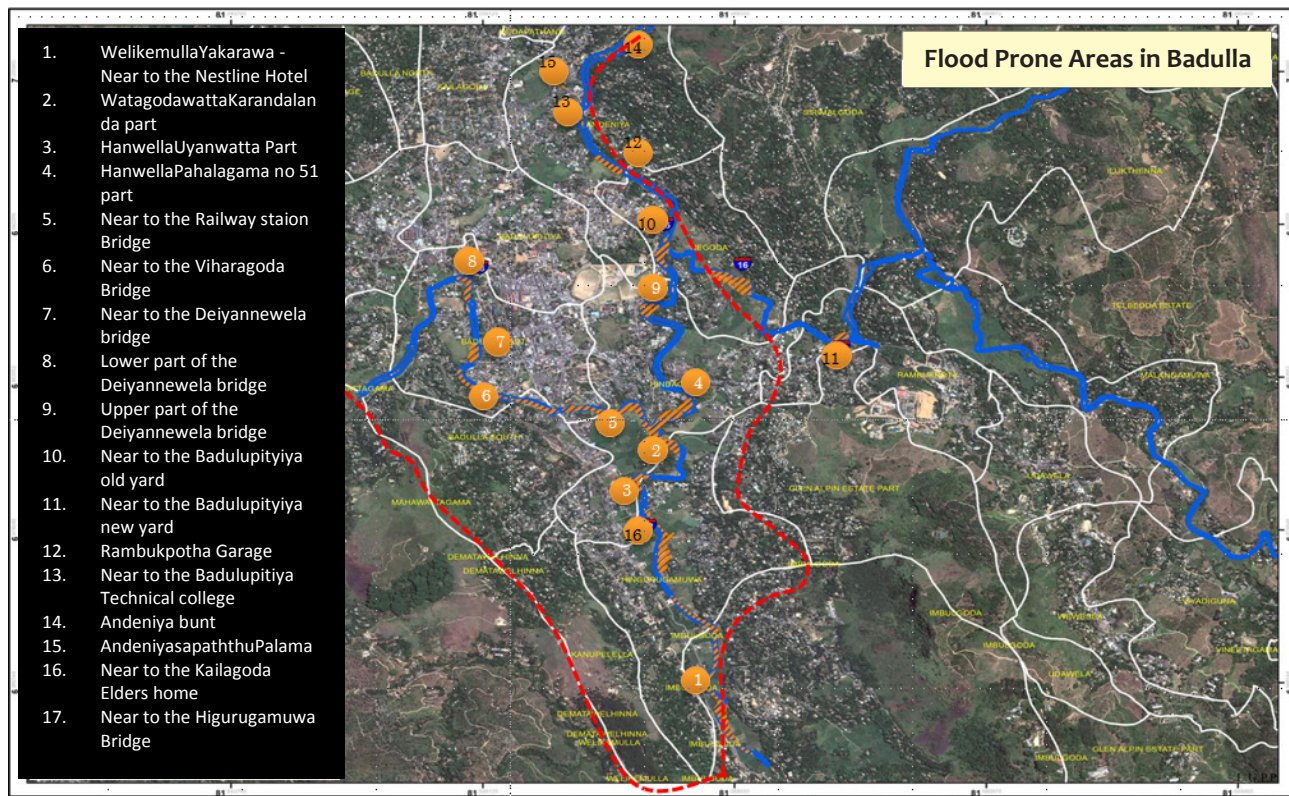
Threats

- i. The low amount of water absorbing in the city center.

When considering the history, Badulla town was a lake. There were paddy lands surrounding the lake. Because of that, at present also the water absorbing level of this paddy lands are very low.

Due that the water at rainy season are connecting to the Badulu Oya without absorbing. It has become a reason for flood also. Such flooding locations are shown in map no 5.13

Map No 5.13: Flooding areas in Badulla Municipal Council Area.



Source: Disaster Management Center, Badulla.2017

Goal 04: Protect the heritage identity of the area

Table No 5.16: Goal No 4 SWOT Analysis

Strengths	i. Existence of Badulla Muthiyanganaya Raja Maha Viharaya	Weaknesses	i. Abandoned situation of archeological places
	ii. Existence of archeological places		ii. Under utilization of the archeological places
Opportunities	iii. Religious places based cultural functions	Threats	
	i. Commuter population coming for religious places		

Strengths

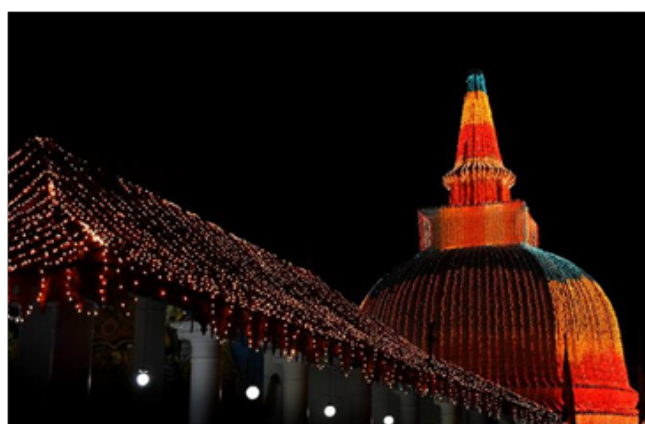
i. Existence of Badulla Muthiyanganaya Raja Maha Viharaya

According to the history, the religious environment is the reason to develop Badulla as a town. Muthiyangana Raja MahaViharaya is getting a special place. According to the invitation by regional governor, Indika the Lord Buddha has come to Badulla area during third visit of Sri Lanka. As per the Mahawansha, the Lord Buddha has stay at Muthiyangana Dagaba Area in that visit.

There are Mukthaka Relics and hair relics of Lord Buddha deposited at Muthiyangana Dagaba. Muthiyangana Dagaba is famous as the only one Dagaba in the world where deposited the supernatural relics of sweat drops of Lord Buddha. Other than this there are Hair Relics also. And also, this place is a one of the Buddhist religious place out of the “Solosmasthanana”.

There are some boutiques of offering items are distributing surrounding the Muthiyangana Raja MahaViharaya which locate in about 8A land. About 300 devotees at weekdays and about 1000 devotees at weekends are coming to this area. And also, about 10,000 people are coming for religious festivals which are based on Muthiyangana Raja MahaViharaya at Vesak Poya day. The importance of Muthiyangana Raja MahaViharaya has not change since the history. Due to that Muthiyangana Raja MahaViharaya can be made as an identity of historically important of Badulla.

Figure No 5.15: Muthiyangana Raja MahaViharaya



Source: From internet, 2020

ii. Existence of archeological places including Katharagama Devalaya

Badulla Kataragama Devalaya is a historically important place in town other than the Muthiyangana Raja MahaViharaya. Kataragama Devalaya was built at Kandy Kingdom period by King Wimala Dharma Sooriya (1548-1604). According to Uva Viharawansaya, king's throne was built to watch perahara. This has built in front of the Devalaya land to seeing the lighting lamp in KatharagamaDevalaya.

King Wimala Dharma Sooriya was the ruler of Badulla town area when Portuguese ruled the coastal side of Sri Lanka. Kings' palace was located at the place calling old Kachcheri now. After that the catholic religious places was built at British ruling period. St. Marks church and Welekade Methodist church are examples for that. Other than that, there are villas built at long history. As examples ThaldenaWalawwa, KothalawalaWalawwa, RathwaththeWalawwa and DimbulanaWalawwa can be mentioned.

Due to the specialty of history, this town has called as the administrative city. Due to that there are some buildings up to now built at British Period. Most of those buildings are conserved as archeologically important places.

Figure No 5.16: Historically important places in Badulla Town



King's Throne



Katharagama Devalaya



Lindamulla - Paththini Devalaya



Old Kachcheri

Source: From Internet, 2020

iii. Religious places based cultural functions.

There are several functions in Badulla famous as cultural functions. Bdulla Muthiyangana Vesak Festival, Kammanankada Temple Perahera, Kailagoda Sri Saddharmananda Temple Perahera, Badulla Katharagama Devala Perahera and Rock hill Kovil Radam Perahera are some of them. The vehicle movement plans are introducing within city on these functional seasons. Cultural functions denote the identity of the area.

Figure No 5.17: Badulla KatharagamaDevalaya Perahera



Captured by: Uva Provincial Office, UDA, 2019

Weaknesses

i. Abandoned condition of archeological places.

Most of the archeologically important places in Badulla city have abandoned. KothalawalaWalawwa, Thaldena walawwa, Salusala Building are some of them. These places locate in high land value areas and it is a problematic situation. Not having proper management for these areas is the main reason for this situation. Private developers are not tending to develop these places due to the limited development abilities due to archeological monuments. Therefore, it is destroying the valuable monuments and identity of the area.

Figure No 5.18: Abandoned archaeological sites



Source: From Internet, 2020

ii. Undeveloped archeological places

Although there are private owners for archeologically important places those are not developed. As example the Welekade open market and Salusala Building can be mentioned. These places can open up for public although those are in abandoned situation.

Figure No 5.19: Undeveloped archeological places



Welekade open Market,

Source: From Internet, 2020

Opportunities

i. Oilgrims coming for religious places

People are attracting to this area other than the residents to worship the places like Muthiyangana Raja MahaViharaya. Accordingly, the existence religious places are a reason to attract the commuter population. In perahera season about 10,000 devotees are coming to this area.

Development Pressure Analysis

Development pressure analysis is done by using the land use, road density, population density and growth rate of the area. It shows in the map no 5.12

Table No 5.17: Development pressure analysis Summary

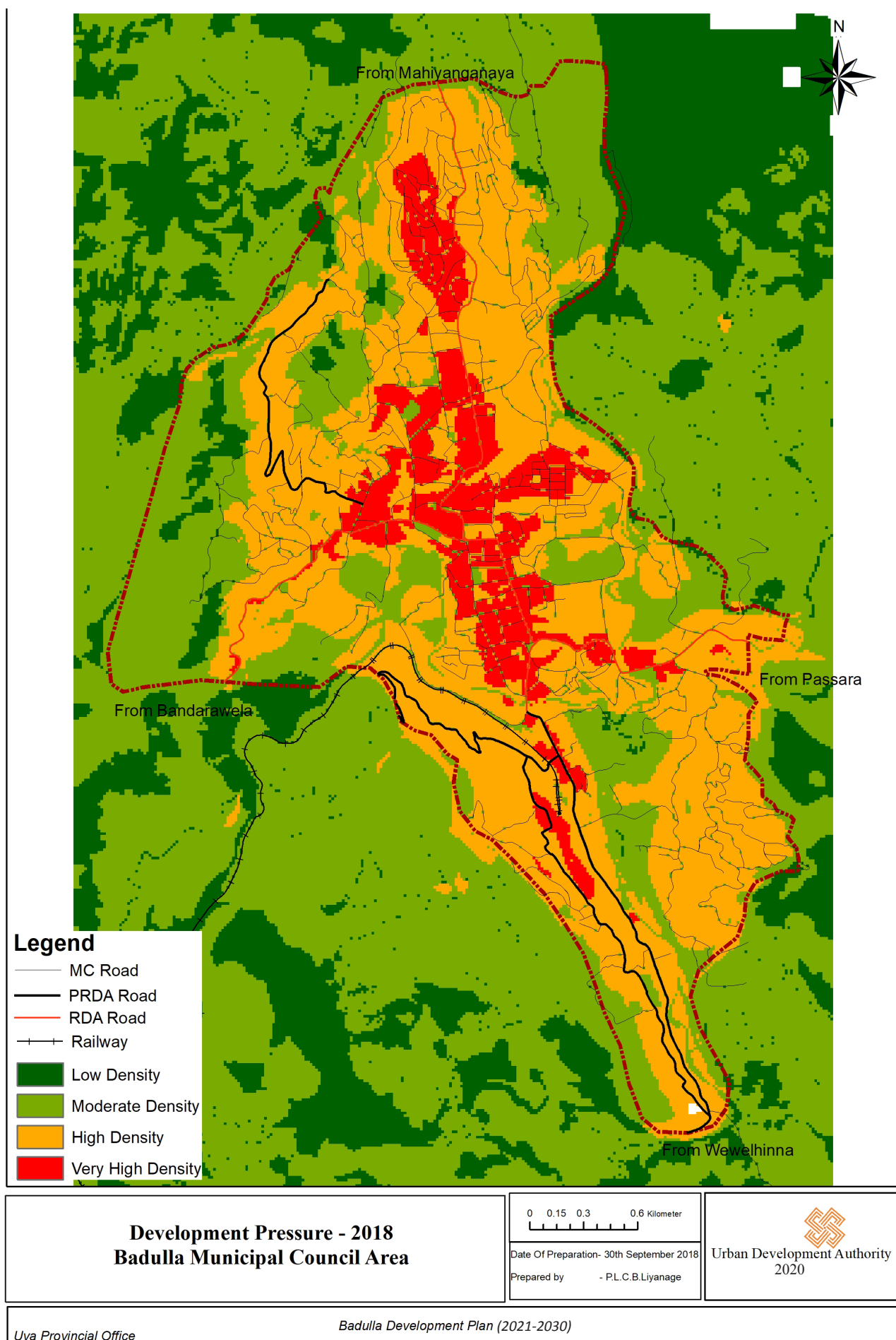
Zone	Description	Extent (km ²)
1	Low Developed	0.33
2	Moderately Developed	3.24
3	Developed	5.74
4	Highly Developed	1.2
Total		10.06

Source: Uva Provincial Office, UDA. 2017

The demand for plain terrain area in town center is high according to the Development Pressure Analysis. And also it shows high density in residential areas like Badulupitiya, Kanupelella. The medium density is in average sloppy areas and there are low densities in hilly areas covering with forest and scrub.

According to the development pressure analysis the demand is high value for 1.2 sqkm of town center area. It is about 11% out of the total land extent. The low developed and moderately developed area is about 84.7% out of the total land extent.

Map No 5.14: Development Pressure Analysis



Source : Urban Development Authority, 2020

Chapter 06

The Plan

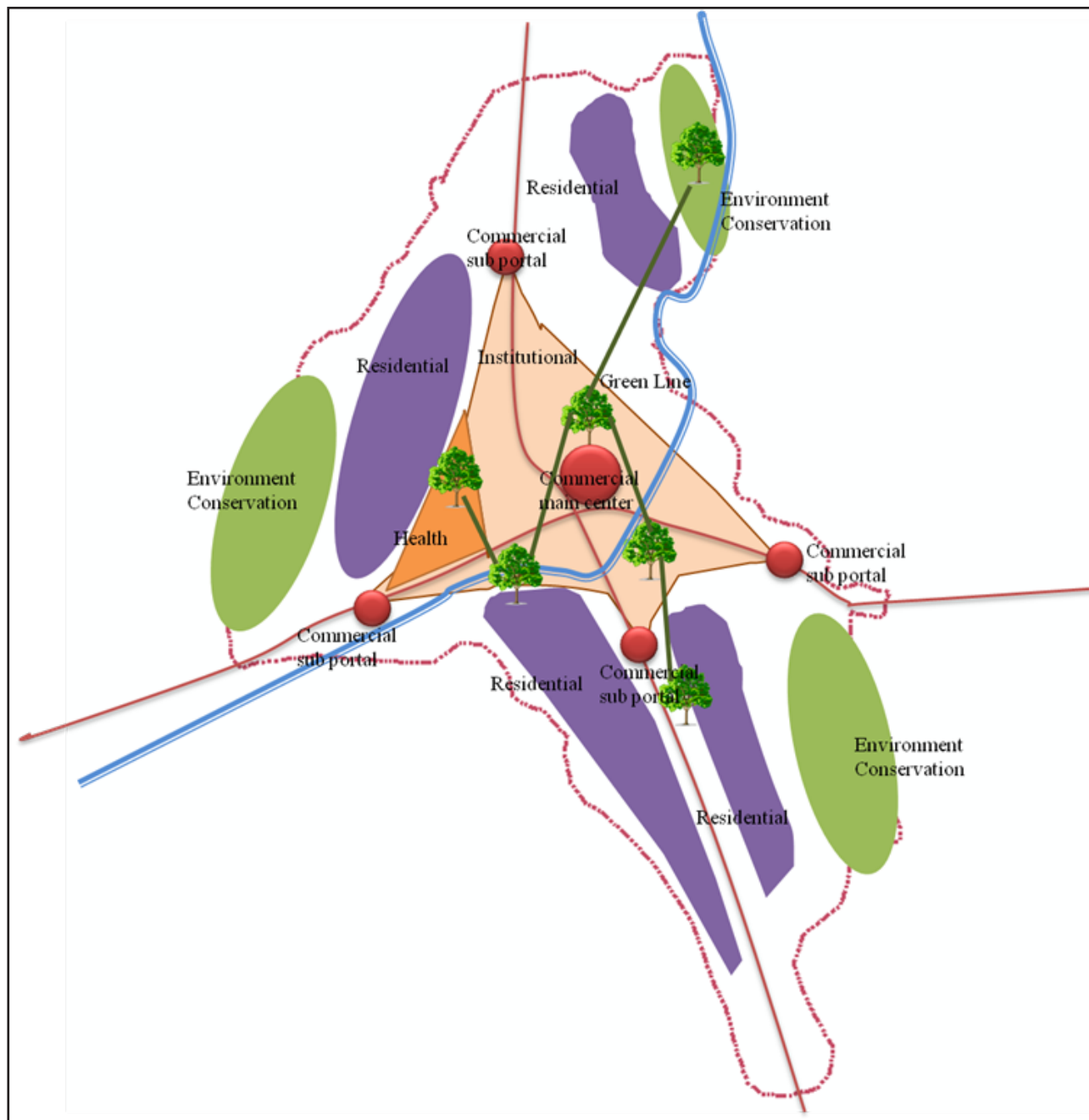
6.1 Concept Plan

The concept plan described the expected urban form of Badulla Town. Throughout this comprehended main four sections of residential, commercial institutional development and sustainable environment. The main concern of this concept is to develop the area without harming the environment considering its sensitivity. Accordingly, a special place has allocated in urban land structure for administrative and health services. A large amount of land extent in town center has allocated for this. Throughout it vision to achieve an efficient service sector. It expected to develop the area as a combination of health and administrative services instead of the administrative capital.

Four commercial service zones are expected to develop based on PahalaVeediya area to enhance the urban economy with providing better service for residents and commuters. Accordingly the area from Pinarawa to Welekade commercial substations will be developed with commercial health facilities, the area from Kailagoda to Puwakgodamulla commercial sub stations will be developed as Institutional, Residential and Commercial Zone, the area surrounding the Hindagoda commercial substation will be developed with commercial uses for commuters and residents of the area and the railway station and its surrounding area will be developed as a commercial zone including wholesale and retail markets.

Topographically gentle slope areas will be developed as residential zones while the town center remain as areas of leisure & provide daily needs for residents. Environmentally sensitive zones shall be subject to natural hazards. These areas will be kept as conservation zones. In addition, green zones will be established in the town center & those will be help to city beautification & connectivity to pedestrian comfort. It is expected to establish pedestrian comfort by green pedestrian ways. Then commuters will not use private transport, but increase walkability in the town.

Map No 6.1: Concept Plan



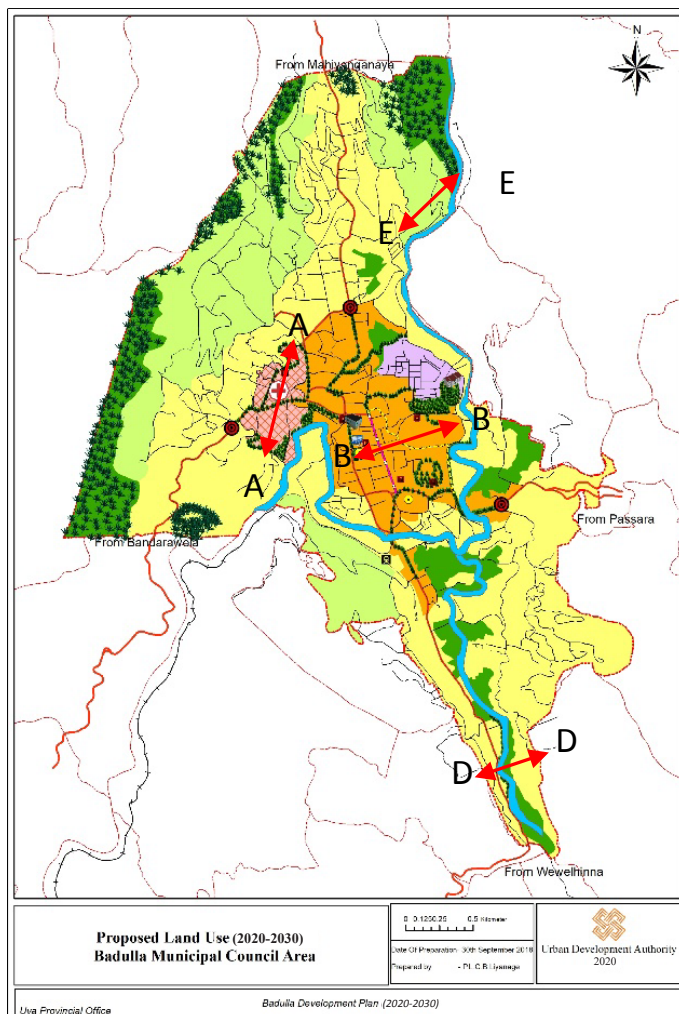
Source : Urban Development Authority, 2020

6.2 Proposed Land Use Plan

Badulla town has become as the capital city of Uva Province in service sector. That priority remains from the history to up-to-date. All sectors of Badulla city support to provide services with devoted land use to provide services.

Due to Badulla was main city from the history, it has added values from in relation to religious, educational, commercial sectors. Accordingly, there is a social and cultural surrounding in related with the religious environment and Muthiyangana Raja MahaViharaya. Due to that connection archeological building and own

Map No 6.2: Proposed Land Use Plan 2020-2030



Source : Urban Development Authority, 2020

architecturing designs created. The religious background caused to beautify the city shape. Badulla Development Plan (2021 - 2030) proposed to develop without harming to that city shape or urban form.

By proposed land use plan expected to add an identity for the grid pattern road network. Accordingly proposed to increase the pedestrian movements by developing green pedestrian paths for facilitate to administrative services at Raja Veediya and by developing special pedestrian paths to facilitate for commercial services at lower street. The proposed high-density mixed development zone is spreading with encouraging the existing mixed-use developments from town center to Welekade, Passara Road to Hindagoda, Wewelhinna Road to Eladaluwa Junction and Mahiyangana Road to Kailagoda. Within that zone the priority is giving to the institutions and its supportive commercial uses. In further green paths will be developed at Alikumbura, Badulupitiya and Mediriya area to provide leisure activities for commuters with controlling the congestion in urban form. The Vincent Dias Ground is proposed to develop as a sports center for all schools and educational institutions of the area.

Figure 6.1: Cross section of the Proposed High dense mixed-use Zone A-A



Source : Urban Development Authority, 2020

Health service zones will be developed to improve the health facilities by Badulla Development Plan (2021-2030) other than the institutional and commercial uses. Badulla General Hospital is the main health service provider of the area and currently it has capacity to provide facilities to outside areas also. Therefore, throughout the Badulla Development Plan (2021-2030) proposed to develop the land uses to support for that service providing. Proposed to develop health service zone is as moderate density building cluster with high development factor. Commercial developments and leisure activities will be established to facilitate for commuters of health service zone. It is proposed to develop commercial facilities in front of the hospital for customers comfortable with providing easy accessibility by increasing the land use of the area.

Figure 6.2: Cross section of the Health Service Zone B-B



Source : Urban Development Authority, 2020

Adjacent to the mixed zone it is proposed to develop badudlupitiya residential area. The vertical development is encouraging at residential zones with better infrastructure facilities instead of the improper low-income houses. There are several institutional complexes towards the Badulupitiya to make easy accessibility for commuters.

Integrated rail and bus terminal locate near the moderate dense residential zones which are surrounding the town. Bus transportation service has combined with the small bus stand in town and it support to create easy accessibility to institutional, residential, health and educational zones.

The sloppy areas between the town and hilly area is proposed to develop as low-density residential areas. It will be a low-density area and encouraging the residential use only.

Figure 6.3: Cross section D-D of the Moderate Dense Residential Zone D-D



Source : Urban Development Authority, 2020

According to the vision of Badulla Development Plan (2021-2030) the identity of the area which has evaluated with the Badulu Oya will be added again. The concept of this plan is proposed to see the Badulu Oya from Mediriya Road Green Path, Green Lane Drive, Herbal Garden and Jogging Track at Kanupelella Road river reservation with making leisure activities with city beautification.

Mountains surrounding the town will be denoted as green area from the city where local forest cultivations and rain forests. Badulla is proposed to develop as the Administrative and Health City of Uva Green Valley with acting as main service provider by the land use development of Badulla Development Plan (2021-2030)

Figure 6.4: Cross Section E-E of the Low Dense Residential Zone E-E



Source : Urban Development Authority, 2020

6.3 Social and Physical Infrastructure Development Strategies

According to the data records, about 100,000 commuters migrate to the area to get services since Badulla is the capital city of the Uva Province. A considerable number of employees are migrating to the city area for residential purposes. Therefore, physical and social facilities should be developed considering the population.

6.3.1 Proposed Service Plan

According to the vision of Badulla Development Plan (2021-2030), it is expected to establish Badulla city as the administrative and health service City of Uva Green Valley. Accordingly, it is aimed to develop as the center of administrative and health service centre of the area. This vision is going to be achieved by four objectives which are proposed to regularize the service sector with fulfilling the needs of residents. Accordingly, this plan proposed to facilitate both residents and commuters.

Accordingly, by now 58% of the migration in this area is based on service providing. Accordingly, it is predicted that the expected population growth and with the impacts of upcoming development projects the expected population growth will be increased in 20%.

Therefore, it is essential to develop the service sector to meet the demand with population growth and development of projects. Therefore, it is expected to direct the development trends of this area towards the service sector, according to the ambitious vision of Badulla Development Plan (2021-2030). It is expected to develop a zone with educational and higher educational institutions, from Mahiyangana Road to Badulupitiya to fulfill the educational needs of the people gathered.

Under the zoning plan, two distinct zones are identified for service provision. Town center as a mixed zone and area around Badulla General Hospital as a health service provision zone. These zones are facilitating based on the development trends and development potentials of the areas. There are several strategic projects identified in regularizing the service provision in strategically manner.

An intergrated health service zone is to be established based on the Badulla General Hospital. Population attraction for health services is the main development potential of this area and it is about 18% out of the total commuter population. Therefore, as a distinct potential of the city, it is expected to provide an optimum service for the migrant community It is proposed to develop the land.

Behind the Badulla Base Hospital, based on the health service provision as a combined service center of food and accommodation for patients and their visitors. Along with the Badulla hospital it is proposed to promote a health zone towards Mediriya road. Accordingly, it is expected to extend the extent of service provision to the Badulla Hospital in both quantitative and qualitative manner.

Also, by modifying and streamlining non-confirming land uses within service zones, the service center will be integrated into the city center, and the migration attractiveness of the service zones will be reduced to other areas, and the existing infrastructure will not be further developed. The best places for land use are provided.

Followings are the strategic projects to be implemented under this strategy.

1. Badulla Administrative Complex Development Project – Phase II

This project is to make people easy to access for service sector which are spreading all over the town area at present. This project has proposed to construct at the land adjacent to the Uva Provincial Governor's Office.

2. Re-establish Badulla prison and quarters at outside of the town

Badulla prison locates at a high valuable place in city center which is not suitable with the institutional and commercial zones according to the identification of the Badulla Development Plan (2021-2030). Because of that proposed to re-establish the prison at a place where can easily access to the hospital and police station. This proposal came due to the limitation of the developable lands within Municipal Council area.

3. New Administrative Complex at existing prison quarters land at Badulupitiya Road.

According to the identification of Badulla Development Plan (2018-2030) distribution of administrative institutions all over the city is an issue for service sector development. As a solution for this there is a need of administrative complexes and the existing prison quarters land at Badulupitiya Road is proposed for this development project. (Map no 2.18)

4. Commercial based mixed development project at existing prison land

This project is to encourage the commercial land use pattern in Pahala Veediya area

5. Mixed development project at Badulla rest house premises

Considering easy accessibility, locational benefit and commercial value this project has proposed to develop as a mixed use development at Badulla rest house premises

6. Housing Development project at Badulupitiya

To regularly develop the low income houses in Badulupitiya area this project has proposed. This project encourages the vertical development instead of horizontal development.

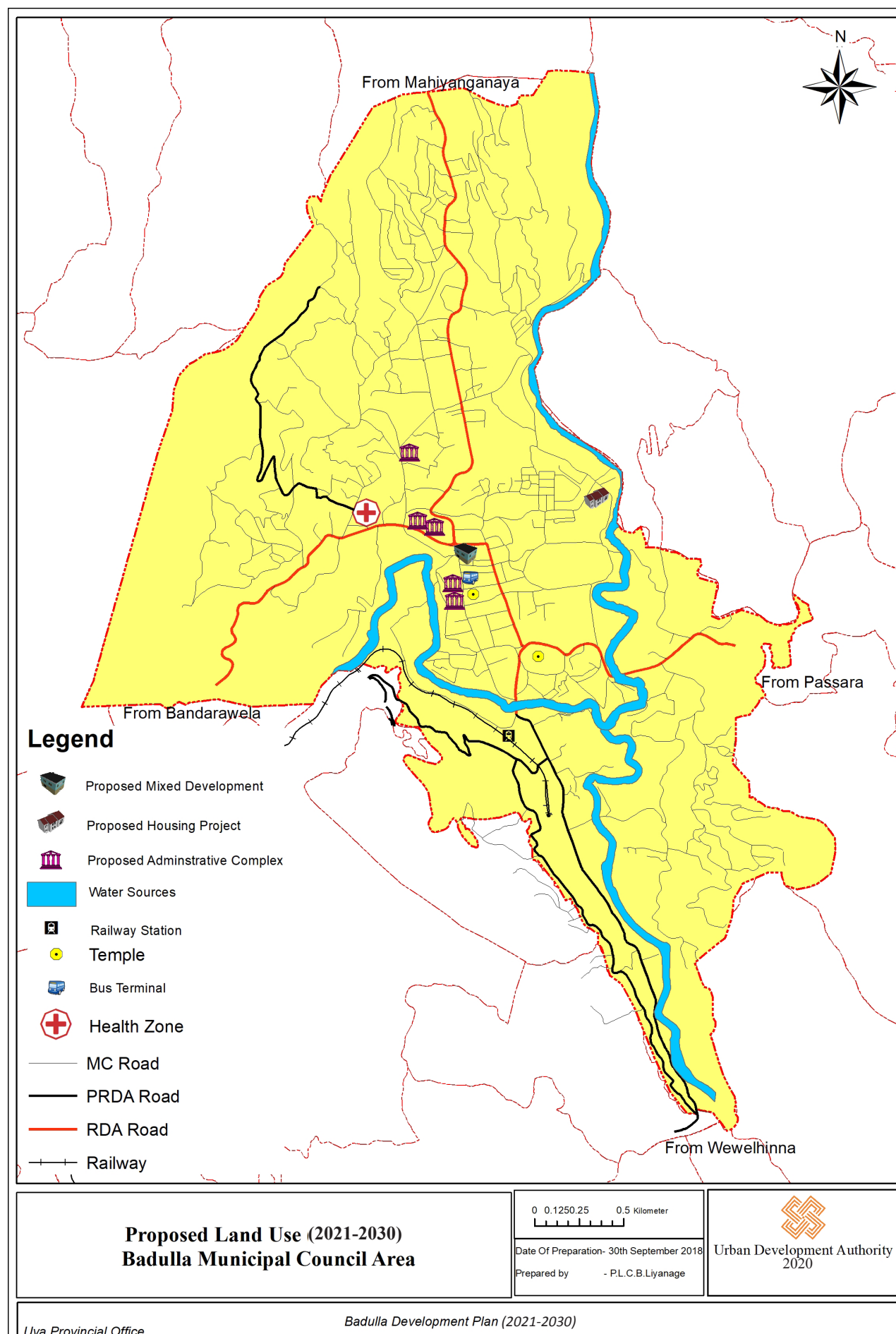
7. New administrative complex at Badulla Alugolla road

A new administrative complex and a housing complex proposed to develop near the Badulla Alugolla Road.

8. Badulla Vincent Dias Playground Development

Under this project solid waste dumping site will be relocated and proposed to develop as a recreational area with combining the Badulla Botanical Garden.

Map no 6.3: Proposed Service Plan 2018-2030



Source : Urban Development Authority, 2020

Educational Service Plan

New educational institutions are needed to fulfill educational needs of residents when Badulla develop as the administrative and health-based center. Accordingly, the Badulla Development Plan (2021-2030) proposed to relocate the schools with providing proper infrastructure at non-suitable areas. Throughout that proposed to improve the play grounds and library facilities of existing schools.

6.3.2 Proposed Transport Development Plan

Badulla will be developed as a service based commercial town in 2030 according to the vision of the plan. Residential population is expected to increase up to 56,000 and the expected commuter population is about 120,000 in 2030.

As a solution for expected traffic congestion and to create a better connectivity between services providing centers are some objectives of this transport strategy. Further it will be made an efficient vehicle movement system.

Accordingly there are aims to improve the mobility between institutional, health, recreational and residential zones with improving the infrastructure facilities. The plan proposed to create streetscape designs along roads with commercial activities for make city beautification.

Less efficiency and the expectation of traffic congestion in future are the main issues related to transportation sector. Badulla traffic congestion has being an issue due to the landscape of the area and irregular locations of service agencies. To minimize these condition efficient transportation strategies has proposed in this plan.

To make efficient transportation the expected and present vehicle movement has considered. The total no of vehicles entering to Badulla City at present is about 11,909 and 90% of are light vehicles. 35% out of those are three wheelers. When comparing the present vehicle movement with the population it will be increased in 20% in 2030. Accordingly following strategic projects are proposed to make efficient transportation.

Under this identified to integrate the railway station with bus terminal. Tourism attraction for this area is low. Other than the five in and out train turns rail transportation is not promoting the tourism industry and at least 2% of people who are coming to Badulla are not using the trains. Therefore, considering this situation it is proposed to integrate the bus terminal near railway station to promote railway transportation.

A5 road which is under the Road Development Authority is one-way road from Prison to Viharagoda. There are difficulties to practice the RDA regulations at this road section since most of the commercial activities are concentrated on Lower Street. Considering that, the direction of A5 road is proposed to change as follows.

Table No 6.1 : Directions of Proposed A5 road

Existing Road	Proposed Road
1.08km from infront of Prison to Viharagoda Kosgas Handiya	1.12km from infront of Prison to Martin Silva Mawatha to Kosgas Handiya across the Riverside Road

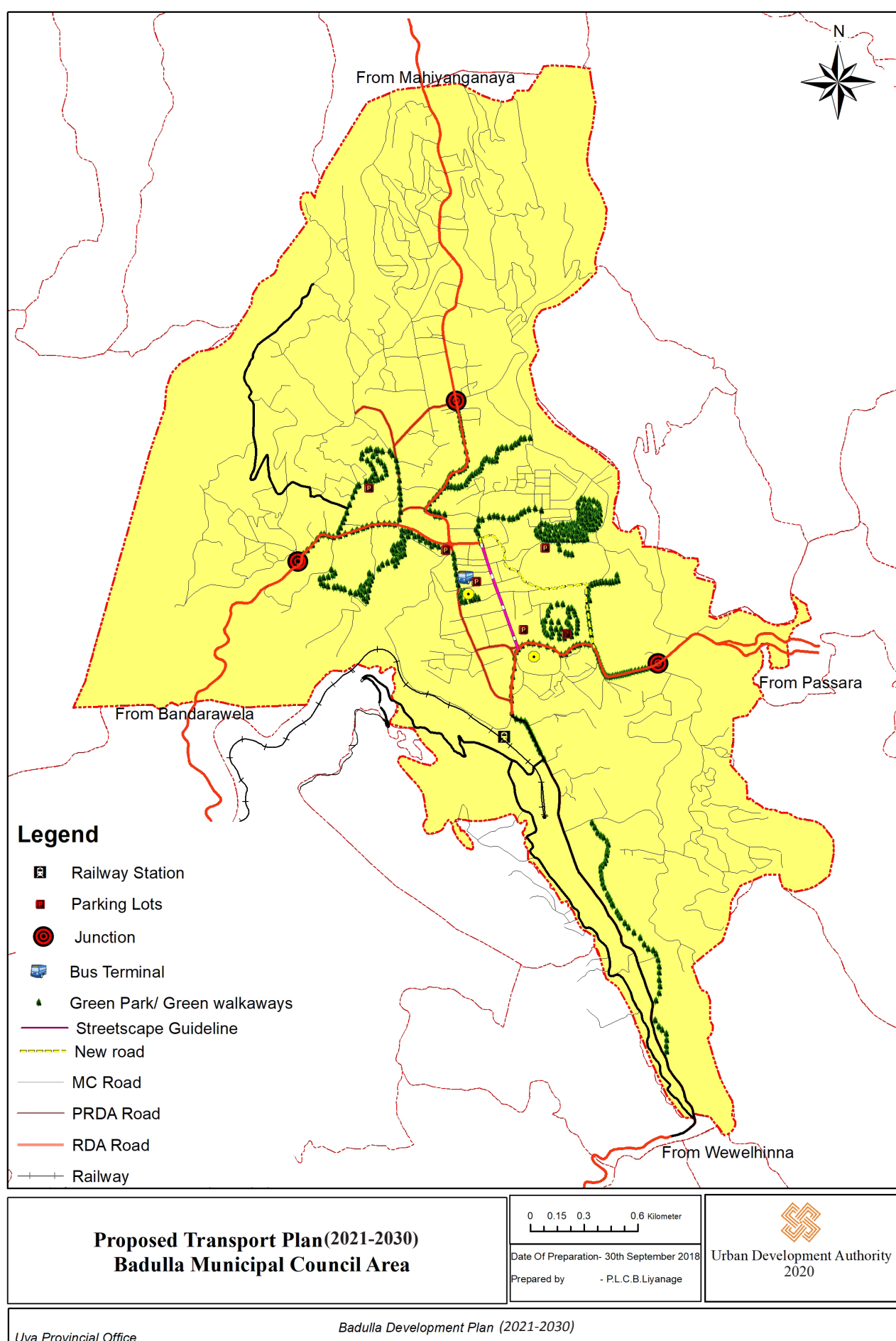
Junction improvement projects are proposed in front of the Badulla Provincial Hospital, near Hindagoda – Hingurugamuwa Road and at Kailagoda Handiya.

Road facilities to access for service and commercial places at plain terrain area are less. Considering it road widening are proposed at identified locations to connect service places, residential and commercial zones.

A new road development has proposed from Mediriya Road to Pilipothagama Road to connect institutional and residential zones. There is a possibility for traffic congestion at existing road network due to the residents and commuters who are coming to get institutional services and commercial services. Existing step roads and narrow roads to be widen up to 3m. As a solution by pass roads are proposed to reach to service centers without going through the town center.

1. From Pinarawa via Keppetipola road to Kailagoda
2. From Kailagoda Junction to via hanwella road to Passara road

Map No 6.4: Proposed Transport Development Plan



Source : Urban Development Authority, 2020

3. From badulla railway station to via Deiyannewela road to clinic road
4. From Hunukotuwa road to Mediriya road

Further, current Bus terminal is proposing to shift near to the Railway Station. Then propose to construct, vertical quarters development instead of the existing horizontal dilapidated railway quarters. Remain land area will be use as the bus terminal development.

Since this town has both bus and train transportation connecting with other cities it should be efficient. In order to make that efficiency by reducing the congestion at existing bus terminal it should be relocated. For that proposed to develop the bus terminal using existing old Municipal Council market land also. Existing commercial buildings is to be relocated to the Commercial Complex in proposed bus terminal.

It is essential to develop pedestrian paths in well-connected road network of Badulla town. For those following roads has identified to develop pedestrian paths.

1. From Kanupelella Bridge to Pahala Raja Veediya
2. From Raja Veediya to Clinic Road
3. From PahalaVeediya to Riverside Road via Alikumbura

Parking places are need for this area due to the vehicular congestion, on street parking and for pedestrian friendliness. Following places has identified to develop parking places for facilitate to people who are coming to get administrative and commercial services.

1. Land behind the Badulla General Hospital
2. Land strip at right of the Racecourse Road
3. Adjacent land portion of existing solid waste management Land
4. Within the Alikumbura Land
5. In front of the Railway Station

Although the well-connected road network benefited for vehicular transportation it is not friendly for pedestrian movements. Both sides of the following roads are proposed to develop the pedestrian paths.

1. From Badulla Prison to Kosgashandiya via Riverside Road
2. From Pinarawa Junction to Badulla Maha Vidyalaya
3. From Kanupelella to Raja Veediya via Railway Station Deiyanwela Road
4. From Rest house junction to Racecourse Road via Raja Veediya and Post Office Road.

The lower street main commercial area in town is stretches about 630m and vehicle movements functioning towards one way. Even though there are high it is a vehicular congestion due to loading and unloading of wholesale goods from vehicles.

Existing width of Lower Street is 10m. Under this plan it is proposed a 5m building line. It is propose 7m building line for ground floors of building facing. That separating potion from building line is proposed to use as pedestrian path only.

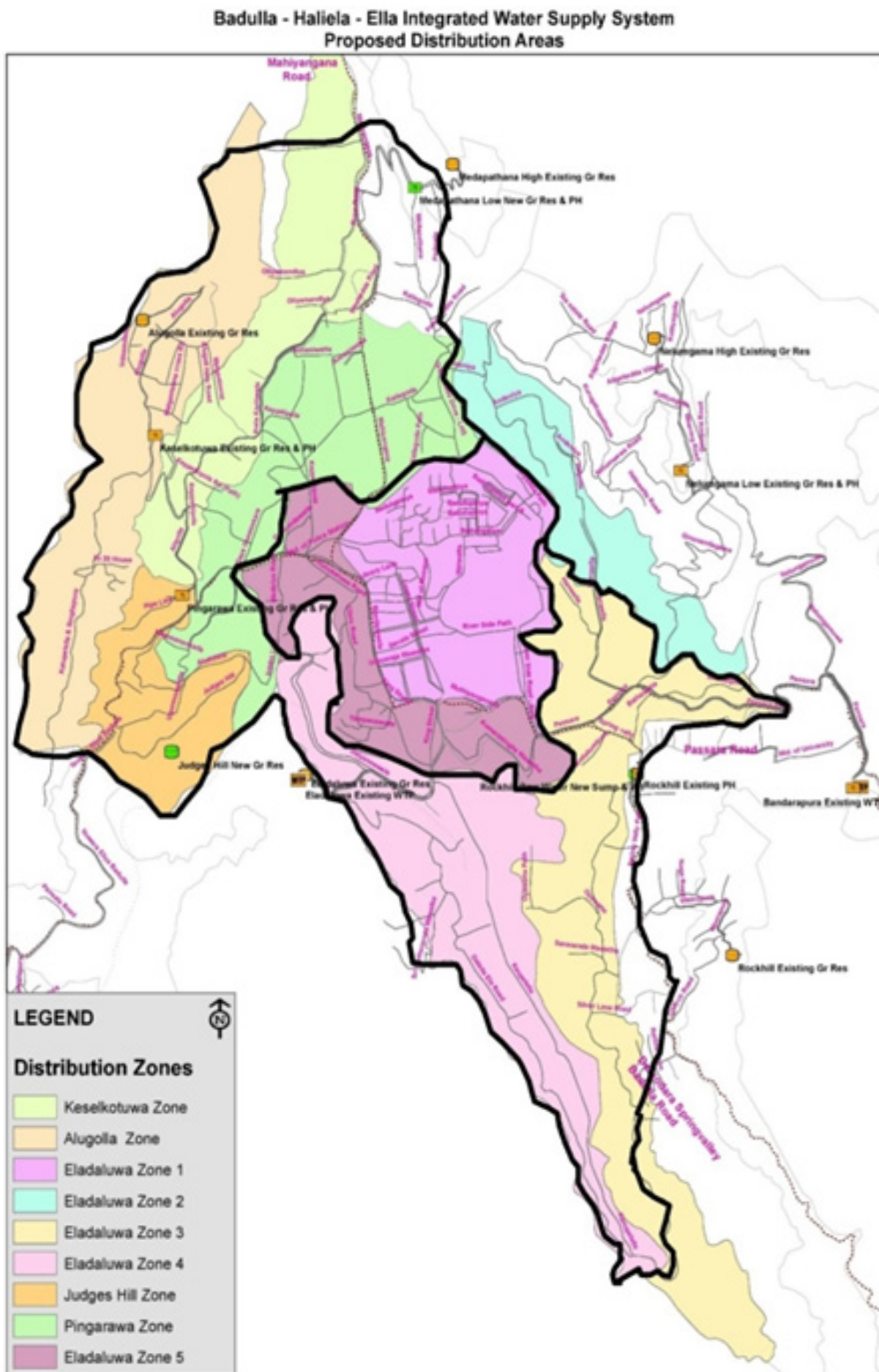
Since Badulla popular for the administrative services, there are massive requiriment to public transportation. Since, administrative services are spread all over the area, there is need of promoting public transport services which connect them. For that proposed an outer circular transportation facility and hope to enhance the efficiency of transportation.

6.3.3 Proposed Water Supply Plan

Water supply plan has proposed to the forecast residential and commuter population of 2030. According to the analysis there is about 278m³ shortage of water supply from existing Badulu Oya water source.

According to the predictions the water needs on 2030 for expected population is 10,292m³. Accordingly, the water supply should be developed to fulfill the existing shortage and predicted need.

Map no 6.5: Distribution areas of proposed Badulla- Haliela – Ella Water Supply Project



Source: Badulla – Haliela – Ella Combine Water Supply Project, NWSDB, Badulla, 2016

Badulla - Haliela - Ella Water Supply Project has proposed considering the population prediction of 2035 by National Water Supply and Drainage Board, Badulla. Accordingly, it proposed to provide 8,500m³ of maximum water supply for Haliela and Badulla Municipal Council Area. Therefore, it will solve the identified water shortage.

The existing water supply source Badulu Oya and Badulla- Haliela - Ella Water Supply Project proposed to supply water to 2030 for fulfill the residents and commuters needs. But following land strips are proposed to separate as service strips.

- i. From Pinarawa Thanayama Junction - Bank Road - Viharagoda to Hindagoda
- ii. From PahalaVeediya - In front of existing Prison to Viharagoda
- iii. From PinarawaThanayama Junction - Prison - Racecourse Road - Riverside Road to KosgasHandiya
- iv. From Post Office Road to Racecourse Road
- v. From Viharagoda to Kanupelella

6.3.4 Proposed Electricity & Communication Plan

6.3.4.1 Electricity Supply

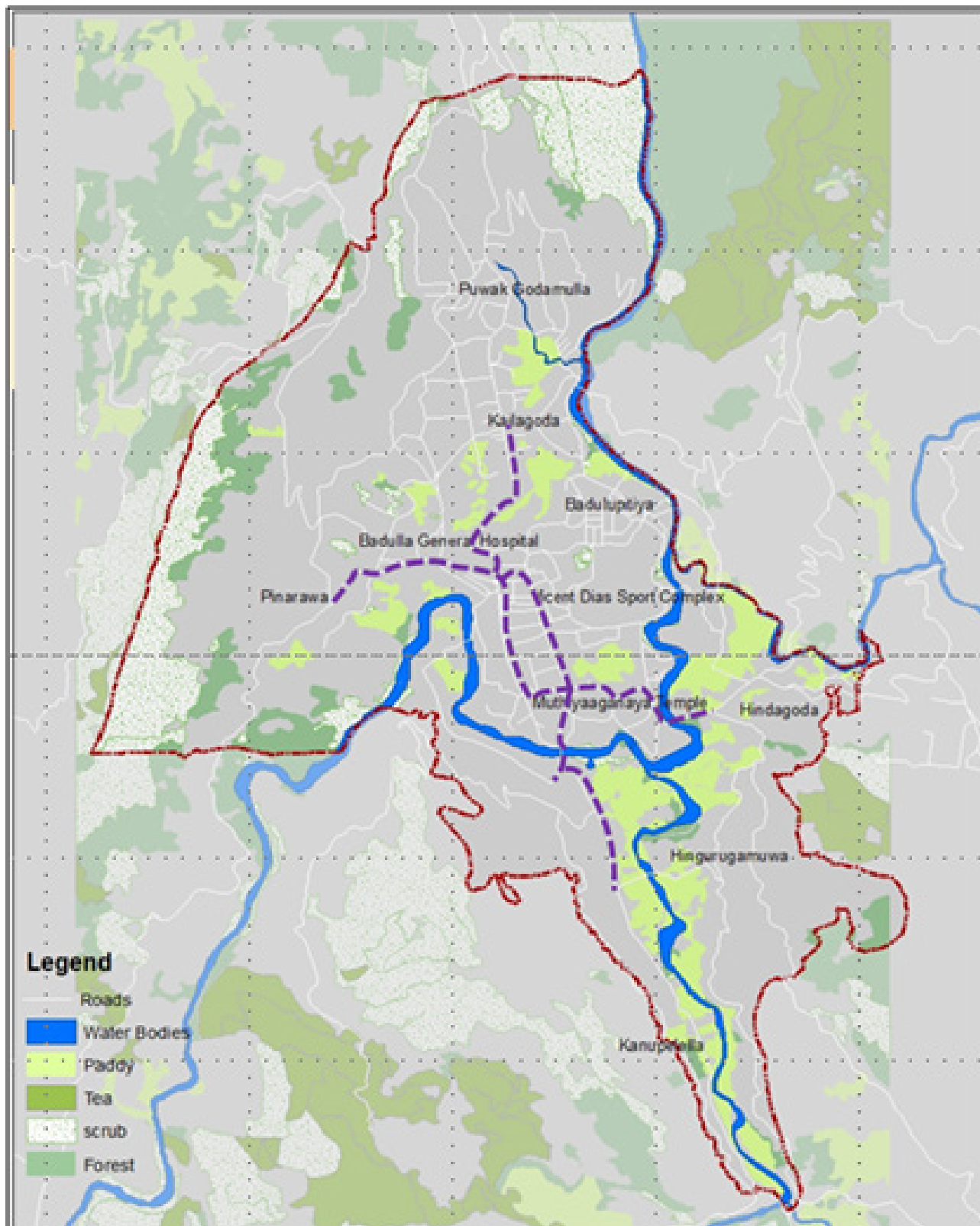
This plan proposed to supply electricity for predicted population on 2030 with keeping the existing supply as it is.

This land strip used for water lines is proposed to use for undergoing electricity supply lines also. For that it is need to use an additional land strip other than the mentioned pedestrian path in 7.3.3.

6.3.4.2 Communication Facilities

All the existing government & private institutions, health service centers & commercial places are already facilitated with communication facilities.

Map no 6.6: Proposed underground service lines.



Source : Urban Development Authority, 2020

Sri Lanka Telecom, Dialog and Mobitel Communication suppliers are providing broadband and web facilities as information & communication technology services. But due to the difference of geographical formation in this area it is difficult to provide communication facilities in the same level for all. Considering that proposed to provide communication facilities using new technology for areas which are not having communication facilities areas as Pinaarawa.

Communication cables in following roads are proposed to relocate as underground lines since those roads will be developed as service corridors. An underground service road will be developed for electricity lines and communication lines. Distribution of these lines all around the city is a reason for traffic congestion and pedestrian disturbances at renovation works in this area. Accordingly proposed to develop a land strip for water lines, electricity lines, communication lines and waste water lines as mentioned in 7.3.3

6.3.5 Proposed Waste Water and Sewerage Management Plan

Badulla Town Area is not available liquid waste and sewerage management plan to facilitate for residents and commuters. Except the natural streams and kanduru network there are several drainages to collect storm water. Even though there are separate irrigation canals and drainages at present some of them are function combinedly. Therefore, it results in an emergent problematic situation to cultivating paddy. Due to not having sewerage and liquid waste management system several domestic and other waste water dispose to these.

Even though paddy fields economic profitability is decreasing parallel to the increase of service sector within town, there is a trend of filling paddy for residential use. However, as per the geographical formation of the town there should be retention areas to eliminate flash flood situation. Further, there should be liquid waste management system as well.

Badulla General Hospital, government and private institutions, residential areas and city area with commercial places should be considered when establishing the liquid and sewerage waste generation. After the purification process of these liquid and sewerage water propose to dispose to the Badulu oya based on the terrain. According to the predictions to 2030 about 2 233 880 will be generated daily in town area. As a solution for this issue a wastewater and sewerage management system has incorporated to this plan which proposed by National Water Supply and Drainage board.

Map No: 6.7: Proposed Waste Water & Sewerage Plan

Source: NWSDB, Badulla - 2018

6.3.6 Proposed Solid Waste Management Plan

Proper managed infrastructure system is essential part to achieve the vision of Badulla as main service provider of Badulla Region. Solid waste management is crucial problem within the town.

At present per day solid waste generation of this area is about 30 tons. Collected solid waste dump at the 5 acre of Municipal yard and it is not well managed. Due to this some amount of liquid and solid waste are adding with Badulu Oya at present.

As per the projections solid waste generation will be increase up to 34 tons by 2030. Therefore, 2030 Badulla development plan has identified the strategic projects to solve the related to solid waste management of 2020. Identified strategic indicators are as follows.

- 1) Relocate the existing solid waste dumping site to identified land at Meegahakewla.

The existing location of solid waste dumping site at town is unsuitable according to the Badulla Development Plan. Existing solid waste at this site is proposed to use for sanitary land filling at Meegahakewla area. And also, it proposed to recycle solid waste at this site.

- 2) Product organic fertilizer using degradable solid waste.

A project to produce organic fertilizer at solid waste dumping site is proposed under this development plan.

- 3) Recycle the non degradable waste at waste dumping site.

Using 20P land portion from existing waste dumping site proposed to a recycling project for solid waste management.

- 4) Established chemical incinerators process by Municipal council.

An improvement in health sector is expected in 2030 according to the Badulla Development Plan. Most of the investors in health sector are private parties and it is essential a proper management for chemical mixed solid waste disposals. For that proposed to established chemical incinerators process by municipal council.

- 5) Should follow the guidelines for every development related to health services having more than 500m² extents.

These strategic interventions proposed to achieves the expected development in health sector under the proposed vision of 2030. According to that there is a need to establish a section for get approval to solid waste disposing method of developments. Under that building exist more than 400m² and health related developments must obtain environment guidelines or must specified description document regarding solid waste disposing method

- 6) Establish a regular and continuous process for waste management.

Under this plan proposed to charge 10% out of total tax from the people who are giving degradable waste more than 50kg. And also people should arrange an onsite waste management methods which are generating more than 100 kg.

6.4 Economic Development Strategies

6.4.1 Proposed Economic Plan

Services based commercial development in Badulla area is essential to achieve the expected vision of administrative and health services city in 2030. Accordingly, this plan proposed to develop a commercial and institutional uses based mixed development corridor from Pinarawa Junction to Badulupitiya and Rest house junction to Sujatha Road. Achieve the vision of this plan is the purpose of this strategy.

This will be promote the service based commercial development which are main development potential of this area. Throughout this expected to develop the city economy with providing commercial services for residents and commuters of this area.

1. Commercial Place Development in related to Health Services.

Private hospitals, Medical centers and laboratories based on Badulla General Hospital are the main drivers of Badulla city economy. Special guidelines have added under the zoning plan of Badulla Development Plan 2030 to enhance the economic and service facilities in related to health sector.

The plot coverage has exceeded to get maximum benefit from health zone lands.

2. Establish the thrift economic activities related to leisure activity promoting places.

Daily commuter population of Badulla area includes all the ages and social status. Accordingly, proposed to establish thrift economic centers from Mediriya Road to Hunukotuwa Road, Alikumbura Urban Wetland Park, and Walking Path from Badulupitiya to Mahiyanganaya Road.

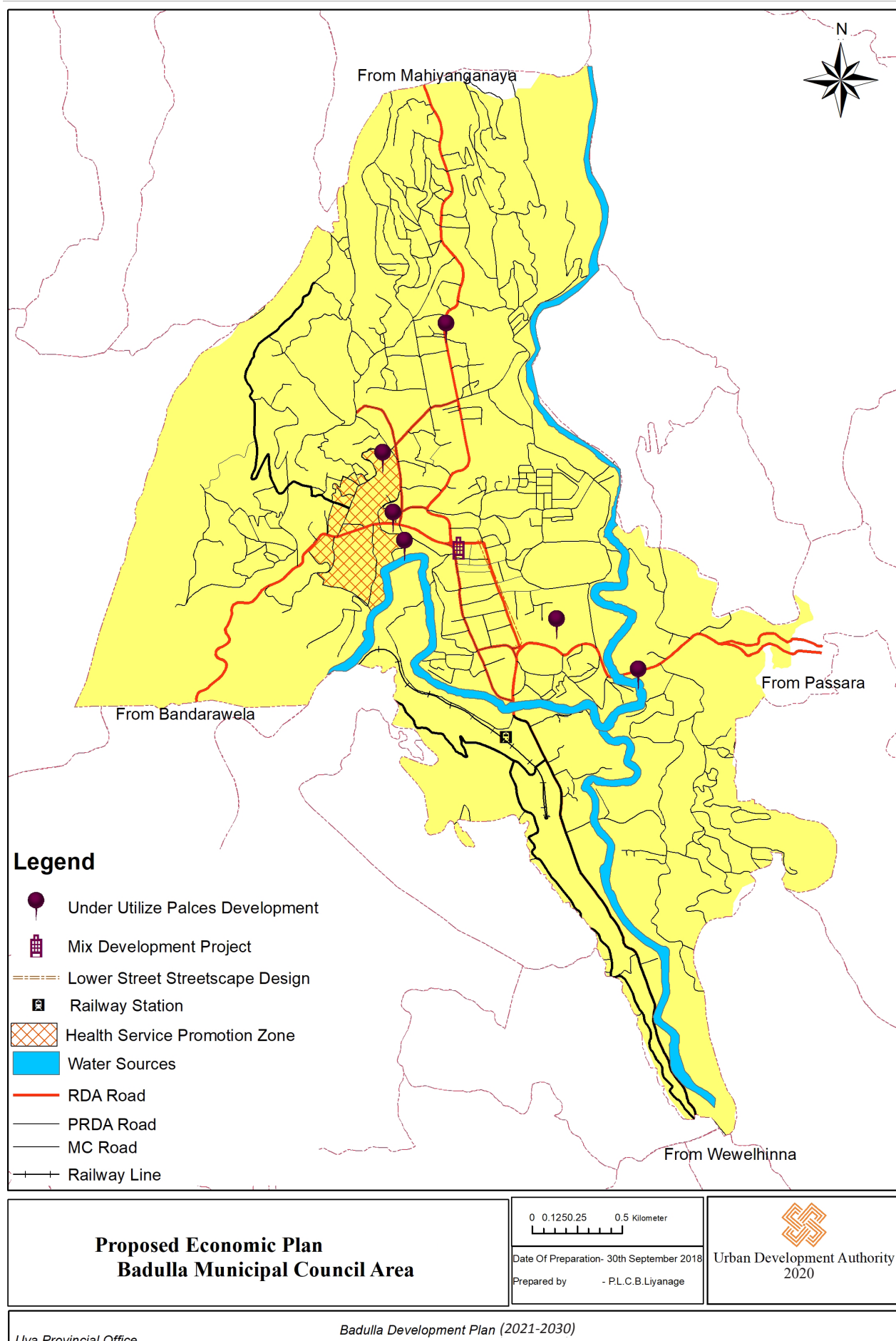
Under this plan expect to achieve a regional economic development with enhancing the strong business community by utilizing existing development potentials. For that main economic portal has introduced along the Lower Street. Due to land subdivisions in to small lots and unauthorized constructions, there are no adequate spaces to commercial development.

Therefore, to maximize the economic activities, proposed to develop suitable economic activities instead of the unsuitable developments. Accordingly, proposed to relocate the Badulla Prison to Edmand Bungalow land at Spring Valley Road. Then propose mix commercial development at the existing prison land.

This plan has identified the underutilized lands in town center and proposed to use those for investment opportunities. Although the land value is high, land utilization is not properly managed within the town. Especially the government lands and archeological lands are proposed to utilize under this strategy. Accordingly, the rest house premises, old public market of Municipal Council and shops along south lane are proposed to utilize in better way.

Archeological sites are proposed to utilized economically viable way with promoting tourism industry while protecting the archeologically importance. Accordingly, Open market at Welekade, Salusala building, Thaldena Walawwa and Kothalawala Walawwa are proposed open up for public with promoting economic activities. These development activities will be cater for tourists who are passing this town.

Map no 6.8: Proposed Economic Plan



Source : Urban Development Authority, 2020

6.5 Sustainable Environment Strategy

Badulla Municipal Council area includes within environmental sensitive areas in National Physical Plan 2030 and Proposed National Physical Plan 2050. And also, this area includes in wet and dry intermediate climate zone of Sri Lanka.

This strategy developed to achieve environment conservation goal under the expected vision of Badulla Development Plan 2021 – 2030. Through this there are several objectives such as to conserve the river reservation, paddy lands, to protect the Badulu Oya and its catchment, to protect the natural hazards zones slope areas exceed 30° degrees, and control developments in low lands, to promote the leisure activities with enhancing the need of leisure activities up to the 80% in 2025 etc. Environmental conservation, Landscape management, mitigates natural disasters and planning leisure activities are the strategies proposed under this plan.

6.5.1 Proposed Environmental Conservation

The Nadukara Kanda and Alugolla Kanda are proposed to continue as conservation areas where having forest cover. In further encourage the reforestation instead of pine trees in hill tops.

6.5.2 Proposed Landscape Management

Landscape management is to protect the environmental systems in suitable manner and it includes the land characters, bio diversity areas and climate and cultural characters. There are several strategies to achieve the aims of landscape management.

Accordingly, 15m reservation should be separated from the edge of the Badulu Oya, Kuda Oya and Rambukpotha Oya to protect those water bodies as main character of the area. And also, this plan proposed to develop walking paths along the river reservation.

In further under this strategy proposed to protect the existing environmental systems of Senanayake Garden, Badulla Botanical Garden, Green library path and the Green path in front of Thisara Florists.

The maximum distance between service centers in city area is about 1.5km and proposed to connect service centers and residential areas by developing green pedestrian paths along identified roads. For that following roads are proposed.

- i. Road section from Welekade Junction to MahaVidyala Junction
- ii. Road section from Pinarawa to Badulupitiya
- iii. Road section from Badulla Depot to Bank Road.
- iv. Road section from Kailagoda to Bank Road.
- v. Road section from Rest house Junction to Bank Road.
- vi. Road section from Viharagoda to Railway Station
- vii. King's Street

Other than this proposed to develop new green gardens to enhance the city beauty. The Mahogani Tree line in Mediriya Road is one of existing isolated environmental system. That tree line is proposed to develop as a recreational area with getting maximum benefit of it. The area proposed to develop as recreational space with the road development specified under infrastructure development. Under this proposal a garden with jogging path is proposed to develop from river reservation to Senanayake Garden where a narrow road has at present.

The land at Alikumbura, is one of the abandon paddy land. To provide parking facilities and recreational facilities close to the lower street main commercial activities, Alikumbura is propose to develop as mix development site. Under that portion of land propose to develop as wetland park with having a water pond since the natural water flow is a cross this land.

A green rest area will be developed at the paddy land behind Badulla General Hospital to facilitate patients and their visitors. And also, a passenger rest area will be developed at Badulla river reservations, Green Lane Drive with having an Herbal Garden. Further propose to open up the Badulu oya to the town function creating jogging tracks along the river reservation. For this purpose it is proposing river reservation near to the Muthiyanganaya Rest House.

6.5.3 Proposed Natural Disasters and Hazard Mitigation Strategies

Following guidelines should be followed when approving the land subdivisions and building applications to mitigate the landslide.

- i. Should be obtaining National Building Research Organization recommendations to lands more than the 200 degree sloppy area relevant to the disaster risk reduction.
- ii. Developments should carried out considering the contour lines
- iii. Area which not include to the conservation areas need to develop with minimum impact or no impact to the landscape.

River reservation has introduced to control the development at flood risky areas according to the Disaster Management Center of Badulla Divisional Secretariat Office. Further, developments are not allowed within 15m reservation from river bank.

To mitigate the flood situation following guidelines should be followed.

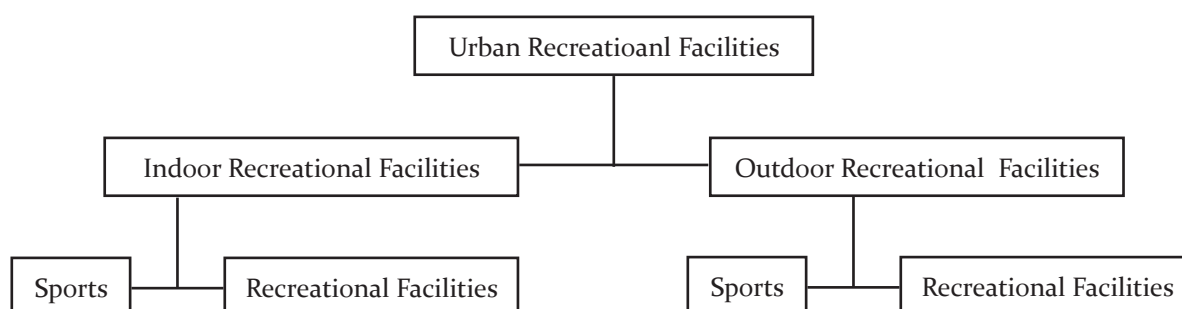
- i. Water flow should be marked at the plan when applying for developments at town area.
- ii. The clearance from Agrarian service department is required for paddy lands when approving for another use.
- iii. Development permits not allowed for paddy lands of zone 5 to convert for another use.
- iv. The existing water flow and proposed water flow should be marked at plan to approve paddy lands for another use which are not at zone 5 but in paddy land list.
- v. Canal reservations should be separated to approve developments adjacent to the canals within town.

Other than this the Pita Ela and irrigation canals in town area should be continuously maintained.

6.5.4 Proposed Common Recreational Facilities Plan

The purpose of this plan is to provide recreational facilities for residential population, forecast population and about 100000 commuter population who visit to get administrative and health services within the extent of 1050 hectare Badulla Municipal council area. Further, expect to provide resting areas to commuter population.

Accordingly, proposed to develop recreational facilities as per the following categorization in Badulla Municipal Council Area.



6.5.4.1 Proposed Public Outdoor Plan

The extent of natural and manmade open spaces in Badulla Municipal Council area is as following table no 6.2.

Table No 6.2: The Extent of Natural and Manmade Open Spaces

	Open Space	Extent (Ha)	Type
1	Senanayake Park	0.8	Active
2	Badulla Botanic Gardens	2	
3	The Wheels Park Ground	0.38	
4	Kammanankada Playground	0.2	
5	Mahogany Green Belt	0.7	
6	Katupelallagama Playground	0.03	
7	Front of Railway Station	0.3	
8	Playground near the Badulupitiya Nelson Community Hall	0.17	
9	Badulupitiya Nimal Wikramathunga Playground	0.7	
10	Passenger rest room in front of Thisara Funeral Parlor (Mal Shalawa)	0.07	
11	Green Library Lane - Mahiyangana Road	0.03	
12	Muthiyangana Raja MahaViharaya	0.37	
13	Mediopathana – Pathana land	29	
14	Hingurugamuwa Playground	0.7	
15	Mailagas Thenna Playground	0.2	
	Total	35.65	

Source : Urban Development Authority, 2020

The standard of open space extent is one hectare for 1000 population. Therefore, open space requirement for Badulla Municipal Council area in 2017 is 48Ha according to the 48,641 of population but the expected population by 2030 is about 55,847 and the required open spaces according to that is increased up to 55 Ha.

Due to that following open spaces, table no 6.3 will be developed to facilitate for people with providing public access. (Map No 6.9)

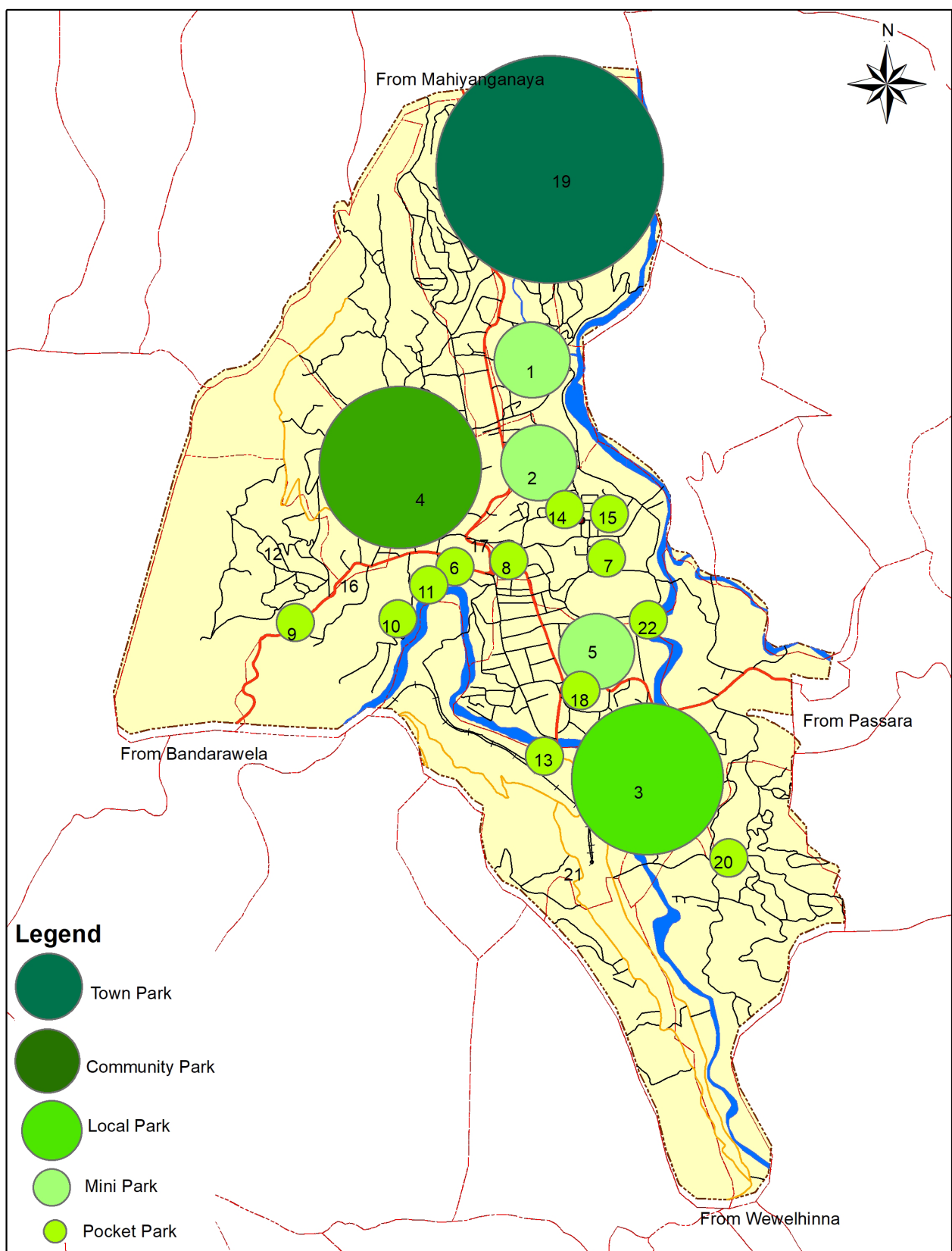
Table No 6.3: Proposed Public outdoor open spaces Extents

	Open Space	Extent (Ha)	Park	Service area (radius)km
1	Paddy Land 1	3.4	Local park	0.4
2	Paddy Land 2	3.5	Local park	0.4
3	Paddy Land 3	11.2	Community park	0.8
4	The park behind the General Hospital	0.2	Pocket park	-
5	Alikumbura	2.5	Local park	0.4
6	Senanayake Park	0.8	Mini Park	0.2
7	Badulla Botanic Gardens	1.5	Mini Park	0.2
8	The Wheels Park Ground	0.38	Mini Park	0.2
9	Kammanankada playground	0.2	Mini Park	0.2
10	Mahogany green belt	0.7	Mini Park	0.2
11	Madiriya Road park & walking paths	0.3	Mini Park	0.2
12	Katupelallagama playground	0.03	Pocket park	-
13	Front of Railway station	0.3	Mini Park	0.2
14	Playground near the Badulupitiya nelson community hall	0.17	Pocket park	-
15	BadulupitiyaNimalWikramathunga Playground	0.7	Mini Park	0.2
16	Passenger rest room in front of Thisara Funeral Parlor (Mal Shalawa)	0.07	Pocket park	-
17	Green Library Lane - Mahiyangana Road	0.03	Pocket park	-
18	Muthiyangana Raja MahaViharaya	0.37	Mini Park	0.2
19	Mediopathana – Pathana land	29	Town park	1.6
20	Hingurugamuwa Playground	0.7	Mini Park	0.2
21	Mailagasthenna Playground	0.2	Pocket park	-
22	River reservation	1.14	Mini Park	0.2
	Total	57.89		

Source : Urban Development Authority, 2020

Under this proposed to develop the existing Badulla Vincent Dias playground and throughout it expect to achieve the vision of administrative and health city of Uva Green Valley. This project will be helped to provide sports facilities not only for the Badulla area but also whole the province.

Map No 6.9: Proposed Service Zone at Public Open Spaces Zone



**Public Open Recreation Space Plan
Badulla Municipal Council Area**

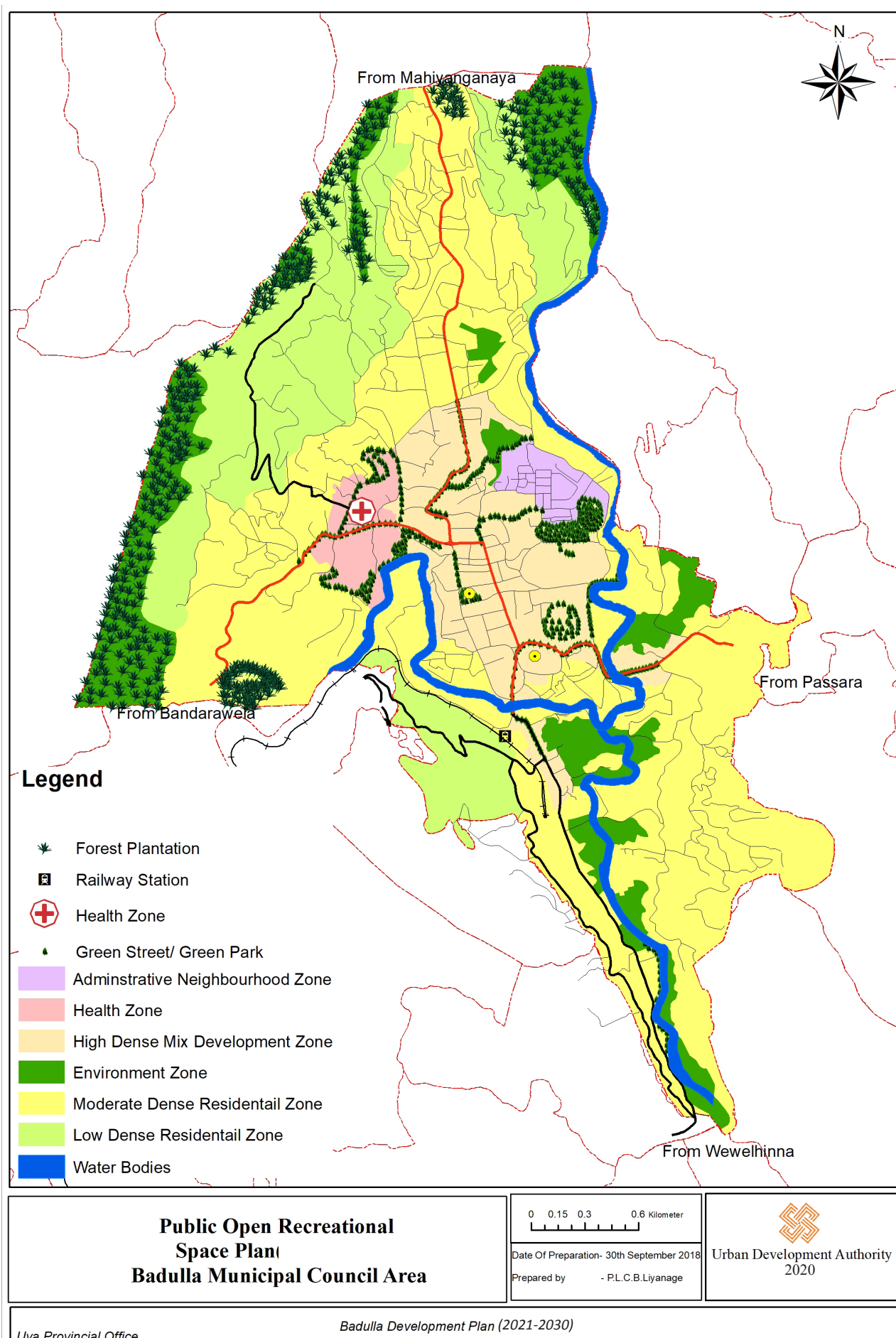
0 0.1250.25 0.5 Kilometer

Date Of Preparation- 30th September 2018
Prepared by - P.L.C.B.Liyanage



Urban Development Authority
2020

Map No 6.10: Proposed Environmental Safety Plan



Source : Urban Development Authority, 2020

6.6 Culture and Heritage Management Strategies

6.6.1 Proposed Cultural Heritage Conservation Plan

Badulla Muthiyangana Raja Maha Viharaya and Katharagama Dewalaya are the most valuable heritages in Badulla Town which are having religious importance. The goal of protect the Badulla identify in Badulla Development Plan 2030 is expected achieve through this strategy. Further, it expects to promote the tourism industry through culture and heritage management.

This strategy is propose to achieve the objectives of to protect the religious identity, protect identify through landscaping the Muthiyangana Raja Maha Viharaya and to change the uses of archeological places in order to the compatible with existing use.

Following sections has identified as the strategic interventions of this strategy. 50 m of both sides of the Passara Road and Station Road are not allowed more than three stories building (more than 35ft height building)

Figure No 6.5: Development Control Buffer Zone Area around the Muthiyangana Raja Maha Viharaya



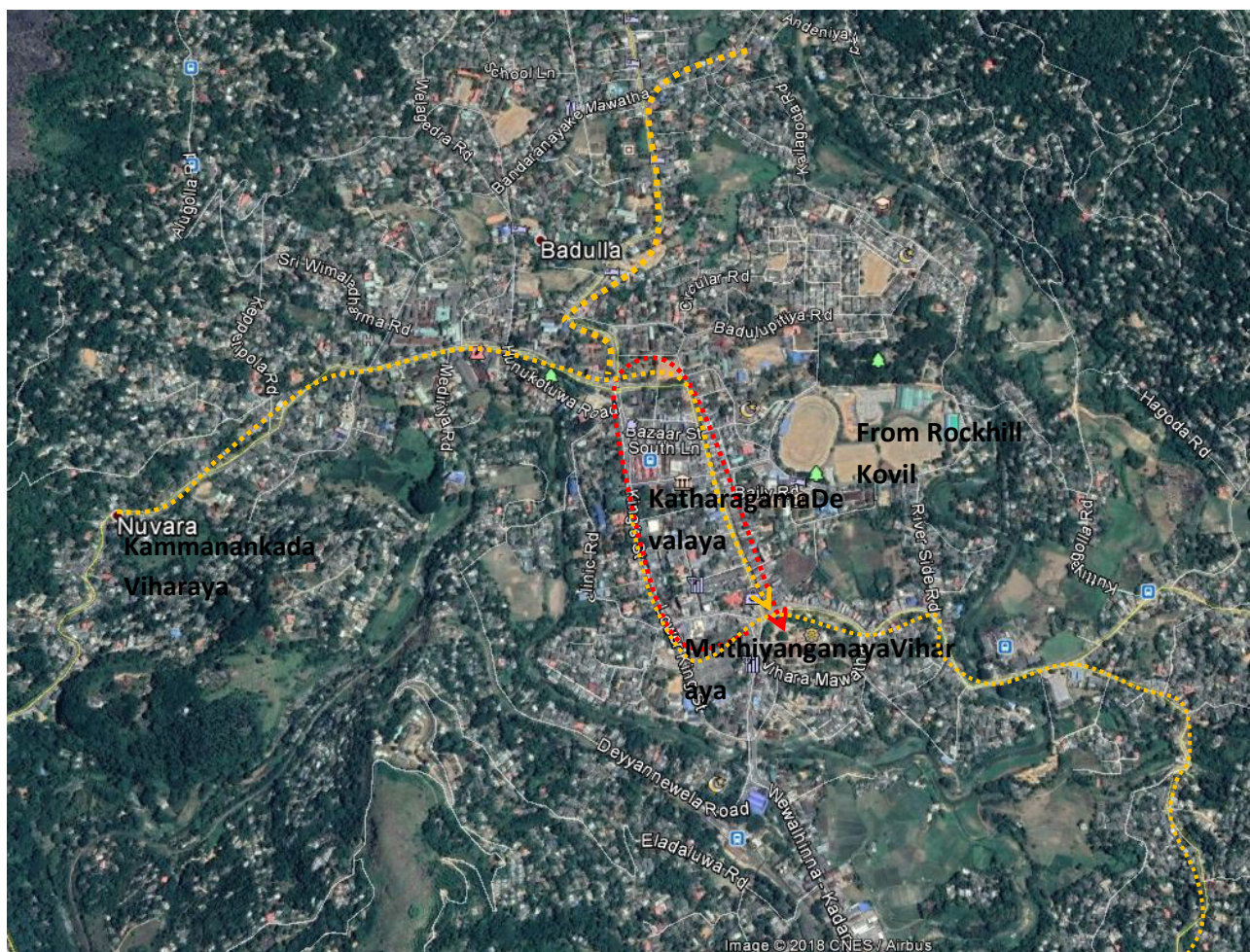
Source : Urban Development Authority, 2020

- i. Regularize the roads where held the cultural functions.

Perahera of each cultural place are important to make the historical importance of this Badulla area. This Perahera concept has established in this area as an inherent cultural pattern.

Muthiyangana Raja Maha Viharaya, Badulla Katharagama Dewalaya, Kammankada Raja Maha Vihara Perahera and Rock Hill Kovil Radam Perahera are important. These functions are a tradition of this area coming from the history and these functions are holding based on the Badulla Lower Street, Bandarawela Road and Bank Road. Accordingly, proposed to develop pedestrian paths at this Perahera holding roads.

Map No 6.11: Roads Holding the Badulla Cultural Perahera



Source: Google Earth ,2018

6.6.2 Proposed Archeological Monuments Conservation Plan

Badulla has a lengthy history and there are evidences within the city area proving that historical value that monuments are proposed to conserve for next future. For that,

i. Religious and archeological monuments conservation strategy

There are two special features of religious heritages in Badulla Municipal Council area The Muthiyangana Raja Maha Viharaya and Katharagama Devalaya. No development is allowed which are not compatible with the architecture and landscape of the Muthiyangana Raja maha Viharaya or Katharagama Devalaya.

The building developments should be followed the guidelines of architecture and landscaping at Raja Veediya to PahalaVeediya, KatharagamaDevalaya premises.

Clearance from archeology department should be obtained for any development at places in annexure 04.

ii. Following archeological places are identified for development projects with changing the use.

- Old Open Market at Welekade – Public Resting Places Project.

Welekade Old Open Market is proposed to develop as a public resting place for commuters who are coming to this area for administrative and health services. In here the landscaping should be done without harming for the archeological characters.

Figure No 6.6: Existing Welekade premises & proposed public resting place

Source: From internet, 2020

- Salusala Building

A mixed development project is proposed combining the places of adjacent rest house premises to existing Salusala Building, Labor Court, Ayurvedic Center. The Archeological Monument at Salusala Building should be protecting as it is in this project.

Figure No 6.7: Existing Salusala Building and Proposed Mixed Development

Source: From Internet, 2020

- Thaldena Walawwa

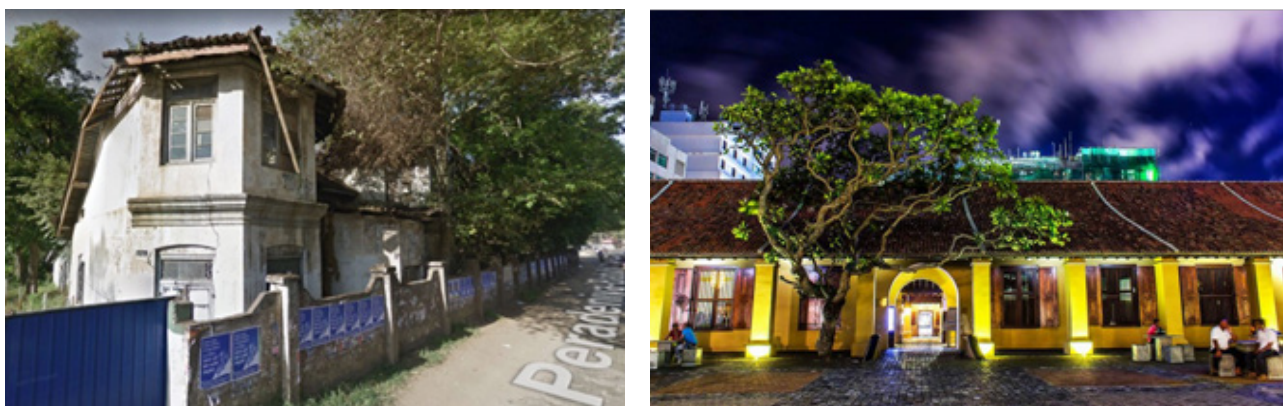
A hotel project is proposed to cater for residential population, commuters and people who are passing this town to visit surrounding tourist's attraction places. The renovation of this project should be done without destroying to the existing archeological monuments.

Figure No 6.16: Existing Thaldena Walawwa and Proposed Restaurants Project

Source: From Internet, 2020

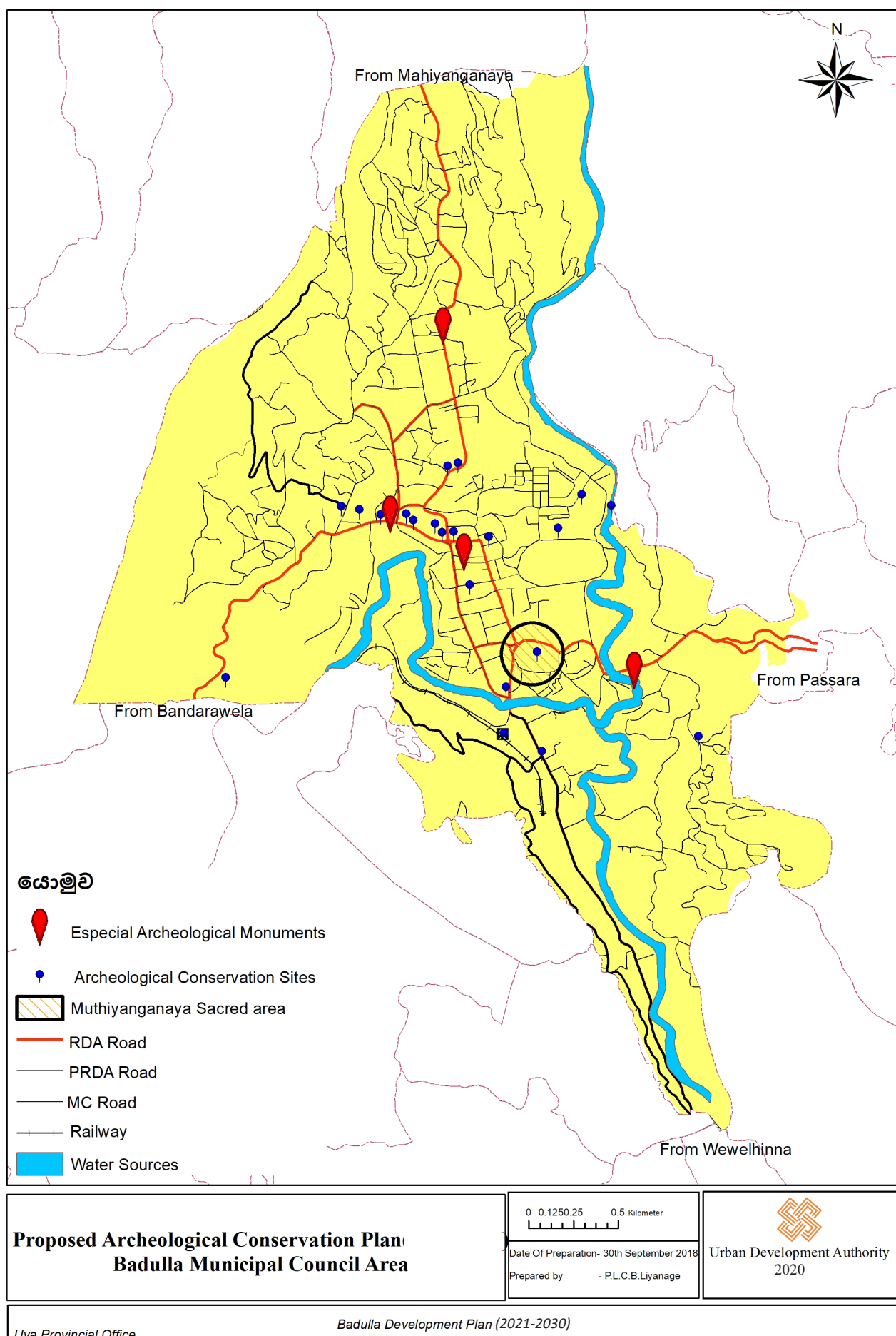
- Kothalawala Walawwa

This building is an archeologically important building which is located in front of the Bus depot at Passara road. This building is proposed to be developed as a hotel to facilitate for residents and commuters who are passing this area to surrounding tourist's attraction places.

Figure No 6.17: Existing Kothalawala Walawwa and Proposed Restaurants Project

Source: From internet, 2020

Map No 6.12: Proposed Heritage Conservation Plan



Source : Urban Development Authority, 2020

6.7 Implementation Strategies

6.7.1. Strategic Projects

i. Summary of Project Priorities

Table No 6.4: Summary of Project Priorities

Priority No	Project
1	Waste Water Management Project
2	Solid Waste Management Project
3	Proposed Green Park – Mediriya Road
4	Green Walkways Development Project
5	Proposed Pedestrian Paths Development Project – Lower Street
6	Vincent Dias Ground Complex Development Project
7	Road Widening Projects
8	Commercial Development Project – Welekade Market Complex 02ndFloor
9	Proposed River Base Development (Green Lane Drive)
10	Kothalawala Walawwa Tourists Restaurant Project
11	Thaldena Walawwa Tourists Restaurant Project
12	Public Vehicle Park, integrated commercial & institutional complex and urban wetland park Development Project-Alikumbura
13	Proposed New Road Development – Mediriya Road
14	Bus and Rail Integrated Transport Terminal - Badulla
15	Badulla General Hospital Backyard Land Development Project
16	Proposed Administration Complex Project at Prison Quarters Premises
17	Proposed Mix Commercial Development at Prison Premises
18	Redevelopment of Badulla Urban Councils Public commercial complex
19	Mixed Development Project at Rest House Premises ((Institutional and Commercial)
20	Badulla Administrative Complex - Stage II Project
21	Welekade open restaurant Project
22	Proposed Junction Developments
23	Proposed Vehicle Parks - Railway Station (Badulla)/ Racecourse Road
24	Incinerator Project
25	Jogging track development project beside the Badulu oya

Source : Urban Development Authority, 2020

6.7.2 Project Implementation Organizational Structure

Table no 6.5: Project Implementation Organizational Structure

Plan	Sub plan and action plan	Associated institutions	Associated institutions responsibility for implementation projects
Service Plan	Badulla General Hospital Backyard Land Development Project	Badulla Provincial General Hospital / Urban Development Authority	Land Acquisition
			Obtaining approvals for filling
			Study the potential of the project.
			Project implementation on project concept.
	Badulla Administrative Complex - Stage II Project	Urban Development Authority/ Badulla Municipal council/ Uva Provincial Council	Releasing lands
			Study the potential of the project.
			Project implementation on project concept.
	Badulla Prison and quarters relocate Outside the Badulla Municipal Council	Badulla Divisional secretariat Office/ Prison Department	Study the potential of the project.
			Project implementation on project concept
	Badulupitiya Road, new administrative complex within the prison quarters land	Urban Development Authority	Releasing lands
			Study the potential of the project.
			Implementation of the project on the project concept.
	Mix Commercial development at proposed prison premises	Urban Development Authority / Badulla Municipal council	Land Acquisition
			Study the potential of the project.
			Implementation of the project on the project concept.
	Mixed Development Project in the Rest house land (Institutions and Commercial)	Urban Development Authority / Badulla Municipal council	Transport plan
			Study the potential of the project.
			Implementation of the project on the project concept.
	Proposed Residential Development Project (Badulupitiya)	Housing development authority/ Badulla Municipal council	Land Acquisition
			Study the potential of the project.
			Implementation of the project on the project concept.
	Commercial Development Project - Welekade shopping complex 2nd floor	Badulla Municipal council	Implementation of the project on the project concept.
	The proposed old public market development project	Badulla Municipal council	Study the potential of the project.
			Implementation of the project on the project concept.
	Relocation the Saraswathi Primary School, Badulla	Uva Provincial council/ Badulla Municipal council	Land Acquisition
			Study the potential of the project.
			Implementation of the project on the project concept.
			Implementation of the project on the project concept.

Plan	Sub plan and action plan	Associated institutions	Associated institutions responsibility for implementation projects
Transport plan	Green Pedestrian Lane Development Project	Urban Development Authority/ Badulla Municipal council/ Road Development Authority	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.
	Alternative Roads Development Project	Badulla Municipal council	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.
	Junctions improvement Project	Badulla Municipal council / Road Development Authority	Study the potential of the project.
			Implementation of the project on the project concept.
	Widening the road from front of general hospital to Kosgas junction through Badulla prison, Riverside road	Urban Development Authority/ Badulla Municipal council	Release the land
			Implementation of the project on the project concept.
	Widening the road from Pin Arawa junction to Badulla Maha Vidyalaya	Urban Development Authority/ Badulla Municipal council	Release the land
	Widening the road from Kailagoda junction to Hindagoda through Hanwella road.	Urban Development Authority/ Badulla Municipal council	Release the land
			Implementation of the project on the project concept.
	Widening the road from Hindagoda to Kanupelella through Higurugamuwa.	Urban Development Authority/ Badulla Municipal council	Release the land
			Implementation of the project on the project concept.
	Widening the road from front of Railway station, Raja vedeya Road through Deyiyannewela road.	Urban Development Authority/ Badulla Municipal council	Release the land
			Implementation of the project on the project concept.
	Road development project from Mediriya road to pilipothagama road.	Urban Development Authority/ Badulla Municipal council	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.
	Decentralize the bus terminal.	Urban Development Authority/ Badulla Municipal council	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.
	Parking places development project	Urban Development Authority/ Badulla Municipal council	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.
	Pahala vedia mmonitoring project	Urban Development Authority/ Badulla Municipal council/ Road development authority	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.
			Study the potential of the project.
	Proposed vehicle parking at Railway station (Badulla)	Badulla Railway Department/ Badulla Municipal council/ Railway Department	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.
	Proposed vehicle parking place - Racecourse Road	Badulla Municipal council	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.

Plan	Sub plan and action plan	Associated institutions	Associated institutions responsibility for implementation projects
Proposed water supply plan	Underground service corridor development project	National Water Supply & Drainage Board	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.
Drain and waste transportation system plan	Proposed Waste Water Management Project	Divisional Secretariat - Badulla / Badulla Municipal Council	Release the land
			Implementation of the project on the project concept.
Solid Waste Management Plan	The Proposed Solid Waste Disposal Site Management Project	Badulla Municipal Council	Implementation of the project on the project concept.
	Solid Waste Based Project	Badulla Municipal Council	Study the potential of the project.
			Implementation of the project on the project concept.
Conservation plan	Local Forest Plantation Project - Alugolla Kanda	Department of Forest Conservation	Implementation of the project on the project concept.
Landscape management plan	Green Park Project in the area of Mahogani forest corridor, Mediriya Road	Urban Development Authority / Badulla Municipal council	Establishment of conservation zones
			Implementation of the project on the project concept.
	Green Park Project from Mediriya Road river reservation to Senanayake Garden	Urban Development Authority / Badulla Municipal council	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.
	Alikumbura - Proposed Wetland Project	Urban Development Authority / Badulla Municipal council	Release the land
			Study the potential of the project.
	Proposed River Base Development	Divisional Secretariat - Badulla / Badulla Municipal council	Implementation of the project on the project concept.
			Release the land
			Study the potential of the project.
	The Park Behind the Badulla General Hospital	Badulla General Hospital	Implementation of the project on the project concept.
			Release the land
Archaeological monument conservation plans	Kotalawala Walauwa Tourist Restaurant Project	Department of Archaeological Conservation / Badulla Municipal Council / Urban Development Authority	Study the potential of the project.
			Release the land
			Implementation of the project on the project concept.
	Welekade Public Rest House Project	Department of Archaeological Conservation / Badulla Municipal Council	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.
	Thaldena Walawwa Tourist Restaurant Project	Department of Archaeological Conservation / Badulla Municipal Council	Release the land
			Study the potential of the project.
			Implementation of the project on the project concept.



Source : Urban Development Authority, 2020

1. Waste Water Management Project

Project Identification

Project Title	Badulla Waste Water Management Project
Project	Urban Waste Water Management
Project Proposal	Waste Water Management Project

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	-	-	-	-
Access	-			
Location Map				
Adjacent Land Uses	<p>This project is proposed for the Mixed Use Zone at city center. Badulla Central, Badulla East and Badulupitiya GN Divisions in city center have selected for this purpose. It is proposing to purify the wastewater collect from pipelines within area in a land at Hindagoda GN division.</p>			
	<p>The proposed land for the plant is an abandoned paddy land and locates close to Rambukpotha Oya. The surrounding lands of this are also paddy fields.</p>			




Project Justification

Project Type	New	√	Improvement		Extension		Land development only.
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other
Project Aspect	Economic		√		Social		
Project Objective	<ul style="list-style-type: none"> • Create a Waste Water Management System. • Improving the city beautification 						
Rational of project	<p>According to Sampath Pethikada 2016, population of Badulla MC area is 48,641. The number of families is 12,132. The Population growth rate is 1.25%. In order to the NDBI analysis it has increased 2% in 2018 urban portion compared to 2017. About 20 Tons of solid wastes collecting in MC boundary as per the Badulla MC data. Daily garbage collection will be reached up to 34.69 tons by 2030.</p> <p>However, due to the poor quality of waste management in the Badulla MC area, a large quantity of garbage has already been collected in the yard. This is mainly due to the handing over of garbage to the Municipal council without proper sorting. And also due to not having a waste water management system in Badulla, the waste water also disposed to the current garbage yard.</p> <p>Throughout the total amount of waste 58% is crumbling garbage and 48% can be added to a management strategy. The Badulla Municipal Council has a basin shape geographic condition. As a result, the city center is plain, and the slope area around the city. Due to the landslide situation of the area, the demand for flat terrain is very high. Accordingly, the amount of developable lands is very low and it cause to high density in town center.</p> <p>However due to not having a common wastewater management system, there are soakage pits in each house.</p> <p>According to the existing sanitary facilities, there is a waste water management system for Badulla General Hospital. Even though waste water by the aforesaid system connects to Baduluoya across Kailagoda. Also, the waste water disposing by administrative institutions, commercial places and the Muthiyangana Raja Maha Viharaya are collecting by the Municipal Council and dispose to the current site of solid waste disposal. Residential wastewater also disposes to that site.</p> <p>Accordingly, it is essential, wastewater management system to solve the expected urbanization issues.</p>						

Property Description

Present Land Ownership	UDA		Private	√	State	
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership						
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
					A	R P

Project Description

Project Period	Short Term (1> year)		Mid Term (1-3 year)	√	Long Term (3< year)		Total Estimated Cost (Rs. Mn)	7500
Financing Method	Foreign funds and Treasury funds							
Description of the Project	This project consists of Waste Water Treatment Plant and 11 of water pumping stations. This project will be covered Badulla Central, Badulla East and Badulupitiya GN Divisions to collect the waste water using off-shore gravity and pumping methods.							
Infrastructure Availability	Water	Required Capacity			Electricity		Required Capacity	
		Available Capacity					Available Capacity	
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	
Zone	High density Mixed Zone	Zoning compatibility			Yes	√	No	
History								
Present Status (Explain details with measurements)								
Existing Situation	<div></div> <div></div>							
Layout Map	<div></div>							

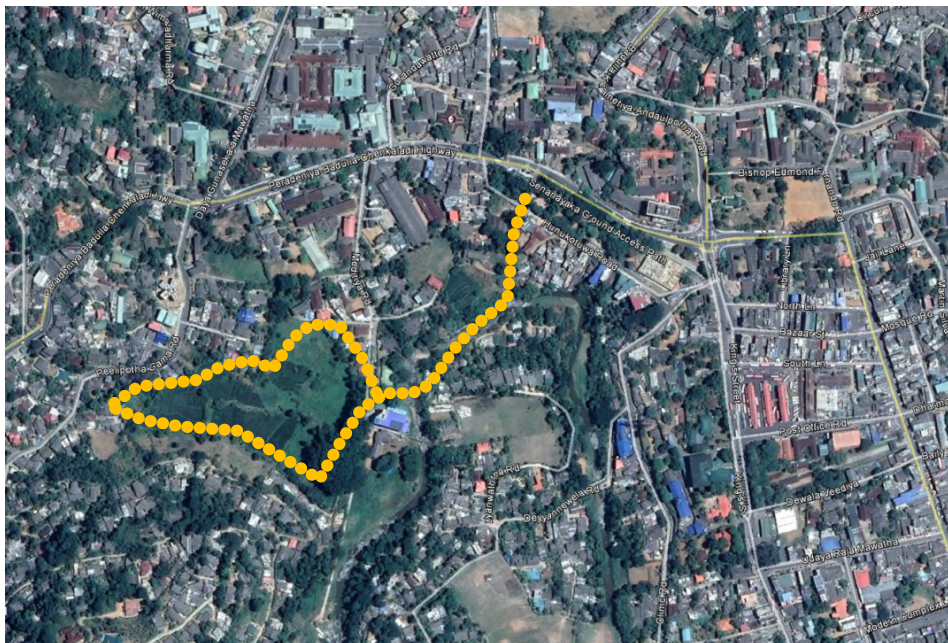
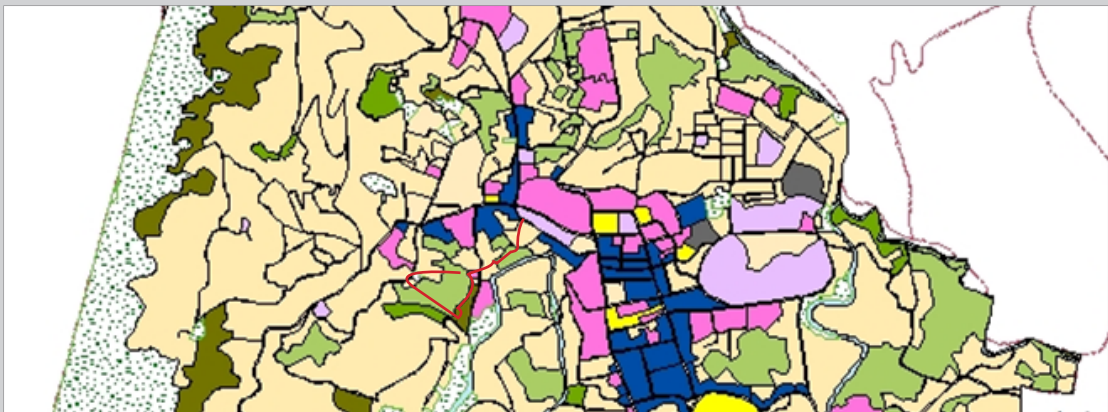
Project Budget		
Activity	Cost (Rs. Mn)	
Land acquisition	299	
Basic Cost	4406	
Construction	2709	
Total	7500	
Approval Agencies		
Activity	Relevant Authority	Authorized person
Land clearances	Department of Agrarian Development	Commissioner
	Urban Development Authority	Director
	N.B.R.O	Geologist
Regulations and Guidelines		
Details of Attachments		

2. Proposed Green Park – Mediriya Road

Project Identification

Project Title	Mediriya Road, Green Park Corridor
Project	Badulu Oya Water Stream Development Project
Project Proposal	Green Park Corridor, Mediriya Road

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Senanayake Park	Residential	BaduluOya	Paddy lands and residential zones
Access	Hunukotuwa Road, Mediriya Road, Pilipothagama Road			
Location Map				
Adjacent Land Uses	<p>The proposed land for development is very close to the city of Badulla. The east of the land is using for residential purposes and currently, the way to this homes is running across this land. Badulu oya is locate south side and that location can see from the Eladaluwa Kanda. Paddy lands located in the west side of land. That place is the location where Kandala Ela join to the Badulu oya. A green corridor is proposed to develop from propose developable land to Madiriya Road along the river reservation. This corridor can be open up for residents in Pilipothagama Road.</p> 			

Project justification

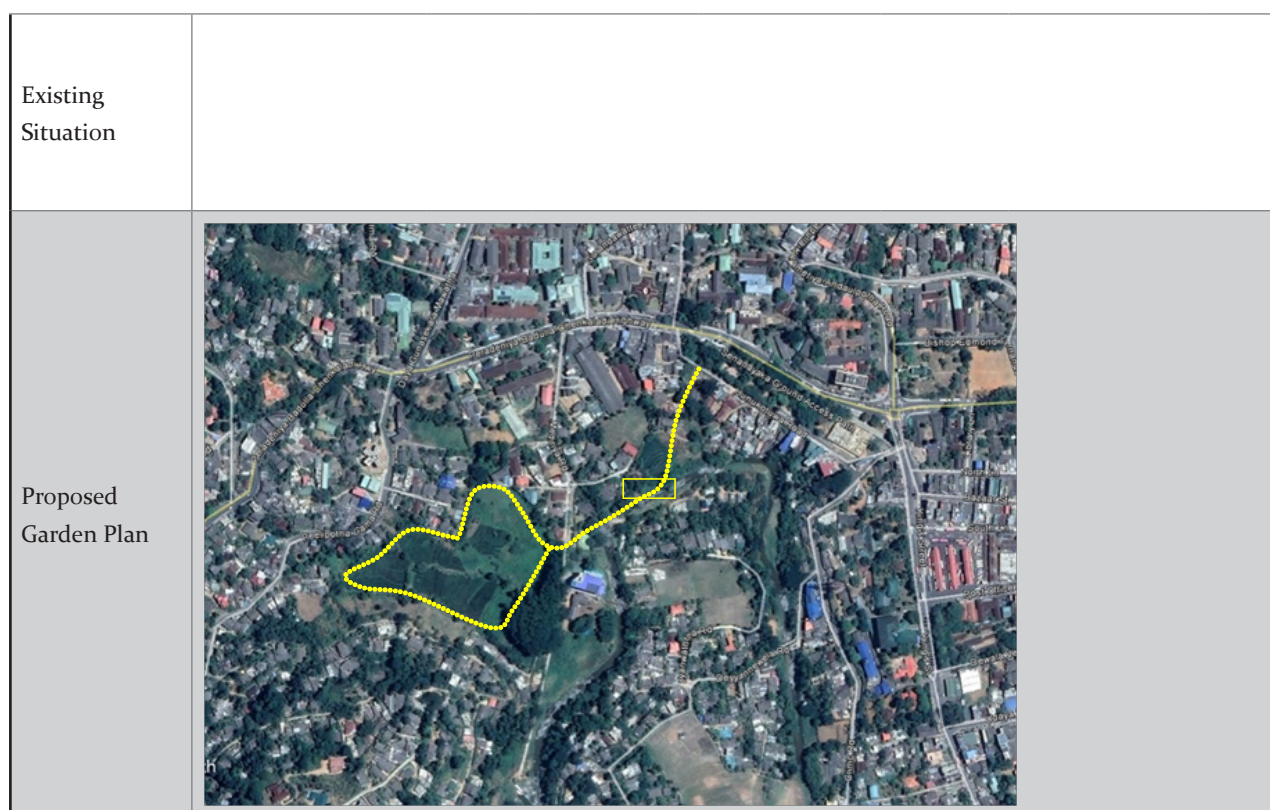
Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
	√		√					
Project Aspect	Economic				Social		√	
Project Objective	<ul style="list-style-type: none">• Develop the river belt of BaduluOya.• Development of a park from Senanayaka Park to Badulu Oya.							
Rational of project	Senanayake Park & Badulla Botanical Garden is important parks in Badulla town area. But it has not opened for the town beautification. Accordingly, BaduluOya is using as waste disposal area of city of Badulla. But there is a need of making environmental sensitive zones in the town and also current green zones in city limit need to be protected. This land proposed to develop as a Green Park (from Senanayake Garden to Badulu Oya) which locates around the Badulla General Hospital, District Secretary Office and Court Complex.							

Property Description

Present Land Ownership	UDA		Private	√	State	
Free Encumbrances	Yes		No		If Yes give details	Negotiations with land owners are taking place for land acquisition.
Details of the Ownership	Private					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
					A 1	R - P 20

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)	√	Long Term (3< year)		Total Estimated Cost (Rs. Mn)	7500
Financing Method	Treasury funds and other							
Description of the Project	The underutilized land in front of Senanayake Park own by Udyoghi Institution needs to be acquired for this development. Accordingly, a green corridor with pedestrian paths is proposed to develop up to the river through this land. In here proposed to develop walking paths from river reservation to Pilipothagama Road through Kendala Ela connecting with Mediriya Road, Mahogany tree lines. A portion of this land is proposed for a Restaurant Development Project which will be develop as private investment.							
Infrastructure Availability	Water	Required Capacity			Electricity		Required Capacity	
		Available Capacity					Available Capacity	
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	
Zone	High Density Mixed Zone	Zoning compatibility			Yes	√	No	
History								
Present Status (Explain details with measurements)								



Project Budget	
Activity	Cost (Rs. Mn)
Land acquisition	80
Restaurant Project	20
Garden development	15
Total	115
Approval Agencies	
Relevant Authority	Authorized person
Badulla Municipal Council	
Irrigation Department	
Urban Development Authority	

Project Identification

Project Location

Project justification







Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
			√					
Project Aspect	Economic			Social			√	
Project Objective	<ul style="list-style-type: none">• Improve Pedestrian movement in town.• Improve infrastructure facilities for pedestrians.							
Rational of project	Badulla is a city which having high daily commuter population as the capital of the Uva Province. Also, the residential zones are locating in vicinity of the city with attracting high pedestrians towards the city.							
	Pedestrian paths are using to reach to institutions and to walk from residential areas. But most of the people are using three-wheelers due to the minimal facilities available in the pavements. There is no at least the required minimum width for pedestrian paths. Accordingly, the project proposed to improve and protect the environmental sensitivity of the city and to enhance the pedestrian movement of the city.							
	Further it is proposed to declre one stretch along said roads as service area.							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If Yes give details	
Details of the Ownership	Municipal Council, Provincial Road Development Authority, Road Development Authority					
Survey Plan Detail	Survey Plan No.		Name of the Surveyor		Date	Land Extent
						A - R - P -

Project Description

Project Period	Short term (1> year)	√	Mid Term (1-3 year)		Long Term (3< year)		Total Estimated Cost (Rs. Mn)	30
Financing Method	Treasury funds and Other							
Description of the Project								
Infrastructure Availability	Water	Required Capacity			Electricity		Required Capacity	
		Available Capacity					Available Capacity	
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	
Zone	High Density Mixed Zone, Middle Density Residential Zone, Health Service Zone	Zoning compatibility			Yes	√	No	
History								
Present Status (Explain details with measurements)								

Existing Situation	Kappetipola Road 1	Kappetipola Road 2
		
	Wewelhinna Road	Mahiyanganaya Road
		
	Passara Road	Green Lane Drive Road
		
Details	Width-	
Kappetipola Road 1	5m	
Kappetipola Road 2	9m	
Wewelhinna Road	9m	
Mahiyanganaya Road	9m	
Passara Road	9m	
Green Lane Drive Road	9m	


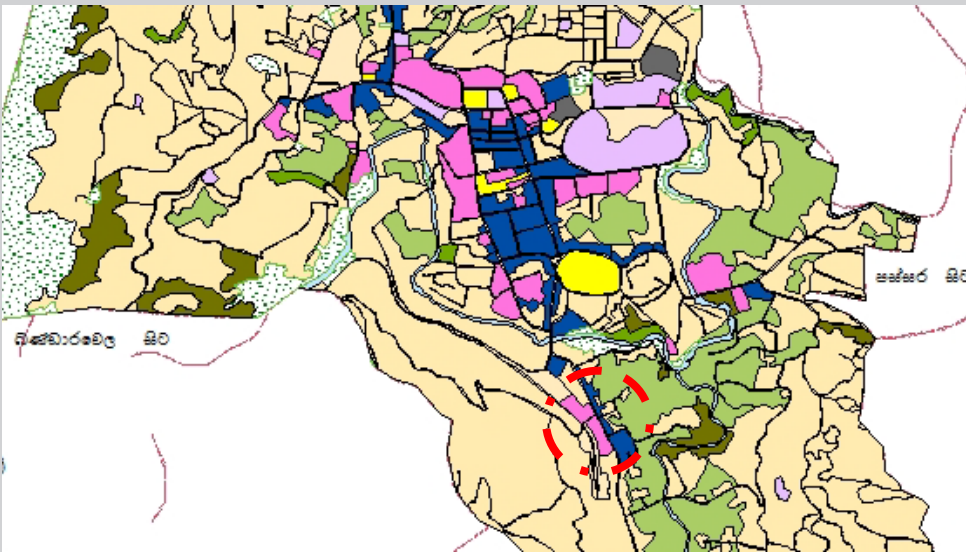
Project Budget	
Activity	Cost (Rs. Mn)
Construction Pedestrian Pavement	15
Total	15
Approval Agencies	
Relevant Authority	Authorized person
Badulla Municipal Council	
Urban Development Authority	
Road Development Authority	
Provincila Road Development Authority	

4. Integrated Bus and Rail transport Square - Badulla

Project Identification

Project Title	Replacement of a Bus Stand at Badulla
Project	Establish bus and railway integrated Transport system.
Project Proposal	Badulla bus station and the railway station Integrated Project

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Badulla Wevelhinna Road	Badulla Wevelhinna Road	Petroleum cooperation	Railway department
Access	Badulla Wevelhinna Road			
Location Map				
Adjacent Land Uses	<p>The land adjacent to railway station is the location where proposed to relocate the existing bus terminal. Current railway quarters are single story buildings and those are old about 20 years. This buildings will be rebuilt as the vertical development and proposed to relocate the bus terminal.</p> <p>There is the railway station at west of the land and the Wewalahina Road is at the North and East side. Commercial uses and Badulla bus terminal are locate. At the left side of this road. The Petroleum Corporation is located at the right side of the land.</p> 			


Project Justification

Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
						√		
Project Aspect	Economic			√	Social		√	
Project Objective	<ul style="list-style-type: none">• Create Multi model Transport Service. (Train and Bus)• Increase the no of Public & private bus stand.• Make safe passenger movement.• Provide necessary commercial facilities to commuters.							
Rational of project	<p>Badulla is the main transport hub of the region. According to the Badulla transport authority survey data, around 800 buses are moving around the Badulla bus terminal daily. But the existing infrastructure and vehicle handling spaces are inadequate for the existing demand.</p> <p>The Badulla bus terminal spreads over 1.3 acres extent in city center. There are 2, two storied building and a three story building at Bus terminal. Ground level is maintained as bus stops and commercial use. Second and third floors are available for commercial premises and lodging facilities of the CTB employees.</p> <p>At present, SLTBs and private buses are an intergrate service. But there are few routes that are functioning as separately. For thses routes, there is one strip to stop private buses. But this strip is not enough for these buses to function smoothly. As result, there is huge traffic congestion in south lane, Post office lane and king’s Street which around the Bus stand.</p> <p>Badulla is a city with both bus and railway services. At present, the railway services have become separate services from the town. The use of the Railway to bring the community to urban activities is low level. The analysis found that for this, the distance between the railway station and the bus terminal is about one kilometer short of a distance.</p> <p>However, since railway transport is separate, the great potential of the city is at a low level of development. Accordingly, this project is proposed to be developed integrated these two transport services.</p>							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes		No	√	If No give details	
Details of the Ownership	Railway Department					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
					A 1	R o P 30

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)	√	Long Term (3< year)		Total Estimated Cost (Rs. Mn)	
Financing Method	UDA Funding/ Treasury Funding							
Description of the Project								
Infrastructure Availability	Water	Required Capacity	5m ³	Electricity		Required Capacity	Yes	
		Available Capacity	-			Available Capacity	-	
	Solid waste Management system	Yes		No		If No give suitable SWM proposal	Municipal council management	
Zone	High Density Mixed Zone	Zoning compatibility		Yes	√	No		
History	<p>The city of Badulla firstly identified as a transportation hub due to the establishment of railway station during the colonial period. Accordingly railway service has used for transport pepper and tea from Passara, Kandana and Meegahakiula to Colombo. That time bus terminal was built in current weekly fair location and after that rebuilt facing to Raja Veediya in city center.</p> <p>With the establishment of the Badulla bus stand, Badulla Municipal Council Public market has been established. This is a high commercially valuable land since locate the commercial uses of South lane at north, Urban Development Authority commercial complex at east, Post Office complex at south and bus stand at west side of the land.</p> <p>Although Badulla is considered as the hub of transport in the region, railway station and bus terminal has been established in a 1 km distance. Due to this reason, the bus transportation is the main transport mode in the city and the railway transport serving for 50-60 passengers per day. Accordingly the potential of having railway station has not been utilized as a potential.</p>							

Present Status (Explain details with measurements)

Existing Situation



Exsiting Railway Quarters	Length	Width
1	40.5	20
2	23.6	20
3	10	20
4	35	20
5	16	20
6	20	20
7	15	20

Proposed Plan & Building Design Requirements

The existing railway quarters of this proposed development site should be rebuilt with as a vertical development at south of the same land. After that the bus stands can be developed as a horizontal way with getting accessibility from the Badulla-Wevelhinna Road. It should be constructed in combine with the backyard of station.


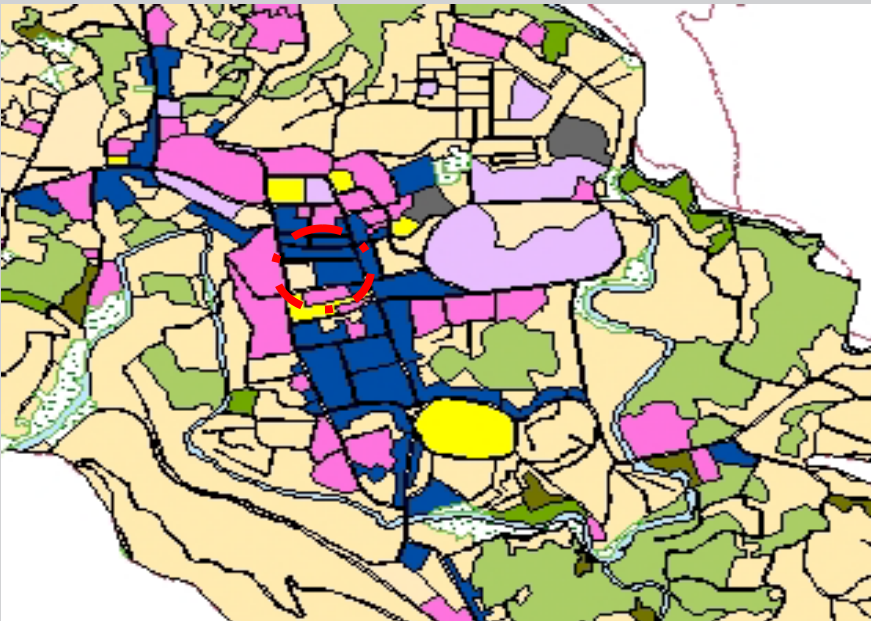
Project Budget	
Activity	Cost (Rs. Mn)
Designing	10
Construction of Bus terminal	300
Railway quarters development	100
Total	410
Approval Agencies	
Relevant Authority	Authorized person
Department of Railway	
Urban Development Authority	
Road Passenger Transport Authority	
Badulla Municipal Council	

5. Redevelopment of Badulla MC public market and expansion of Bus stand

Project Identification

Project Title	Redevelopment of Public market and expansion of Badulla Bus stand
Project	Redevelopment of Public market & Bus stand expansion
Project Proposal	Redevelopment of Badulla Public market , Bus stand expansion

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Devala Lands	Municipal Council Lands	Government Lands	UDA Lands
Access	From Raja Veediya South Lane or Post office Lane			
Location Map				
Adjacent Land Uses	<p>With the establishment of the Badulla bus stand, the Badulla Municipal Public Market has been established. At north South lane commercial uses, east side UDA commercial Building, south side Post office building, west side current bus terminal is locating. Accordingly, it has high commercial value for this land.</p> 			


Project justification

Project Type	New	√	Improvement		Extension	√	Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
		√						
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none"> Re-establishment of commercial activities providing easy accessibility. Provide commercial facilities to the proposed city Intermediate Passenger terminal 							
Rational of project	<p>Current public market locates as backyard to the bus terminal. There is about 160 shops and need to be regenerated due to the dilapidated condition.</p> <p>Further current private buses haven't enough space to park their buses at the bus terminal. Therefore, huge traffic congetion occurring due to that. Therefore, it is need to locate public market with better formation to cater bus bays for private busus as well.</p>							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Badulla Municipal Council					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
		-		-	A	R P

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)	√	Long Term (3< year)		Total Estimated Cost (Rs. Mn)	7500
Financing Method	Tresurary funds and other							
Description of the Project	 <p>The shops locate facing to South Lane and bus stand and shops at backside of the bus stand to be rebuilt with facing to proposed middle size bus terminal. In further it should be built as wo story building with connecting to the upper floor of existing bus stand by bridges.</p>							

Infrastructure Availability	Water	Required Capacity	-	Electricity		Required Capacity	-
		Available Capacity	5m³			Available Capacity	-
	Solid waste Management system	Yes		No		If no proposed suitable SWM proposal	Method of work together of Municipal Council
Zone	High Density Mixed zone	Zoning compatibility		Yes	√	No	
History							
Present Status (Explain details with measurements)							
Existing Situation							
							
Proposed building plan							

Project Budget	
Activity	Cost (Rs. Mn)
Construct commercial building	90
Construction of Bus terminal	90
Total	180



Approval Agencies	
Relevant Authority	Authorized person
Municipal Council	
Urban Development Authority	
Road Passenger Transport Authority	

6. Lower Street Streetscape Development Project

Project Identification

Project Title	Lower Street Streetscape Development Project
Project	Streetscape development
Project Proposal	Streetscape and pedestrian Improvement

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	-	-	-	-
Access	Lower Street			
Location Map				
Adjacent Land Uses	 <p>Lower Street is the main commercial street in Badulla town and it is running about 0.6km from prison premises to Viharagoda. This street is considered as a part of A5 Road. The buildings facing this road is commercial except the Katharagama Devalaya.</p>			

Project justification

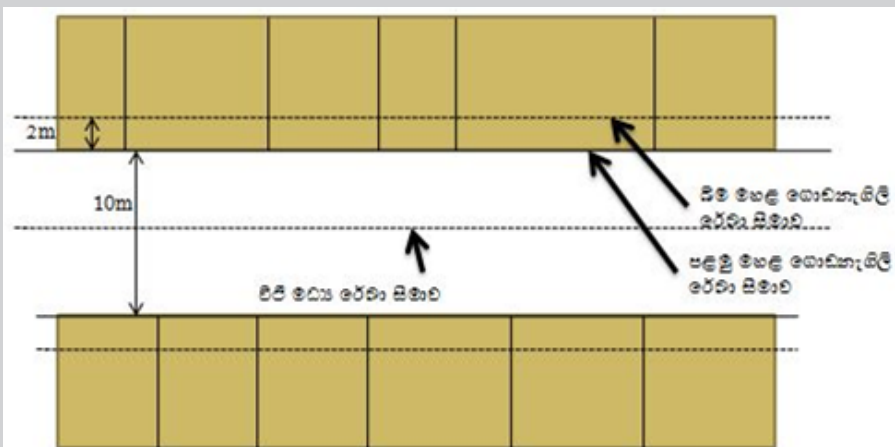
Project Type	New		Improvement		Extension		Land development only.	√
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
			√					
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none">• Make safe and easy accessibility for pedestrians in PahalaVeediya.• Get maximum utilization of the lands in the lower street							
Rational of project	Lower Street is the highest pedestrian movement road in the Badulla city. Commercial places are located at both sides of the road and there are no pedestrian paths. One side of the road is using for parking facilities.							
	It is a one way road and this on street parking make barriers to pedestrian movement and access to the commercial places. Although this is the main commercial street of town commercial spaces have become abandoned.							

Property Description

Present Land Ownership	UDA		Private		State	√		
Free Encumbrances	Yes	√	No		If No give details	Will be discussed with owners of commercial places.		
Details of the Ownership	Kataragama Devalaya, Muthiyangana Raja MahaViharaya							
Survey Plan Detail	Survey Plan No.		Name of the Surveyor		Date	Land Extent		
	-		-		-	A	R	P

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)		Long Term (3< year)		Total Estimated Cost (Rs. Mn)	7500
Financing Method	Municipal Council- Badulla							
Description of the Project	By this project it is proposed to develop a 2m wide pedestrian path through getting 2m from ground floors of commercial buildings in PahalaVeediya.							
Infrastructure Availability	Water	Required Capacity			Electricity		Required Capacity	
		Available Capacity					Available Capacity	
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	
Zone	High Density Mixed zone	Zoning compatibility			Yes	√	No	
History								

Present Status (Explain details with measurements)Existing
SituationProposed
building plan


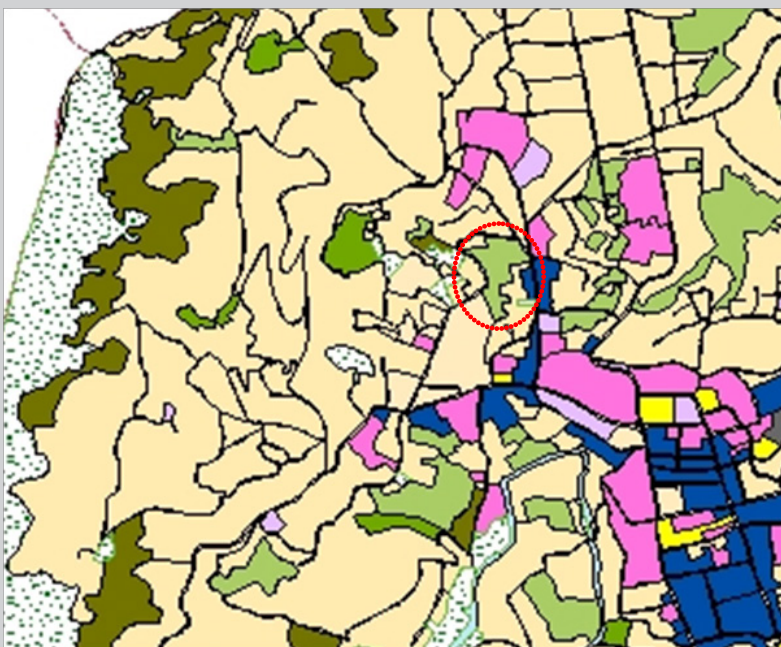
Project Budget	
Activity	Cost (Rs. Mn)
Demolishing	9
Construction	11
Total	19
Approval Agencies	
Relevant Authority	Authorized person
Badulla Municipal Council	
Urban Development Authority	

7. Badulla General Hospital backyard Development Project

Project Identification

Project Title	Badulla General Hospital backyard Development Project
Project	Development at the backyard lands of General Hospital - Badulla
Project Proposal	Land Development Project backyard of the Badulla General Hospital

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Private	Private	Government Lands	Private
Access	Daya Gunasekara Mawatha			
Location Map				
Adjacent Land Uses	 <p>Proposed developable land locates behind the Badulla General Hospital. Daya Gunasekara Road has been developed as an alternative route. It is running around this land and government and private lands are facing to that road. Badulla General Hospital is locating at south side.</p>			


Project justification


Project Type	New		Improvement	√	Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
							√	
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none">• Establishment of rest rooms for the Badulla General Hospital.• Provide required parking facilities for the Badulla General Hospital• Expansion of Hospital Services							
Rational of project	<p>Badulla General Hospital is getting important place in Badulla. There is a need to provide facilities for patients who are coming daily from outer areas to get health services. About 18% out of the total commuters are coming to get the services from Badulla General Hospital. This amount will be increased in 2030 and parallel to that community parking and leisure places need to be provide.</p> <p>But with the demand of the area there is a trend to subdivide this land in to small lots for residential purpose. And also people are filling lands unauthorized way. Considering the environmental sensitivity this land is proposed to develop based on the Garden concept.</p>							

Property Description

Present Land Ownership	UDA		Private	√	State	
Free Encumbrances	Yes		No	√	If No give details	Will be discussed with owners of commercial places.
Details of the Ownership	Private					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
					A	R P

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)	√	Long term (3< year)		Total Estimated Cost (Rs. Mn)	7500
Financing Method	Ministry of Health							
Description of the Project	 <p>Description of the Project This development project will be mainly provided parking facilities for Badulla Hospital. As well as expected to establish small scale shops (Cups, Food packs, Plates, Fast foods). This shops need to build without exceeding 10m2. Except that this project will be develop as a hospital park to provide resting facilities for patients and visitors separately.</p>							

Infrastructure Availability	Water	Required Capacity		Electricity		Required Capacity	Yes		
		Available Capacity				Available Capacity			
	Solid waste Management system	Yes	√	No		If No give suitable SWM			
Zone	Health service zone	Zoning compatibility		Yes	√	No			
History									
Present Status (Explain details with measurements)									
Existing Situation									
Layout Map									

Project Budget	
Activity	Cost (Rs. Mn)
Land acquisition	9
Construction	5
Total	14

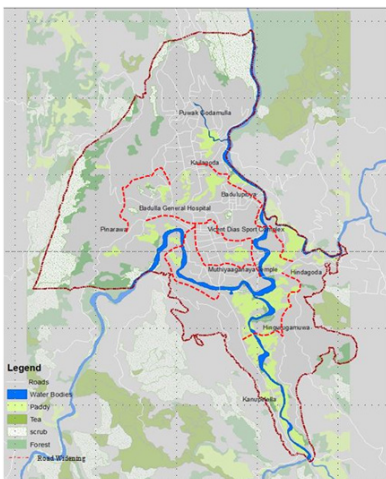
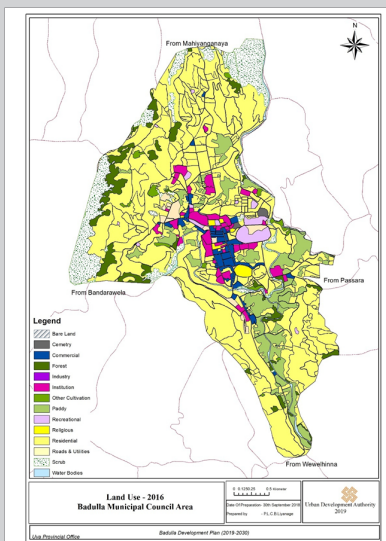
Approval Agencies	
Relevant Authority	Authorized person
Ministry of Health	
Department of Agrarian Development	
Badulla General Hospital	
Divisional Secreteraite	

8. Road widening project

Project Identification

Project Title	Road Widening Project
Project	Kappetipola Road, A05 Road, Hanwella Road, Hingurugamuwa Road Widening Projects
Project Proposal	Road widening

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	-	-	-	-
Access	-			
Location Map				
Adjacent Land Uses	<p>Proposed roads for road widening projects.</p> <ul style="list-style-type: none"> - Keppetipola Road - Residential & Institution land use - A05 Road - Provincial General Hospital, Residential, Commercial and Institutional land uses - Hanwella Road - Residential & Institutional land uses - Hingurugamuwa Road - Residential & Institutional land uses - Kings' Street - Commercial, Institutional land uses 			

Project justification


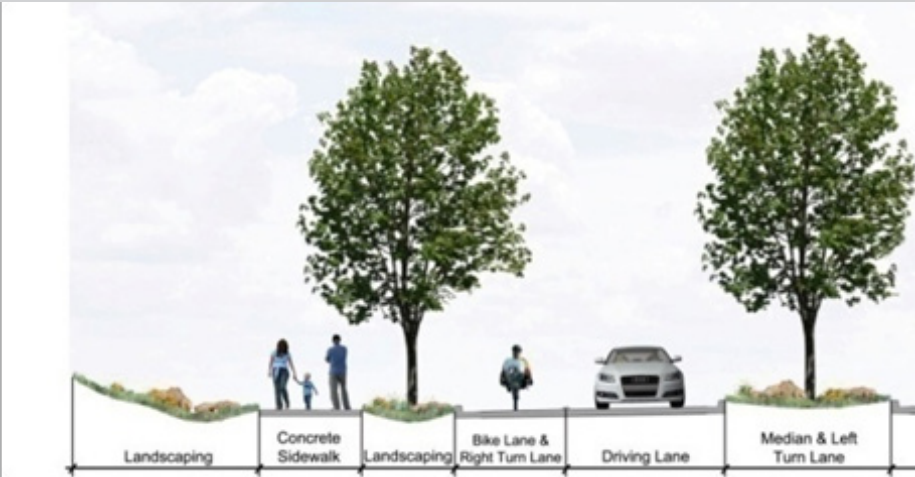
Project Type	New		Improvement		Extension	√	Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
			√					
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none">• Reduce the vehicle congestion at town center.• Develop alternative roads to skip the town area							
Rational of project	Badulla town has a basin shape of terrain. Accordingly town center is a plain area. This plain terrain caused for the grid road pattern of town center. Due to this the vehicle passing the town is also using these roads. It has created a vehicular congestion in town area. But the road density is 9.8km to 1km². Accordingly the analysis has proved that there is a good road pattern in Badulla.							
	Accordingly proposed to widen the Kappetipola Road, A05 Road, Hanwella Road and Hingurugamuwa Road to reduce the vehicular congestion. And also proposed to widen the Raja Veediya where commercial and institutional uses are existing. Accordingly expect to get space for green pedestrian path developments at these two roads.							





Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	Will be discuss with RDA, PRDA and Badulla MC.
Details of the Ownership	RDA, PRDA, Badulla MC					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
					A	R P

Project Description

Project Period	Short term (1> year)	√	Mid Term (1-3 year)		Long Term (3< year)		Total Estimated Cost (Rs.Mn)	
Financing Method	Treasury funds, Provincial Road Development Authority and Road Development Authority							

Description of the Project	This project proposed to widden roads, develop green pedestrian paths and to develop alternative roads up to two lane roads without harming to land uses.						
	<div></div> <div></div>						
Infrastructure Availability	Water	Required Capacity		Electricity		Required Capacity	
		Available Capacity				Available Capacity	
	Solid waste Management system	Yes		No		If No give suitable SWM proposal	
Zone	High Density Mixed zone Middle Density Residential zone Health Service zone	Zoning compatibility		Yes	√	No	
History							
Present Status (Explain details with measurements)							

Existing Situation	Keppetipola Road - 5m	A5 Road - 9m
		
	Hanwella Road - 5m	Hingurugamuwa Road - 5m
		
Layout Map	Keppetipola Road	9m
	A5 Road	12m
	Hanwella Road	9m
	Hingurugamuwa Road	9m

Project Budget	
Activity	Cost (Rs. Mn)
Land acquisition	10
Road widening	400
Total	410
Approval Agencies	
Relevant Authority	Authorized person
Provincial Road Development Authority	
Road Development Authority	
Badulla Municipal Council	

9. Commercial Development Project - 02ndFloor of Welekade Shopping Complex

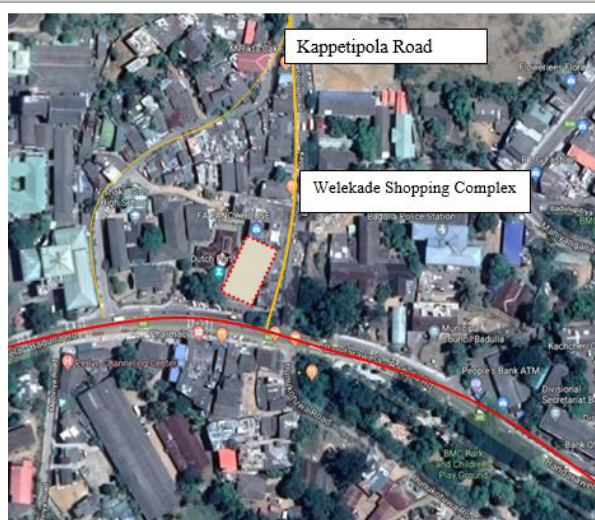
Project Identification

Project Title	2nd floor of Welekade Shopping Complex
Project	Facilitate for commercial and institutional services.
Project Proposal	02nd Floor of Welekade Shopping Complex Development

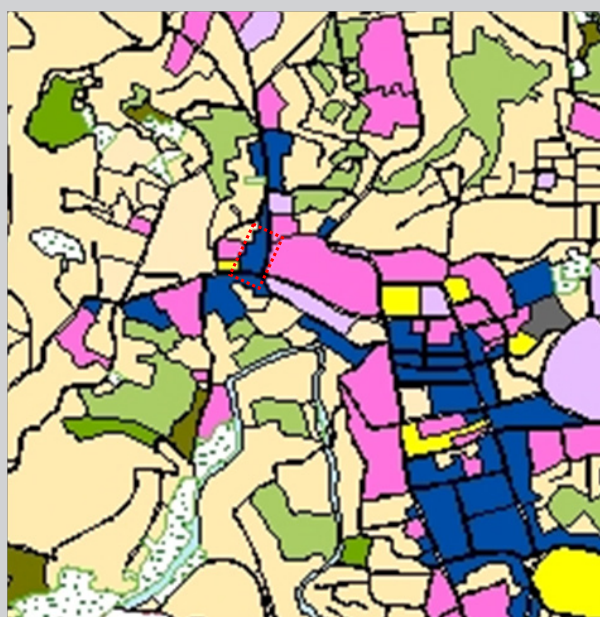
Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Private	Kappetipola Road	A05 Road	Welekade Dutch Fortress
Access	A05 Road			

Location Map



Adjacent Land Uses



Welekade Commercial Complex is locating facing to the Keppetipola Road and A5 Badulla Chenkaladi Main Road. this place catering for large population due to this is the only one commercial complex near to the Badulla General Hspital, Prison complex and Vishaka Vidyalaya.

Project justification

Project Type	New		Improvement		Extension	√	Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
		√					√	
Project Aspect	Economic			√	Social		√	
Project Objective	<ul style="list-style-type: none">• Develop Welekade Shopping complex as an institutional & commercial mixed development project.• Develop as a facilitating place for court complex							
Rational of project	Welekade commercial complex is important among the commercial complexes in Badulla city. The reason for that is the welekade junction has developed as a small town due to this commercial complex. Adjacent to this place Badulla General Hospital, Schools like Vishaka Vidyalaya, court complex, stationary shops, communication facilities, lowyers office, laboratory facilities are locating. The residential community near to this place are using to fulfill their day to day needs without going to the city center.							
	This is a two storied building and it attracts high amount of customer community. But when consider the demand there is a need to develop second floor for lowyers offices.							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Municipal Council					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date		Land Extent
						A R P

Project Description

Project Period	Short term (1> year)	√	Mid Term (1-3 year)		Long term (3< year)		Total Estimated Cost (Rs. Mn)	7500
Financing Method	Badulla Municipal council and Other							
Description of the Project	• Current two storied building develop as three storied building.							
Infrastructure Availability	Water	Required Capacity		5m³	Electricity		Required Capacity	
		Available Capacity		15m³			Available Capacity	
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	Collect by MC
Zone	High Density Mixed zone	Zoning compatibility			Yes	√	No	
History								
Present Status (Explain details with measurements)								

Existing
Situation



Project Budget	
Activity	Cost (Rs. Mn)
Construction of Second floor	50
Total	50
Approval Agencies	
Relevant Authority	Authorized person
Badulla Municipal Council	

10. Proposed River Based Development (Green Lane Drive)

Project Identification

Project Title	"Green Lane Drive" River Base Park
Project	River Based Development
Project Proposal	River Based Garden Development

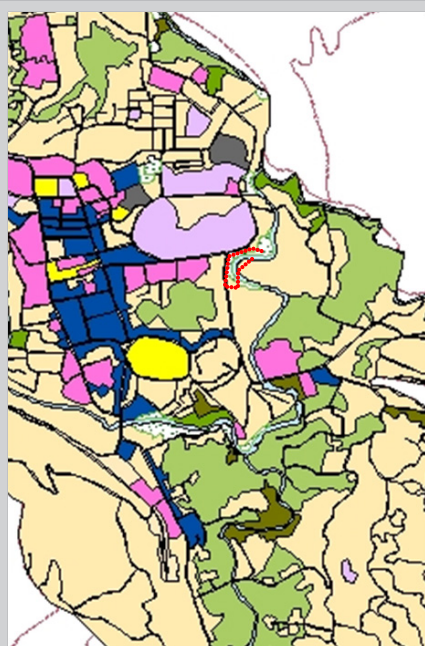
Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Green Lane Drive	BaduluOya	Private	Green Lane Drive
Access	Green Lane Drive			

Location Map



Adjacent Land Uses



Green Lane Drive garden zone is located facing to proposed A5 Road (existing Green Lane Drive). This is a grassy land and Badulu Oya is flowing from the east side. Badulla Vincent Dias Ground is located in front of the river reservation strip. And also the proposed Alikumbura Wetland Park is located at the east side.


Project justification



Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
	√		√					
Project Aspect	Economic			Social			√	
Project Objective	<ul style="list-style-type: none">Landscaping the river reservation.Develop a leisure activity corridor in town							
Rational of project	Badulu Oya has not tapped as a potential to develop the city beauty. Further to protecting the environmental sensitivity has became as an important thing. Accordingly proposed to develop the river riservation as a park with adding city beauty.							

Property Description

Present Land Ownership	UDA		Private		State	√			
Free Encumbrances	Yes	√	No		If No give details				
Details of the Ownership	Divisional Secretariat Office, Badulla								
Survey Plan Detail	Survey Plan No.		Name of the Surveyor		Date		Land Extent		
							A	R	P

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)	√	Long term (3< year)		Total Estimated Cost (Rs. Mn)	50
Financing Method	Badulla Municipal Council Fund / Tresuary Fund							
Description of the Project	<div></div> <p>Connect both river banks by developing a bridge with parks at both sides.</p>							
Infrastructure Availability	Water	Required Capacity		Electricity		Required Capacity		
		Available Capacity				Available Capacity		
	Solid waste Management system	Yes		No		If No give suitable SWM proposal		Collect by Municipal Council.

Zone	High Density Mixed zone	Zoning compatibility	Yes	√	No	
History						
Present Status (Explain details with measurements)						
Existing Situation	<div></div>					

Project Budget		
Activity	Cost (Rs. Mn)	
Garden Development	20	
Bridge Development	40	
Total	60	

Approval Agencies	
Relevant Authority	Authorized person
Divisional Secreteraite Office - Badulla	
Urban Development Authority	
Badulla Municipal Council	

11. KothalawaaWalawwa -Tourist Restaurant Project

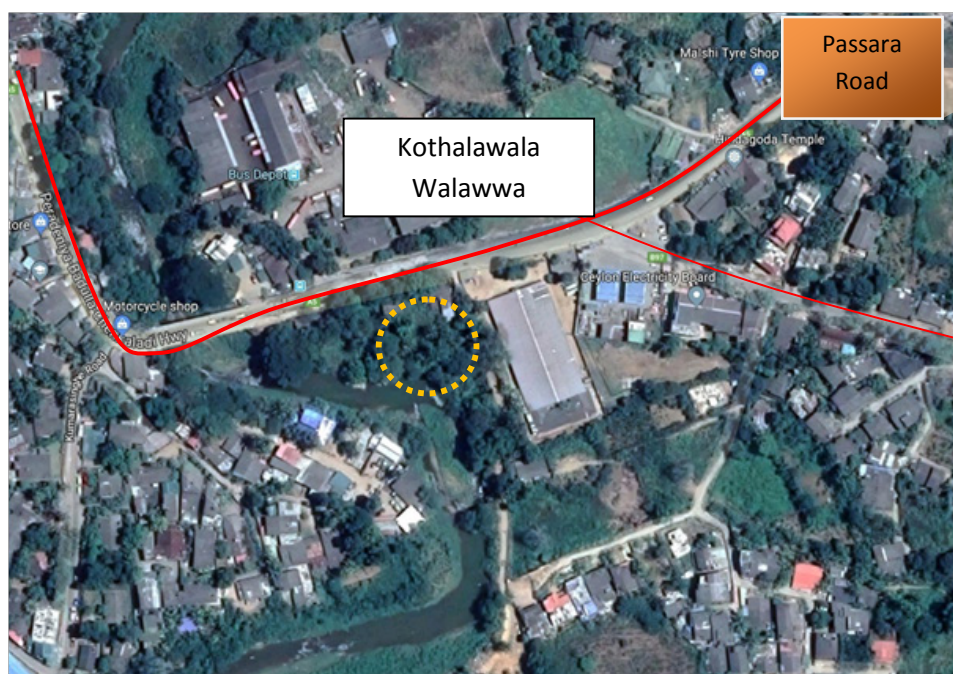
Project Identification

Project Title	KothalawaaWalawwa Tourist Restaurant Project
Project	Tourist Restaurant Development Project
Project Proposal	KothalawaaWalawwa Tourist Restaurant Project

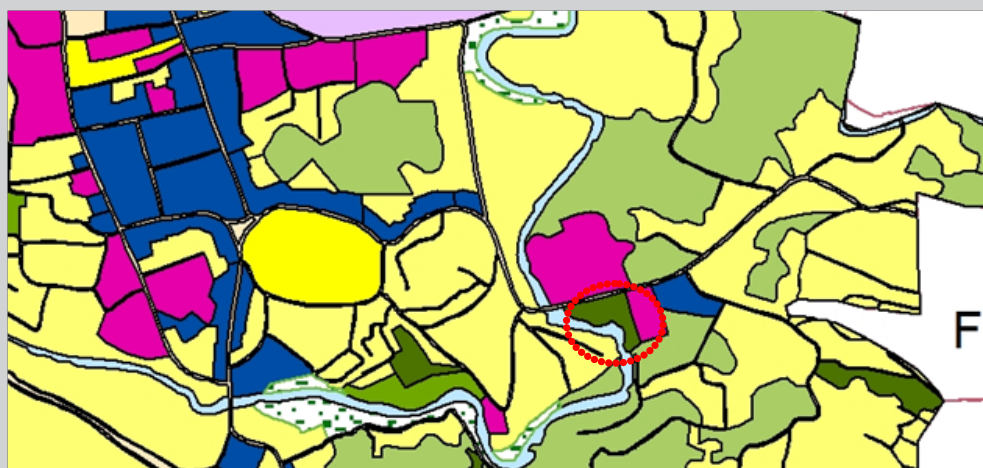
Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Passara Road	BaduluOya	BaduluOya	Private lands
Access	Passara Road			

Location Map



Adjacent Land Uses



The proposed land locates facing to the A5 Passara Road. Badulu Oya is at west and south sides of the land. Badulla Depot is at the front of this land.

Project justification

Project Type	New		Improvement	√	Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
	√	√		√				
Project Aspect	Economic		√	Social				
Project Objective	<ul style="list-style-type: none">Conservation of archaeological sites.Archaeological sites focus for an effective and efficient economic process.							
Rational of project	Badulla Kothalawala Walawwa belongs to a initial generation of Badulla city. This is a coservable building due to its archeological importance and historical building pattern. But the present condition is not good it is dilapidating. Although it is locating very near to townit is not contribute to the city economy. Considering those proposed to regenerate as a restaurant.							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Badulla Depot					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date		Land Extent
						A R 3 P 4

Project Description

Project Period	Short term (1> year)	√	Mid Term (1-3 year)		Long term (3< year)		Total Estimated Cost (Rs. Mn)		
Financing Method	Private Entrepreneurship and Other								
Description of the Project	It is proposed to carry out a Restaurant project in this land using the beautiful view of BaduluOya. It is necessary to develop the monuments with minimizing damages to existing buildings.								
Infrastructure Availability	Water	Required Capacity		10m³	Electricity		Required Capacity		-
		Available Capacity		-			Available Capacity		-
	Solid waste Management system	Yes			No		If No give suitable SWM proposal		Collect by Municipal Council.
	Zone	High Density Mixed zone	Zoning compatibility			Yes	√	No	

Present Status (Explain details with measurements)Existing
Situation**Project Budget**

Activity	Cost (Rs. Mn)	
Regeneration of the building	30	
Construction	30	
Total	60	

Approval Agencies

Relevant Authority	Authorized person
Department of Archeological conservation	
Urban Development Authority	
Badulla Municipal Council	
Badulla Divisional Secretarite	

12. ThaldenaWalawwa Tourist Restaurant Project

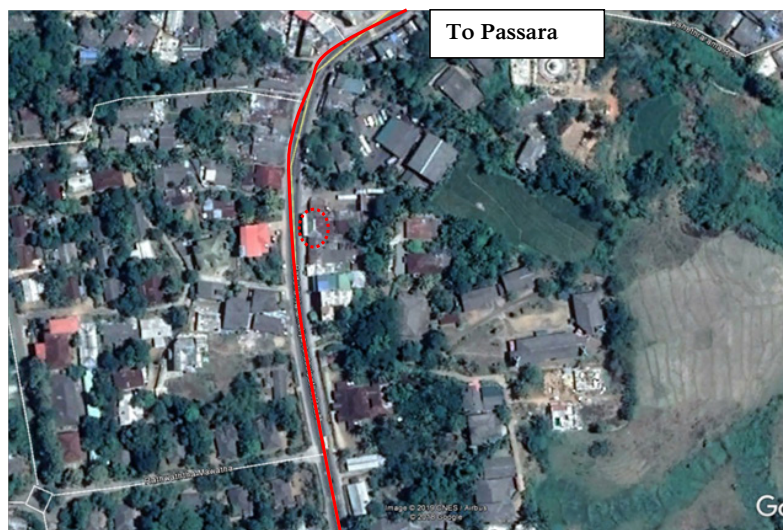
Project Identification

Project Title	ThaldenaWalawwa Tourist Restaurant Project
Project	Tourist Restaurant Development Project
Project Proposal	ThaldenaWalawwa Tourist Restaurant Project

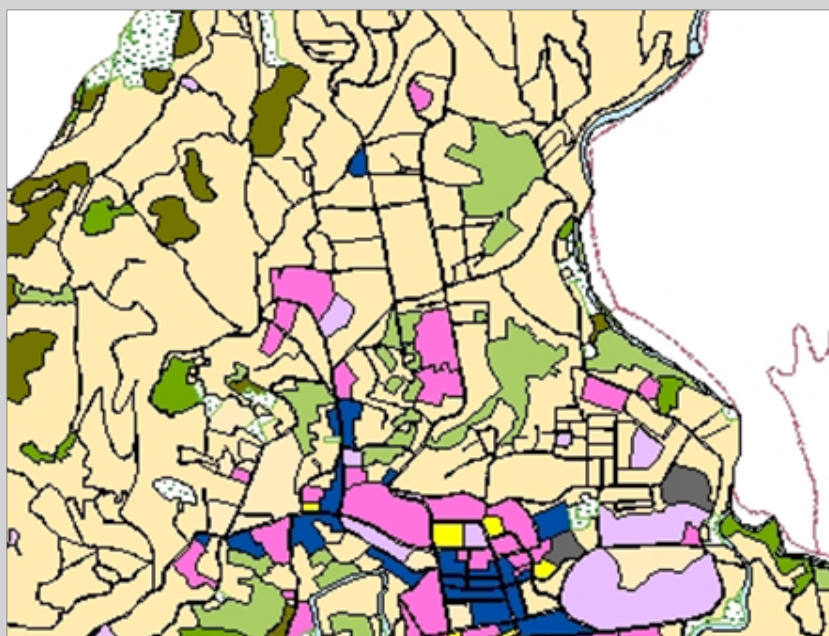
Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Private lands	Private lands	Private lands	Badulla Mahiyangana Road
Access	Badulla Mahiyangana Road			

Location Map



Adjacent Land Uses



This land situated face to Badulla Mahiyangana Road. Residential uses at north, south and west boundaries are important. This land close to Kailagoda junction and it is little bit far away from Badulla Town.

Project justification

Project Type	New		Improvement	√	Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
	√		√	√				
Project Aspect	Economic		√	Social				
Project Objective	<ul style="list-style-type: none">Conservation of archaeological sites.Archaeological sites focus for an effective and efficient economic process.							
Rational of project	Badulla Thadena Walawwa belongs to a initial generation of Baulla city. This is a coservable building due to its archeological importance and historical building pattern. But the present condition is not good it is dilapidating. Although it is locating near the town not contribute to the town economy. Considering those proposed to regenerate as a restaurant.							

Property Description

Present Land Ownership	UDA		Private	√	State	
Free Encumbrances	Yes		No	√	If No give details	
Details of the Ownership	Private					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date		Land Extent
						A R P

Project Description

Project Period	Short term (1> year)	√	Mid Term (1-3 year)		Long Term (3< year)		Total Estimated Cost (Rs. Mn)	
Financing Method	Private Entrepreneurship and Other							
Description of the Project	It is proposed to carry out a Restaurant project. It is necessary to develop such monuments in a manner that minimizes damage to existing buildings.							
Infrastructure Availability	Water	Required Capacity		10m³	Electricity		Required Capacity	-
		Available Capacity		-			Available Capacity	-
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	Collect by Municipal Council.
Zone	Middle Density Residential Zone	Zoning compatibility			Yes		No	

Present Status (Explain details with measurements)	
Existing Situation	

Project Budget		
Activity	Cost (Rs. Mn)	
Regenerate	20	
Construction	20	
Total	40	
Approval Agencies		
Relevant Authority		Authorized person
Department of Archeological conservation		
Urban Development Authority		
Badulla Municipal Council		

13. Propose Housing Development Project (Badulupitiya)

Project Identification

Project Title	Badulupitiya Housing Development Project
Project	Low Income Housing Redevelopment Project
Project Proposal	Settlement Regeneration Project

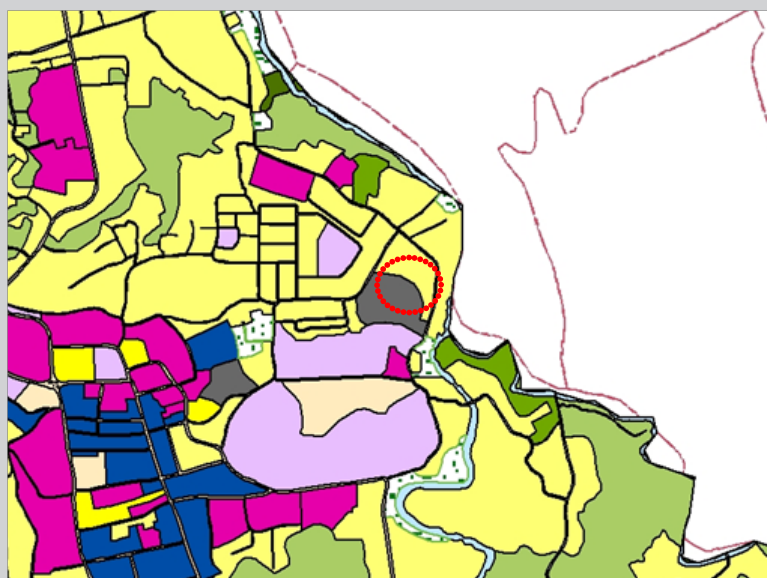
Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Private lands	Private lands	Badulla Cemetery	Badulla Cemetery
Access	Badulupitiya Road			

Location Map



Adjacent Land Uses



There are 42 families in 37 houses within the proposed land. This land face to Badulupitiya Road and west side locate cemetery.

Project justification

Project Type	New		Improvement	√	Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
Project Aspect	Economic			Social				
Project Objective	<ul style="list-style-type: none"> Enhance the living status of labor population 							
Rational of project	This project can be named as a development which cater for labor community who are working at offices being Badulla is the main administrative city of the area. Accordingly, there are 42 families and 37 of houses. The land extent of a house is about 1P-1.5P. Due to that a new housing project is proposed to enhance their living condition.							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Badulla Municipal Council					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
					A	R 2 P 5

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)	√	Long Term (3< year)		Total Estimated Cost (Rs. Mn)		
Financing Method	Badulla Municipal Council and Other								
Description of the Project	This is a sub project of Kanupella Road middle income housing project. The income from that middle income housing project and investments of residents are hoping to use for this project. Accordingly proposed to develop a three storied building with having 150sqm for a house.								
Infrastructure Availability	Water	Required Capacity		200m³		Electricity	Required Capacity		-
		Available Capacity		-			Available Capacity		-
	Solid waste Management system	Yes			No	√	If not given a suitable SWM proposal	Developing a separate management system for these housing units in parts of land of the housing development proposals	
	Zone	High Density Mixed Zone	Zoning compatibility			Yes	√	No	

History		
Present Status (Explain details with measurements)		
Existing Situation		

Project Budget	
Activity	Cost (Rs. Mn)
Construct Houses	300
Total	300

Approval Agencies	
Relevant Authority	Authorized Person
Badulla Municipal Council	
Urban Development Authority	

14. Alikumbura, Public Car Park, Urban Facilities and Wetland Park Project

Project Identification

Project Title	Alikumbura, Public Car Park, Urban facilities and Wetland Park Project
Project	Public Car Park, Urban Facilities and Wetland Park Project
Project Proposal	Alikumbura, Public Car Park, Urban Facilities and Wetland Park Project

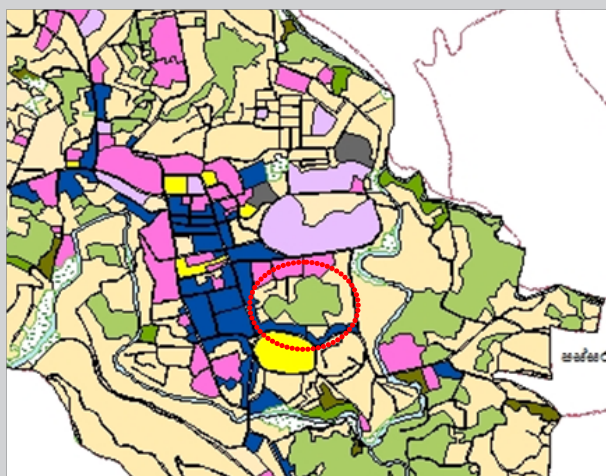
Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Private lands	KatharagamaDevalaya	Muthiyangana Raja MahaViharaya	Private lands
Access	Lower Street/ Green Lane Drive/ Passara Road			

Location Map



Adjacent Land Uses



This land strip has abandoned paddy land which is locating behind the Pahala Veediya main commercial corridor. Private lands, a government school and Uva Provincial Council are locating at the north of this land. at the eastern side there are private lands. Those lands are facing to the Green Lane Drive. The lands at the south are belongs to Muthiyangana Raja Maha Viharaya and Andeniya Raja Maha Viharaya. It includes trade centers, Piriven and residential uses. Pahala Veediya commercial uses are locating at the south of this land and it is the main commercial street.


Project justification

Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
	√	√	√					
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none">• Develop green zone in city center.• Reduce the Traffic congestion in Lower Street.• Highest and best use of the land through intergrated development							
Rational of project	<p>It is essential to preserve the city's green zones to develop the Badulla town since its environmentally sensitive town. But paddy lands are rapidly acquired for Commercial purposes due to the commercial demand.</p> <p>There are no parking places at Lower Street for commercial purposes and due to that the onsite parking in this road is a regular seen.</p> <p>And also the commercial uses in Lower Street are existance from a long period. Accordingly there is a trend of spreading commercial uses to outer area. But this land can be used to establish essential urban uses at town center. This land can be used to develop commercial purpose with having parking facilities.</p>							

Property Description

Present Land Ownership	UDA		Private	√	State			
Free Encumbrances	Yes	√	No		If No give details	Arrange the meetings.		
Details of the Ownership	Muthiyangana Raja MahaViharaya, Andeniya Raja MahaViharaya							
Survey Plan Detail	Survey Plan No.		Name of the Surveyor		Date		Land Extent	
	Karadekumbura-1772 Alimkumbrura		D,M.M. Disanayaka		3rd of December 2005		A 6	R P

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)		Long Term (3< year)		Total Estimated Cost (Rs. Mn)	
Financing Method	UDA funding/ Treasury Funding/ Badulla Municipal Council and Private							
Description of the Project								

Infrastructure Availability	Water	Required Capacity		Electricity		Required Capacity	
		Available Capacity				Available Capacity	
	Solid Waste Management system	Yes		No		If not give a suitable SWM proposal	
Zone	High Density Mixed Zone	Zoning compatibility		Yes	√	No	
History							

Present Status (Explain details with measurements)	
Existing Situation	 



Project Budget	
Activity	Cost (Rs. Mn)
Green Park	40
Parking Places	20
Mixed Development	60
Total	160
Approval Agencies	
Relevant Authority	Authorized person
Department of Agrarian Development	
Urban Development Authority	
Muthiyanganaya Temple	
Andeniya Temple	

15. Proposed New Road Development Project - Mediriya Road

Project Identification

Project Title	Proposed New Road Development Project - Mediriya Road
Project	Develop Road Facilities for Nadukara Kanda Residential Zone
Project Proposal	Develop A New Road Connecting Mediriya Road and Pilipothagama Road

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	-	-	-	-
Access	Mediriya Road, Pilipothagama Road			
Location Map				
Adjacent Land Uses	 <p>Proposed new road development is to connect Mediriya Road and Pilipothagama Road. National Water Supply And Drainage Board and residential uses at the south of this road and paddy lands and Madiriya Forest reservation is at the left side.</p>			


Project justification

Project Type	New		Improvement		Extension	√	Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
			√					
Project Aspect	Economic			Social			√	
Project Objective	<div><div></div><div><div>New Road Development.</div><div>Conservation of Mediriya Road Forest Reservation.</div></div></div>							
Rational of project	Mediriya Road exists as a foot path from mahogany reservation. The width of it is about 3m from Mediriya Road to mahogany reservation. After that it connects with Pilipothagama Road. Because of that people who are living in Nadukarakanda to Pilipothagama Road have to travel around 1km again. This road is a main road locates in proposed Health Zone. Because of that there is a need to develop this road up to Pilipothagama Road.							

Property Description

Present Land Ownership	UDA		Private	√	State	
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Private					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
	-	-		-	A	R P

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)	√	Long term (3< year)		Total Estimated Cost (Rs. Mn)	7500
Financing Method	Badulla Municipal council and other							
Description of the Project								

Infrastructure Availability	Water	Required Capacity		Electricity		Required Capacity	
		Available Capacity				Available Capacity	
	Solid waste Management system	Yes		No		If No give suitable SWM proposal	
Zone	Health Service Zone	Zoning compatibility		Yes		No	

Project Budget		
Activity	Cost (Rs. Mn)	
Road Development	20	
Total	20	
Approval Agencies		
Relevant Authority		Authorized person
Municipal Council - Badulla		
Urban Development Authority		

16. Institutional Complex Project at Badulupitiya Road, Prison Quarters Land

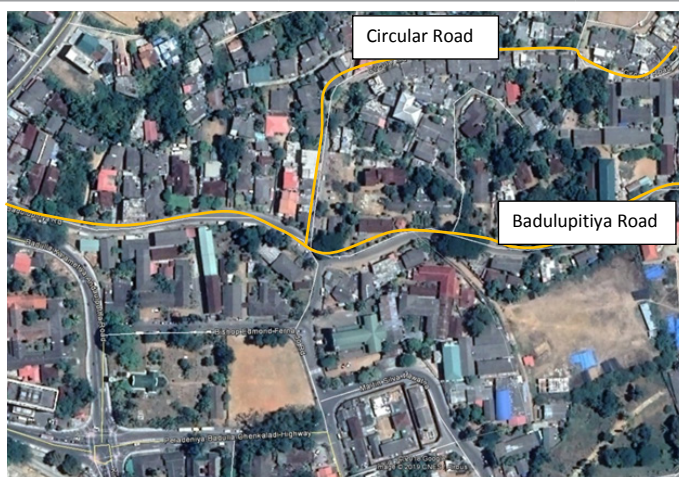
Project Identification

Project Title	Insitutional Complex Project at Badulupitiya Road, Prison Quraters Land
Project	Providing opportunities for institutional services
Project Proposal	Corporate Service Complex at Badulupitiya Road

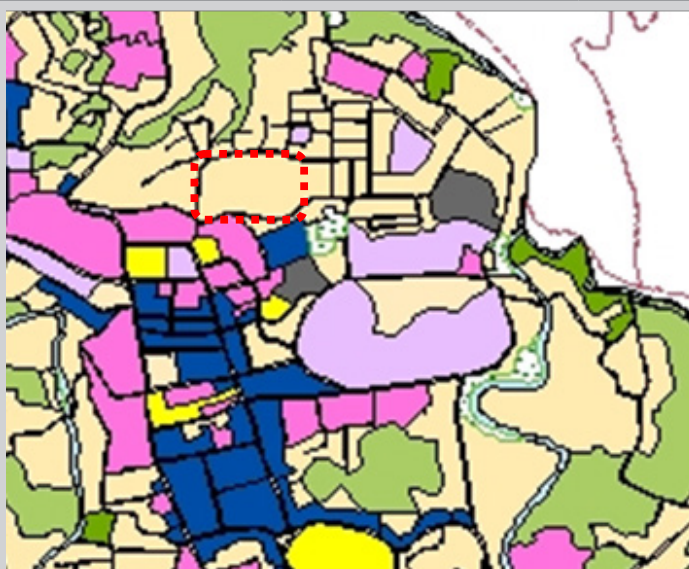
Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Private	MC lands	Badulupitiya Road	Turning cycle Road
Access	Badulupitiya Road, Turning cycle Road			

Location Map



Adjacent Land Uses



This land located closed to Badulla town and it exists with municipal quarters. Badulla prison is proposed to be relocated according to the Badulla Development Plan 2021-2030.

Accordingly, the prisons official quarters will be relocated and the area will be used for development purposes. The Survey Department, Board of Investment is locating close to this property. The quarters land belongs to the Badulla Municipal Council on the right. There are residential and commercial uses on the left of the land.

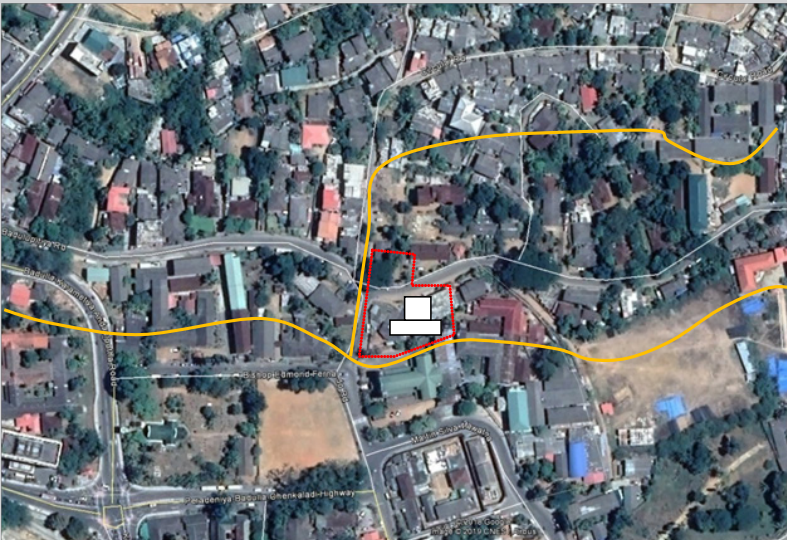
Project justification

Project Type	New	√	Improvement		Extension	√	Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
		√					√	
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none">• Providing access to city center for institutional services.• Develop the underutilized lands in Badulla city center							
Rational of project	<p>Although the Badulla is famous as the administrative capital of the area institutional uses are not spread within the city center. Further most of the offices are locate at renting spaces. Because of that the Badulla Development Plan 2021-2030 proposed to relocate the prison since there is no any direct involvement to the city functionality.</p> <p>Accordingly the quarters behind the prison also will be relocated under this project. This project proposed to develop the land with combining the bare land belongs to Municipal Council.</p>							

Property Description

Present Land Ownership	UDA		Private		State	√	
Free Encumbrances	Yes	√	No		If No give details		
Details of the Ownership	Prison Department/ Badulla Municipal Council						
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date		Land Extent	
	-	-		-		A 1	R o P o

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)	√	Long Term (3< year)		Total Estimated Cost (Rs.Mn)	300
Financing Method	Badulla Municipal Council/ Treasury fund/ Other							
Description of the Project	<p>A three story Institutional Complex is proposed to develop at this land. It will be includes offices and a day care center. Further the accessibility to private lands will be improved by widening the private road which is through this land up to 4.5m by this project.</p> 							

Infrastructure Availability	Water	Required Capacity		Electricity		Required Capacity	
		Available Capacity				Available Capacity	
	Solid waste Management system	Yes		No		If No give suitable SWM proposal	
Zone	High Density Mixed Zone	Zoning compatibility		Yes	√	No	
History							
Present Status (Explain details with measurements)							
Existing Situation							
Layout Map							

Project Budget		
Activity	Cost (Rs. Mn)	
Demolition of Buildings	1	
Development of Buildings	370	
Road Development	1	
Total	372	


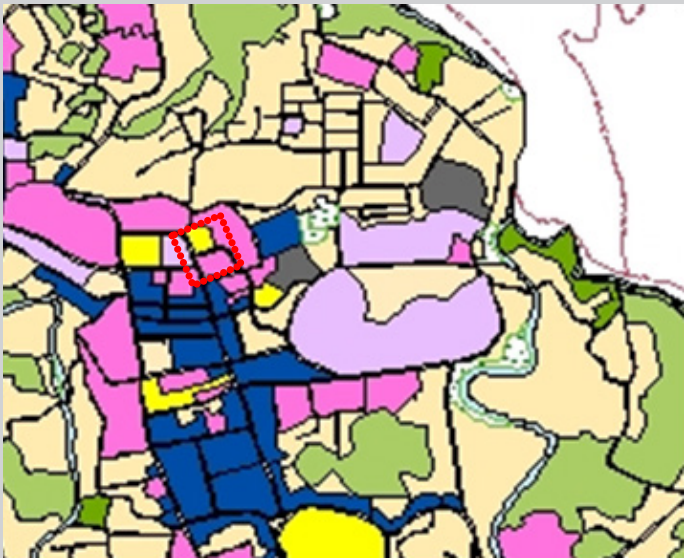
Approval Agencies	
Relevant Authority	Authorized person
Municipal Council - Badulla	
Urban Development Authority	
Prison Department	

17. Mixed Commercial Development Project at Proposed Prison Complex

Project Identification

Project Title	Mixed Commercial Development Project at Proposed Prison Complex
Project	Commercial services integrated complex development
Project Proposal	Mixed Commercial Development Project at Proposed Prison Complex

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Badulla Wenkaladi A5 Road	Racecourse Road	Prison Road	Badulla Wenkaladi A5 Road
Access	Badulla Wenkaladi A5 Road			
Location Map				
Adjacent Land Uses	 <p>It is proposed to relocate the Badulla prison from the Badulla town to out of the city limit according to the 2021 - 2030 Development plan. Currently it locates near to the commercial zone and Badulla Chenkaladi road. Racecourse Road is going around the land. Viharamahadevi Balika School is in north side, Provincial Administrative Department at east, Prison store land at south and Bank of Ceylon at west are located.</p>			

Project justification

Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
		√					√	
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none">• Lower Street commercial zone development.• Develop the underutilized lands at Badulla city center							
Rational of project	Even though it is considered the capital of the province for administrative services in Badulla, it is providing minimum lands for institutional services. Only 1% of migrant populations in the Badulla are coming to Badulla Prison.							
	There is a geographical barrier in establishing urban activities and facilities in Badulla. As a result, the city center has a high land price and demand for disasters less lands.							
	Among them the land with the prison is unique. The limited land space is a limitation to widen the prison activities. Because of that the Badulla Development Plan 2021-2030 proposed to relocate the prison since there is no any direct involvement to the city functionality.							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Department of Prison					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
	-	-		-	A	R 3 P 20

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)		Long Term (3< year)	√	Total Estimated Cost (Rs. Mn)	275
Financing Method	Tresuary fund and Private							
Description of the Project	The proposed project is to be developed as a three storied commercial building. The ground floor and the second floor of the building should be used for commercial services and third floor should be used for institutional services. The provision of the access should be entered in the east of the land area, as to minimize the traffic congestion in the city. The commercial community currently operating commercially viable commercial space and under phase 2 of the Administrative Complex is proposed to be re-established in this commercial zone.							
Infrastructure Availability	Water	Required Capacity			Electricity		Required Capacity	
		Available Capacity					Available Capacity	
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	
Zone	High Density Mixed Zone	Zoning compatibility			Yes	√	No	

Project Budget	
Activity	Cost (Rs. Mn)
Demolition of Buildings	1
Development of Buildings	274
Total	275

Approval Agencies	
Relevant Authority	Authorized person
Municipal Council - Badulla	
Urban Development Authority/	
Department of Prison	

18. Badulla Administrative Complex – Stage II Project

Project Identification

Project Title	Badulla Administrative Complex – Stage II Project
Project	Institutional services complexes Development
Project Proposal	Badulla Administrative Complex – Stage II Project

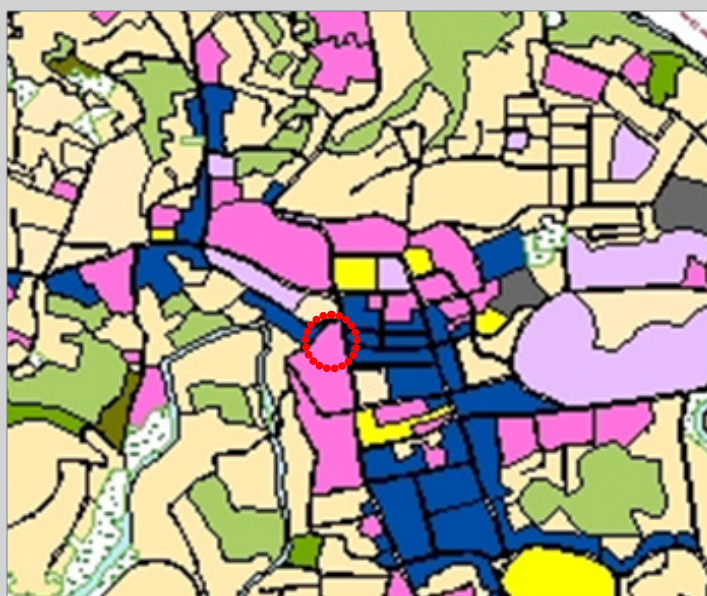
Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Hunukotuwa Road	Raja Vediya	Government Office Complex	Housing Development Authority
Access	Kings' Street			

Location Map



Adjacent Land Uses



Proposed land is located close to Governor's office and one side of this land is used for commercial uses facing Kings' Street. Behind this land National Housing Development Authority, National Electricity Board and Divisional Engineer's Office are located. Commercial places and current bus terminal are located in front of the land.

Project justification



Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
		√					√	
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none"> Allocate underutilized lands in Badulla town center for land development purposes. Allow land spaces for Administrative complexes in city center. 							
Rational of project	Even though it is considered as the capital city of the province for administrative services in Badulla, there are minimum numbers of lands providing for institutional services. Land uses also not well planned and most of the lands are separated for several uses. Accordingly the land facing to Kings' Street is proposed to develop as an administrative complex to well utilize the underutilized lands.							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Governor's office					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date		Land Extent
		-		-		A - R - P -

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)	√	Long Term (3< year)		Total Estimated Cost (Rs.Mn)	280
Financing Method	Tresuary Fund and other							
Description of the Project	This project is proposed to develop as a five story building. 40% of green plot coverage is proposed for this administrative complex development project. The accessibility of this project should not create any vehicular congestion.							
Infrastructure Availability	Water	Required Capacity			Electricity		Required Capacity	
		Available Capacity					Available Capacity	
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	
Zone	High Density Mixed zone	Zoning compatibility			Yes	√	No	
History								
Present Status (Explain details with measurements)								

Existing Situation	
Commercial Buildings	11
Proposed Building Plan	

Project Budget		
Activity	Cost (Rs. Mn)	
Exist building demolishing	2	
Building Development	278	
Total	280	

Approval Agencies	
Relevant Authority	Authorized person
Municipal Council - Badulla	
Urban Development Authority	
Governor's office	

19. Welekade Pubic Rest House Project

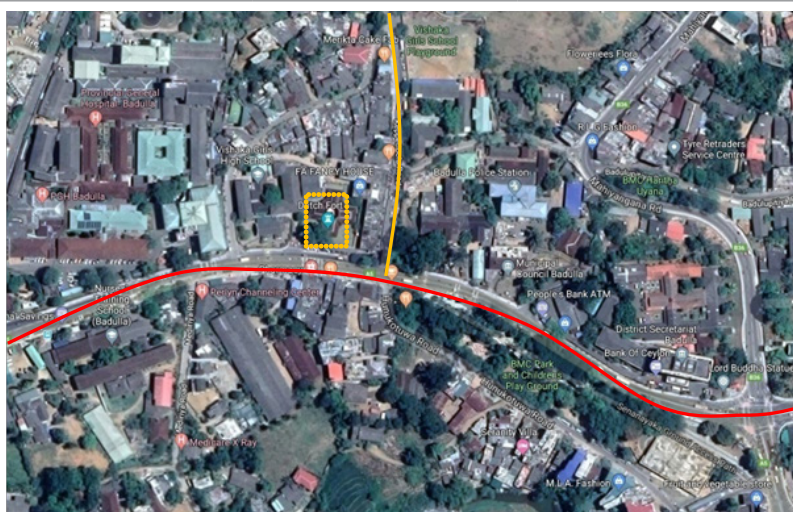
Project Identification

Project Title	Welekade Pubic Rest House Project
Project	A regeneration project including restaurant facilities and leisure facilities
Project Proposal	Welekade Pubic Rest House Project

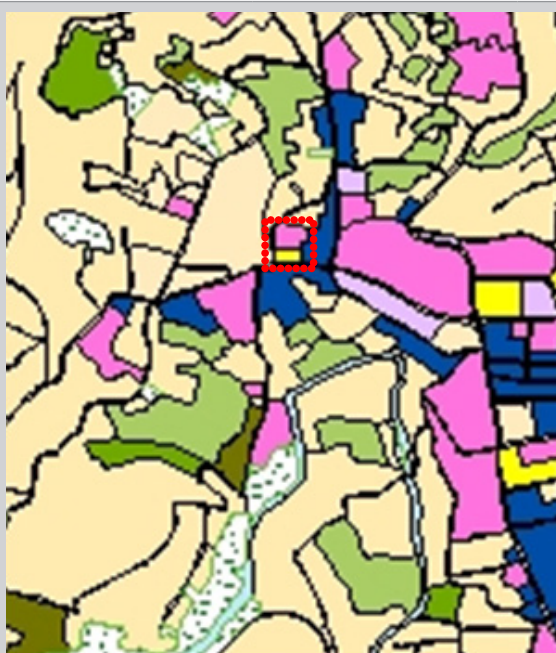
Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	Welekade MC Shop	Welekade MC Shop	A5 Badulla – Chenkaladi Road	VisakaVidaylaya
Access	Chankaladi- Badulla (A5)Road			

Location Map



Adjacent Land Uses



The proposed regeneration Project is closed to Badulla General Hospital. This site is facing the Badulla-Chenkaladi main road. Archeological monuments of Welekade Dutch Fort, Vishaka Vidyalyaya, Welekade Municipal Council, Public Market is situated in this area.

Project justification

Project Type	New		Improvement	√	Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
	√		√	√				
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none">• Develop the underutilized lands in Badulla town center• Allow land spaces in city center for resting places.							
Rational of project	Welekade Dutch Market is proven the rich history of Badulla. This place was built in pre colonial period and now it has listed as an archeological place. But this place is not adding any fuctionality to the city. Due that the place has abandoned. It is at least not open for tourists also. Considering those this project proposed to open this place for tourists without harming to the archeological importance.							

Property Description

Present Land Ownership	UDA		Private		State	√		
Free Encumbrances	Yes	√	No		If No give details			
Details of the Ownership	Archeological Department							
Survey Plan Detail	Survey Plan No.		Name of the Surveyor		Date		Land Extent	
	-		-		-		A -	R -

Project Description

Project Period	Short term (1> year)	√	Mid Term (1-3 year)		Long Term (3< year)		Total Estimated Cost (Rs.Mn)	≥80
Financing Method	Treasury funds and UDA funda							
Description of the Project	This project proposed to develop a restuarant and resting place without harming to the archeological monuments and to conserve the Welekade Dutch Market under the proposed archeological places regeneration project.							
Infrastructure Availability	Water	Required Capacity			Electricity		Required Capacity	
		Available Capacity					Available Capacity	
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	
Zone	Health Service Zone	Zoning compatibility			Yes	√	No	
History	This was identified as the commercial center constructed by the English Government after the Kandyan Convention of 1818. This market place was built in 1889 and was known as 'Welekade' because of locating above of paddy fields. The building had been built with wooden arches and some arches had been preserved by the Department of Archeology. Detailed information about this place is given in the book of British Architecture in Sri Lanka. The building has been designed with a courtyard, four entrance gates and four corridor towers. It is considered the first open market built in Sri Lanka. This building and the nearby buildings have been built as a cross. The archaeological and architectural value is preserved in its preservation.							
Present Status (Explain details with measurements)								

Existing
Situation



Project Budget	
Activity	Cost (Rs. Mn)
Monuments conservation and repairing	20
Make resting places	10
Total	30
Total	30

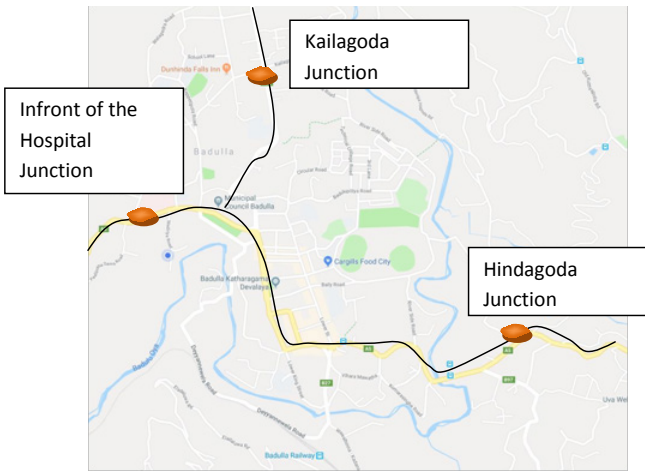
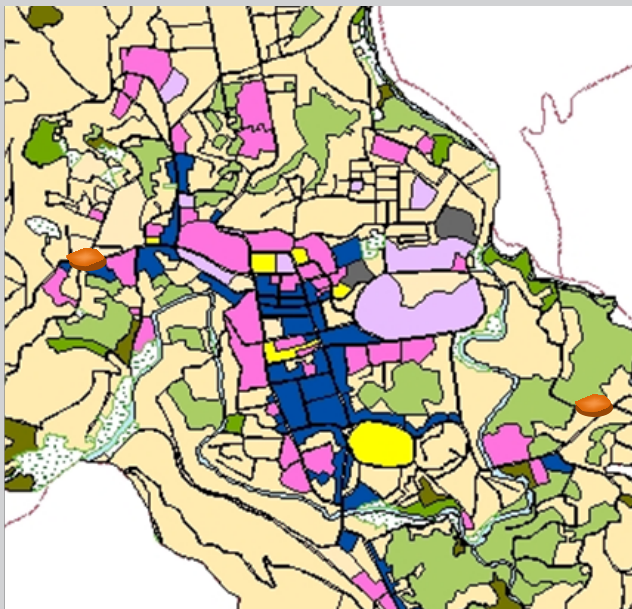
Approval Agencies	
Relevant Authority	Authorized person
Archeological Department	
Urban Development Authority	

20. Proposed Junctions Improvement

Project Identification

Project Title	Proposed Junctions Improvement Project
Project	Kailagoda, Infront of Hospital and Hindagoda Junction Improvements
Project Proposal	Kailagoda, Infront of Hospital and Hindagoda Junction Improvements

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	-	-	-	-
Access	A5 Badulla - Chenkaladi Road, Mahiyangana Road			
Location Map				
Adjacent Land Uses	 <p>Commercial and institutional services have been consolidated in the proposed junction of the Kailagoda. The residential property facing the junction has a trend to switching to institutional services or commercial use. There is a petrol filling station in the Hindagoda Junction and on the other there are paddy lands.</p> <p>The Badulla General Hospital, private hospitals and laboratories are in the Hospital Junction.</p>			

Project justification

Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
			√					
Project Aspect	Economic			Social			√	
Project Objective	<ul style="list-style-type: none">• Reduce the Traffic congestion in Badulla.• Develop alternative roads to avoide the Badulla town							
Rational of project	Badulla road network is a connected road network. In terms of road density, there is a road pattern of about 9 kilometers in length per square kilometer, but this will be created a traffic jam in future. Accordingly, the analysis found that the proper use of the existing road network is not used properly and that most of the service supply points have been gathered around the main roads.							
	Accordingly, this project proposed to improve the vicinity junctions to avoide the city center for passing through vehicles.							

Property Description

Present Land Ownership	UDA		Private		State	√	
Free Encumbrances	Yes	√	No		If No give details		
Details of the Ownership	Road Development Authority						
Survey Plan Detail	Survey Plan No.		Name of the Surveyor		Date		Land Extent
			-		-		A - R - P -

Project Description

Project Period	Short term (1> year)	√	Mid Term (1-3 year)		Long Term (3< year)		Total Estimated Cost (Rs.Mn)	30
Financing Method	RDA funds/ Treasury Fund							
Description of the Project	This project contain 03 steps. Accordingly, the Kailagoda Junction will be provided 4 accesses, hospital junction will be access to 4 roads and three accesses will be developed by Hindagoda Junction.							
Infrastructure Availability	Water	Required Capacity			Electricity		Required Capacity	
		Available Capacity					Available Capacity	
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	
Zone	High Density Mixed Zone	Zoning compatibility			Yes	√	No	

Project Budget	
Activity	Cost (Rs. Mn)
Kailagoda Junction Development	10
Infront pf Hospital Junction Development	10
Hindagoda Junction Development	10
Total	30

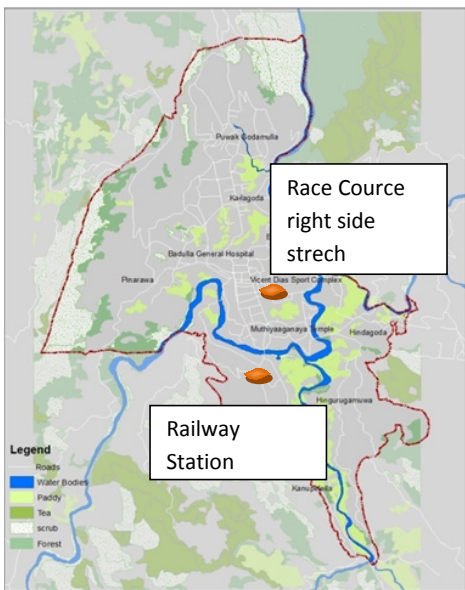
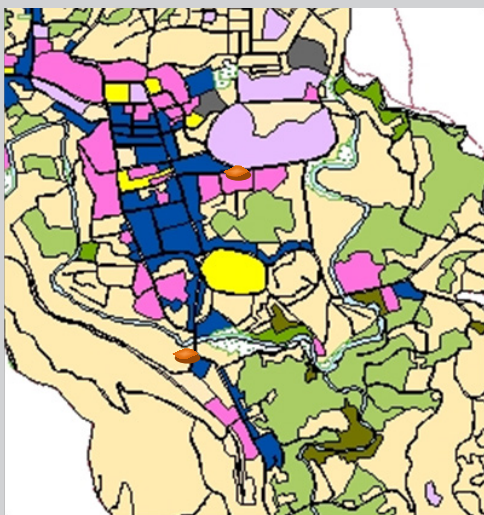
Approval Agencies	
Relevant Authority	Authorized person
Road Development Authority	
Badulla Municipal Council	

21. Proposed Parking Places

Project Identification

Project Title	Proposed Parking Places at Railway Station, and southside of the Racecourse Road.
Project	Proposed Parking Places at Railway Station, and southside of the Racecourse Road.
Project Proposal	Development of Parking Places at Railway Station, and southside of the Racecourse Road.

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	-	-	-	-
Access	A5 Badulla – Chenkaladi Road, Railway station Road			
Location Map				
Adjacent Land Uses	 <p>The land in front of the railway station is proposed for this development. Nowadays the sunday fair is locating at this land. Other than this, land strip at right of the Racecourse ground is also not using. Provincial libraries and commercial uses are locate nearby this and at the left the Vincent Dias ground and the Complex is locating.</p>			

Project justification

Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
			√					
Project Aspect	Economic		√	Social			√	
Project Objective	• Reduce the traffic congestion in Badulla.							
Rational of project	Badulla being as a service town, the number of vehicle movements are high. Among that the school service and staff service vehicles are parking in the city. They are using streets to park their vehicles and it creates a vehicular congestion. Infront of the railway station is using as a temporary parking space.							
	Accordingly proposed a parking space, maintain by railway station. Other than this the land strip at the right of the Vincent Dias Ground is not using and it is proposed to utilized.							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Municipal Council / Railway Department					

Project Description

Project Period	Short term (1> year)	√	Mid Term (1-3 year)		Long Term (3< year)		Total Estimated Cost (Rs. Mn)	30
Financing Method	UDA funds and Municipal Council / Railway Department							
Description of the Project	<p>This project contain 02 steps.</p> <p>Accordingly, a parking lot in front of the railway station will be developed as the first. The second stage is the land at left of the Race Course ground will be developed.</p>							
Infrastructure Availability	Water	Required Capacity			Electricity		Required Capacity	
		Available Capacity					Available Capacity	
	Solid waste Management system	Yes			No		If No give suitable SWM proposal	
Zone	High Density Mixed zone	Zoning compatibility			Yes	√	No	

Project Budget	
Activity	Cost (Rs. Mn)
Infront of Railway Station	10
Race Course Land Left side Section	10
Total	20



Approval Agencies	
Relevant Authority	Authorized person
Road Development Authority	
Railway Department	
Badulla Municipal Council	

22. Play Grounds Development

Project Identification

Project Title	Badulla Play Grounds Development Project
Project	Vincent Dias Playground, Football Playground, Cricket Playground, Basketball Playground development project.
Project Proposal	Vincent Dias Playground, Football Playground, Cricket Playground, Basketball Playground, Swimming pools redevelopment and proposed Hockey Playground development project.

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	-	-	-	-
Access	Race Course Road			
Location Map				
Adjacent Land Uses	 <p>Badulla playground is locating at the left side of the Racecourse Road and in right side there are commercial places, Uva Provincial Library Service Board, the Druid's Sports Club, river reservation near the Gangabada Road and the Badulla fire brigade. In addition, the Al-Adan Tamil Maha Vidyalaya, the current garbage yard, the Badulla Botanical Garden and residential uses are located.</p>			

Project justification

Project Type	New	√	Improvement	√	Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none"> Sports related integrated services development in Badulla Town. Beautification of the city landscape 							
Rational of project	<p>Badulla town is a service center for various services. Accordingly, Badulla is considered as the main sports capital of the Uva Province. By now, the Badulla Municipal Council has 14 playgrounds, 02 swimming pools and one walking path. These services are available to improve the health and wellness of the city's inhabitants, while the play areas of Vincent Dias's playground are very important.</p> <p>Vincent Dias Stadium, Football ground, Cricket Ground and Basketball Stadium are using to hold Uva provincial sports competitions and all island competitions. The stadium also has outdoor shows and shows.</p> <p>However, the existing facilities of the Sports Complex are confronted with difficulties due to inadequacy and lack of infrastructure facilities. The bad smell of the waste dumping yard, not having paths for training, not having electricity system and other facilities are main issues of this ground. The old swimming pool can also be used to the full extent possible through the development up to usable condition.</p> <p>In addition, the garbage dump will be shifted from this region and will be made a significant contribution to the Uva region through the development of this area as Hockey ground.</p>							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Badulla Municipal Council					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date		Land Extent
	-	-		-		A - R - P -

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)	√	Long Term (3< year)		Total Estimated Cost (Rs.Mn)	
Financing Method	Badulla Municipal Council and Sport Ministry							

Description of the Project	<p>This project contain 06 steps.</p> <p>Accordingly, as the first phase of the Vincent Dias Stadium, soccer stadium, and cricket stadium and basketball court will be developed in the following fields.</p> <p>1. Vincent Dias Stadium</p> <p>Development proposals for Vincent Dias Stadium</p> <p>Develop Synthetic Tracks.</p> <p>Preparation of mobile platform.</p> <p>Preparation of an internal fence to separate the Pavilion and the stadium.</p> <p>Preparation of a roof covering the existing two sides of pavilion.</p> <p>Construct a covered pavilion for public around the ground.</p> <p>Establishment of a gymnasium to develop the health of the general public.</p> <p>Install open body build sets to cover the existing walking ways.</p> <p>Preparation of a regular electrical system covering the stadium.</p> <p>As a Phase II,</p> <p>02. Soccer stadium</p> <p>Regularize the electrical system.</p> <p>Preparing a fence behind the playground.</p> <p>Construction of a concrete drainage system for the proper drainage of the playground and the refuse site between the boundary playgrounds.</p> <p>As a Phase III,</p> <p>03. Cricket stadium</p> <p>Improvement of the old pavilion.</p> <p>Preparation of the playground for play Division one category.</p> <p>Fencing around the playground.</p> <p>Construction of the electrical system at the stadium.</p> <p>Completed work on the newly constructed public pavilion.</p> <p>As a Phase IV,</p> <p>04. Basketball court</p> <p>Preparation of surface level.</p> <p>Construct a upper floor pavilion covering the Basketball court, Vincent Dias stadium and a sports ground and a playground, an office room and a gymnasium.</p> <p>Construction of a roof covering the public pavilion.</p> <p>Modernization of the electric lighting system.</p> <p>As a Phase V,</p> <p>08. Swimming pool</p> <p>Development of the old swimming pool for reuse.</p> <p>The swimming pool is developed for children and as a warm-up pool. Ground preparation around it, construct an auditorium and construct filters.</p> <p>Prepare a electrical system for main swimming pool.</p> <p>As the sixth stage,</p> <p>The current garbage yard is proposed to be developed as a complete hockey ground</p>
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Infrastructure Availability	Water	Required Capacity		Electricity		Required Capacity	
		Available Capacity				Available Capacity	
	Infrastructure Availability	Yes		No		If No give suitable SWM proposal	
Zone	High Density Mixed zone	Zoning compatibility		Yes	√	No	
History							
Present Status (Explain details with measurements)							
Existing Situation							


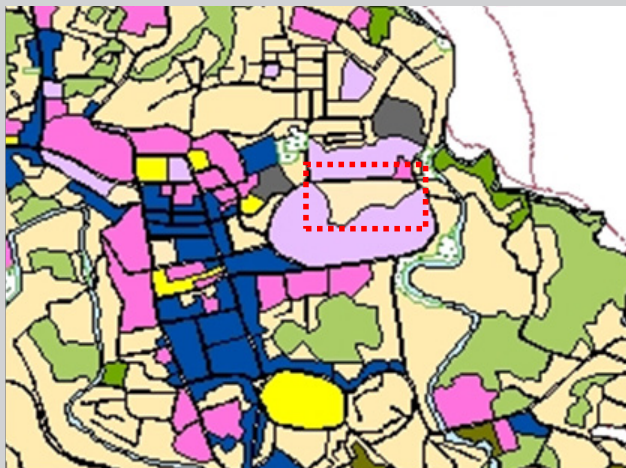
Project Budget		
Activity	Cost (Rs. Mn)	
Vincent Dias Playground		
Football Playground		
Cricket Playground		
Netball Playground		
Swimming Fool		
Completed Hockey Playground		
Total		
Approval Agencies		
Activity	Relevant Authority	Authorized person
	Municipal Council	Mayor
	Sports Department	Director
Regulations and Guidelines.		

23. Solid Waste Management Project

Project Identification

Project Title	Solid Waste Management Project
Project	Current waste yard shifting and proposed Meegahakewla solid waste management project.
Project Proposal	Current waste yard shifting and proposed Meegahakewla solid waste management project.

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	-	-	-	-
Access				
Location Map				
Adjacent Land Uses	 <p>The current garbage yard is adjacent to the main city of Badulla town. Accordingly, the garbage yard has been adjoined to the Badulla Vincent Dias Stadium, the Basketball Complex, the cricket stadium and the Badulla Botanical Gardens</p>			

Project justification

Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
			√					
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none">Relocate the existing garbage yardPromotion of the existing sports grounds and gardens							
Rational of project	The Badulla garbage yard is a long-standing problem. Accordingly, only 20 tons of garbage will be collected by the Municipal Council per day and all this garbage are disposing to the this yard. The solid waste is classified as decaying and non-decaying. However, 80% of the garbage has not classified and it exists as a garbage dump in this yard.							
	Accordingly, the harsh stench and disease spreading in the area have led to many cumbersome issues. Players practicing around the region are unsuccessful in doing this. By getting the maximum benefits from the sports activities and by helping for players around this area expected to achieve the vision							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Badulla Municipal Council					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
		-		-	A -	R - P -

Project Description

Project Period	Short term (1> year)	√	Mid Term (1-3 year)		Long Term (3< year)		Total Estimated Cost (Rs.Mn)	30
Financing Method	Badulla Municipal Council and Other							
Description of the Project	This project contain 02 steps.							
	As the first stage the existing garbage yard to be relocated at the proposed Meegahakiula yard. Accordingly the existibng garbage to be transported.							
	As the second stage the land filling to be done with a proper management. In further the daily collecting waste to be sorted as crumbling and non crumbling waste. The crumbling waste to be used to make fertilizer and non crumbling waste to be recycled. It is also proposed to set up a chemical within the yard.							
Infrastructure Availability	Water	Required Capacity			Electricity		Required Capacity	
		Available Capacity					Available Capacity	
	Solid waste Management system	Yes			No	If No give suitable SWM proposal		
Zone		Zoning compatibility			Yes		No	

Project Budget	
Activity	Cost (Rs. Mn)
Relocate the existing garbage	5
Land filling using garbage at Meegahakiula Yard	10
Daily management of the Meegahakiula yard	5
Set up Chemicals	10
Total	20
Approval Agencies	
Relevant Authority	Authorized person Mayor
Municipal Council	
Central Environment Authority	
SSolid Waste Management Authority	

24. Jogging Track project along Badulu Oya

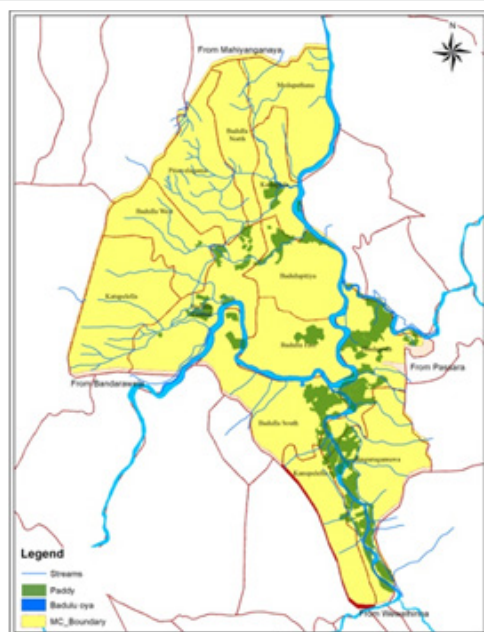
Project Identification

Project Title	Jogging Track Development beside the river
Project	Gambian Wall construction, Jogging track Track Development
Project Proposal	Project on Gambian Wall construction, Jogging track Track Development

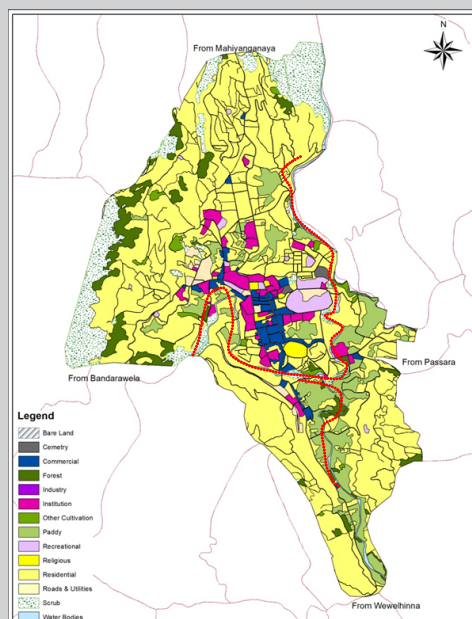
Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	-	-	-	-
Access				

Location
Map



Adjacent
Land Uses



Beside the Badulu oya there are majority of residential uses and paddy lands.

Project justification

Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
		√						
Project Aspect	Economic		√	Social			√	
Project Objective	<ul style="list-style-type: none">• Protection of Badulu Oya reservation• Increase the health condition of the residents							
Rational of project	<p>The main water source of the Badulla MC limit is Badulu oya. But this is not open up to the town function currently. This is beigng hidden potential to the town beautification. Currently several unauthorized constructions are existing along the breservation.</p> <p>Furter, Badulla residents do not have recreational spaces to grow their health conditions. To minimize the non communicable disease among residents while open up the badulu oya beutification to the town this project is proposing under badulla development Plan.</p>							

Property Description

Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Badulla Paththini Devalaya, Muthyanagnaya Temple, Katharagama Devalaya, Badulla					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
		-		-	A -	R - P -

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)		Long Term (3< year)	√	Total Estimated Cost (Rs. Mn)	1000
Financing Method	Tresury funds and Badulla Municipal Council							

Description of
the Project



Under this project it is proposing gambain walls and jogging tracks

Zone	Environment Sensitive Zone	Zoning compatibility	Yes	√	No	
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Project Budget		
Project Budget	Cost (Rs. Mn)	
Gambain wall Construction- Badulu oya	390	
Gambain wall Construction- Kuda oya	110	
Jogging Track Development	55	
Total	555	
Approval Agencies		
Relevant Authority	Authorized person	
Municipal Council		
Irrigation Department		
Muthiyanaganaya Temple		

25. Mixed Development Project – Thanayam Land Area.

Project Identification

Project Title	Mixed Development Project – Rest house Land
Project	Vertical Commercial Development and Institutional Mixed Use Development Project at Rest House Land Premises
Project Proposal	Mixed Development Project at Rest House Land Premises.

Project Location

Location	Province	Uva	District	Badulla
	DS Division	Badulla	LA	Badulla
Boundary	North	East	South	West
	-	-	-	-
Access	Kings' Street, A5 Road, North Lane			
Location Map				
Adjacent Land Uses	<p>The present Rest House land is locating adjacent to the King's Street A-5 Road and the North Lane. Accordingly, the Senanayaka Park, Senanayke underground car park, District Secretariat Office, Bazaar Street and commercial uses at Raja Veediya are located nearby</p>			

Project justification

Project Type	New	√	Improvement		Extension		Land development only.	
Project category	Conservation	Commercial	Landscape	Historical	Housing	Reconstruction	Other	
		√						
Project Aspect	Economic		√	Social			√	
Project Objective	• Establish a High-end commercial complex including office space, parking facilities and leisure activities.							
Rational of project	Even though it is considered the capital of the province for administrative services in Badulla, There are minimum spaces for institutional services. Land uses are not well planned and most of the lands are seperated for several uses. Accordingly the rest house land facing to Raja Veediya is proposed to develop to well utilize the underutilized lands. In that it is proposed to develop as a commercial complex considering the land value and adjacent land uses.							

Property Description

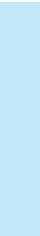
Present Land Ownership	UDA		Private		State	√
Free Encumbrances	Yes	√	No		If No give details	
Details of the Ownership	Badulla Municipal Council					
Survey Plan Detail	Survey Plan No.	Name of the Surveyor		Date	Land Extent	
		-		-	A -	R - P -

Project Description

Project Period	Short term (1> year)		Mid Term (1-3 year)		Long Term (3< year)	√	Total Estimated Cost (Rs.Mn)	1000
Financing Method	Badulla Municipal Council and Other							
Description of the Project	<p>This project is proposed to develop as a ten-story building including institutional and commercial uses. 30% of green plot coverage is proposed for this mixed commercial complex development project. The accessibility of this project should not create any vehicular congestion. Accordingly a tunnel is proposed to construct connecting this complex and Senanayaka underground parking space. And also the designs should follow the building line of the Raja Veediya. The vehicular entrance should be kept from the Library Road.</p>							
Zone	High Density Mixed zone	Zoning compatibility		Yes	√	No		

Project Budget		
Activity	Cost (Rs. Mn)	
Building Clearing	0.5	
Current institutions are shifting	3	
Construction	996.5	
Total	1000	
Approval Agencies		
Relevant Authority	Authorized person	
Badulla Municipal Council	Mayor	
Road Development Authority		
Urban Development Authority		
Archeological Department		

Part II



Chapter 7

Development Zones and Zoning Guidelines

7.1. Introduction

The preparation of the Zoning Plan was based on the findings of the critical analysis of development pressure prevailed within the planning area, hill slope analysis, habitable zones analysis and the bearing capacity analysis of zones.

The analysis of prevailing population density, housing density, distribution of infrastructure facilities, population growth rate and the road density within the zones laid the basis for analysis of the development pressure that has been prevailing in the area. The impact of each finding of the analytical works were assessed thereafter and weighted them depending on the magnitude of each of them. These results were then depicted on maps with the help of the Geographical Information System. (Map 2.9: Part I)

The hill slope analysis was based on the geographical slopes of the existing landscape. The Badulla Municipal Council area is situated at an elevation ranging from 625 Meters to 1025 Meters, this slope of the landscape was taken in to consideration in analysis of the hill slopes of Badulla. It has been found that the core town area is located within almost a flat land area while it is being surrounded by hilly mountains with slopes ranging from 0 degree to 68 degrees (Map 5.6 : Part I) in Badulla

The most suitable habitable areas were analyzed through a process during which the land slide prone areas and river reservations were first eliminated from the habitable lands and then road density, building density, and availability of infrastructure facilities were assessed. The results were critically analysed and depicted in the Map 5.1: Part I

The findings of the analytical works of each consideration based on each criteria were weighted according to the impact of each criteria that can exert on human habitation were presented on a map with the help of the Geographical Information System (GIS) technology, after identifying the planning area by five zones based on the findings of the above mentioned analytical process.

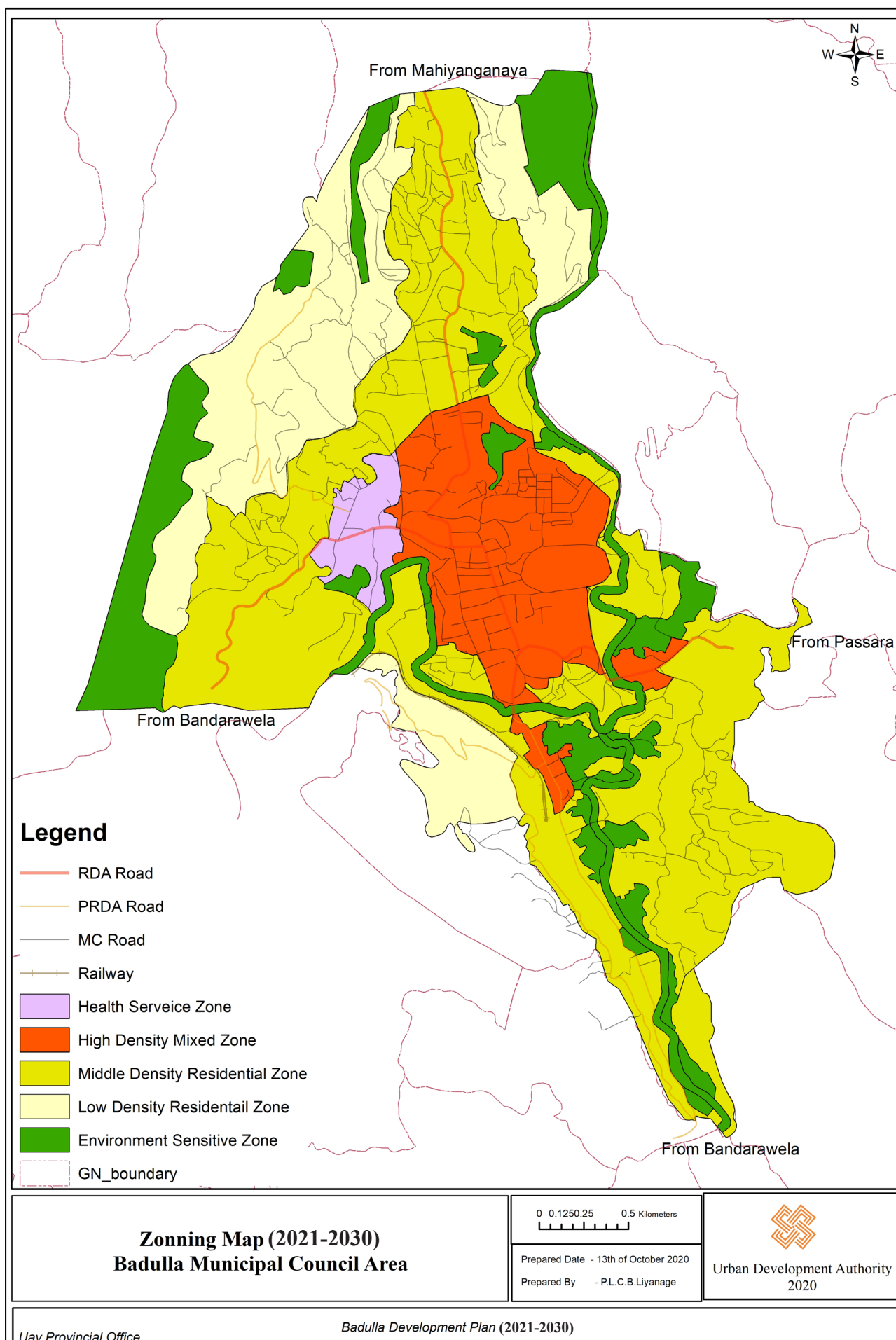
7.2 Development Zones

The five zone so identified are appended bellow.

1. Zone no 01 - Health Services Zone
2. Zone no 02 - High-Density Mixed Development Zone
3. Zone no 03 - Medium-Density Residential Zone
4. Zone no 04 - Low-Density Residential Zone
5. Zone no 05 - Environment Sensitive Zone

Accordingly the total land area of the Badulla Planning Area is covered under the five land use zones so identified and all the land uses too are covered under the said use zones. (Map No 7.1)

Map no 7.1: Proposed Zoning Plan 2020-2030



7.3 Zoning Factor

7.3.1 Calculation of Zone factor

The zone factor was determined to formulate the land use pattern within the vision formed for development of the Badulla Town under the Development Plan. The zone factor is a value determined with a view of achieving the end results of the vision formed for Badulla Development based on the prevailing environment, social, and economic conditions of the planning area. In this process the land ownership shall be entitled to a fair share in proportion to the ownership depending on the development potentials prevailing in the area.

The vision of the Development plan formed for the Badulla Town has been aimed at creation of a city in a green valley as a center of administrative and Health service facilities by the year of 2030. In this vision it has become necessary to promote administrative institutions and health facilities on a priority basis. As such the City will be prepared to facilitate the administrative and health facilities development as the main functions on a sustainable footing.

In line with the vision of the development plan formed for the city's development 5 development zones have been identified for guiding the future land use of the city, of which two use zones have been planned to accommodate and develop the administrative and health facilities as catalysts. However, it has been carefully laid down the zoning boundaries of the zones to prevent the expansion of the development activities in to the environmentally sensitive areas. Therefore while encouraging a higher density development in the core area of the town the density of development will be diminishing towards the fringe areas of the town. Accordingly the zone factor has been determined.

In the process of determining the zone factor, zonal sensitivity, development potentials and bearing capacity of each zone were identified in the first place. Secondly the population in each zone and the migratory population coming in to each zone from outside were estimated, depending on the level of services available. Thereafter the level of services and the resident population including the migratory population in each zone were decided within the limitations of bearing capacities of each zone. In this planning process it has become necessary to make a set of assumptions to facilitate the determination of the zoning factor realistically.

Determination of Permissible Floor area for developments According to the Form 'A' 'B' in Schedule 6 to Part IV of the Extraordinary Gazette Notification No. 2235/54 dated Thursday 08th July 2021, the coefficients applicable to the Badulla Development Plan indicated by table no 7.1 and 7.2

In determining the open space of the building pertaining to the said permissible floor area, the form 'E' of the above Gazette is indicated and it is specified in the Badulla Development Plan table no 7.3

Table No 7.1 : Form A - Permissible Floor Area Ratio

Form A - Permissible Floor Area Ratio																
Land extent (Sq.M)	Zone factor = 0.50				Zone factor = 0.75				Zone factor = 1.50				Zone factor = 2.00			
	Minimum Road Width				Minimum Road Width				Minimum Road Width				Minimum Road Width			
	**6m	9m	12m	15m or above	**6m	9m	12m	15m or above	**6m	9m	12m	15m or above	**6m	9m	12m	15m or above
150 less than 250	0.8	0.9	0.9	0.9	1.3	1.3	1.4	1.4	2.4	2.6	2.7	2.8	3.0	3.4	3.6	3.8
250 less than 375	0.9	1.0	1.2	1.3	1.3	1.6	1.8	2.0	2.6	3.2	3.6	4.0	3.2	3.6	4.5	4.5
375 less than 500	0.9	1.0	1.2	1.4	1.3	1.6	1.9	2.1	2.7	3.3	3.8	4.2	3.4	3.7	4.8	5.2
500 less than 750	1.0	1.1	1.3	1.5	1.4	1.7	2.0	2.2	2.8	3.4	4.0	4.5	3.5	4.0	5.0	6.0
750 less than	1.0	1.2	1.4	1.7	1.5	1.8	2.2	2.5	3.1	3.6	4.3	5.0	3.6	4.5	5.7	6.5
1000 less than	1.1	1.3	1.5	1.8	1.6	1.9	2.3	2.7	3.2	3.8	4.6	5.5	3.7	5.0	6.1	8.0
1500 less than	1.1	1.4	1.7	2.0	1.7	2.1	2.5	3.0	3.4	4.0	5.0	6.0	3.8	5.1	6.7	9.0
2000 less than	1.2	1.5	1.8	2.1	1.8	2.3	2.7	3.1	3.5	4.2	5.2	6.5	3.9	5.2	7.1	*10
2500 less than	1.2	1.6	2.0	2.4	1.9	2.4	3.0	3.6	3.6	4.4	5.5	7.0	4.0	5.3	7.4	*10.5
3000 less than	1.3	1.7	2.1	2.5	2.0	2.5	3.1	3.7	3.7	4.6	6.0	7.5	4.0	5.4	7.6	*11
3500 less than	1.4	1.8	2.2	2.6	2.2	2.6	3.3	3.9	3.8	4.8	6.3	7.7	4.0	5.5	7.8	*11.5
More than	1.5	1.9	2.3	2.8	2.5	2.8	3.5	4.0	4.0	5.0	6.5	8.0	4.0	5.6	8.0	*12

UL - Unlimited

Floor area allocated for parking facilities are not calculated for FAR

Above Floor Area Ratio shall not be applicable for the zones where number of floors or FAR indicated under the zoning Regulations

Above Permissible FAR may be restricted under the development plan based on the slope of the land

Clearance shall be taken from National Building Reserach Organization for the lands having slope more than 11°

* FAR more than or equal to 10.0 shall be permitted only for the roads having minimum of 12m (from road center) Building Line, if not maximum FAR shall be limited to 9.0

** Minimum road width of 7m shall be considered for the roads identified as 7m wide road in the particular development Plan

Table 7.2 : Form B - Number of Floors for 3m & 4.5m wide Roads

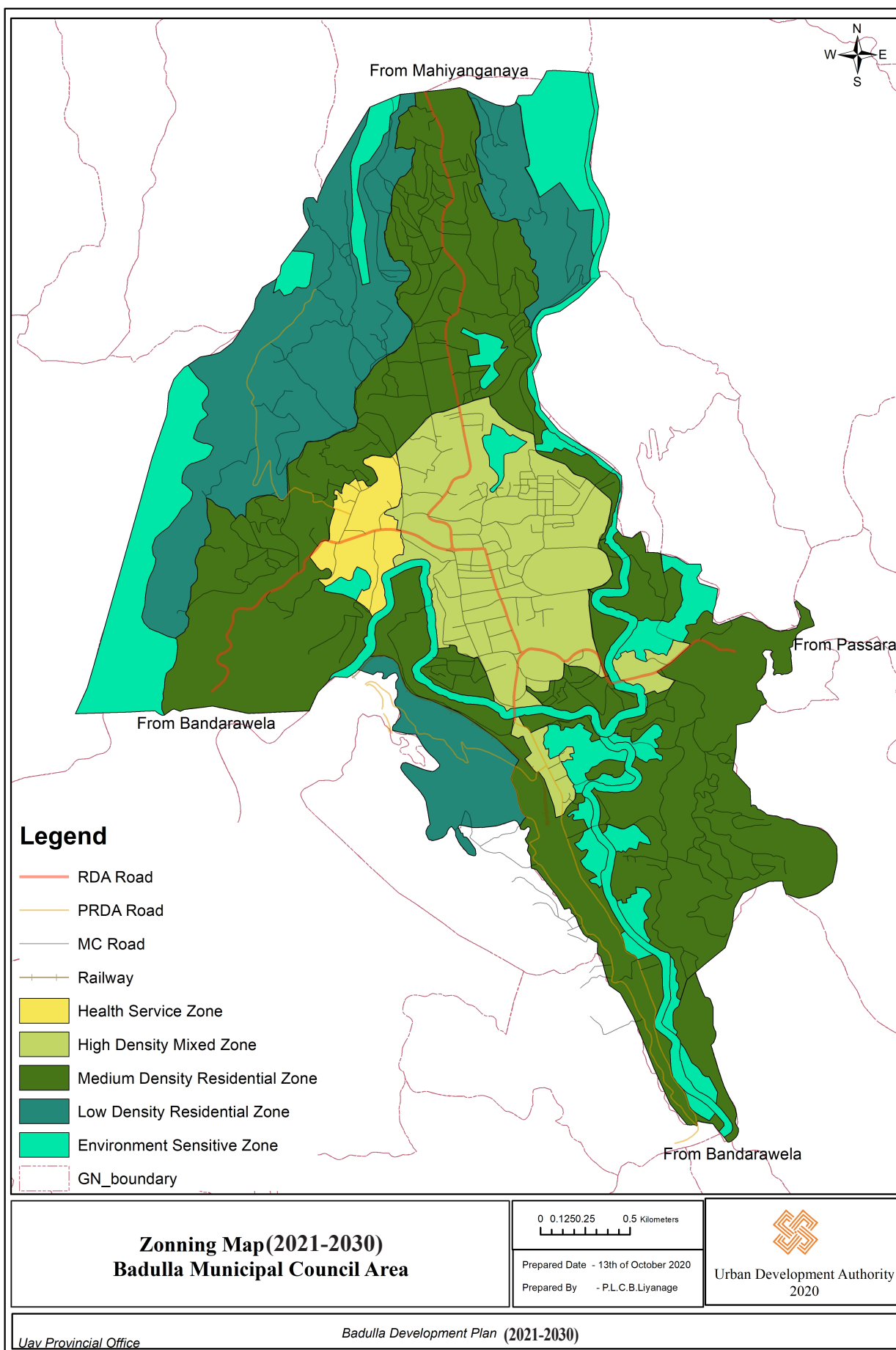
Form B - Number of Floors for 3.0m & 4.5m wide Roads						
Minimum Road Width	Minimum Site Frontage	Plot Coverage*	Maximum Number of Floors			
			Zone Factor 0.5 - 0.74	Zone Factor 0.75 - 1.24	Zone Factor 1.25 - 3.49	Zone Factor 3.50 - 4.00
3.0m	6m	65%	1 (G)	2 (G+1)	3 (G+2)	3 (G+2)
4.5m	6m	65%	1 (G)	2 (G+1)	3 (G+2)	4 (G+3)
Number of floors are indicated including parking areas						
Number of units allowed for each road shall not be changed						
* Where no plot coverage specified under the zoning Regulations						

Table 7.3 : E- Setback and Open Spaces

Form E - Setbacks & Open Spaces										
Building Category	Building Height (m)	Minimum Site Frontage (m)	Plot Coverage *		Rear Space (m)		Side Space (m)		Light Well for NLV	
			Non Residential	Residential	When no NLV is taking	When NLV is taking	When no NLV is taking	When NLV is taking	Minimum width	Minimum Area
Low Rise	less than 7	6	80%**	65%	2.3m	2.3m	-	2.3m	2.3m	5 Sq.m
	7 less than 15	6	65%	65%	3.0m	3.0m	-	3.0m	3.0m	9 Sq.m
Inter Mediate Rise	15 less than 30	12	65%	65%	4.0m	4.0m	1.0m and 3.0m	4.0m	4.0m	16 Sq.m
Middle Rise	30 less than 50	20	65%	65%	4.0m	5.0m	3.0m both side	5.0m	5.0m	25 Sq.m
High Rise	50 less than 75	30	50%***	50%***	5.0m	6.0m	4.0m both side	6.0m	6.0m	36 Sq.m
	75 and above	Above 40m	50%***	50%***	5.0m	6.0m	5.0m both side	6.0m	6.0m	****
NLV - Natural Light & Ventilation										
Building Height - Height between access road level to roof top or roof level (Including parking floors)										
* Where no Plot Coverage specified under the zoning Regulations										
** The entire development is for non-residential activities										
*** 65% plot coverage can be allowed only for the podium level not exceeding 20% of the tower height or 12 floors which ever is less										
**** Minimum area shall be increased by 1 Sq.m for every additional 3m height										

7.3.2 Zoning Plan (Density based)

Map no 7.2: Zoning Plan (Density based)



7.4. Common Guidelines for Planning Area

This chapter describes the common guidelines for planning area, in addition to the permissible uses and zoning guidelines that have been introduced in each zone of the proposed zoning plan as outlined in Chapter 8.

- 7.4.1. These guidelines apply to all the areas within the administrative limits of the Badulla Municipal Council area which have been declared as Urban Development Areas in the Extraordinary Gazette Notification No. 38/16 and 01.06.1979 under Section 3 of the Urban Development Authority Act No. 41 of 1978.
- 7.4.2. In addition to the provisions of this zoning plan, the Planning and Development Regulations applicable to any development work is regulated by the Gazette Notification No 2235/54 dated 08th July 2021. The said legalized Planning and Development Regulations also apply to the Badulla Municipal Council planning area.
- 7.4.3. In the event of developing any plot of land within this Urban Development Area the use of such land should comply only with the uses prescribed under the provisions of the Zoning Plan of the Badulla Development Plan.
- 7.4.4. When considered as “appropriate” by the Authority, any area containing development areas may be declared as a special project area, a redevelopment area, a special housing project area, a central business district, a scenic area, a conservation area, a cultural site etc. The especial regulations and guidelines which introduced to such areas will be applicable.
- 7.4.5. The Authority shall permit, restrict or prohibit the construction of any special building in the areas mentioned in clause 7.4.4 above. Easing the prohibitions imposed or imposing any new regulations for the use of the lands shall be done by the UDA
- 7.4.6. Approval is considered to continue existing uses in the proposed zoning plan. If such use is to be modified or expanded, prior preliminary planning clearance shall be obtained from the UDA. In this case, a maximum floor area of up to 10% will be considered for infrastructure and staff facilities.
- 7.4.7. For public buildings such as government offices and government hospitals at least 50% of the allocated parking facilities should be reserved for public parking before obtaining the Certificate of Conformity.
- 7.4.8. If a plot of land fall between two local authority areas, the UDA will decide on the use of that plot of land (with the consent of the relevant Local Authorities) by considering the zone to which the main access belongs.
- 7.4.9. Where a land lot is located in between two zones, the designated zone for the lot is determined as the zone which provides the main access to the respective lot.
- 7.4.10. The total floor area of any development in each zone prescribed under zoning provisions of the Badulla Development Plan should be computed as per the form A, B and E.
- 7.4.11. The Authority shall permit; provisions for external appearance of the buildings for protect the identity of the zones of development plan, to any person who request for the any development.
- 7.4.12. The Authority may specify the modification of the roof, color, materials used and architecture of existing buildings and proposed public structures within the zoning plan of proposed land use plan.
- 7.4.13. The Zone factor shall not be enforced in the Conservation and Special Conservation Zones, but only the zoning regulations of that particular zone shall be enforced.
- 7.4.14. The Authority may direct the owner or developer to maintain the landscaping of the development site in a manner that is approved by the Authority.
- 7.4.15. In the event that no reservation has been made by the relevant institution for the protection and maintenance of the environment in a particular place, the final decision will be taken by the Authority.
- 7.4.16. Permission will not be granted for any construction that obstructs road reservation or visibility.

- 7.4.17. Recommendation of the National Building Research Organization (NBRO) regarding land suitability and construction for each construction in these zones should be obtained.
- 7.4.18. Construction of buildings or structures within a public cemetery should be undertaken in compliance with the provisions of the Public Cemeteries and Burial Ground Ordinance No. 47 of 1946.
- 7.4.19. Residential buildings of more than two units and other buildings related to commercial and health services exceeding 400m² shall be implemented in accordance with the recommendations of the CEA with proper wastewater management mechanism. The UDA can request for a landscape plan along with the building plan where necessary
- 7.4.20. The Authority shall not permit the construction or expansion of hazardous, toxic and polluting industries or businesses within the Badulla Municipal Council Area.
- 7.4.21. Prior approval of the Central Environmental Authority and the Urban Development Authority should be obtained for any development work which may cause dangerous and unsafe environmental damage but essential for the public welfare.
- 7.4.22. Preliminary Planning clearance shall be obtained from the Authority for the developments in the low lying lands, marshy, paddy fields, Owita or other such lands except identified Public Open and Recreation Spatial Plan (PORS) or Environment Sensitive Zone of Badulla Development Plan 2021-2030.
- 7.4.23. If any land when using for waste recycling centers, sanitation centers or other related activities or expanding an existing waste dumping land, a 10m green fence should be maintained around that boundary.
- 7.4.24. In the situations where absence of a proposed Road width, development work will be considered if the following requirement are met:
 - A. If the road width requirement is 6 m and existing access road not less than 4.5m , if the road width requirement is 9m and existing access road not less than 6m.
 - B. Developer widens the required space for the road (space required up to 6 or 9 m) from his land without additional cost.
 - C. The road requirement width should be physically open before starting development work.
- 7.4.25. Every plot of land which adjacent to a river/stream or any other water source, their reserve should be kept in accordance with section 9.2.4 in Chapter 9
- 7.4.26. The buildings, monuments and structures of historical, archeological, heritage and architectural significant and listed in the annexure no 04 should be conserved without changing the original form of such structures. The rehabilitation or refurbishment of such structures or places shall be permitted subject to the clearances and approval of Department of Archeology and other relevant Government Agency.
- 7.4.27. Most of the bounds of the Zones depicted in the Zoning Map are based on the existing physical features such as roads, by roads, Railway Tracks and the water ways; in the event such bounds are not based on such physical features the bounds of the zones should be established with the aid of the X and Y Coordinates' Decimal Degree as indicated in the Google Earth Maps.
- 7.4.28. If a boundary change occurs between physical boundaries, and (Google Earth) geographical coordinates shown in the zoning plan, the physical boundary should be taken as the boundary of the zone.
- 7.4.29. The proposed road width and building boundaries applicable to public footpaths, stairways and all roads within the municipal limits shall be as mentioned in section 9.1 and 9.2 in Chapter 9

Chapter 8

Zoning Guidelines

8.1 Development Guidelines of Health Service Zone

The main objective of this development zone is to promote the health services in the Badulla Municipal Council Area, accordingly the Badulla General Hospital is expected to expand its hospital premises and services with a target of promoting it to the level of a Teaching Hospital. It is also expected to advance the services of the private sector medical and health services as well while developing the commercial facilities in line with the advancing health services. Some of the areas currently being used for residential purposes may have to be encouraged to change their uses to provide more accommodation facilities for the people employed in the health sector as well as for the people coming to the Badulla town from far distance places of the province to fetch medical services.

This expected development will be managed within a medium-density physical environment supported by the necessary infrastructure networks.

Zoning Boundaries

The decimal degrees of Google Earth for the boundaries of this region are X and Y coordinates with latitude and longitude are given in Annexure 1.

Table No 8.1 : Development guidelines for Health service zone

A	Zone Factor	2.0
B	Permissible Minimum Number of floors	-
C	Permissible Plot Coverage	Residential - 65% Non Residential- 70%
D	Minimum Plot size	The minimum land area is 250 square meters and the minimum land area for each use is as per the table 8.2.
E	Common Regulations enforceable within the Zone	i. The proposed development work as a combination of the approved uses listed in Table 8.2 will determine the minimum land area based on its main use. ii. The permissible plot coverage enforced on the development of paddy lands located outside of the environment Sensitive zone except for the single residential lots shall be 50%.

8.1.1 Permissible uses in Health service zone**Table No 8.2: Permissible Uses in Health service zone**

No	Use		Minimum plot size (Sqm)
1	Minimum plot size (Sqm)	Residential Houses	-
2		Hostel	-
3		Housing scheme (more than 4 units)	500
4	Health	Government Hospital	1000
5		Private Hospital	1000
6		Channeling centers	1000
7		Laboratory	-
8		Pharmacy	-
9		Medical Centers	-
10		Spa	-
11	Education	Vocational Training Institutes	1000
12	Institute	Offices	-
13		Banks, Financial institute	-
	Sports/ Recreational spaces	Library	
15		Physical Fitness Centers	-
16	Commercial	Super market	1000
17		Retail Shops	-
18		Cafeteria	-
19		Holiday resorts	500
20		Lodges	-
21		Funeral homes	20
22		Washing centers	

No	Use	Minimum plot size (Sqm)
23	Public vehicle park	-
24	Care Service Centers	-
25	Day Care Centres	-
26	Elders Home	-
27	Park	500

8.2 Development Guidelines of High Density Mixed Development Zone

The vision formed for the Badulla Town envisages providing maximum possible services for the service beneficiaries who visit the town from distant places of the province. The use of precious lands of the town for achievement of this objective is one of the focuses of this development zone. Accordingly, the development of infrastructure networks to support this objective will be another objective of this zone. This zone will also provide services relating to commerce, education and residential activities; hence it will be developed as a center of mix of all these service activities.

Zoning Boundaries

The decimal degrees of Google Earth for the boundaries of this region are X and Y coordinates with latitude and longitude are given in Annexure 1

Table No 8.3: Development Guidelines for High-Density mix Development Zone

A	Zone Factor	1.5
B	Permissible Minimum Number of floors	<p>The maximum height of buildings within the limits defined in the annexure 5 and as follow around the Muthiyanganaya sacred area shall not be permitted exceeding 3 floors or 35 feet.</p> <ul style="list-style-type: none"> Vihara Mawatha - From North Latitude 6°59'1.94", East Longitude 81° 3'36.80" to North Latitude 6°59'3.54" East Longitude 81° 3'44.89" Passara Road - From North Latitude 6°59'1.94", East Longitude 81° 3'36.82" To North Latitude 6°59'3.54" East Longitude 81° 3'44.89" Bank Road - From North Latitude 6°59'4.65", East Longitude 81° 3'36.05" To North Latitude 6°59'4.73", East Longitude 81° 3'37.06" Station road - From North Latitude 6°59'2.04", East Longitude 81° 3'36.57" to North Latitude 6°59'4.73", East Longitude 81° 3'35.90"
C	Permissible Plot coverage	<p>Residential - 65%</p> <p>Non- Residential - 80%</p>
D	Minimum Plot Size	The minimum land area is 150 square meters and the minimum land area for each use is as per the Table 8.4
E	Common Regulations in force within the zone	<p>i. The proposed development work as a combination of the approved uses listed in Table 8.4 will determine the minimum land area based on its main use</p> <p>ii. Before undertaking any development work within Muthiyangana Sacred area as defined under the Annexure 01 should be obtained Preliminary Planning Clearance of the Urban Development Authority and shall not be permitted liquor shops, meat and fish selling shops within the said area.</p>

8.2.1. Permissible uses and Minimum plot sizes of High-Density Mix Development Zone

Table No 8.4: Permissible uses and Minimum plot sizes of High-Density Mix Development Zone

No		Use	Minimum plot size (Sqm)
1	Residential	Residential Houses	-
2		Hostel	-
3		Housing scheme (more than 4 units)	500
4	Health	Private Hospital	-
5		Channeling centers	-
6		Laboratory	500
7		Pharmacy	-
8		Medical Centers	-
9	Education	Government and Semi-Government Schools	2000
10		International School	2000
11		Institutions of Higher Education	1000
12		Technical schools / vocational training institutes	1000
13		Kindergarten	500
14		Institutions conducting tertiary education courses	500
15		Private tutoring classes	500
16	Offices	Offices	-
17		Administrative office complex (More than 400 m ²)	1000
18		Banks, Financial Institutions	250
19	Sport/ Resting/ Recreational	Outdoor theaters	500
20		Indoor Sports Center	250
21		Day care centers	500
22		Community halls / cultural centers	-
23		Library	-
24		Public vehicle parks	-
25		Children's parks	500
26		Cinemas	-
27		Fitness Centers	-
28		Landscape areas	500

No	Use	Minimum plot size (Sqm)
29	Salon	-
30	Grocery Stores	-
31	Wholesale Stores	500
32	Building Material Outlets (Cement, Wire, Pipe etc.)	-
33	Bakery	-
34	Gas & Electricity (Vehicle Filling Stations)	300
35	Furniture outlets	-
36	Tourist Hotel	500
37	Restaurants	500
38	Cafeteria	500
39	Ceremonial Halls	500
40	City Hotels	1000
41	Lodge	-
42	Car dealerships	250
43	Vehicle Service Centers	-
44	Handicrafts / Home Industries (Environment friendly)	-
45	Liquor stores	-
46	Garage	-
47	Fish Outlet	-
48	Meat outlets (packed)	-

8.3 Development Guidelines of the Middle Density Residential Zone

The main focus of this zone is to provide largest extent of land area for the resident population while developing service centres at appropriate locations in view of providing such population. The reason for providing such a large extent of land area within this zone is that it is the zone with minimum number of incidents of natural disasters were recorded in the past and that the vision formed for the Badulla Town Development envisages encourage institutional development too within this zone while residential development is promoted with services necessary for the resident population. With this vision in mind this zone will be developed as a medium density residential zone while encouraging institutional and services required such as commercial and medical facilities for resident population.

Zoning Boundaries

The decimal degrees of Google Earth for the boundaries of this region are X and Y coordinates with latitude and longitude are given in Annexure 1

Table No 8.5 : Development Guidelines of Medium Density residential Zone

A	Zone Factor	0.6
B	Permissible Minimum Number of floors	The maximum height of buildings within the limits defined in the annexure 5 and as follow around the Muthiyanganaya sacred area shall not be permitted exceeding 3 floors or 35 feet. • Vihara Mawatha- From North Latitude 6°59'1.94", East Longitude 81° 3'36.80" to North Latitude 6°59'3.54" East Longitude 81° 3'44.89"
C	Permissible plot coverage	Residential – 65% Non- Residential- 80%
D	Minimum Plot Size	The minimum land area is 150 square meters and the minimum land area for each use is as per Table 8.6
E	Common regulations in force within the zone	i. Before undertaking any development work within Muthiyangana Sacred area as defined under the Annexure 05 should be obtained Preliminary Planning Clearance of the Urban Development Authority and shall not be permitted liquor shops, meat and fish selling shops within the said area. ii. The proposed development work as a combination of the approved uses listed in Table 8.6 will determine the minimum land area based on its main use

8.3.1. Permissible uses and Minimum plot sizes of Middle Density Residential Zone

Table No 8.6: Permissible uses and Minimum plot sizes of Medium-Density Residential Zone

No	Use		Minimum plot size (Sqm)
1	Residential	Residential Houses	-
2		Hostel	-
3		Housing scheme (more than 4 units)	500
4	Health	Laboratory	-
5		Pharmacy	-
6		Medical Centers	-
7	Education	International School	2000
8		Technical schools / vocational training institutes	1000
9		Kindergarten	500
10		Institutions conducting tertiary education courses	500
11		Private tutoring classes	500
12	Institution	Offices	-
13		Administrative office complex (More than 400m ²)	1000
14		Banks, Financial Institutions	250
15	Sport/ Resting/ Recreational spaces	Indoor Sports Center	250
16		Outdoor Theaters	500
17		Cinema	250
18		Fitness Centres	-

No	Use	Minimum plot size (Sqm)
19	Salon	-
20	Grocery Stores	-
21	Wholesale Stores	500
22	Bakery	-
23	Filling Station	1000
24	Gas & Electricity (Vehicle Filling Stations)	-
25	Vehicle Spare Parts outlets (Body Parts)	250
26	Furniture outlets	-
27	Tourist Hotel	500
28	Restaurant	-
29	Holiday Homes	500
30	Reception Hall	500
31	City Hotel	1000
32	Lodge	-
33	Liquor stores	-
34	Fish Outlet	-
35	Meat outlets (packed)	-
36	Vehicle dealerships	250
37	Garage	250
38	Service Centers	500
39	Building Material Finishing Companies (Brick Finishing)	500
40	Building material outlets (Sand, Stone, Cement, Wire, Pipe etc.)	500
41	Handicrafts / Home Industries (Environment friendly)	-
42	Community halls / cultural centers	-
43	Library	300
44	Day care centers	300
45	Elder's Home	500
46	Public Vehicle park	500
47	Landscape areas	-
48	Children 's Park	-

8.4 Development Guidelines of the Low Density Residential Zone

This zone has been established within an environmentally sensitive area, hence the uses that are likely to exert harmful impact on the sensitive environment shall not be permitted. Accordingly the low-density residential development will be encouraged within this zone while service activities with harmful effect impact on environment will not be permitted. The overall development will be managed as a low-density development zone

Zoning Boundaries

The decimal degrees of Google Earth for the boundaries of this region are X and Y coordinates with latitude and longitude are given in Annexure 1

Table No 8.7 : Development Guidelines of Low-Density Residential Zone

A	Zone factor	0.5
B	Permissible Plot Coverage	Residential- 60% Non- Residential- 65%
C	Minimum Plot Size	The minimum land area is 250 square meters and the minimum land area for each use is as per the Table 8.8
D	Common Regulations in force within the Zone	i. The proposed development work as a combination of the approved uses listed in Table 8.8 will determine the minimum land area based on its main use

8.4.1 Permissible uses and Minimum plot sizes of Low Density Residential Zone

Table No 8.8 : Permissible uses and Minimum plot sizes of Low -Density Residential Zone

No	Use		Minimum plot size (Sqm)
1	Residential	Residential Houses	-
2		Hostel	-
3	Health	Medical Centers (Maximum 50 sqm)	
4		Pharmacy	-
5	Education	Technical schools / vocational training institutes	1000
6		Kindergartens	500
7		Institutions conducting tertiary education courses	500
8	Institution	Professional Office	-
9	Social	Community halls / cultural centers	-
10		Library	-
11		Day Care Centers	-
12		Elder's Home	-

No	Use		Minimum plot size (Sqm)
13	Commercial	Salon	-
14		Grocery Stores	-
15		Stores	-
16		Bakery	-
17		Garage (Maximum 50 sqm)	-
18		Vehicle Spare Parts outlets (Body Parts)	-
19		Tourist Hotel	500
20		Restaurant	-
21		Holiday Home	500
22		Lodge	-
23		Handicrafts / Home Industries (Environment friendly)	-
24		Building Material Finishing Companies (Brick Finishing)	-
25		Building material outlets (Sand, Stone, Cement, Wire, Pipe etc.)	500
26	Sport/ Resting/ Recreational Spaces	Fitness Centers	-
27		Public Vehicle park	-
28		Children Park	-
29		Landscape area	-

8.5 Development Guidelines of the Environment Sensitive Zone

The main focus of this development zone is to maintain the land area of the zone with a minimum of built environment and with full of natural physical features such as wetlands, paddy areas forests and water bodies

Zoning Boundaries

The decimal degrees of Google Earth for the boundaries of this region are X and Y coordinates with latitude and longitude are given in Annexure 1

Table No 8.9 : Environment Sensitive zone

A	Zone factor	o
B	Permissible plot coverage	30%
C	Common Regulations in force within the Zone	<p>i. The Zone divide into main three parts, as showing in the annexure no 1</p> <ul style="list-style-type: none"> • Special Paddy & Low land conservation sub zone • River reservation sub zone • Scrub and forest sub zone <p>ii. No developments shall be permitted within the Special paddy & Low land conservation sub zone</p> <p>iii. Only tourism related development shall be permitted within the Scrub and forest sub zone. Following regulations are related to the tourism related developments within this zone</p> <ul style="list-style-type: none"> • Minimum Plot Size - 40 perches • Permissible plot coverage- 30% • Maximum height - 7m • Nature of Development - Temporary and semi- permanent construction of using eco-friendly materials such as tourist attractions, cabana hotels, etc. Without impact to the existing landscape. <p>iv. Only parks, jogging tracks and open vehicle parking areas are permitted within the River reservation sub zone</p> <p>v. The developments specified under section III and IV permitted only when such developments are granted with Preliminary planning clearance by the Urban Development Authority.</p>

8.5.1 Permissible uses and Minimum plot sizes of Environment Sensitive Zone

Table No 8.10: Permissible uses and Minimum plot sizes of Environment Sensitive Zone

No	Use	Remarks
1	Open Vehicle parks	Only River reservation sub zone
2	Jogging Track	Only River reservation sub zone
3	Tourism related development	Only Scrub and forest sub zone - Construction using eco-friendly raw materials such as tourist attractions, cabana hotels, etc which are not damaging the existing landscape.
4	Parks	Only River reservation sub zone

Chapter 9

Proposed road width, Building Line and Reservations

Development of the road network in the Badulla Development Plan, the proposed road width has been given for the roads to be widened on the basis of prudent priorities and for other roads building line have been introduced.

9.1 Proposed road widths are in operation

Table No 9.1 : Proposed Widths of Roads

No	Road	Grade	Proposed Road Width (m)	Building Line (Meters From Center of the Road)
1	Badulla Andaulpotha Road (Mahiyangana Road)	B	9	12
2	Kappetipola Road	D	9	10
3	Bandaranayaka Mawatha	D	9	10
4	Staion Road	A	9	12
5	Wewelhinna Road	C	9	10
6	Springvalley Road	B	9	12
7	Hanwella Road	D	9	7.5
8	Eladaluwa Road	C	9	10
9	Alugolla Road	D	9	10
10	Clinic Road	D	9	10
11	Hunukotuwa Road	D	9	10
12	Deyyannewela Road	D	8	7.5
13	Hingurugamuwa Road	D	8	7.5

No	Road	Grade	Proposed Road Width (m)	Building Line (Meters From Center of the Road)
14	Kalugalpitiya Road	D	8	7.5
15	Mediriya Road	F	7	4.5
16	Piyaratha Road	E	7	4.5
17	Pilopothagama 1st Lane	E	7	4.5
18	Mediriya 1st lane	E	7	4.5
19	Madapathana Road	E	4.5	6
20	Rock Hill Road	E	4.5	6
21	Dalada Ela Road	C	7	10
22	Andeniya Road	E	7	4.5
23	Kailagoda Road	D	7	10
24	Pilipothagama Road	D	7	10
25	Eladaluwa 1st lane	E	4.5	4.5

9.1.1 Opening of the Proposed Street Line for Developments

1. If the land is released for public use as a gift to the relevant Local Authority, Road Development Authority, Provincial Road Development Authority in the widening of the proposed road by a deed without obtaining money in the event that there is a proposed road line to the development land at the time of issuing the development permit Authority will consider the development by substituting the width of the line as the physical width to be considered for development
2. In the development of a plot of land which facing the proposed road width in operation, the width of the road should be at least 7 m. The land should be transferred to the local government body or the relevant institution free of charge.
3. Development activities carried out within the High Density Mixed Development Zone and the Health Services Zone, the space required for the proposed road width should be maintained from the center of the road to the relevant land without any hindrance.
4. If it is desired to get advantage of square footage of the proposed road width, the part belonging to the development land from the center of the road should be released to the road and handed over to the relevant institutions by a deed of gift.

9.2 Building lines are in operation

In addition to the roads identified for development on a priority basis under the Badulla Urban Development Plan, building boundaries have been introduced for existing roads considering future development needs. Accordingly, building restrictions will apply to the following roads.

9.2.1 Building lines for roads owned by Road Development Authority, Provincial Road Development Authority and Municipal Council

Table No 9.2: Building Lines for Roads

No	Name of the Road	Grade	Width of Road (Meters)	Building Line (Meters From Center of the Road)
1	Peradeniya, Badulla, Chenkalady (Bandarawela and Passara) road	A	10	15
2	Lower Street	A	10	15
3	Kings' Street	D	10	12
4	Lower King's Street	D	6	10
5	London Road	D	6	7.5
6	Bank Road	D	7.5	10
7	Cocowatta Roas	D	7.5	10
8	Udaya Raja Mawatha (Road)	D	6	7.5
9	R.H.Gunawardhane Road	D	6	7.5
10	Dewala Road	D	6	7.5
11	Dharmadutha Road	D	6	7.5
12	Post Office Road	D	7.5	7.5
13	Southern Street	D	10	10
14	Market Street	D	10	7.5
15	Library Road	D	10	7.5
16	Bandaranayake Mawatha	D	10	10
17	Badulupitiya Road	D	6	7.5
18	Martin Silwa Mawatha (Road)	D	10	10
19	Racecourse Road	D	10	10
20	Welagedara Road (Dayagunasekara Mawatha (Road))	D	7.5	12
21	Green Lane Drive	D	6	10
22	Gangabada Road	E	10	15
23	Vishaka Road	E	4.5	6
24	Vihara Mawatha	E	4.5	6
25	Kumarasingha Lane	E	4.5	6
26	Northern lane	E	4.5	6
27	Botnical Garden Road	E	6	10
28	Rokhil Circular Road	E	4.5	6
29	Thurangapitiya Road	E	4.5	6
30	Church Road	E	4.5	6
31	Batuwatta Road	E	4.5	6
32	Rathwaththa Cross Road	E	4.5	6
33	Gurandawaththta Road	E	4.5	6
34	Kopiawaththa Road	E	4.5	6

No	Name of the Road	Grade	Width of Road (Meters)	Building Line (Meters From Center of the Road)
35	Wheel's Park Road	E	4.5	6
36	Badulupitiya Lane	E	4.5	6
37	School Lane	E	4.5	6
38	Pahalawaththa Road	E	4.5	6
39	Rathpaha Road	E	4.5	6
40	Rathpaha Circular Road	E	4.5	6
41	Kshethraarama Road	E	4.5	6
42	Pahalagama Road	E	4.5	6
43	Pahalagama Niwasa Road	E	4.5	6
44	Annasiwattha Road	E	4.5	6
45	Millaniya Road	E	4.5	6
46	Sujaatha Road	E	4.5	6
47	Pahalawaththa Road	E	4.5	6
48	Mahindaraama Road	E	4.5	6
49	Badulusirigama Road	E	4.5	6
50	Saraananda Road	E	4.5	6
51	Aluthgedara Road	E	4.5	6
52	Cemetary Road	E	4.5	6
53	Galkanda Road	E	4.5	6
54	Jalanala Road	E	4.5	6
55	Rockhill Circular Road	E	4.5	6
56	Suwineetha Gama Road	E	4.5	6
57	Karunapura Road	E	4.5	6
58	Bonyland Road	E	4.5	6
59	Pitawelagama Road	E	4.5	6
60	Sri Rahula Road	E	4.5	6
61	Jinanandagama Road	E	4.5	6
62	Yampanawattha Road	E	4.5	6
63	Rockhill Cross Road	E	4.5	6
64	Walikemulla Road	E	4.5	6
65	Upper Aluth Ela Road	E	4.5	6
66	Oliyamandiya Road	E	4.5	6
67	Katupelallagama Road	E	4.5	6
68	Weduruwe Upali Mawatha	F	3	4.5
69	Wimaladharma Mawatha	E	4.5	6
70	Galkanda Road	E	4.5	6
71	Dalukebedda Road	E	4.5	6
72	Milagasthenna Road	E	4.5	6

No	Name of the Road	Grade	Width of Road (Meters)	Building Line (Meters From Center of the Road)
73	Water Tank Road	E	4-5	6
74	Jalanala (Pipe) Raod	E	4-5	6
75	Hela Mawatha (Raod)	E	4-5	6
76	Bangalawaththa Road	E	4-5	6
77	Kanupelalla 2nd Lane	E	3	4.5
78	Welagedara Lane	F	3	4.5
79	Badulupitiya 1st Lane	F	4	4.5
80	Badulupitiya 2nd Lane	F	4	4.5
81	Badulupitiya 3rd lane	F	4	4.5
82	Badulupitiya 4th lane	F	4	4.5
83	Badulupitiya 5th lane	F	3	4.5
84	Badulupitiya 6th lane	F	3	4.5
85	Oliyamandiya 1st Lane	F	3	4.5
86	Local Government Quarter's Lane	F	3	4.5
87	Technical College Lane	F	4	4.5
88	Badulupitiya 7th Street	F	3	4.5
89	Badulupitiya 8th Street	F	3	4.5
90	Badulupitiya 9th Street	F	3	4.5
91	Badulupitiya 10th Street	F	3	4.5
92	Badulupitiya 11th Street	F	3	4.5
93	Badulupitiya 12th Street	F	3	4.5
94	Rathnapala Road	F	3	4.5
95	Baddegedara Foot path	F	3	4.5
96	Lower King's (Raja) Street 1st Lane	F	3	4.5
97	Lower King's (Raja) Street 2nd lane	F	3	4.5
98	Clinic (Sayanaya) Road	F	3	4.5
99	Galkanda 2nd Lane	F	3	4.5
100	Wimaldharma 1st Lane	F	3	4.5
101	Target Range Road	F	3	4.5
102	Gangabada Lane	F	3	4.5
103	Nikathanna Road	F	3	4.5
104	Karunapura Road	F	3	4.5
105	Judge's Hill Road	F	3	4.5
106	Kurunduwattha Road	F	3	4.5
107	Andeniya Lane	F	3	4.5
108	Wedaruwe Upali Mawatha	F	3	7

9.2.2 Foot paths and lanes owned by Municipal Council

Table No 9.3: Building lines for Foot paths and Lanes

No	Name of the Road	Grade	Width of Road (Meters)	Building Line (Meters)
1	Bathalawattha Foot path	F	3	3
2	Wellawattha Foot path	F	3	3
3	Ela Addara Foot Path	F	3	3
4	Dawunde Gedara Foot Path	F	3	3
5	Galkanda 1st Lane	F	3	3
6	Veeryapura Foot path	F	3	3
7	Pinnalanda Foot path	F	3	3
8	Bogahapihilla Foot path	F	3	3
9	Udathanna Foot path	F	3	3
10	Kailagoda Foot path	F	3	3
11	Dehithanna Foot path	F	3	3
12	Thanna Foot path	F	3	3
13	Hingurugamuwa wattha Road	F	3	3
14	Nilawella Foot path	G	3	3
15	Meda Ela Foot path	G	2	3
16	Pahalagama Foot path	G	2	3
17	Oyapahala Foot path	G	2	3
18	Hindagoda Ela Foot path	G	2	3
19	Ella Wattha Foot path	G	2	3
20	Kandala Ela Foot path	G	2	3
21	Sirimalgoda Ela Foot Path	G	2	3
22	Himburukambura Foot path	G	2	3
23	Mahakumbura Foot Path	G	2	3
24	Dalada Ela Foot path	G	2	3
25	Wljesooriya Foot path	G	2	3
26	Gallombuwa Foot path	G	2	3
27	Uposathaaramaya Foot path	G	2	3
28	Wadimandiya Foot Path	G	2	3
29	Karagoda Foot path	G	2	3
30	Welagedara Foot Path	G	2	3
31	Pahala (Lower) Ela Foot path	G	2	3
32	Kudaoya Foot path	G	2	3
33	Rikgahawattha Foot path	G	2	3
34	Ambanpitiya Foot Path	G	2	3
35	Salgaduwatta Foot path	G	2	3
36	Wijaya Foot path	G	3	3

No	Name of the Road	Grade	Width of Road (Meters)	Building Line (Meters)
37	Paragathanna Foot path	G	2	3
38	Karunapura Meda Foot path	G	2	3
39	Karunapura Foot path	G	2	3
40	Dalukebedda Foot path	G	2	3
41	Kehelakotuwa Foot path	G	2	3
42	Himbiliyagahakotuwa Foot path	G	2	3
43	Selamawan Foot path	G	2	3
44	Jalanala 3rd Lane	G	2	3
45	Nikawatta Foot path	G	2	3
46	Epitagedara Foot path	G	2	3
47	Milagahakotuwa Foot path	G	2	3
48	Kanupelalla Foot path	G	2	3
49	Wimaladharma 1 Foot path	G	2	3
50	Medapathana padi pela Foot path	G	1.5	3
51	Dambagahawattha Foot path	G	2	3
52	Ihala Gedara Foot path	G	2	3
53	Bogahawattha Foot path	G	2	3
54	Kalugamameda Foot Path	G	2	3
55	Kohowila Foot path	G	2	3
56	Pilipothagama Foot Path	G	2	3
57	Thewatta Foot Path	G	2	3
58	Rathnagewatta Foot path	G	2	3
59	Galbokkawatta Foot Path	G	2	3
60	Diyakiwula Foot path	G	2	3
61	Badulupitiya Upper Foot path	G	2	3
62	Maliyadda Foot Path	G	2	3
63	Ambagahawatta Foot Path	G	2	3
64	Hanwella Foot Path	G	2	3
65	Hingurugamuwaela Foot Path	G	2	3
66	Railway Foot path	G	2	3
67	Kotabehinna Foot Path	G	2	3
68	Maligammana Foot Path	G	2	3
69	Galkanda Foot path	G	2	3
70	Bulathwattha Foot Path	G	2	3
71	Oliyamandaela Road	G	2	3
72	Rathpahameda Foot path	G	2	3
73	Dikwattha Foot path	G	2	3
74	Jayasinghagedara Foot Path	G	2	3
75	Galheeya Foot path	G	2	3

No	Name of the Road	Grade	Width of Road (Meters)	Building Line (Meters)
76	Jalanala Foot Path	G	2	3
77	Pinarawa Lane (Patumaga)	G	2	3
78	Udawattha Foot Path	G	2	3
79	Udagedara Foot path	G	2	3
80	Dambakote Foot Path	G	2	3
81	Kanupelalla 1 Lane (Patumaga)	G	2	3
82	Kanupelella 2 Lane		2	3
83	Kanupelalla 3 Lane (Patumaga)	G	2	3
84	Welangolla Foot Path	G	2	3
85	Wimaladharma Lane (Patumaga)	G	2	3
86	Oliyamandiyabodhiya Foot Path	G	2	3
87	Batuwattha Foot Path	G	2	3
88	Gankara Foot Path	G	2	3
89	Dimbulagahagedara Foot Path	G	2	3
90	Jalanala 1 Lane (Patumaga)	G	2	3
91	Jalanala 2 Lane (Patumaga)	G	2	3
92	Hillandagedara Foot Path	G	2	3
93	Pilipothagama 3 Foot Path	G	2	3
94	Ugurassagahawaththa Foot Path	G	2	3
95	Gammaddawaththa Foot Path	G	2	3
96	Polgaswaatha Foot Path	G	2	3
97	Malithhawaththa Road	G	2	3
98	Adigahathanna Foot Path	G	2	3
99	Himbiliyagahakotuwa Foot Path	G	2	3
100	Kohowila Lane	G	2	3

The building limit for roads owned by the Badulla Municipal Council which is not mentioned in Table 9.2 and 9.3 is 6 meters and the building limit of the applicable institution is valid for roads where ownership changes

9.2.3 Building line for other roads

- i. Other Public Roads maintained by the Badulla Municipal Council not mentioned in Table 9.2 and 9.3
 - Building line 4.5 m
- ii. Private Roads
 - 1.5 m from the building line

9.2.4 Reservation for Canals/Streams and Rivers

Table No 9.4 : Reservation

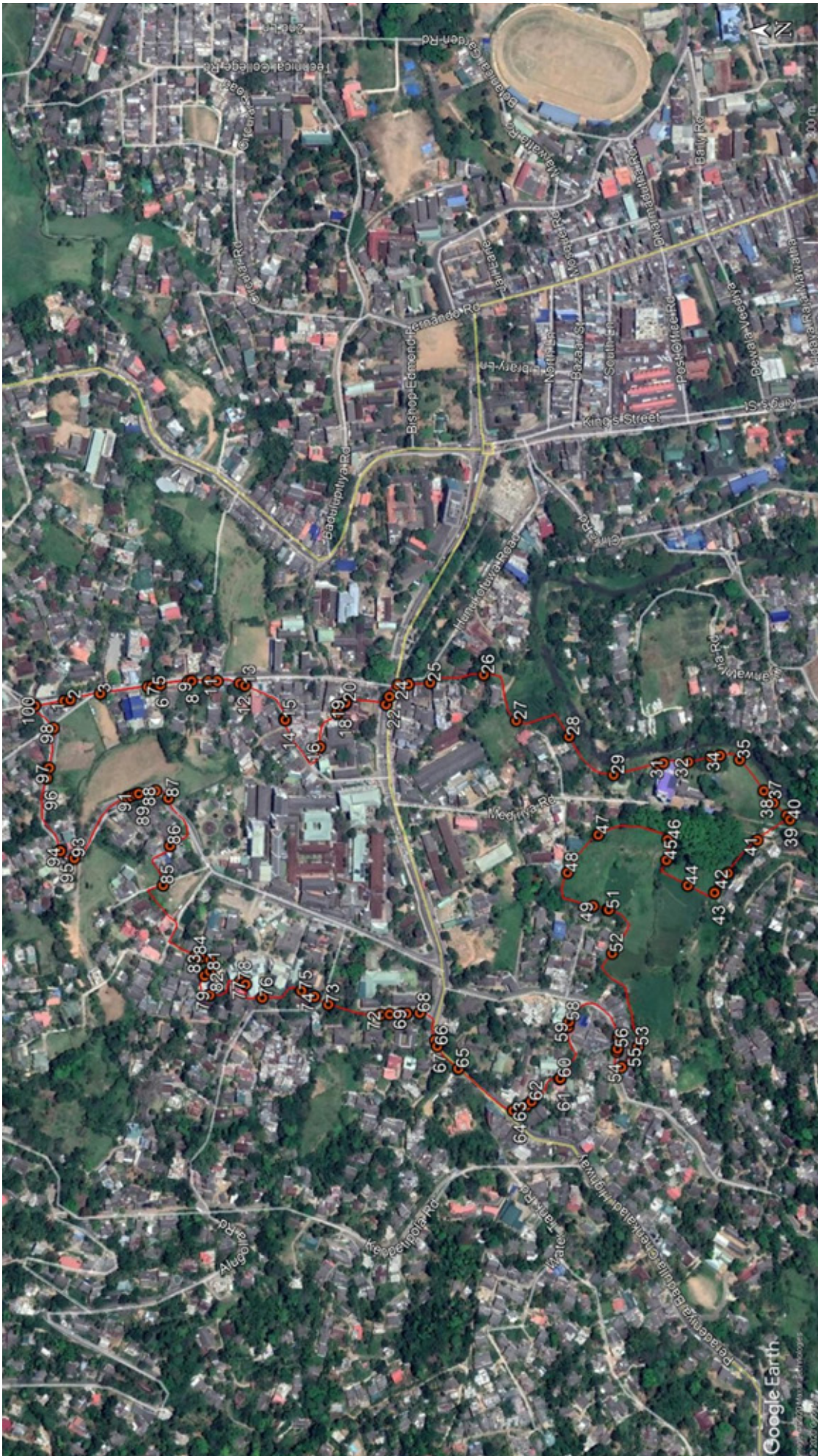
No	Name of the River/ Oya/ Stream	Reservation line from the edge of River/ Oya/ Stream (m)
1	Badulu Oya	15
2	Kuda Oya	15
3	Rambukpotha Oya	15
4	All the Streams	3
12	All the Kanduru	3
14	Water springs	50m radius from center of the water spring

The distances declared by the Irrigation Department, Central Environmental Authority, Mahaweli Authority, Agrarian Services Department and the Local Government Institution in respect of the above reserves should be reserved in cases where the reserve amounts declared in this statement are exceeded.

Part III

Annexures

Annexures
Annexures No 01- Zoning Boundaries
Boundaries of Health Service Zone



Geo-Coordinates of the Health service Zone

No	X (Longitude)	Y (Latitude)
1	81.05415	6.994461
2	81.05416	6.994397
3	81.05423	6.994069
4	81.05431	6.993545
5	81.05431	6.993496
6	81.05432	6.993433
7	81.05433	6.993409
8	81.05437	6.9931
9	81.05437	6.993064
10	81.05437	6.992881
11	81.05437	6.99278
12	81.05434	6.992529
13	81.05432	6.992473
14	81.05395	6.992029
15	81.05394	6.992027
16	81.05364	6.991645
17	81.05401	6.991455
18	81.05409	6.99141
19	81.05412	6.991373
20	81.05413	6.991362
21	81.05411	6.990918
22	81.0542	6.990882
23	81.05433	6.990788
24	81.05433	6.990675
25	81.05435	6.990436
26	81.05444	6.989846
27	81.05393	6.989487
28	81.05376	6.988902
29	81.05333	6.98841
30	81.05345	6.987924
31	81.05346	6.987863
32	81.05347	6.98759
33	81.05352	6.987341
34	81.05354	6.987244
35	81.0535	6.987031
36	81.05315	6.986769
37	81.05305	6.986692
38	81.05302	6.986665

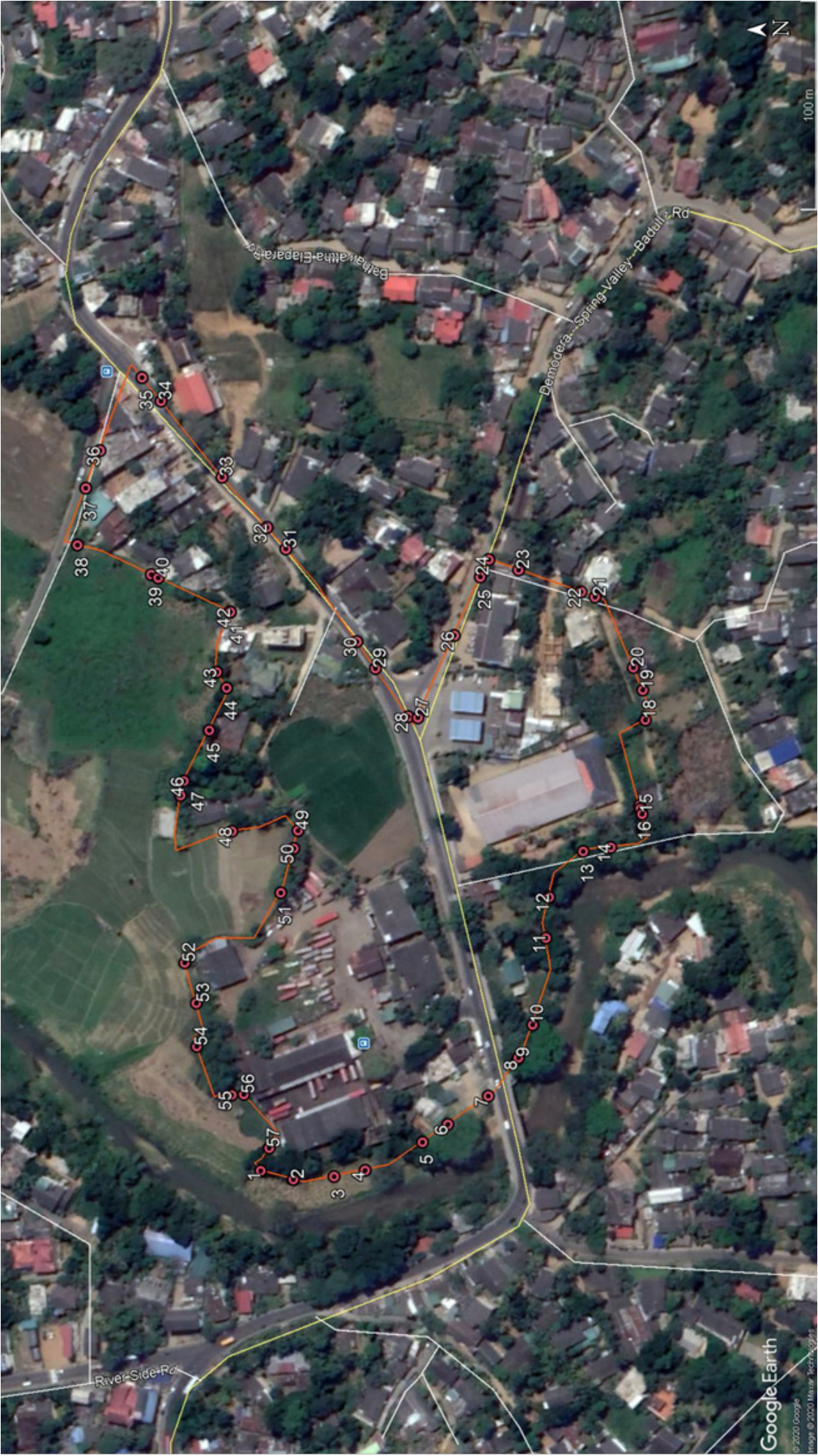
No	X (Longitude)	Y (Latitude)
39	81.05289	6.986524
40	81.05284	6.986493
41	81.05261	6.986853
42	81.05225	6.987177
43	81.05204	6.987322
44	81.05211	6.987608
45	81.05239	6.987835
46	81.05261	6.98782
47	81.05266	6.988581
48	81.05225	6.988923
49	81.05188	6.988643
50	81.05184	6.988483
51	81.05184	6.988469
52	81.05136	6.988437
53	81.05034	6.988166
54	81.05013	6.988352
55	81.0503	6.988397
56	81.05033	6.988391
57	81.05045	6.988378
58	81.05062	6.988921
59	81.05057	6.988932
60	81.05002	6.989023
61	81.05001	6.98903
62	81.04978	6.989338
63	81.04974	6.989394
64	81.04968	6.989538
65	81.05012	6.990131
66	81.05036	6.99036
67	81.05043	6.99038
68	81.05072	6.990551
69	81.05072	6.990694
70	81.05072	6.990748
71	81.05071	6.990879
72	81.05071	6.990976
73	81.05082	6.991544
74	81.05091	6.991696
75	81.05097	6.991839
76	81.05089	6.992266

No	X (Longitude)	Y (Latitude)
77	81.05104	6.992449
78	81.05107	6.992507
79	81.05092	6.992843
80	81.05113	6.992899
81	81.05117	6.992844
82	81.0513	6.992842
83	81.05132	6.992942
84	81.05134	6.992998
85	81.05211	6.993363
86	81.05255	6.993291
87	81.05307	6.993313
88	81.05316	6.993452

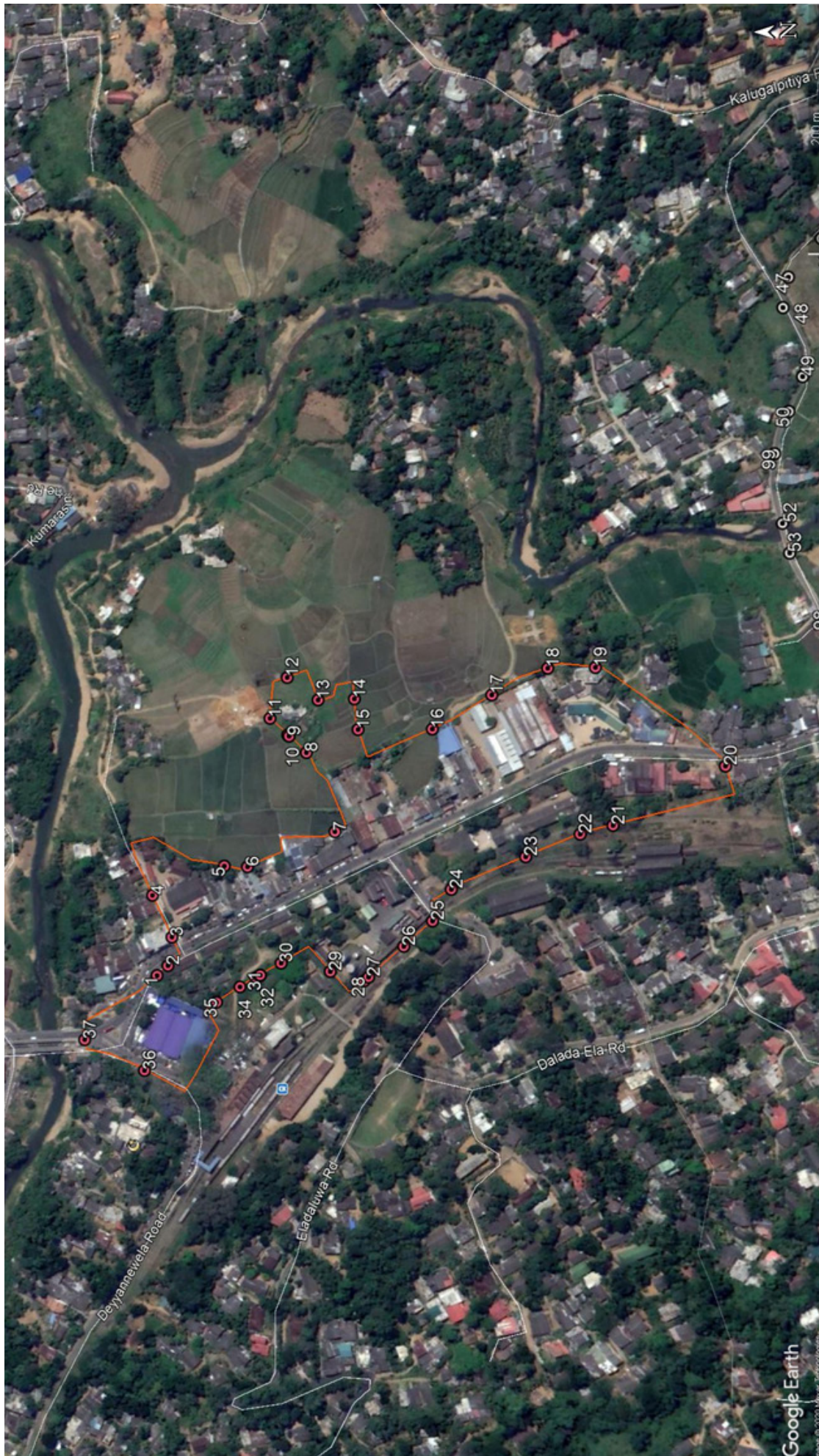
No	X (Longitude)	Y (Latitude)
89	81.05312	6.993639
90	81.05311	6.993672
91	81.05309	6.99372
92	81.05308	6.993757
93	81.05241	6.994337
94	81.05249	6.994489
95	81.0525	6.99449
96	81.05329	6.994644
97	81.05341	6.99462
98	81.05385	6.994576
99	81.05409	6.9948
100	81.0541	6.994782



Boundaries of the High density Mixed Development Zone- Part 2



Boundaries of the High density Mixed Development Zone- Part 3



Geo- Coordinates of the High Density Mixed Zone

Part 1

No	X (Longitude)	Y (Latitude)
1	81.05441	6.990021
2	81.05438	6.990292
3	81.05418	6.991286
4	81.05395	6.992006
5	81.05418	6.992141
6	81.05436	6.992546
7	81.05426	6.993842
8	81.05423	6.993981
9	81.05429	6.995057
10	81.05464	6.995439
11	81.05489	6.995711
12	81.05552	6.996359
13	81.05565	6.996491
14	81.05597	6.996768
15	81.05656	6.996913
16	81.05764	6.997245
17	81.05814	6.997427
18	81.05904	6.996987
19	81.05986	6.996216
20	81.06005	6.996108
21	81.06106	6.995526
22	81.06114	6.995065
23	81.06138	6.994765
24	81.06216	6.994345
25	81.06268	6.994158
26	81.06297	6.993821
27	81.0643	6.992942
28	81.06491	6.991982
29	81.06474	6.991238
30	81.06455	6.990691
31	81.06436	6.99032
32	81.06475	6.989416
33	81.0649	6.988953
34	81.06456	6.988129
35	81.06391	6.987912
36	81.06378	6.987532
37	81.06389	6.986272

No	X (Longitude)	Y (Latitude)
38	81.06396	6.985863
39	81.06396	6.985842
40	81.06405	6.985273
41	81.06415	6.984727
42	81.06341	6.98397
43	81.06271	6.984071
44	81.0626	6.984117
45	81.06259	6.984119
46	81.06173	6.982752
47	81.06124	6.982683
48	81.06108	6.982748
49	81.06068	6.982979
50	81.06057	6.982908
51	81.06112	6.982387
52	81.06123	6.982276
53	81.06117	6.981996
54	81.06039	6.981921
55	81.06012	6.981899
56	81.05948	6.981869
57	81.05935	6.981952
58	81.05889	6.982823
59	81.05889	6.982827
60	81.05833	6.984201
61	81.05817	6.984448
62	81.05779	6.984456
63	81.0572	6.98464
64	81.05688	6.985062
65	81.05661	6.984942
66	81.05616	6.984934
67	81.05612	6.985511
68	81.05602	6.98606
69	81.05585	6.987227
70	81.05582	6.987782
71	81.05576	6.989041
72	81.05561	6.989328
73	81.05433	6.98916
74	81.05399	6.989045

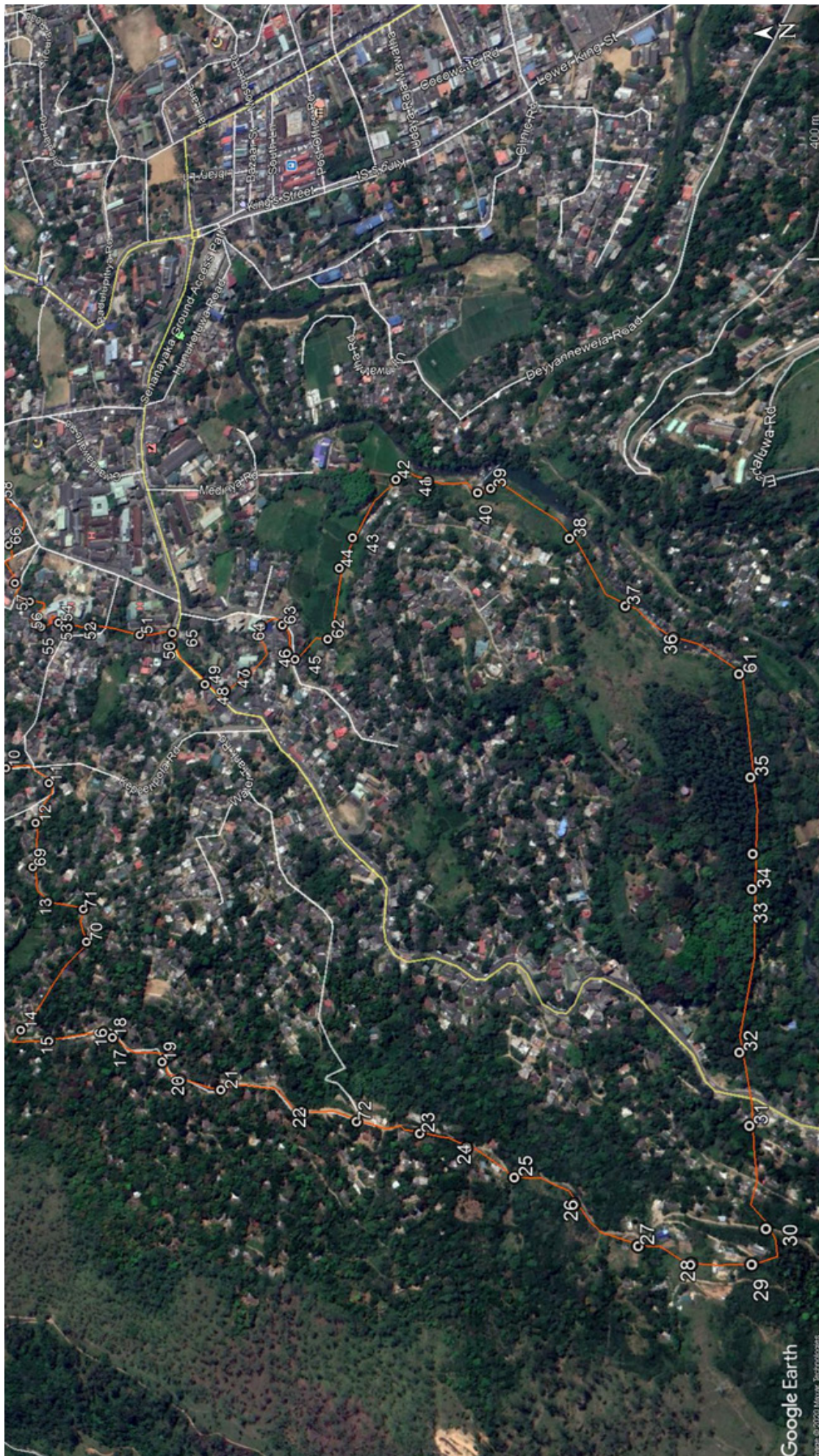
Part 2

No	X (Longitude)	Y (Latitude)
1	81.06503	6.984416
2	81.06499	6.98426
3	81.065	6.984066
4	81.06503	6.983918
5	81.06516	6.983645
6	81.06525	6.983524
7	81.06538	6.983331
8	81.06556	6.983193
9	81.06557	6.983187
10	81.06573	6.98312
11	81.06614	6.983057
12	81.06634	6.983041
13	81.06656	6.982878
14	81.06658	6.982745
15	81.06674	6.982594
16	81.06676	6.982602
17	81.06678	6.982606
18	81.06719	6.98258
19	81.06734	6.982593
20	81.06744	6.982639
21	81.06778	6.982825
22	81.0678	6.982892
23	81.06791	6.98319
24	81.06796	6.983331
25	81.06787	6.983371
26	81.0676	6.983494
27	81.0672	6.983667
28	81.06721	6.983713
29	81.06744	6.983869
30	81.06757	6.983957
31	81.06801	6.984293
32	81.06811	6.984382
33	81.06835	6.984593
34	81.06871	6.984879
35	81.06882	6.984968
36	81.06848	6.985173
37	81.0683	6.985243
38	81.06803	6.985287

No	X (Longitude)	Y (Latitude)
39	81.06789	6.984935
40	81.06787	6.984902
41	81.06771	6.98456
42	81.06771	6.984559
43	81.06742	6.984626
44	81.06735	6.984579
45	81.06714	6.984663
46	81.0669	6.984786
47	81.06683	6.984802
48	81.06666	6.984556
49	81.06666	6.984239
50	81.06657	6.984259
51	81.06636	6.984322
52	81.06602	6.984784
53	81.06582	6.984728
54	81.06562	6.984725
55	81.06538	6.984557
56	81.06539	6.984499
57	81.06513	6.984376

Part 3

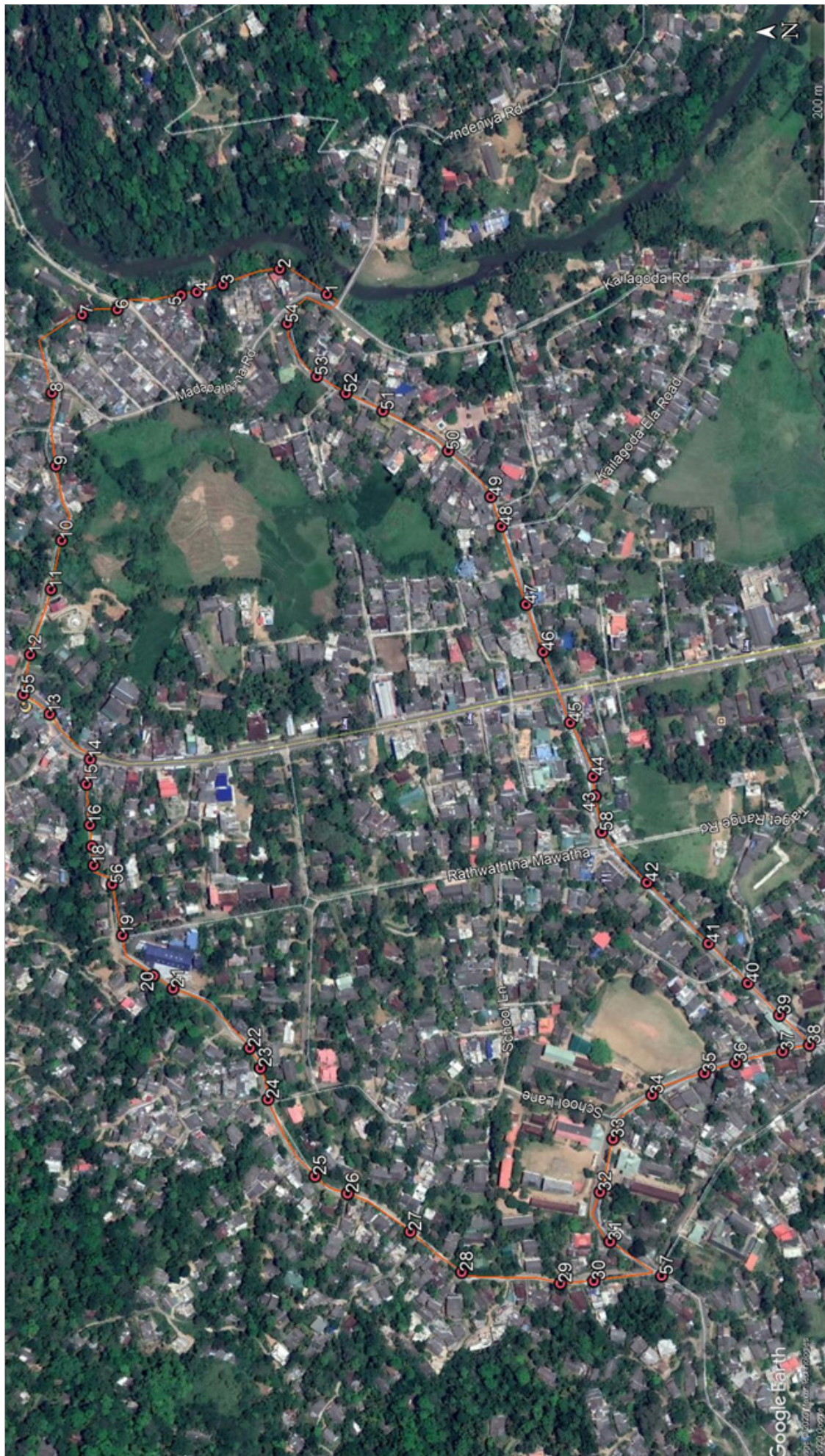
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1	81.06064	6.980836
2	81.06072	6.980749
3	81.06094	6.980719
4	81.06127	6.980877
5	81.06151	6.980302
6	81.06151	6.980117
7	81.06179	6.979426
8	81.06241	6.979653
9	81.06254	6.97979
10	81.06255	6.979801
11	81.06268	6.979942
12	81.063	6.979806
13	81.06283	6.979562
14	81.06283	6.979276
15	81.06259	6.979246
16	81.0626	6.978665
17	81.06286	6.978203
18	81.06307	6.977771
19	81.06308	6.977404
20	81.06231	6.976416
21	81.06185	6.977273
22	81.06178	6.977524
23	81.0616	6.977942
24	81.06134	6.978516
25	81.0611	6.978661
26	81.0609	6.978884
27	81.06065	6.979158
28	81.06062	6.979193
29	81.06069	6.979458
30	81.06075	6.979846
31	81.06065	6.980011
32	81.06065	6.980013
33	81.06063	6.980046
34	81.06056	6.980172
35	81.06044	6.980358
36	81.05989	6.980929
37	81.06012	6.981417



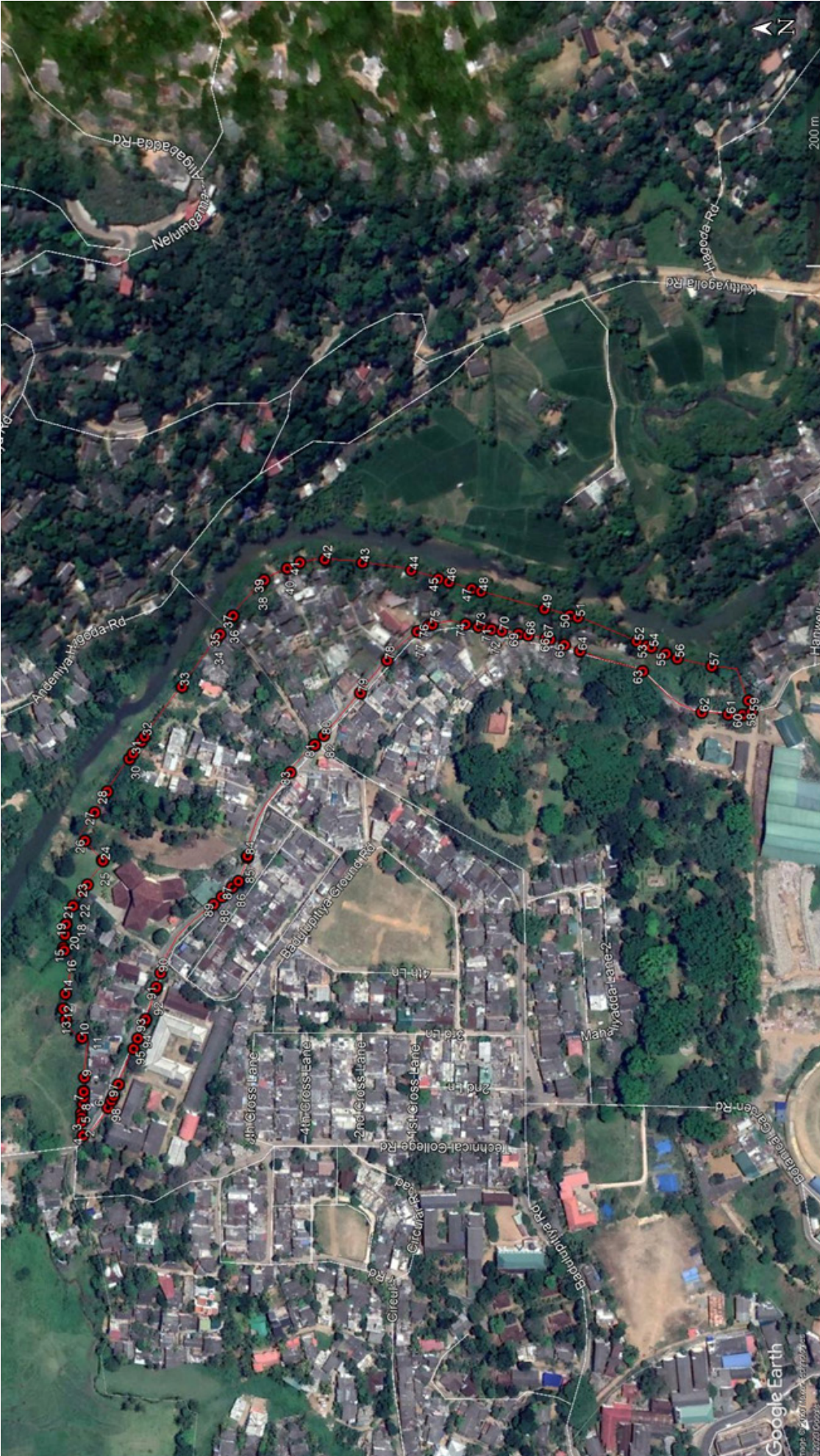
Medium Density Residential zone - Part 1.2



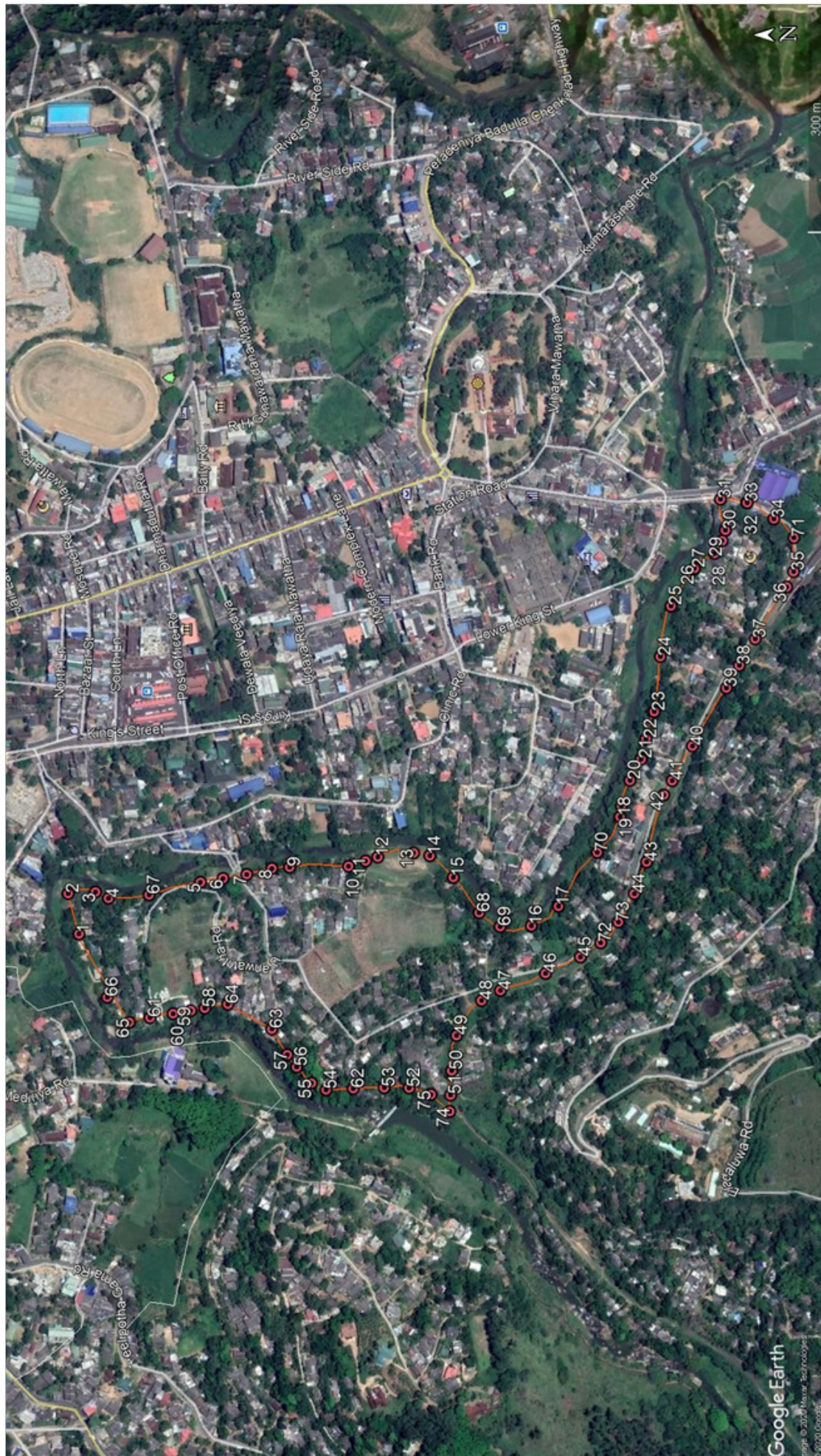
Medium Density Residential zone - Part 2



Medium Density Residential zone - Part 3



Medium Density Residential zone - Part 4



Medium Density Residential zone – Part 5.1



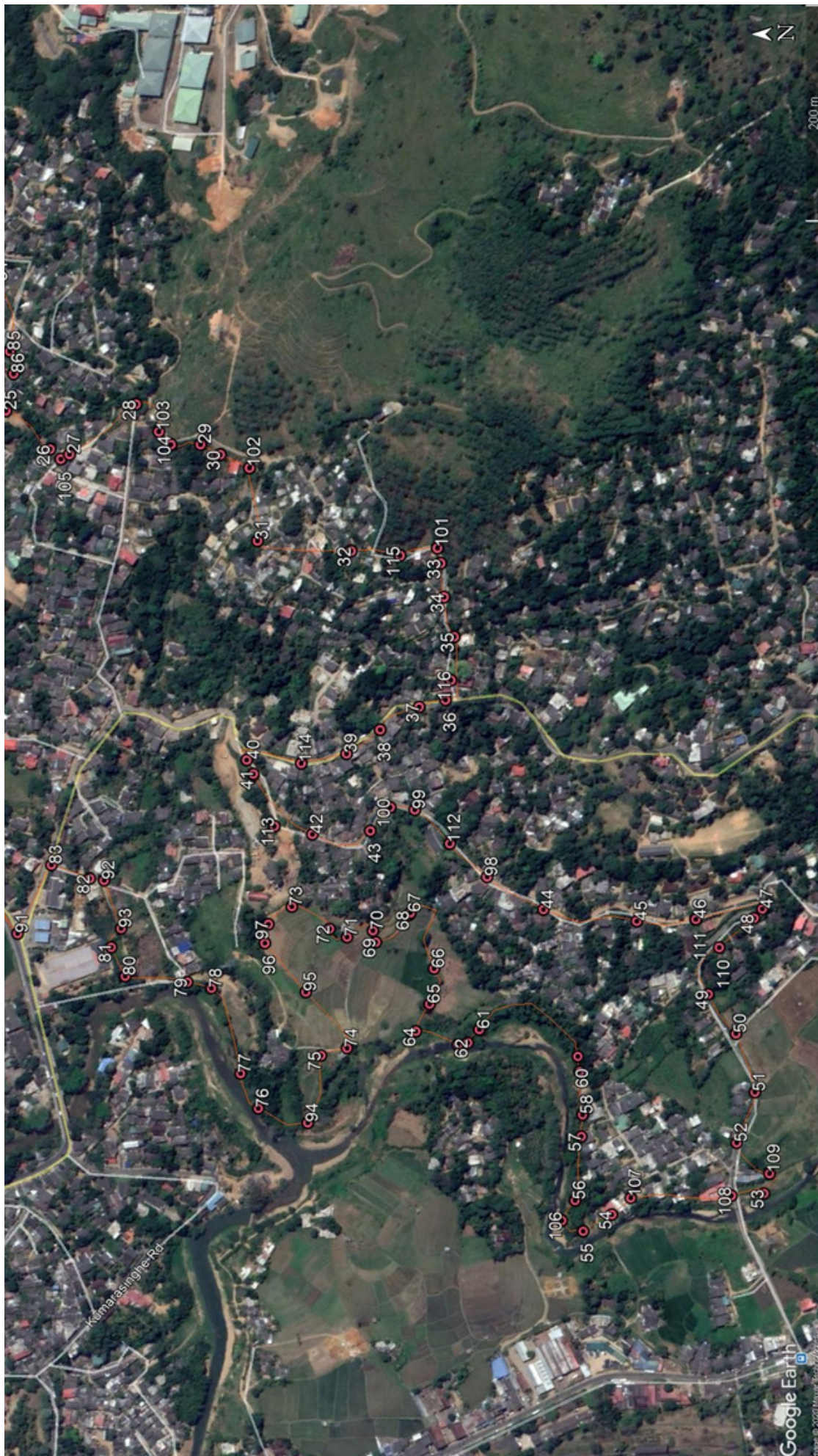
Medium Density Residential zone - Part 5.2



Medium Density Residential zone – Part 6.1



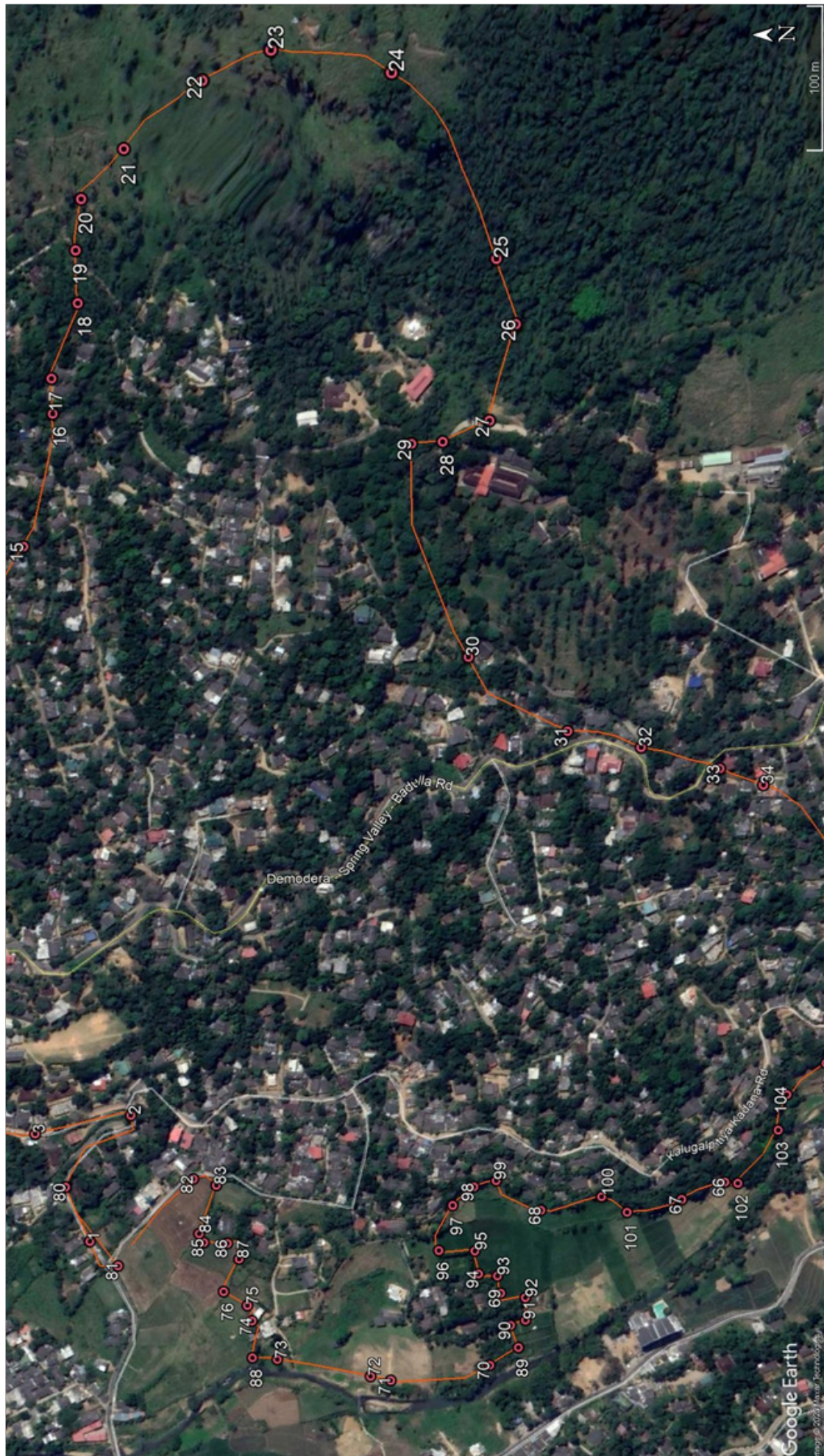
Medium Density Residential zone – Part 6.2



Medium Density Residential zone – Part 7.1



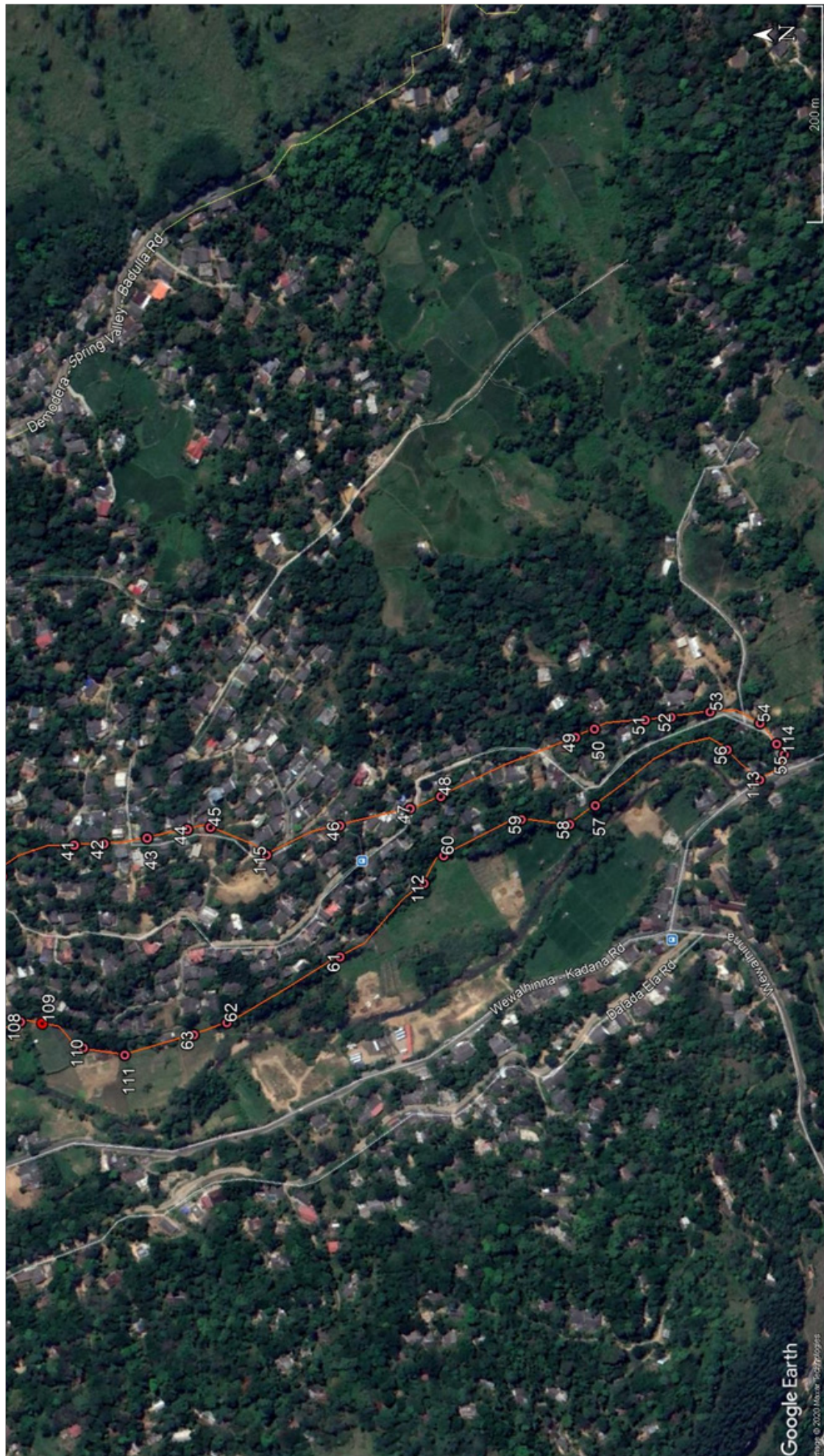
Medium Density Residential zone – Part 7.2



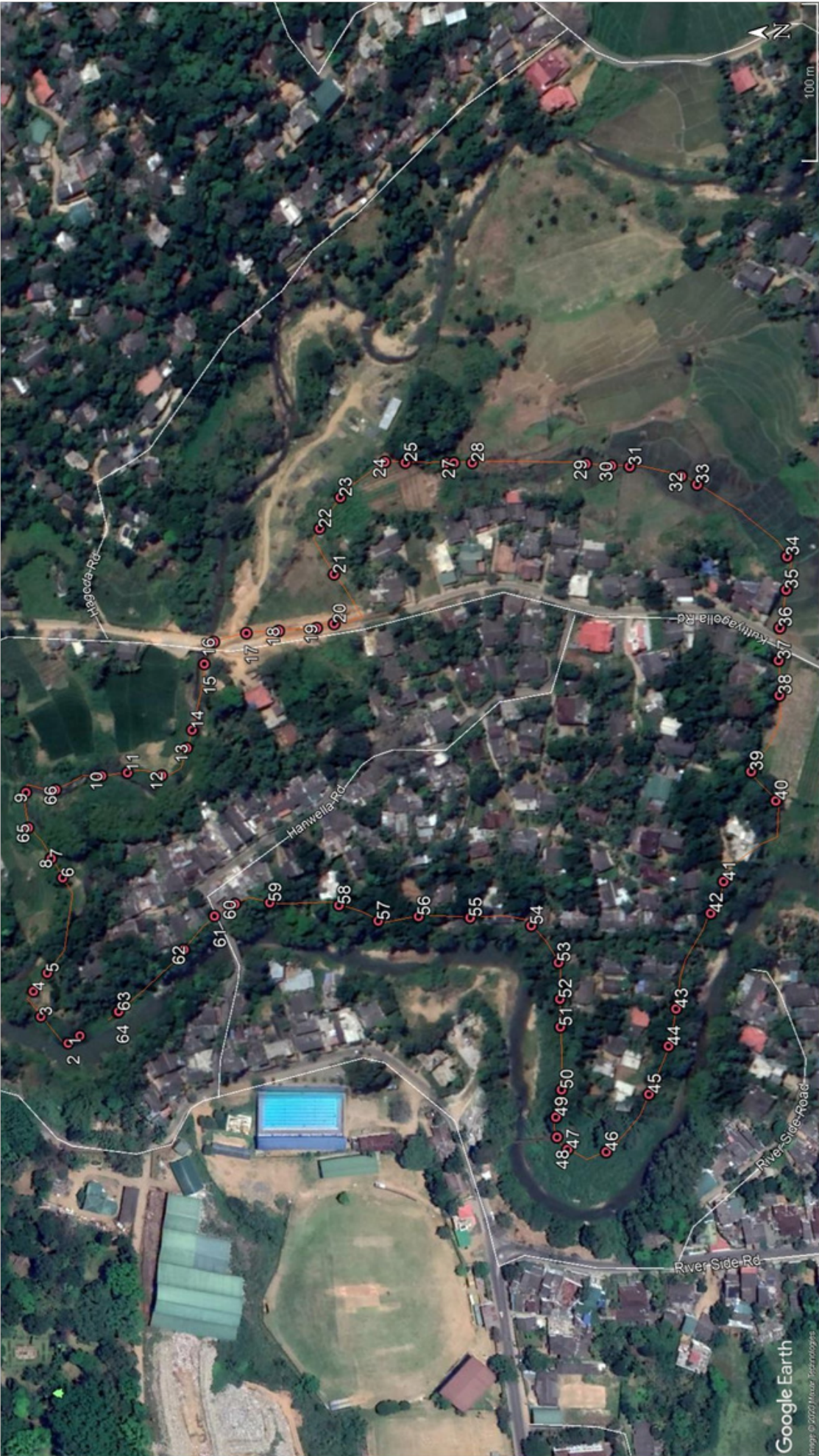
Medium Density Residential zone – Part 7.3



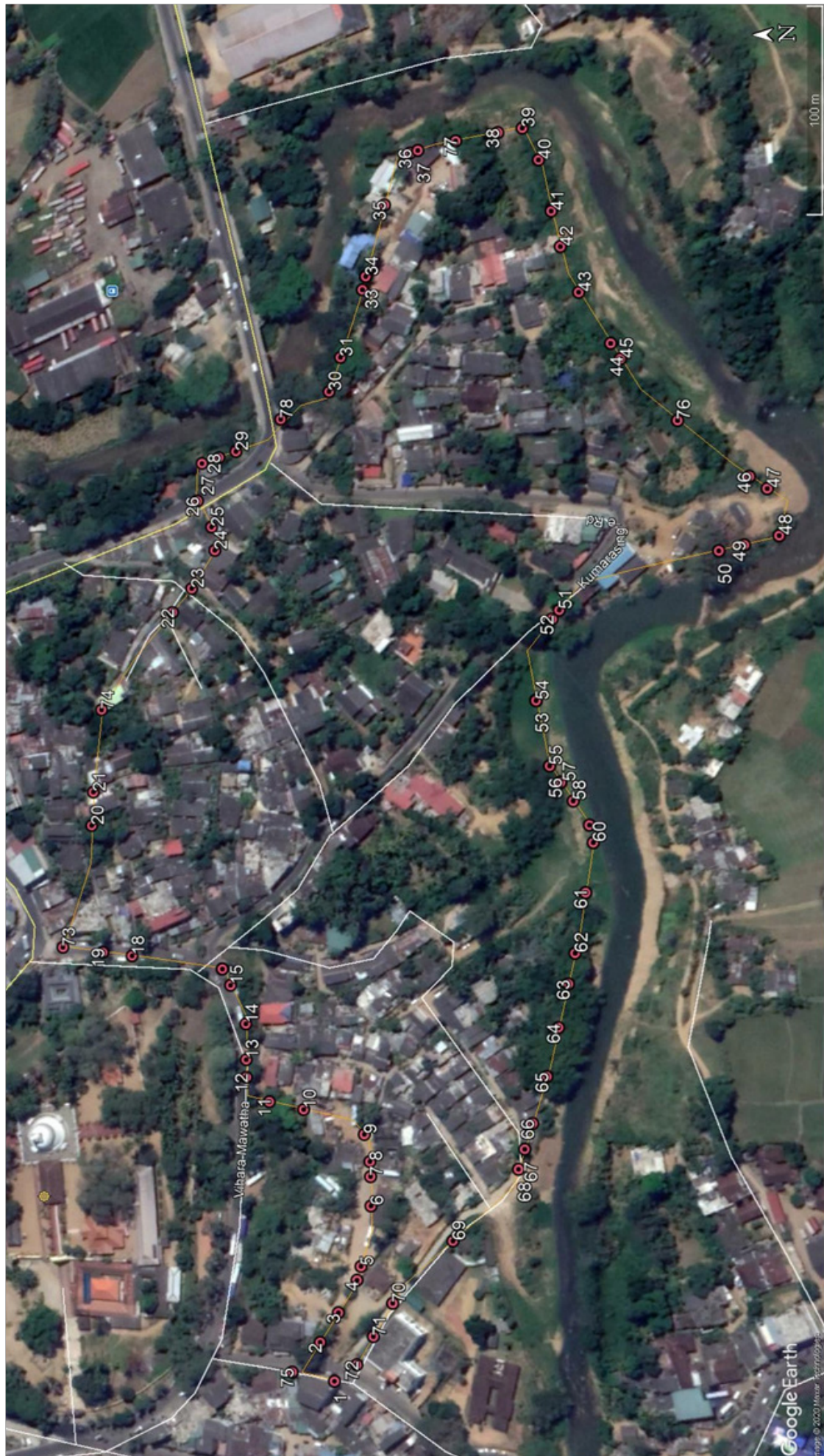
Medium Density Residential zone - Part 7.4



Medium Density Residential zone – Part 8



Medium Density Residential zone – Part 9



Medium Density Residential zone – Part 10

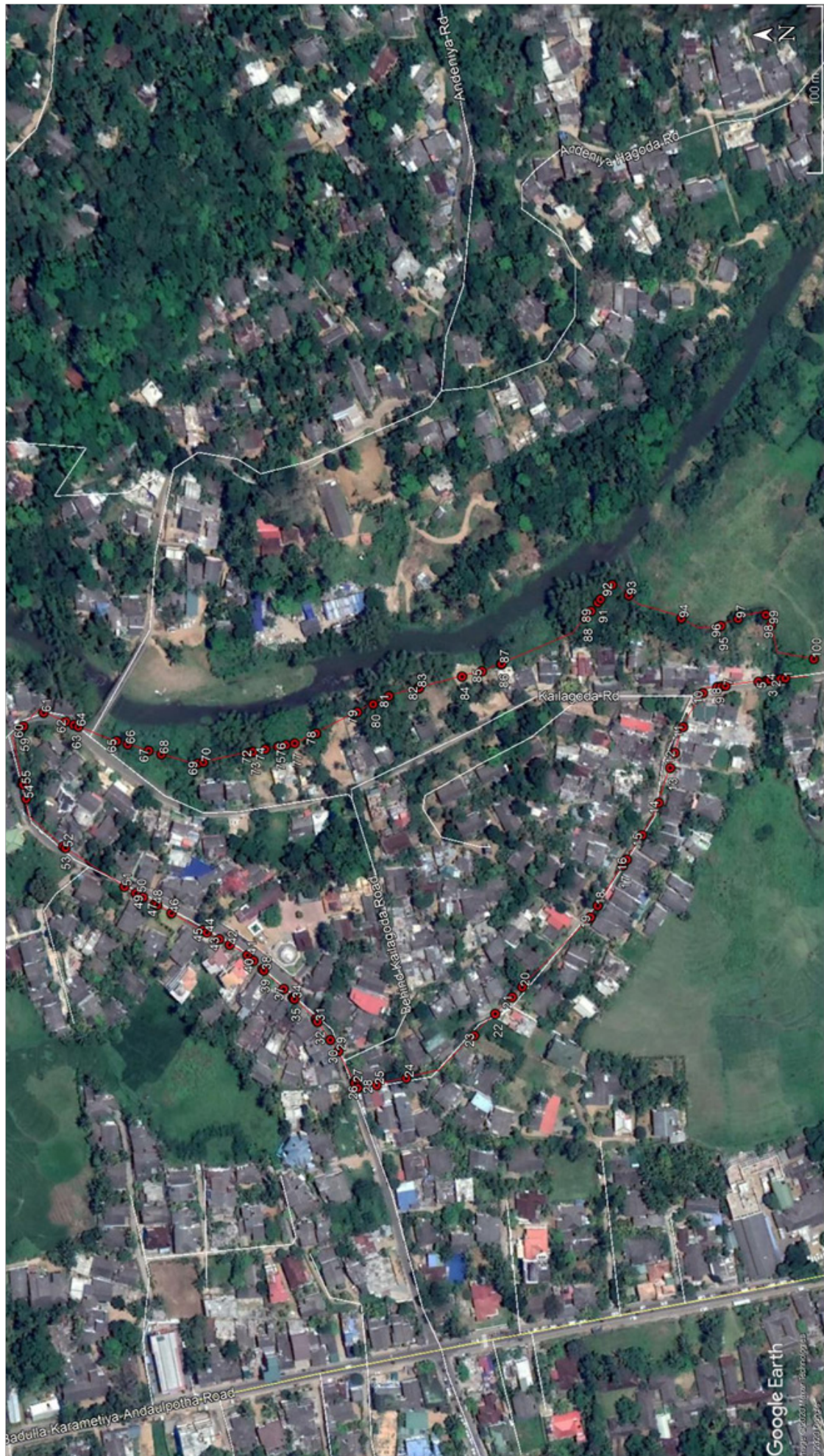




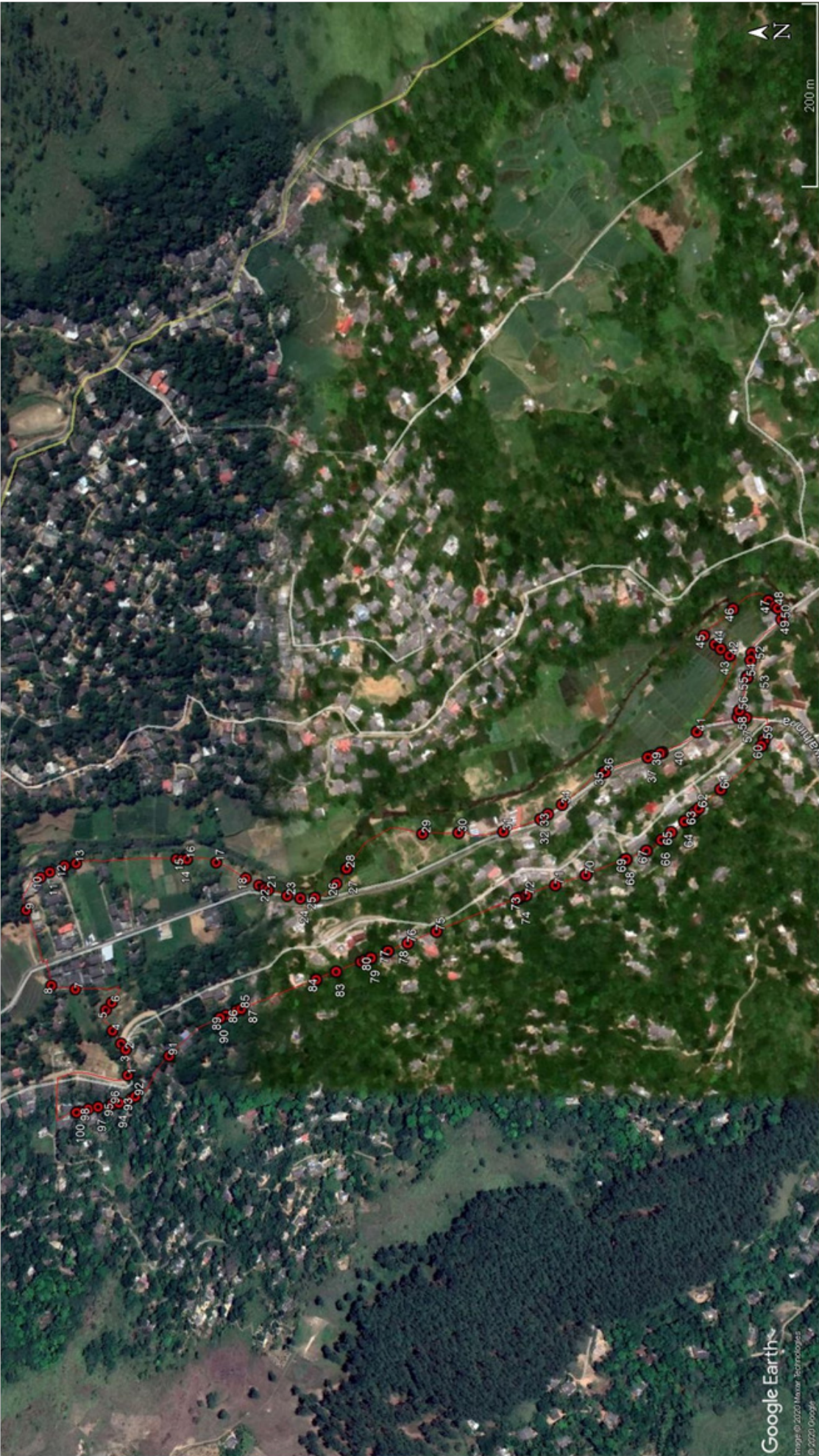
Medium Density Residential zone -Part 12



Medium Density Residential zone - Part 13



Medium Density Residential zone – Part 14



Geo-coordinates of the Medium Density Residential Zone

Part 1

No	X (Longitude)	Y (Latitude)
1	81.05311	6.996766
2	81.05227	6.996485
3	81.05216	6.996333
4	81.051	6.99585
5	81.05033	6.99547
6	81.04943	6.995033
7	81.04908	6.994551
8	81.04868	6.994054
9	81.04868	6.994043
10	81.04865	6.993254
11	81.04839	6.992445
12	81.04777	6.992612
13	81.04655	6.992236
14	81.04469	6.992376
15	81.04457	6.991858
16	81.0447	6.990985
17	81.04463	6.990834
18	81.04463	6.990832
19	81.0443	6.990049
20	81.04405	6.989746
21	81.04393	6.989122
22	81.04367	6.987893
23	81.04343	6.986209
24	81.04329	6.985537
25	81.04298	6.984863
26	81.0427	6.984066
27	81.04229	6.983227
28	81.04215	6.98257
29	81.04218	6.981838
30	81.04255	6.981663
31	81.04367	6.98185
32	81.04456	6.981961
33	81.04673	6.981718
34	81.0472	6.981691
35	81.0482	6.981691
36	81.05013	6.982651

No	X (Longitude)	Y (Latitude)
37	81.05063	6.983292
38	81.05165	6.984053
39	81.05248	6.985176
40	81.05243	6.985371
41	81.05268	6.986126
42	81.05276	6.986627
43	81.05195	6.987338
44	81.05151	6.987567
45	81.05016	6.988314
46	81.05027	6.988439
47	81.04998	6.989102
48	81.04973	6.989437
49	81.04985	6.989789
50	81.05049	6.99038
51	81.05069	6.990935
52	81.05089	6.991778
53	81.0509	6.992214
54	81.05099	6.992408
55	81.05094	6.992739
56	81.05137	6.992962
57	81.0517	6.993252
58	81.05313	6.993559
59	81.05283	6.994639
60	81.05378	6.99459
61	81.0496	6.981801
62	81.05044	6.98778
63	81.0507	6.988518
64	81.05071	6.988866
65	81.05069	6.990368
66	81.05234	6.993359
67	81.05411	6.994893
68	81.05372	6.996231
69	81.04709	6.992574
70	81.04597	6.991471
71	81.04645	6.991595
72	81.04356	6.987116

Part 2

No	X (Longitude)	Y (Latitude)
1	81.06092	6.999241
2	81.06115	6.999671
3	81.06102	7.000193
4	81.06095	7.000433
5	81.06093	7.000582
6	81.06081	7.001172
7	81.06076	7.001496
8	81.06003	7.00177
9	81.05936	7.001734
10	81.05867	7.001687
11	81.05822	7.001782
12	81.05761	7.001962
13	81.05706	7.001778
14	81.05665	7.001398
15	81.05642	7.001428
16	81.05605	7.001386
17	81.05585	7.001363
18	81.05568	7.001343
19	81.05505	7.001073
20	81.05469	7.000782
21	81.05458	7.000602
22	81.05405	6.999904
23	81.05388	6.999806
24	81.05361	6.999734
25	81.05294	6.99931
26	81.05278	6.999021
27	81.05245	6.998466
28	81.05211	6.998012
29	81.05203	6.997149

No	X (Longitude)	Y (Latitude)
30	81.05206	6.996857
31	81.05239	6.99671
32	81.05281	6.996793
33	81.05327	6.996674
34	81.05365	6.996324
35	81.05384	6.995857
36	81.05393	6.995579
37	81.05403	6.995161
38	81.05409	6.994921
39	81.05436	6.995185
40	81.05464	6.995465
41	81.055	6.995813
42	81.05554	6.996355
43	81.05632	6.996814
44	81.05649	6.996831
45	81.05698	6.997035
46	81.05763	6.997276
47	81.05806	6.997431
48	81.05878	6.997656
49	81.05905	6.997751
50	81.05946	6.998135
51	81.05984	6.99873
52	81.06001	6.999068
53	81.06017	6.999336
54	81.06066	6.999607
55	81.05724	7.002018
56	81.05551	7.001172
57	81.0521	6.996264
58	81.05599	6.996757

Part 3

No	X (Longitude)	Y (Latitude)
1	81.06142	6.994852
2	81.06139	6.99485
3	81.06136	6.994849
4	81.06126	6.99484
5	81.06149	6.994838
6	81.06153	6.994837

No	X (Longitude)	Y (Latitude)
7	81.06157	6.994836
8	81.06158	6.994836
9	81.06168	6.994831
10	81.06197	6.99485
11	81.06197	6.994851
12	81.06209	6.994968

No	X (Longitude)	Y (Latitude)
13	81.06218	6.994984
14	81.06229	6.99497
15	81.0626	6.994979
16	81.06262	6.994985
17	81.06272	6.994975
18	81.06279	6.994968
19	81.06279	6.994967
20	81.06279	6.994967
21	81.06293	6.994918
22	81.06303	6.994851
23	81.06308	6.994813
24	81.06326	6.994701
25	81.06326	6.994706
26	81.0634	6.994832
27	81.06361	6.994759
28	81.06376	6.994667
29	81.064	6.994506
30	81.06404	6.994479
31	81.06413	6.994419
32	81.06416	6.994395
33	81.06453	6.994124
34	81.06487	6.993871
35	81.06491	6.993845
36	81.06503	6.993759
37	81.06504	6.99375
38	81.06527	6.993553
39	81.0653	6.993526
40	81.06538	6.99336
41	81.06543	6.99327
42	81.06545	6.99309
43	81.06543	6.992821
44	81.06538	6.992468
45	81.06531	6.992272
46	81.06529	6.992196
47	81.06524	6.992031
48	81.06522	6.991965
49	81.06509	6.991506
50	81.06505	6.991323
51	81.06503	6.991265

No	X (Longitude)	Y (Latitude)
52	81.06486	6.99084
53	81.06483	6.990764
54	81.06481	6.990734
55	81.06477	6.99063
56	81.06473	6.990548
57	81.06467	6.9903
58	81.06442	6.990038
59	81.06434	6.990017
60	81.06432	6.990084
61	81.06432	6.990187
62	81.06434	6.990379
63	81.06464	6.9908
64	81.06479	6.991252
65	81.06483	6.991364
66	81.06487	6.99147
67	81.06488	6.991498
68	81.0649	6.991626
69	81.06491	6.991694
70	81.06493	6.991816
71	81.06494	6.99189
72	81.06495	6.991921
73	81.06496	6.991984
74	81.06498	6.992076
75	81.06498	6.992316
76	81.06497	6.992341
77	81.06493	6.992423
78	81.06472	6.992642
79	81.06448	6.992835
80	81.06417	6.9931
81	81.0641	6.993165
82	81.0641	6.993168
83	81.0639	6.993343
84	81.06329	6.993652
85	81.06328	6.993654
86	81.06311	6.993717
87	81.06307	6.993762
88	81.063	6.993836
89	81.06294	6.993896
90	81.06244	6.994277

No	X (Longitude)	Y (Latitude)
91	81.06234	6.994308
92	81.06232	6.994312
93	81.0621	6.994384
94	81.06208	6.994392
95	81.06197	6.994441

No	X (Longitude)	Y (Latitude)
96	81.06189	6.994472
97	81.06163	6.994581
98	81.06155	6.994617
99	81.06151	6.994633
100	81.06146	6.994658

Part 4

No	X (Longitude)	Y (Latitude)
1	81.05482	6.988943
2	81.0553	6.989063
3	81.05532	6.988743
4	81.05525	6.988592
5	81.05544	6.9875
6	81.05549	6.987233
7	81.05553	6.986952
8	81.05561	6.986654
9	81.05562	6.986445
10	81.05563	6.985751
11	81.05569	6.985551
12	81.05574	6.985406
13	81.05579	6.984984
14	81.05575	6.984791
15	81.0555	6.984514
16	81.05492	6.983594
17	81.05515	6.983273
18	81.05622	6.982552
19	81.05635	6.982535
20	81.05665	6.982434
21	81.05691	6.982303
22	81.05715	6.982246
23	81.05747	6.982147
24	81.05813	6.982069
25	81.05873	6.98194
26	81.05917	6.98167
27	81.05918	6.981665
28	81.05936	6.981429
29	81.05951	6.981339
30	81.05963	6.981301
31	81.06	6.981356

No	X (Longitude)	Y (Latitude)
32	81.05996	6.98105
33	81.05996	6.981043
34	81.05977	6.980731
35	81.05913	6.980509
36	81.05895	6.980594
37	81.05833	6.980966
38	81.05802	6.981155
39	81.05775	6.981309
40	81.05706	6.981708
41	81.05665	6.981946
42	81.05648	6.982045
43	81.05569	6.982254
44	81.05532	6.982397
45	81.05458	6.983032
46	81.05438	6.983438
47	81.05418	6.983966
48	81.05406	6.984187
49	81.05366	6.984482
50	81.05325	6.984539
51	81.05296	6.984552
52	81.05303	6.985035
53	81.05303	6.985327
54	81.05299	6.986011
55	81.05307	6.986184
56	81.05325	6.98636
57	81.0534	6.986471
58	81.05394	6.98745
59	81.05391	6.987618
60	81.05387	6.987827
61	81.05382	6.988102
62	81.05301	6.985691

No	X (Longitude)	Y (Latitude)
63	81.0537	6.986653
64	81.05399	6.987176
65	81.05376	6.988348
66	81.05406	6.988608
67	81.05529	6.988109
68	81.05507	6.984208
69	81.05491	6.983962

No	X (Longitude)	Y (Latitude)
70	81.0558	6.98282
71	81.05954	6.980499
72	81.05474	6.982795
73	81.05498	6.982585
74	81.05276	6.984562
75	81.05296	6.984781

Part 5

No	X (Longitude)	Y (Latitude)
1	81.06353	6.977452
2	81.0635	6.977283
3	81.06321	6.976963
4	81.06318	6.976802
5	81.06313	6.976792
6	81.06286	6.97673
7	81.06279	6.97648
8	81.06326	6.976267
9	81.06315	6.974917
10	81.0636	6.974738
11	81.06363	6.974762
12	81.06369	6.974728
13	81.06345	6.974011
14	81.06377	6.973669
15	81.06395	6.973599
16	81.06396	6.973315
17	81.06394	6.973304
18	81.06393	6.973066
19	81.06449	6.972702
20	81.06454	6.972505
21	81.06457	6.972412
22	81.06506	6.971465
23	81.0652	6.971242
24	81.06541	6.970515
25	81.06548	6.970282
26	81.06594	6.969476
27	81.06613	6.969343
28	81.06594	6.968811
29	81.06545	6.968249

No	X (Longitude)	Y (Latitude)
30	81.065	6.968525
31	81.065	6.968674
32	81.06491	6.968959
33	81.06435	6.96929
34	81.06426	6.969462
35	81.06426	6.969464
36	81.0642	6.969687
37	81.06411	6.969774
38	81.06389	6.970234
39	81.0637	6.970338
40	81.06363	6.970388
41	81.06351	6.970525
42	81.0635	6.970538
43	81.0631	6.971352
44	81.06299	6.971478
45	81.06283	6.971658
46	81.06224	6.972316
47	81.0622	6.972374
48	81.06205	6.972591
49	81.06183	6.972833
50	81.06165	6.973037
51	81.06146	6.973339
52	81.0609	6.973859
53	81.06078	6.974457
54	81.06073	6.974587
55	81.06057	6.975198
56	81.06058	6.975302
57	81.06063	6.97544
58	81.06065	6.975887

No	X (Longitude)	Y (Latitude)
59	81.06056	6.975829
60	81.06048	6.975779
61	81.06046	6.975766
62	81.06035	6.975735
63	81.06043	6.97623
64	81.06041	6.976573
65	81.06039	6.976619
66	81.06031	6.97679
67	81.05982	6.978365
68	81.06003	6.978979
69	81.06008	6.979054
70	81.06016	6.979183
71	81.06025	6.979235
72	81.06017	6.979325
73	81.06006	6.979444
74	81.05997	6.979528
75	81.05987	6.979616
76	81.05958	6.979884
77	81.05913	6.980526
78	81.05925	6.980514
79	81.05982	6.980572

No	X (Longitude)	Y (Latitude)
80	81.05985	6.980557
81	81.05993	6.980506
82	81.06031	6.980376
83	81.06062	6.980011
84	81.06062	6.980003
85	81.06078	6.979022
86	81.06099	6.978788
87	81.0612	6.978679
88	81.06122	6.978697
89	81.06137	6.978484
90	81.06155	6.978195
91	81.06171	6.977761
92	81.06176	6.977621
93	81.06182	6.977455
94	81.06201	6.976755
95	81.06204	6.976644
96	81.06218	6.976389
97	81.06219	6.976389
98	81.06305	6.977397
99	81.06335	6.977614
100	81.0635	6.977447

Part 6

No	X (Longitude)	Y (Latitude)
1	81.06814	6.984412
2	81.06836	6.984617
3	81.06867	6.985948
4	81.06902	6.986145
5	81.06928	6.986393
6	81.06991	6.986691
7	81.07003	6.986577
8	81.07118	6.986352
9	81.07185	6.986434
10	81.07297	6.985889
11	81.07335	6.985711
12	81.07337	6.985716
13	81.07422	6.987236
14	81.07446	6.98712
15	81.075	6.986686

No	X (Longitude)	Y (Latitude)
16	81.07511	6.986188
17	81.07445	6.985762
18	81.07415	6.985314
19	81.07398	6.984529
20	81.07402	6.984248
21	81.07308	6.98416
22	81.07305	6.984652
23	81.07273	6.984761
24	81.07278	6.984309
25	81.07272	6.983699
26	81.07231	6.983229
27	81.07225	6.983021
28	81.07274	6.982309
29	81.07233	6.981649
30	81.07222	6.981447

No	X (Longitude)	Y (Latitude)
31	81.07135	6.981076
32	81.07123	6.980108
33	81.07109	6.979193
34	81.07075	6.979157
35	81.07035	6.979052
36	81.0697	6.979136
37	81.06962	6.97941
38	81.06939	6.979819
39	81.06913	6.980174
40	81.06906	6.981229
41	81.06891	6.98116
42	81.06827	6.98054
43	81.06831	6.979927
44	81.06747	6.978095
45	81.06735	6.977109
46	81.06736	6.976482
47	81.06748	6.975785
48	81.06738	6.97587
49	81.06654	6.976326
50	81.06611	6.976022
51	81.06548	6.975815
52	81.06493	6.976006
53	81.06438	6.975712
54	81.06415	6.977342
55	81.06397	6.977651
56	81.0643	6.977737
57	81.06499	6.97767
58	81.06523	6.977657
59	81.0657	6.977692
60	81.06587	6.977712
61	81.06615	6.978765
62	81.06601	6.978888
63	81.06599	6.978994
64	81.06613	6.979444
65	81.06643	6.979297
66	81.06681	6.97925
67	81.06742	6.979503
68	81.0674	6.979516
69	81.0671	6.979872

No	X (Longitude)	Y (Latitude)
70	81.06723	6.979902
71	81.06716	6.980178
72	81.06725	6.980363
73	81.06749	6.980764
74	81.06595	6.980182
75	81.06587	6.980461
76	81.06529	6.981134
77	81.06567	6.981324
78	81.0666	6.981634
79	81.06666	6.981894
80	81.06672	6.982561
81	81.06704	6.982707
82	81.06778	6.982929
83	81.06793	6.983334
84	81.07404	6.983775
85	81.07333	6.983646
86	81.0731	6.983607
87	81.07005	6.986207
88	81.06883	6.985647
89	81.06853	6.985183
90	81.06889	6.985026
91	81.06719	6.983705
92	81.06776	6.982777
93	81.06724	6.982602
94	81.06514	6.980604
95	81.06656	6.980621
96	81.06709	6.981055
97	81.0673	6.981016
98	81.06781	6.97869
99	81.06853	6.979456
100	81.06856	6.979716
101	81.07124	6.979226
102	81.07208	6.981147
103	81.07246	6.982078
104	81.07233	6.981955
105	81.0722	6.983115
106	81.06409	6.97788
107	81.06432	6.977139
108	81.06435	6.976061

No	X (Longitude)	Y (Latitude)
109	81.06459	6.975654
110	81.06706	6.976228
111	81.06736	6.976482
112	81.06817	6.979085
113	81.06836	6.980943
114	81.06903	6.980652
115	81.07117	6.979607

No	X (Longitude)	Y (Latitude)
116	81.0699	6.979082
117	81.07516	6.986022
118	81.07246	6.986256
119	81.0741	6.985873
120	81.07443	6.986387
121	81.07069	6.986122

Part 7

No	X (Longitude)	Y (Latitude)
1	81.06625	6.976221
2	81.06751	6.975795
3	81.06733	6.976706
4	81.06738	6.977328
5	81.06749	6.978091
6	81.06814	6.980278
7	81.06841	6.980937
8	81.0691	6.98119
9	81.06934	6.97988
10	81.06982	6.979054
11	81.0711	6.97896
12	81.07131	6.978482
13	81.07184	6.977836
14	81.072	6.976995
15	81.07281	6.976546
16	81.07393	6.976224
17	81.07422	6.976215
18	81.07478	6.975925
19	81.07517	6.975907
20	81.07555	6.975831
21	81.07587	6.975438
22	81.07619	6.974735
23	81.07623	6.974168
24	81.0761	6.973281
25	81.07499	6.972456
26	81.07453	6.972284
27	81.07381	6.972482
28	81.07365	6.972873
29	81.07363	6.973138

No	X (Longitude)	Y (Latitude)
30	81.07184	6.972636
31	81.07118	6.971747
32	81.07103	6.971092
33	81.07084	6.970379
34	81.07069	6.969974
35	81.06976	6.969063
36	81.06933	6.968763
37	81.06922	6.968527
38	81.06934	6.968103
39	81.0696	6.967425
40	81.06974	6.967271
41	81.07003	6.966591
42	81.07004	6.966322
43	81.0701	6.965927
44	81.07018	6.96556
45	81.07019	6.965348
46	81.0702	6.964163
47	81.07036	6.963503
48	81.07047	6.963214
49	81.07103	6.961953
50	81.07111	6.961775
51	81.0712	6.961295
52	81.07122	6.96105
53	81.07127	6.960679
54	81.07117	6.960203
55	81.07097	6.960049
56	81.07091	6.960511
57	81.07038	6.96175
58	81.0702	6.96199

No	X (Longitude)	Y (Latitude)
59	81.07025	6.962451
60	81.0699	6.963185
61	81.06893	6.964169
62	81.0683	6.96524
63	81.06819	6.965557
64	81.06817	6.968697
65	81.06801	6.969212
66	81.06686	6.970163
67	81.0667	6.970575
68	81.06659	6.97191
69	81.06575	6.972287
70	81.06505	6.972391
71	81.06489	6.97334
72	81.06493	6.973534
73	81.06509	6.97443
74	81.06547	6.974672
75	81.06562	6.974715
76	81.06576	6.974943
77	81.06852	6.979811
78	81.06853	6.979456
79	81.06795	6.978853
80	81.0668	6.976439
81	81.06601	6.975955
82	81.06688	6.97522
83	81.06682	6.975
84	81.06633	6.975172
85	81.06624	6.975129
86	81.06624	6.974903
87	81.06608	6.974792
88	81.06511	6.974669

No	X (Longitude)	Y (Latitude)
89	81.06523	6.972117
90	81.06544	6.972191
91	81.06549	6.972049
92	81.06571	6.972051
93	81.06592	6.972319
94	81.06594	6.972499
95	81.06617	6.972536
96	81.06618	6.972879
97	81.06663	6.972749
98	81.06682	6.972549
99	81.06688	6.972338
100	81.06673	6.971339
101	81.06657	6.971093
102	81.06684	6.970036
103	81.06736	6.96966
104	81.06771	6.969586
105	81.06818	6.968367
106	81.06827	6.968089
107	81.06828	6.967572
108	81.06832	6.967192
109	81.0683	6.966985
110	81.06806	6.966607
111	81.06799	6.966214
112	81.06963	6.963371
113	81.07063	6.960211
114	81.07087	6.95998
115	81.06993	6.964844
116	81.07108	6.979189
117	81.07048	6.979116

Part 8

No	X (Longitude)	Y (Latitude)
1	81.06502	6.990417
2	81.06498	6.99049
3	81.06514	6.990666
4	81.06529	6.990716
5	81.0654	6.990629
6	81.06599	6.990533

No	X (Longitude)	Y (Latitude)
7	81.06611	6.990605
8	81.06611	6.990606
9	81.06652	6.990765
10	81.06662	6.990289
11	81.06664	6.990128
12	81.06662	6.989912

No	X (Longitude)	Y (Latitude)
13	81.06679	6.989754
14	81.0669	6.98972
15	81.0673	6.989645
16	81.06744	6.989587
17	81.06749	6.989387
18	81.0675	6.989189
19	81.06752	6.988957
20	81.06754	6.98885
21	81.06784	6.988851
22	81.06812	6.988939
23	81.0683	6.988813
24	81.06851	6.988547
25	81.0685	6.988424
26	81.06849	6.98818
27	81.06849	6.988136
28	81.06849	6.988028
29	81.06847	6.987364
30	81.06846	6.987216
31	81.06845	6.987111
32	81.06839	6.986816
33	81.06834	6.986726
34	81.06791	6.986218
35	81.06771	6.986225
36	81.06749	6.986264
37	81.0673	6.986272
38	81.0671	6.986267
39	81.06666	6.986426

No	X (Longitude)	Y (Latitude)
40	81.06649	6.986285
41	81.06602	6.986578
42	81.06584	6.986651
43	81.06527	6.986846
44	81.06505	6.986889
45	81.06477	6.987
46	81.06442	6.987246
47	81.06443	6.98747
48	81.0645	6.987531
49	81.06461	6.987538
50	81.06478	6.987505
51	81.06515	6.987512
52	81.06532	6.987515
53	81.06553	6.987523
54	81.06575	6.987681
55	81.06579	6.988038
56	81.0658	6.988342
57	81.06576	6.988582
58	81.06585	6.988817
59	81.06586	6.989238
60	81.06585	6.989452
61	81.06577	6.989579
62	81.06557	6.989769
63	81.06518	6.990175
64	81.06517	6.990182
65	81.0663	6.99075
66	81.06653	6.990577

Part 9

No	X (Longitude)	Y (Latitude)
1	81.06055	6.982853
2	81.06073	6.982919
3	81.06087	6.982835
4	81.06102	6.98275
5	81.06108	6.982732
6	81.06136	6.982687
7	81.0615	6.982689
8	81.06156	6.982692
9	81.06169	6.982718

No	X (Longitude)	Y (Latitude)
10	81.0618	6.982997
11	81.06183	6.983156
12	81.06194	6.983262
13	81.06202	6.983263
14	81.06219	6.983265
15	81.06237	6.983336
16	81.06244	6.983374
17	81.06244	6.983375
18	81.0625	6.983797

No	X (Longitude)	Y (Latitude)
19	81.06251	6.983937
20	81.06311	6.98399
21	81.06326	6.983981
22	81.0641	6.983611
23	81.06421	6.983523
24	81.06439	6.983416
25	81.0645	6.983433
26	81.06463	6.983502
27	81.0648	6.983482
28	81.06483	6.983401
29	81.06485	6.98332
30	81.06512	6.982881
31	81.06528	6.982829
32	81.06558	6.982727
33	81.06564	6.982712
34	81.06564	6.982712
35	81.06597	6.982627
36	81.06621	6.98251
37	81.06622	6.982474
38	81.06628	6.98211
39	81.0663	6.981999
40	81.06615	6.981926
41	81.06591	6.981869
42	81.06575	6.981828
43	81.06554	6.981746
44	81.0653	6.981604
45	81.06523	6.981561
46	81.06468	6.980999
47	81.06463	6.980922
48	81.06442	6.980871

No	X (Longitude)	Y (Latitude)
49	81.06438	6.981021
50	81.06435	6.981131
51	81.06409	6.981832
52	81.06405	6.981864
53	81.06369	6.981936
54	81.06369	6.981935
55	81.06339	6.981875
56	81.06332	6.981827
57	81.06332	6.981826
58	81.06323	6.98177
59	81.06312	6.981698
60	81.06305	6.981681
61	81.06282	6.981715
62	81.06254	6.981762
63	81.0624	6.981792
64	81.0622	6.981836
65	81.06198	6.981888
66	81.06176	6.981952
67	81.06165	6.981987
68	81.06155	6.982015
69	81.06121	6.982312
70	81.06092	6.982586
71	81.06077	6.982674
72	81.06063	6.98275
73	81.06253	6.984133
74	81.06365	6.983944
75	81.06058	6.983049
76	81.06494	6.98131
77	81.06626	6.982301
78	81.065	6.983108

Part 10

No	X (Longitude)	Y (Latitude)
1	81.05615	6.984775
2	81.05609	6.98453
3	81.0559	6.984363
4	81.05562	6.984152
5	81.05562	6.984152
6	81.05553	6.984096

No	X (Longitude)	Y (Latitude)
7	81.05542	6.984026
8	81.05531	6.983882
9	81.05528	6.983824
10	81.05529	6.983777
11	81.05536	6.983695
12	81.05541	6.983644

No	X (Longitude)	Y (Latitude)
13	81.05554	6.983501
14	81.05582	6.983256
15	81.056	6.983109
16	81.0561	6.983048
17	81.0562	6.982993
18	81.0564	6.98291
19	81.05662	6.98283
20	81.05681	6.982741
21	81.05701	6.982649
22	81.05717	6.982602
23	81.05724	6.982591
24	81.05766	6.982534
25	81.05778	6.982518
26	81.05809	6.982483
27	81.05825	6.982464
28	81.05831	6.982457
29	81.0585	6.982434
30	81.05855	6.982414
31	81.05886	6.982281
32	81.059	6.982255
33	81.05899	6.982359
34	81.05896	6.982569
35	81.05892	6.982732
36	81.05887	6.982844

No	X (Longitude)	Y (Latitude)
37	81.05881	6.983005
38	81.05877	6.983104
39	81.05873	6.983207
40	81.05867	6.983358
41	81.05849	6.983805
42	81.05843	6.983941
43	81.05838	6.984075
44	81.05831	6.984243
45	81.05824	6.984404
46	81.05822	6.984452
47	81.05812	6.984402
48	81.05798	6.984321
49	81.05792	6.984351
50	81.05781	6.984411
51	81.05774	6.984452
52	81.05758	6.984515
53	81.05733	6.984602
54	81.05714	6.984712
55	81.05708	6.984944
56	81.05689	6.985045
57	81.05679	6.98507
58	81.05672	6.984945
59	81.05654	6.984932
60	81.0563	6.984914

Part II

No	X (Longitude)	Y (Latitude)
1	81.0646	6.983552
2	81.0646	6.983553
3	81.06452	6.98378
4	81.06444	6.983988
5	81.06439	6.984114
6	81.06432	6.98431
7	81.0642	6.98463
8	81.06411	6.984933
9	81.06405	6.985258
10	81.06401	6.985539
11	81.06392	6.986253
12	81.06391	6.986368

No	X (Longitude)	Y (Latitude)
13	81.06387	6.986731
14	81.06385	6.986906
15	81.06383	6.987106
16	81.06375	6.987841
17	81.06392	6.987942
18	81.0642	6.988032
19	81.06436	6.988086
20	81.06447	6.988127
21	81.0647	6.988324
22	81.06481	6.988443
23	81.06494	6.988635
24	81.06491	6.988751

No	X (Longitude)	Y (Latitude)
25	81.06484	6.989009
26	81.06457	6.989699
27	81.0644	6.989907
28	81.06433	6.990215
29	81.06433	6.990308
30	81.06449	6.990388
31	81.06462	6.990271
32	81.06487	6.989968
33	81.06518	6.989677
34	81.06528	6.989589
35	81.06543	6.989418
36	81.06549	6.989287
37	81.06543	6.988981
38	81.06533	6.988455
39	81.06533	6.988333
40	81.06499	6.987919
41	81.06486	6.987918
42	81.06407	6.987749
43	81.06417	6.986856

No	X (Longitude)	Y (Latitude)
44	81.06433	6.986754
45	81.06488	6.986519
46	81.06509	6.986443
47	81.06535	6.986389
48	81.06557	6.986321
49	81.06568	6.986237
50	81.06568	6.986031
51	81.06545	6.985735
52	81.06537	6.985622
53	81.06507	6.985239
54	81.06476	6.984698
55	81.06463	6.984412
56	81.06464	6.983865
57	81.0647	6.9837
58	81.06476	6.983585
59	81.06397	6.987205
60	81.06391	6.987465
61	81.06545	6.987921

Part 12

No	X (Longitude)	Y (Latitude)
1	81.06055	6.98283
2	81.06056	6.982909
3	81.06066	6.98296
4	81.06077	6.98267
5	81.06087	6.982833
6	81.06101	6.982527
7	81.06105	6.982742
8	81.06114	6.982394
9	81.06123	6.9823
10	81.06131	6.982686
11	81.06136	6.982687
12	81.0614	6.982116
13	81.06159	6.982695
14	81.06169	6.98272
15	81.06169	6.981973
16	81.06177	6.982881
17	81.06182	6.981935

No	X (Longitude)	Y (Latitude)
18	81.06185	6.983234
19	81.06192	6.983261
20	81.06207	6.983263
21	81.06213	6.981852
22	81.06227	6.983291
23	81.06238	6.98334
24	81.06244	6.981785
25	81.06246	6.983524
26	81.06248	6.983633
27	81.06251	6.9839
28	81.06257	6.984119
29	81.06262	6.984101
30	81.06264	6.981742
31	81.0628	6.984041
32	81.06288	6.981707
33	81.06314	6.981708
34	81.06314	6.98171

No	X (Longitude)	Y (Latitude)
35	81.06321	6.981753
36	81.06325	6.983982
37	81.06338	6.981871
38	81.06346	6.981891
39	81.06363	6.981985
40	81.06369	6.983917
41	81.06379	6.981956
42	81.06382	6.983831
43	81.06387	6.981972
44	81.06406	6.983644
45	81.06418	6.981764
46	81.06424	6.981608
47	81.06433	6.981235
48	81.06439	6.980938
49	81.06443	6.980868
50	81.06446	6.983408
51	81.06458	6.980853
52	81.06471	6.981041

No	X (Longitude)	Y (Latitude)
53	81.06472	6.981045
54	81.06474	6.983509
55	81.06478	6.981125
56	81.06481	6.983452
57	81.06484	6.983353
58	81.06492	6.983154
59	81.06513	6.982878
60	81.06524	6.982842
61	81.06527	6.981589
62	81.06558	6.982728
63	81.06585	6.981853
64	81.06587	6.981858
65	81.06607	6.981902
66	81.06618	6.982574
67	81.06622	6.982476
68	81.06625	6.98232
69	81.06627	6.98223
70	81.0663	6.982023

Part 13

No	X (Longitude)	Y (Latitude)
1	81.06113	6.995162
2	81.06113	6.995187
3	81.06112	6.995248
4	81.06112	6.995259
5	81.06112	6.99527
6	81.06111	6.995314
7	81.06109	6.995503
8	81.06108	6.995527
9	81.06108	6.99555
10	81.06104	6.995634
11	81.06085	6.995749
12	81.0607	6.995797
13	81.06061	6.995825
14	81.06041	6.995891
15	81.06022	6.995987
16	81.06008	6.996076
17	81.06005	6.996098
18	81.05981	6.996244

No	X (Longitude)	Y (Latitude)
19	81.05975	6.996286
20	81.05935	6.996677
21	81.05929	6.996735
22	81.05919	6.996832
23	81.05907	6.996952
24	81.05882	6.997341
25	81.05878	6.997511
26	81.05877	6.997619
27	81.0588	6.997634
28	81.0588	6.997638
29	81.05898	6.997729
30	81.05905	6.997775
31	81.05915	6.997848
32	81.05916	6.99785
33	81.05917	6.997858
34	81.05928	6.997979
35	81.05929	6.997986
36	81.05929	6.997988

No	X (Longitude)	Y (Latitude)
37	81.05934	6.99804
38	81.05945	6.998153
39	81.05946	6.998161
40	81.0595	6.998212
41	81.05954	6.998246
42	81.0596	6.998348
43	81.05963	6.998408
44	81.05967	6.998479
45	81.05968	6.998503
46	81.05978	6.998683
47	81.05982	6.998766
48	81.05983	6.998778
49	81.05987	6.998847
50	81.05989	6.998889
51	81.05993	6.998956
52	81.06015	6.999297
53	81.06016	6.999311
54	81.06043	6.999526
55	81.06051	6.999542
56	81.06053	6.999544
57	81.06053	6.999545
58	81.06083	6.999551
59	81.06084	6.999543
60	81.06085	6.999535
61	81.06093	6.999417
62	81.06088	6.999291
63	81.06086	6.999246
64	81.06085	6.99922
65	81.06077	6.999004
66	81.06075	6.99894
67	81.06071	6.998819
68	81.06069	6.998746

No	X (Longitude)	Y (Latitude)
69	81.06064	6.998537
70	81.06064	6.998504
71	81.0607	6.998244
72	81.0607	6.998228
73	81.0607	6.99822
74	81.06072	6.998149
75	81.06073	6.998074
76	81.06074	6.99803
77	81.06075	6.99798
78	81.06081	6.997857
79	81.06093	6.997621
80	81.06098	6.997531
81	81.06103	6.997441
82	81.06107	6.997276
83	81.06107	6.997267
84	81.06114	6.997022
85	81.06117	6.996908
86	81.06121	6.996798
87	81.06121	6.996794
88	81.06148	6.996313
89	81.06152	6.996279
90	81.06157	6.99624
91	81.06159	6.996225
92	81.06167	6.996158
93	81.06161	6.996061
94	81.06148	6.995758
95	81.06143	6.995546
96	81.06143	6.995529
97	81.06148	6.995431
98	81.0615	6.995273
99	81.06144	6.995243
100	81.06124	6.995

Part 14

No	X (Longitude)	Y (Latitude)
1	81.06502	6.968035
2	81.06529	6.968087
3	81.06536	6.968151
4	81.06549	6.968271
5	81.06573	6.968371
6	81.06581	6.968302
7	81.06595	6.968774
8	81.06598	6.969077
9	81.06689	6.969394
10	81.06728	6.969216
11	81.06735	6.969101
12	81.06743	6.968923
13	81.06746	6.968783
14	81.06752	6.967554
15	81.06752	6.967482
16	81.06752	6.967426
17	81.06749	6.967069
18	81.06731	6.966704
19	81.06723	6.966538
20	81.0672	6.966477
21	81.0672	6.966465
22	81.06718	6.966427
23	81.06712	6.966195
24	81.06709	6.966035
25	81.0671	6.965865
26	81.06727	6.965614
27	81.06744	6.965501
28	81.06744	6.9655
29	81.06786	6.964616
30	81.06787	6.964198
31	81.06789	6.963684
32	81.06804	6.963261
33	81.0681	6.963179
34	81.06821	6.963017
35	81.06857	6.962562
36	81.06858	6.962533
37	81.06875	6.962058
38	81.06877	6.962017

No	X (Longitude)	Y (Latitude)
39	81.06888	6.961925
40	81.06881	6.961901
41	81.06904	6.961519
42	81.06991	6.961153
43	81.06998	6.961249
44	81.07003	6.961312
45	81.07013	6.961435
46	81.07043	6.961117
47	81.07052	6.960729
48	81.07046	6.960658
49	81.07043	6.960627
50	81.07031	6.960586
51	81.06993	6.960913
52	81.06985	6.960926
53	81.06967	6.960961
54	81.06966	6.960965
55	81.06965	6.960967
56	81.06928	6.961055
57	81.06921	6.961073
58	81.0692	6.960987
59	81.06895	6.9608
60	81.06889	6.960831
61	81.0684	6.96128
62	81.06819	6.961523
63	81.06815	6.961567
64	81.06805	6.961676
65	81.06792	6.961825
66	81.06784	6.961928
67	81.06771	6.962094
68	81.06761	6.962314
69	81.06761	6.962328
70	81.06743	6.962756
71	81.06731	6.963096
72	81.06719	6.963423
73	81.06716	6.963499
74	81.06715	6.963529
75	81.06677	6.96443
76	81.06664	6.964752

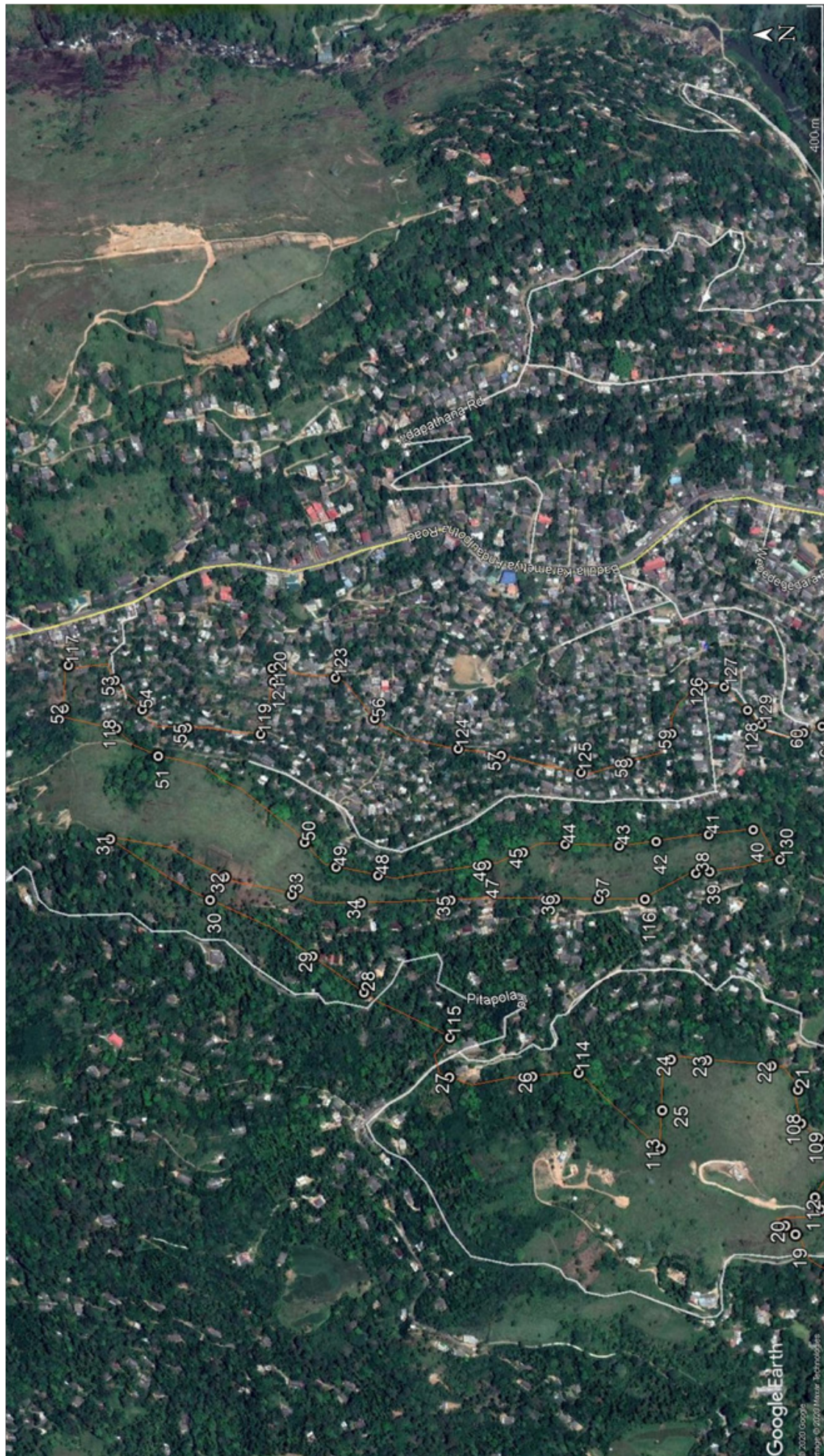
No	X (Longitude)	Y (Latitude)
77	81.06654	6.964973
78	81.06654	6.964988
79	81.06647	6.965166
80	81.06646	6.965179
81	81.06644	6.965232
82	81.06642	6.965277
83	81.06631	6.965563
84	81.06621	6.965791
85	81.06585	6.966661
86	81.06583	6.966717
87	81.06583	6.966719
88	81.06577	6.966842

No	X (Longitude)	Y (Latitude)
89	81.06574	6.966912
90	81.06574	6.966912
91	81.06528	6.967512
92	81.0648	6.967915
93	81.06477	6.967964
94	81.0647	6.96812
95	81.06468	6.968205
96	81.06468	6.968216
97	81.06464	6.968378
98	81.06461	6.968499
99	81.06458	6.968608
100	81.06457	6.968645

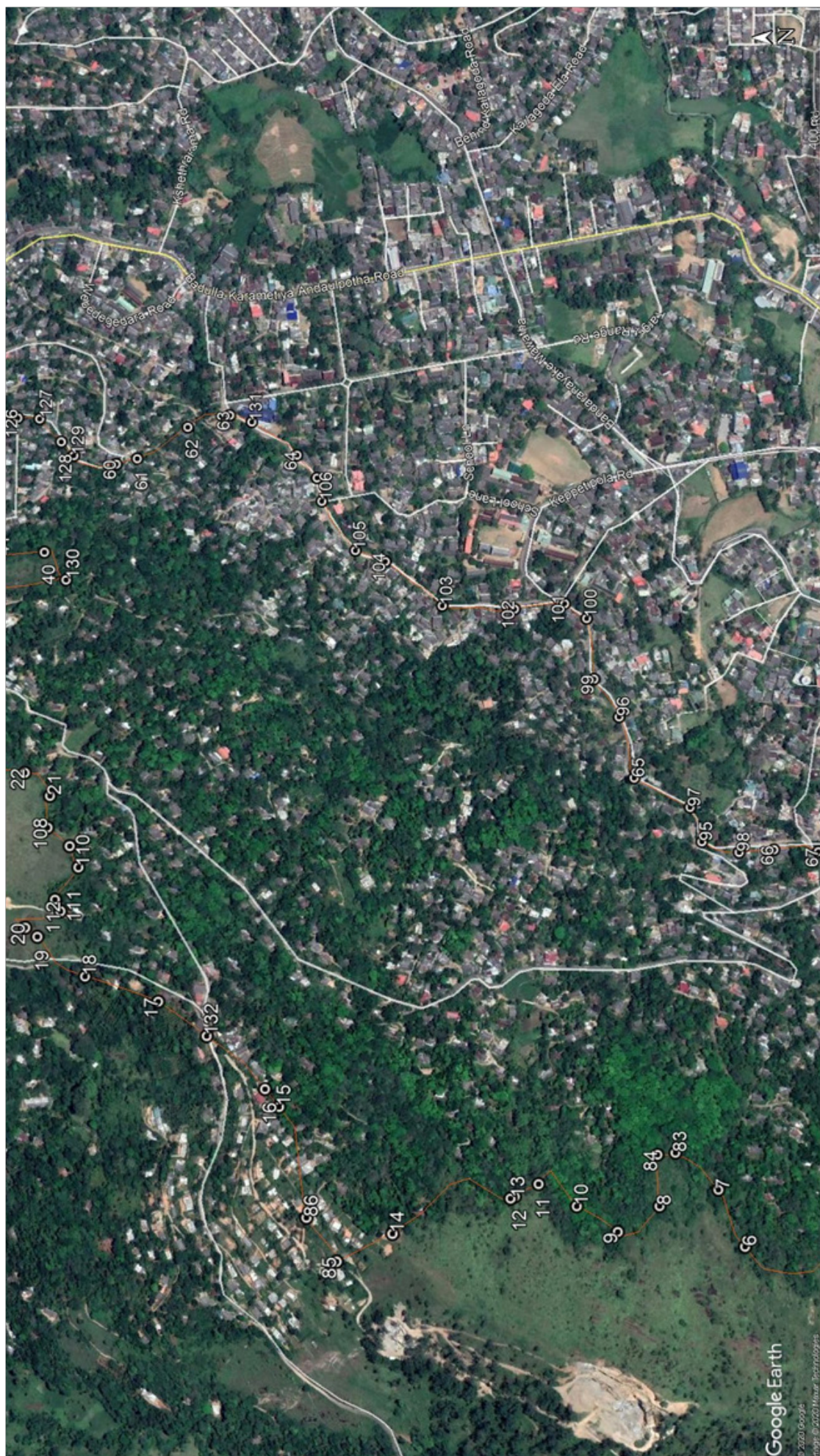
Low Density Residential Zone- Part 1



Low Density Residential Zone- Part 2.1

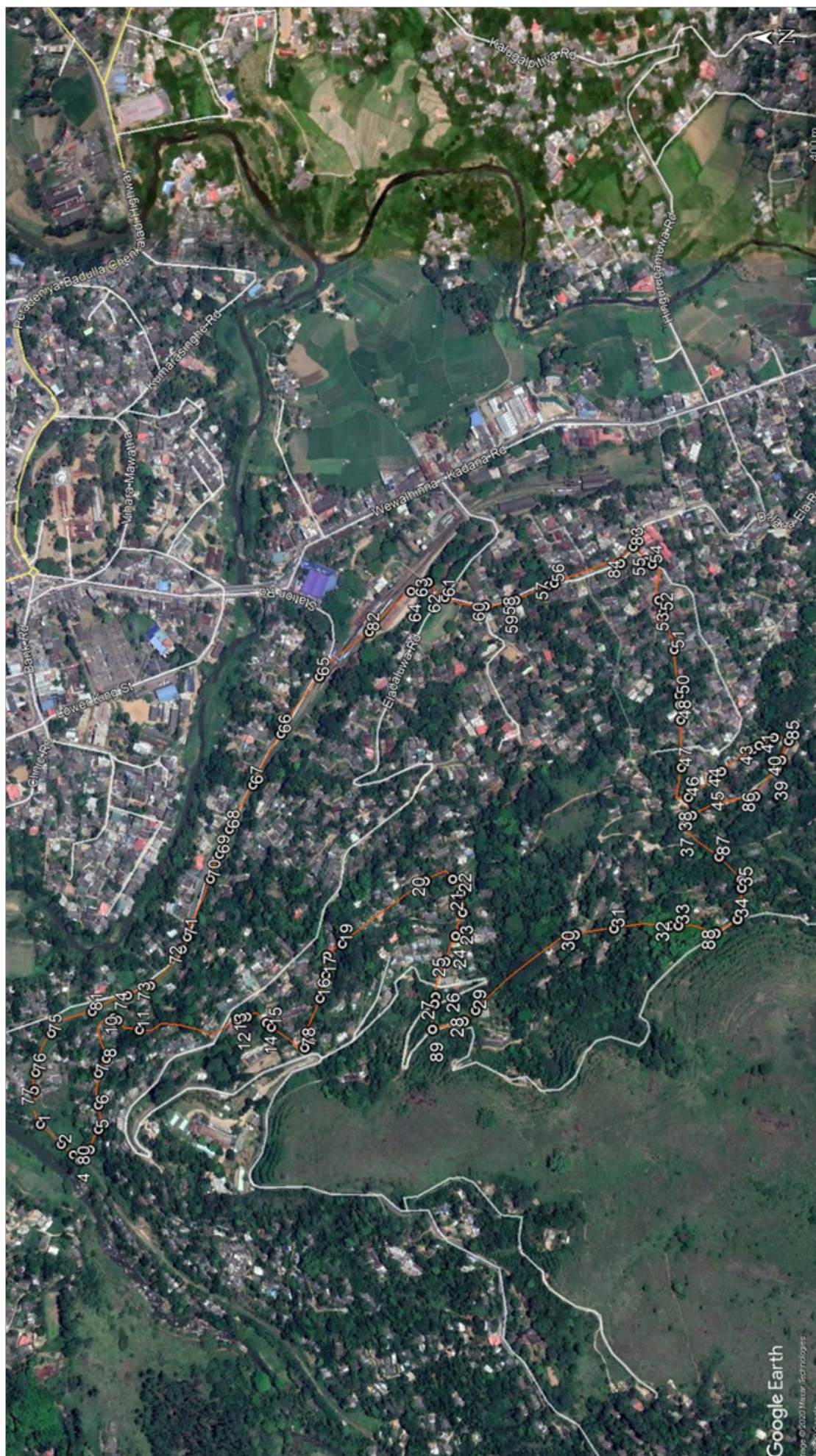


Low Density Residential Zone- Part 2.2





Low Density Residential Zone- Part 3



Geo coordinates of the Low Density Residential Zone-

Part 1

No	X (Longitude)	Y (Latitude)
1	81.05766	7.013123
2	81.05788	7.012987
3	81.05832	7.012713
4	81.05891	7.012443
5	81.05942	7.012319
6	81.05994	7.012261
7	81.06023	7.012488
8	81.0603	7.012341
9	81.06057	7.01074
10	81.0606	7.010544
11	81.06074	7.009713
12	81.06072	7.009469
13	81.06069	7.00925
14	81.06097	7.008375
15	81.062	7.008106
16	81.06216	7.00823
17	81.06232	7.008316
18	81.06284	7.007616
19	81.06289	7.007539
20	81.06408	7.006906
21	81.06408	7.00687
22	81.06407	7.006663
23	81.06406	7.006424
24	81.06405	7.005859
25	81.06403	7.005479
26	81.06398	7.004972
27	81.06395	7.003921
28	81.06338	7.003005
29	81.06264	7.002501
30	81.0614	7.001883
31	81.06098	7.001284
32	81.06098	7.001282

No	X (Longitude)	Y (Latitude)
33	81.06077	7.001401
34	81.06068	7.002141
35	81.06095	7.002302
36	81.06124	7.002634
37	81.0612	7.003079
38	81.0612	7.003432
39	81.0612	7.003552
40	81.06098	7.003967
41	81.06103	7.004474
42	81.06096	7.004524
43	81.06078	7.004951
44	81.06071	7.005137
45	81.06061	7.005348
46	81.06033	7.006105
47	81.06004	7.006506
48	81.06003	7.00651
49	81.05894	7.006617
50	81.05882	7.006903
51	81.05846	7.00776
52	81.05829	7.008328
53	81.05832	7.008863
54	81.05819	7.009536
55	81.0581	7.010487
56	81.05828	7.01096
57	81.05816	7.011634
58	81.05809	7.011972
59	81.05799	7.012173
60	81.06024	7.006352
61	81.06134	7.007572
62	81.06185	7.002087
63	81.06088	7.001031
64	81.06056	7.001843

Part 2

No	X (Longitude)	Y (Latitude)
1	81.04219	6.985644
2	81.04191	6.989355
3	81.04237	6.990954
4	81.0434	6.992116
5	81.04375	6.992675
6	81.04363	6.994191
7	81.04427	6.994466
8	81.0441	6.995256
9	81.04384	6.995822
10	81.04414	6.996333
11	81.0444	6.996816
12	81.04428	6.99713
13	81.04426	6.997185
14	81.04395	6.998682
15	81.04543	7.000134
16	81.04565	7.000318
17	81.04675	7.001709
18	81.04708	7.002655
19	81.04761	7.003229
20	81.04774	7.00337
21	81.04942	7.003137
22	81.04972	7.003469
23	81.04982	7.004327
24	81.04983	7.004792
25	81.04922	7.004936
26	81.04953	7.00655
27	81.04947	7.007635
28	81.05057	7.008773
29	81.05108	7.009453
30	81.05185	7.0108
31	81.05265	7.012143
32	81.05216	7.010597
33	81.05192	7.009717
34	81.05179	7.00881
35	81.05183	7.007616
36	81.05185	7.00623
37	81.05185	7.005651
38	81.05217	7.00431

No	X (Longitude)	Y (Latitude)
39	81.05219	7.004122
40	81.05274	7.00347
41	81.05267	7.004085
42	81.05258	7.004813
43	81.05253	7.005323
44	81.05255	7.006061
45	81.05245	7.006639
46	81.05229	7.007132
47	81.05228	7.007143
48	81.05214	7.008587
49	81.05226	7.009149
50	81.05259	7.009571
51	81.05375	7.011565
52	81.05441	7.012909
53	81.0548	7.012235
54	81.0544	7.011836
55	81.05414	7.011208
56	81.05427	7.008653
57	81.05376	7.006893
58	81.05365	7.005129
59	81.05406	7.004497
60	81.05407	7.002621
61	81.05417	7.002338
62	81.05466	7.001653
63	81.05485	7.001061
64	81.05426	7.000092
65	81.0496	6.995311
66	81.04858	6.993338
67	81.04855	6.992706
68	81.04847	6.99259
69	81.04766	6.992638
70	81.04623	6.991669
71	81.04506	6.992131
72	81.04455	6.992336
73	81.04399	6.988888
74	81.04358	6.987317
75	81.04344	6.986293
76	81.04325	6.985766

No	X (Longitude)	Y (Latitude)
77	81.0414	6.986021
78	81.04115	6.98655
79	81.04137	6.987322
80	81.04135	6.987814
81	81.04179	6.990192
82	81.04289	6.99136
83	81.04471	6.994999
84	81.04469	6.995238
85	81.04358	6.999381
86	81.0441	6.999765
87	81.04438	6.990598
88	81.04466	6.990874
89	81.0444	6.990116
90	81.04394	6.989346
91	81.04366	6.988072
92	81.04595	6.991484
93	81.04644	6.99163
94	81.04668	6.99244
95	81.0487	6.994358
96	81.05047	6.995507
97	81.04918	6.994503
98	81.04855	6.993834
99	81.05101	6.995861
100	81.05189	6.995951
101	81.0521	6.996264
102	81.05202	6.996983
103	81.05207	6.998013
104	81.05271	6.998824

No	X (Longitude)	Y (Latitude)
105	81.05287	6.999251
106	81.05358	6.999733
107	81.05393	6.999804
108	81.04901	7.00313
109	81.04877	7.002843
110	81.0485	7.002718
111	81.0481	7.002988
112	81.04795	7.002919
113	81.04876	7.004979
114	81.04961	7.005957
115	81.04998	7.007625
116	81.05184	7.005032
117	81.05502	7.012899
118	81.05413	7.012164
119	81.05405	7.010214
120	81.05479	7.010067
121	81.05499	7.010095
122	81.05499	7.010095
123	81.05485	7.009209
124	81.05385	7.007489
125	81.05352	7.005794
126	81.05474	7.004017
127	81.05473	7.003712
128	81.05439	7.003399
129	81.05419	7.003211
130	81.05234	7.003137
131	81.05475	7.000745
132	81.04631	7.001079

Part 3

No	X (Longitude)	Y (Latitude)
1	81.05268	6.984474
2	81.05242	6.984181
3	81.05228	6.984013
4	81.0522	6.983922
5	81.05267	6.983635
6	81.053	6.983635
7	81.05342	6.983644
8	81.05362	6.983544

No	X (Longitude)	Y (Latitude)
9	81.05415	6.983476
10	81.05412	6.983414
11	81.054	6.9831
12	81.0542	6.981731
13	81.05424	6.981608
14	81.05418	6.981335
15	81.05413	6.981271
16	81.05451	6.980624

No	X (Longitude)	Y (Latitude)
17	81.05481	6.980551
18	81.05506	6.980541
19	81.05523	6.980334
20	81.05607	6.979227
21	81.05611	6.978863
22	81.05593	6.978757
23	81.05568	6.978736
24	81.05538	6.978831
25	81.05505	6.978962
26	81.05462	6.979098
27	81.05453	6.979109
28	81.05433	6.978736
29	81.05447	6.978586
30	81.05545	6.977313
31	81.05556	6.976841
32	81.05563	6.976179
33	81.05564	6.976075
34	81.05574	6.97537
35	81.05611	6.975271
36	81.05621	6.975262
37	81.05687	6.975904
38	81.05699	6.975776
39	81.0576	6.974653
40	81.05771	6.97459
41	81.05801	6.974655
42	81.0579	6.974844
43	81.05785	6.97492
44	81.05755	6.975348
45	81.05746	6.975458
46	81.05722	6.9758
47	81.05761	6.97586
48	81.05824	6.975831
49	81.05844	6.975835
50	81.05857	6.975838
51	81.05919	6.975877
52	81.05972	6.976006
53	81.05988	6.976057

No	X (Longitude)	Y (Latitude)
54	81.06038	6.976131
55	81.06043	6.976219
56	81.06013	6.977459
57	81.0601	6.977538
58	81.0599	6.977985
59	81.05986	6.978094
60	81.05982	6.978401
61	81.05994	6.978953
62	81.06016	6.979185
63	81.06016	6.979185
64	81.06003	6.979418
65	81.05885	6.98068
66	81.05805	6.981206
67	81.05735	6.981589
68	81.05673	6.981911
69	81.05639	6.982045
70	81.05604	6.982168
71	81.05525	6.982482
72	81.05508	6.982548
73	81.05458	6.982977
74	81.05444	6.983296
75	81.05392	6.984334
76	81.05339	6.984539
77	81.05315	6.984555
78	81.0539	6.980813
79	81.05408	6.980793
80	81.05237	6.983763
81	81.05422	6.98378
82	81.05947	6.979993
83	81.06063	6.976382
84	81.0604	6.976556
85	81.05796	6.974483
86	81.05724	6.974948
87	81.05648	6.9755
88	81.05556	6.975643
89	81.05422	6.97914

Environment Sensitive Zone

- Special paddy & low land conservation sub zone- Part 1



• Special paddy & low land conservation sub zone- Part 2



• Special paddy & low land conservation sub zone- Part 3



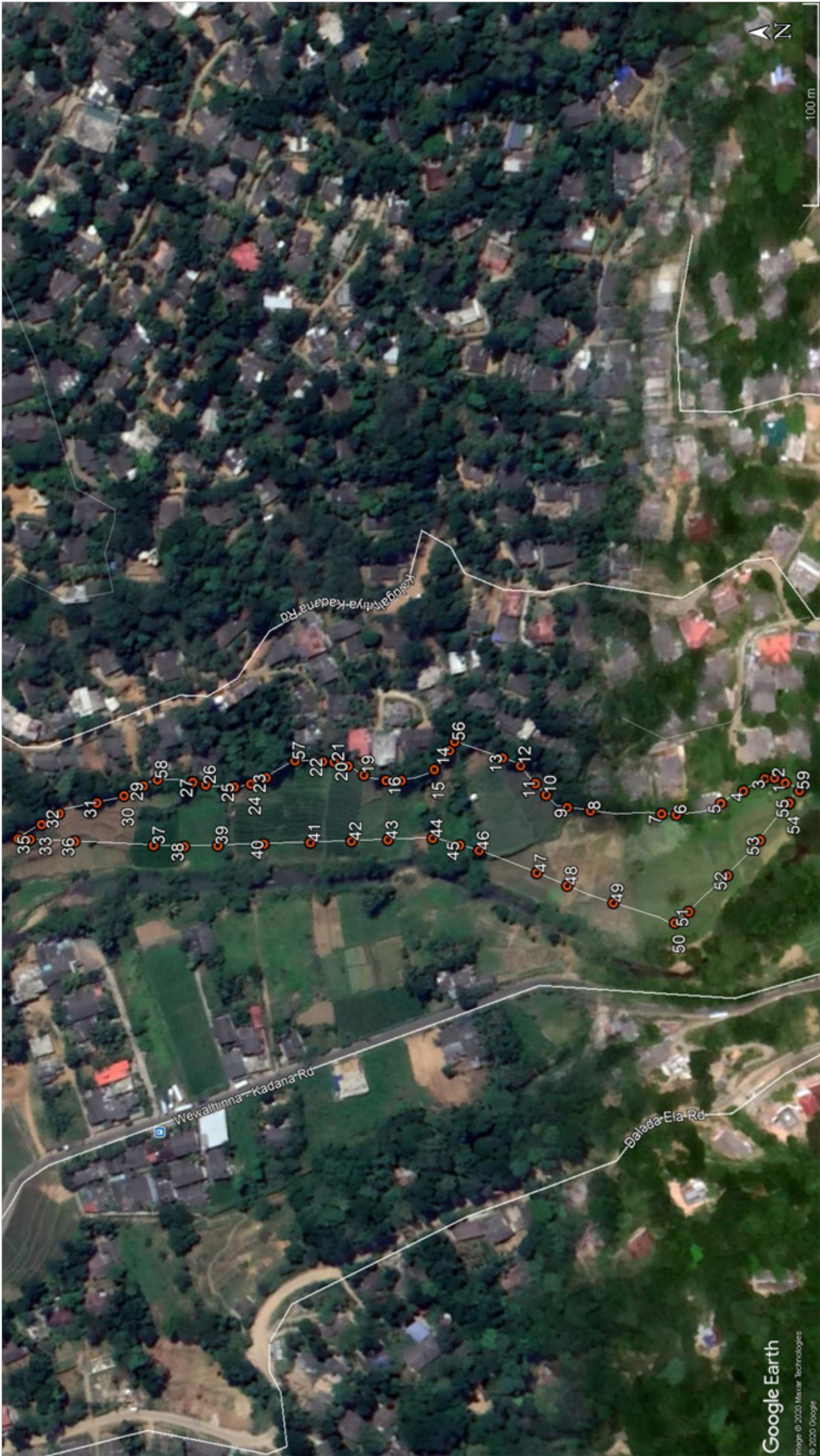
• Special paddy & low land conservation sub zone- Part 4



• Special paddy & low land conservation sub zone- Part 5



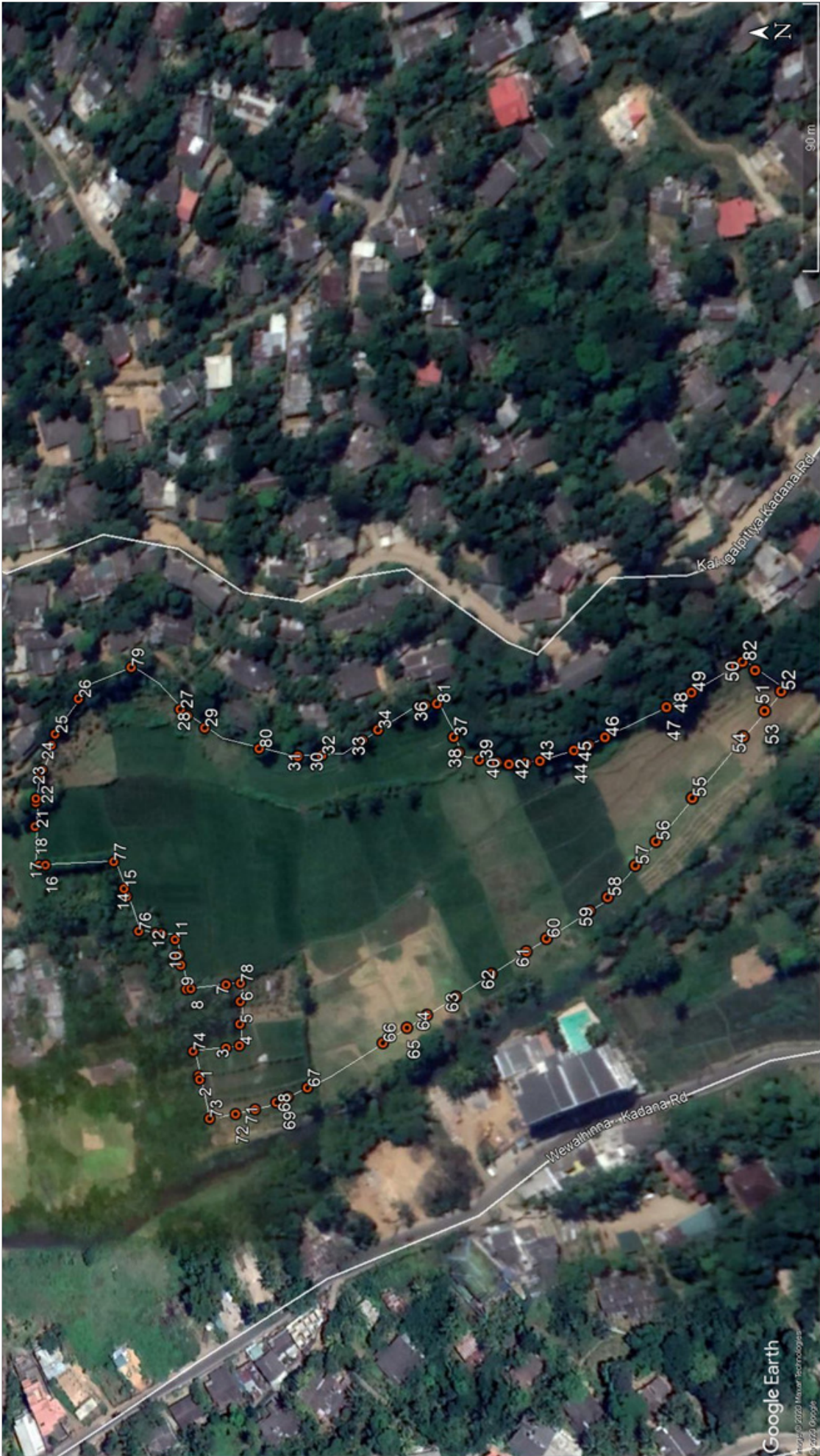
• Special paddy & low land conservation sub zone- Part 6



• Special paddy & low land conservation sub zone- Part 7



• Special paddy & low land conservation sub zone- Part 8



• Special paddy & low land conservation sub zone- Part 9



• Special paddy & low land conservation sub zone- Part 10



• Special paddy & low land conservation sub zone- Part II



• Special paddy & low land conservation sub zone- Part 12



• Special paddy & low land conservation sub zone- Part 13



• Special paddy & low land conservation sub zone- Part 14

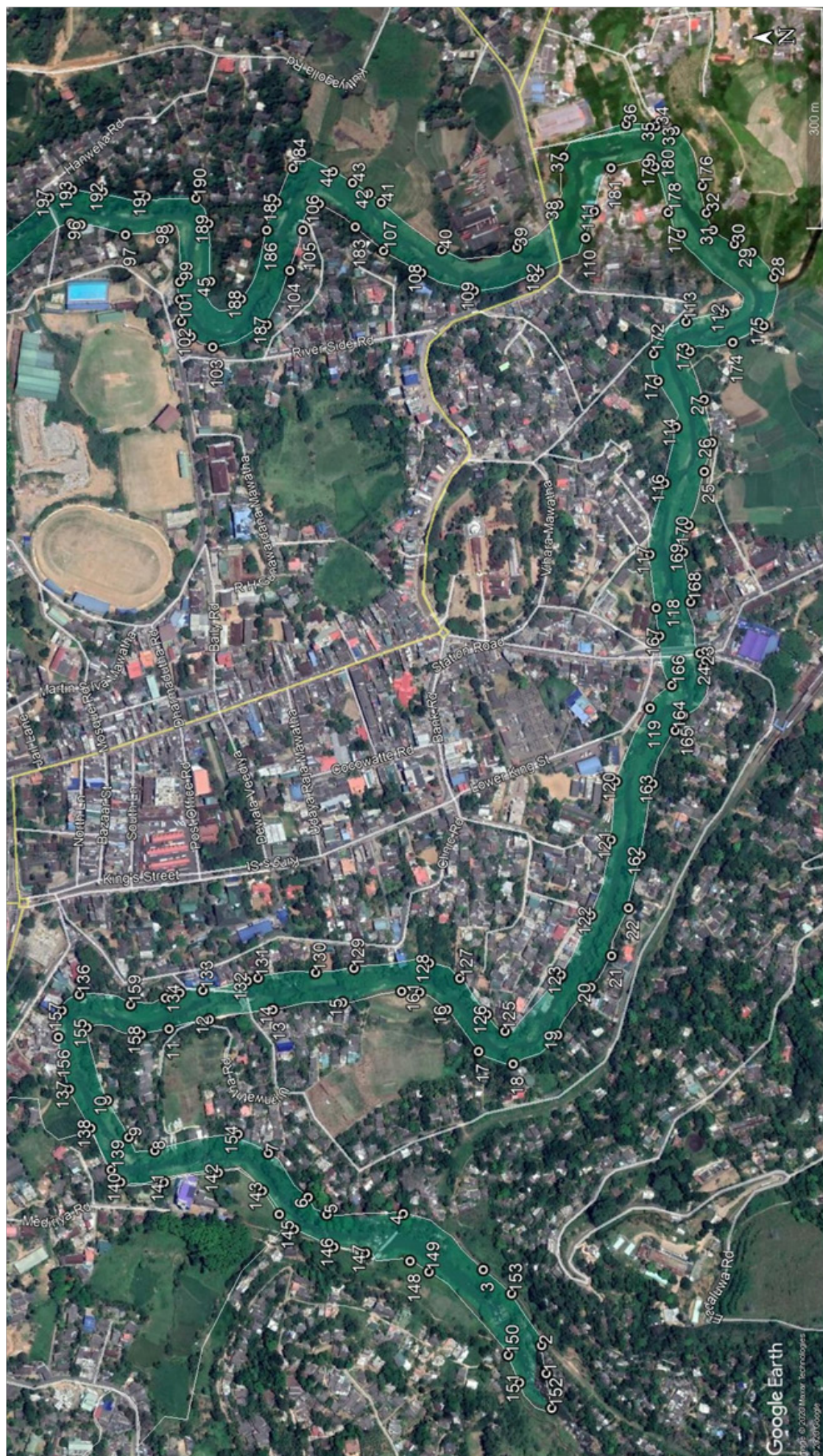


• Special paddy & low land conservation sub zone- Part 15



Environment Sensitive Zone

- **River Reservation Sub Zone 1.1**



• River Reservation Sub Zone 1.2



- **River Reservation Sub Zone 1.3**



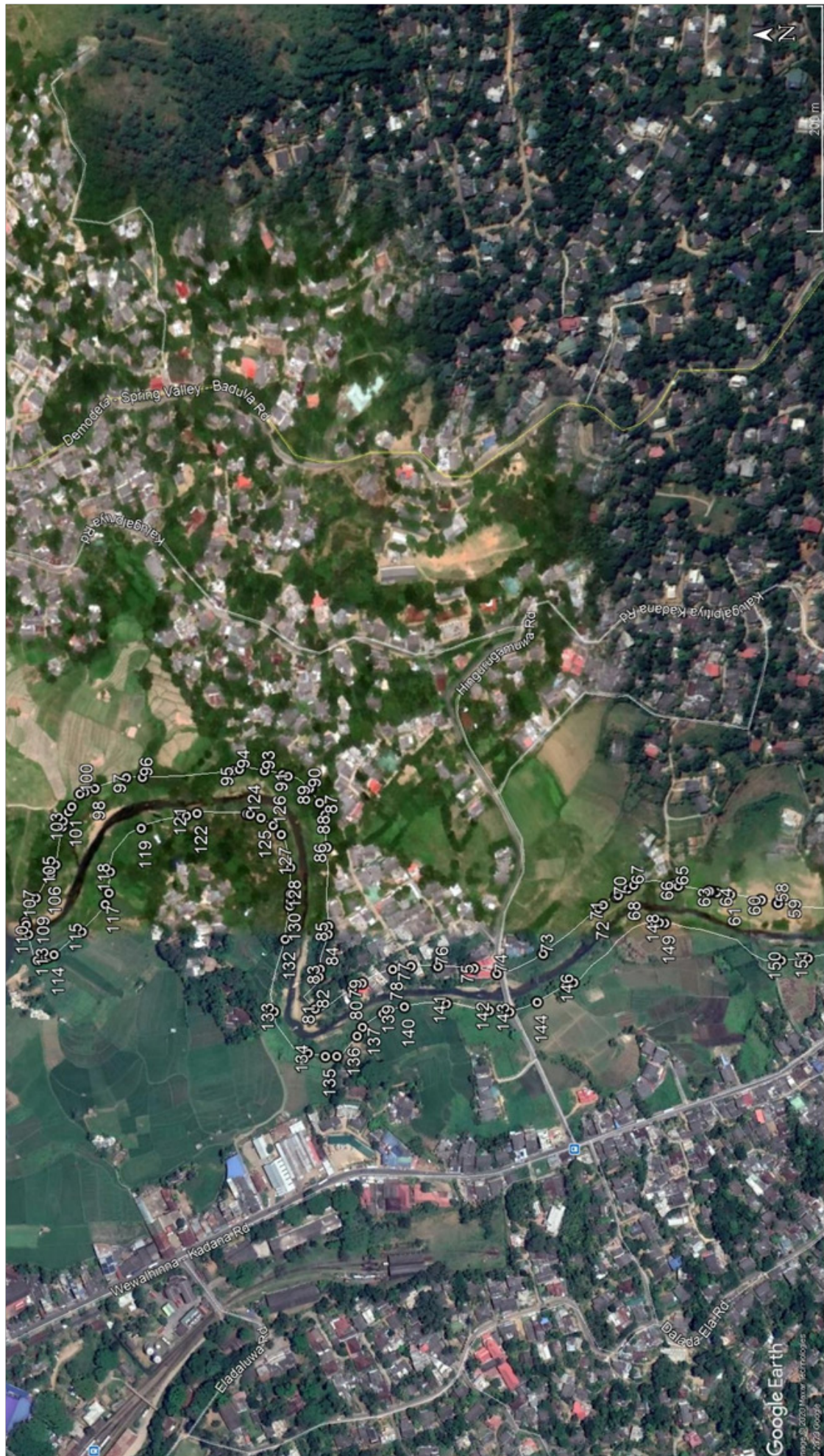
• River Reservation Sub Zone - Part 2.1



• River Reservation Sub Zone- Part 2.2



• River Reservation Sub Zone - Part 2.3



Environment Sensitive Zone

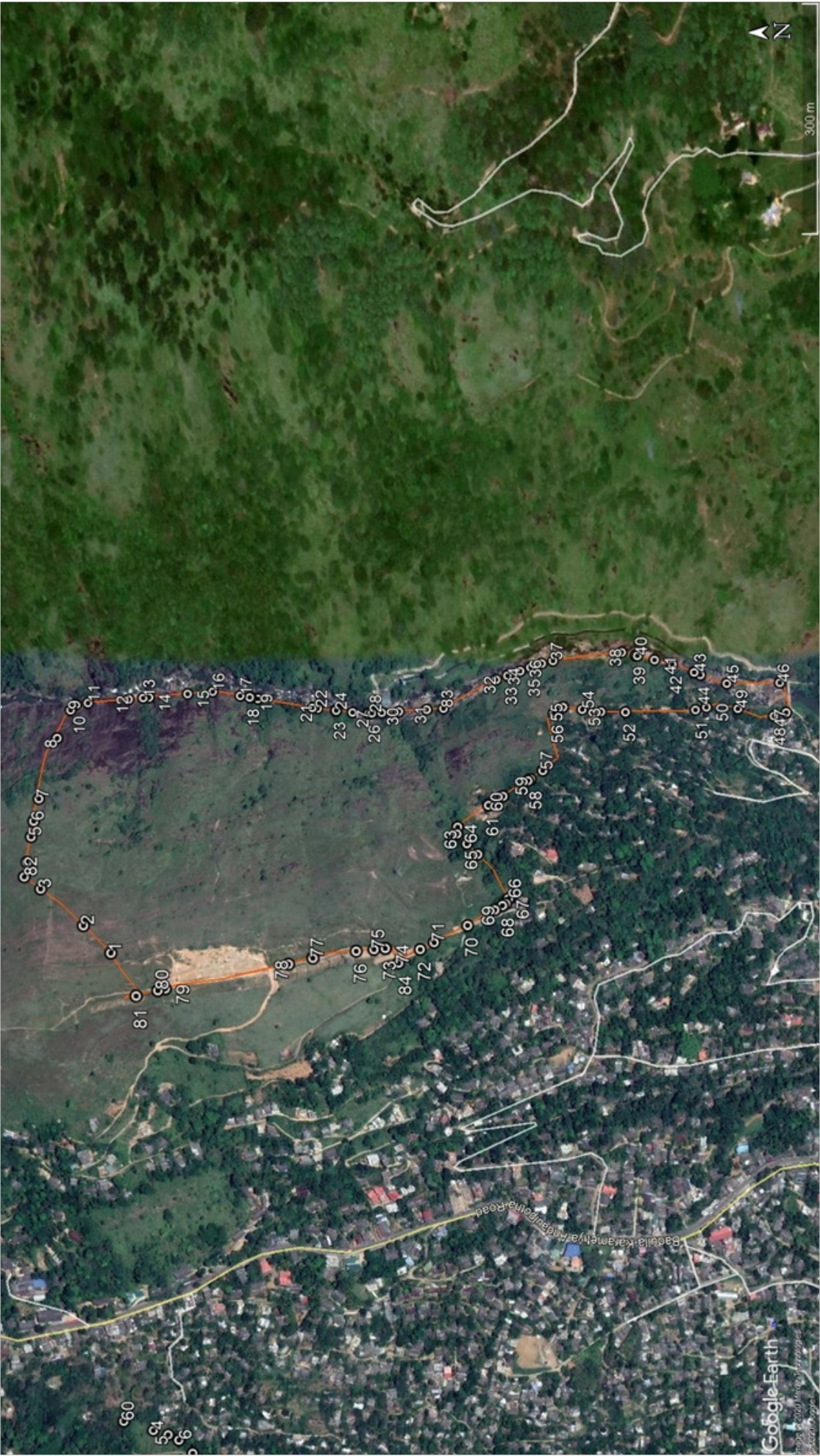
- Scrub and Forest Sub Zone 1



• Scrub and Forest Sub Zone - Part 2



• Scrub and Forest Sub Zone - Part 3



• Scrub and Forest Sub Zone -Part 4



Geo Co-ordinates of the Environment Sensitive Zone

• Special paddy & low land conservation sub zone - Part 1

No	X(Longitude)	Y(Latitude)
1	81.05852	6.998008
2	81.05856	6.998037
3	81.05873	6.998202
4	81.0583	6.998205
5	81.05837	6.998497
6	81.05909	6.998551
7	81.05852	6.998745
8	81.05925	6.99875
9	81.05921	6.998805
10	81.05859	6.998871
11	81.05908	6.998963
12	81.05787	6.999125
13	81.05784	6.999135
14	81.05836	6.999169
15	81.05866	6.999195
16	81.059	6.999231
17	81.05903	6.999379
18	81.05926	6.999546
19	81.05774	6.999581
20	81.05799	6.999697
21	81.05803	6.999704
22	81.05827	6.999832

No	X(Longitude)	Y(Latitude)
23	81.05951	6.999913
24	81.05825	7.000005
25	81.05958	7.000005
26	81.05934	7.000076
27	81.05824	7.000087
28	81.05822	7.000025
29	81.05821	7.000335
30	81.05821	7.000336
31	81.05946	7.000386
32	81.05807	7.000518
33	81.05927	7.000525
34	81.05775	7.000644
35	81.05899	7.000652
36	81.05764	7.000687
37	81.05885	7.00007
38	81.05757	7.000717
39	81.05864	7.000769
40	81.05842	7.000776
41	81.05732	7.000846
42	81.05785	7.00086
43	81.05774	7.000913
44	81.05745	7.001029

• Special paddy & low land conservation sub zone - Part 2

No	X(Longitude)	Y(Latitude)
1	81.05903	6.9963
2	81.05917	6.996182
3	81.05923	6.996138
4	81.0594	6.995999
5	81.05954	6.995884
6	81.05968	6.995773
7	81.05982	6.995693
8	81.05993	6.995649
9	81.06001	6.995618
10	81.0604	6.995385
11	81.06051	6.995312

No	X(Longitude)	Y(Latitude)
12	81.06055	6.995279
13	81.06046	6.995231
14	81.0604	6.995199
15	81.06022	6.995102
16	81.06007	6.995025
17	81.05977	6.994863
18	81.05956	6.994745
19	81.05955	6.994622
20	81.05955	6.994373
21	81.05955	6.994244
22	81.05954	6.993991

No	X(Longitude)	Y(Latitude)
23	81.05954	6.993879
24	81.05954	6.993782
25	81.05952	6.993681
26	81.05945	6.993548
27	81.0594	6.99347
28	81.05927	6.993212
29	81.0592	6.993085
30	81.05914	6.992978
31	81.05905	6.992815
32	81.05903	6.992776
33	81.05895	6.992817
34	81.05883	6.992882
35	81.05883	6.992944
36	81.059	6.993115
37	81.0592	6.993389
38	81.05929	6.993573
39	81.05917	6.993761
40	81.05912	6.993796
41	81.05897	6.993899
42	81.05882	6.994004

No	X(Longitude)	Y(Latitude)
43	81.05874	6.994134
44	81.05877	6.994244
45	81.05878	6.994407
46	81.0587	6.994809
47	81.05867	6.994892
48	81.05861	6.995049
49	81.05856	6.995166
50	81.05849	6.995355
51	81.05846	6.995501
52	81.05862	6.995655
53	81.05873	6.995668
54	81.05883	6.995746
55	81.05885	6.995852
56	81.05889	6.996071
57	81.05892	6.996205
58	81.05892	6.996206
59	81.05845	6.995634
60	81.05892	6.996328
61	81.05933	6.993652
62	81.05872	6.994075

• Special paddy & low land conservation sub zone - Part 3

No	X(Longitude)	Y(Latitude)
1	81.06762	6.989634
2	81.06831	6.989359
3	81.06852	6.989275
4	81.06867	6.989213
5	81.06881	6.989195
6	81.06922	6.989159
7	81.06942	6.988751
8	81.06935	6.988662
9	81.06929	6.988474
10	81.06932	6.988413
11	81.06944	6.98825
12	81.06966	6.988132
13	81.06983	6.988081
14	81.07014	6.987916
15	81.07028	6.987752
16	81.07028	6.987468

No	X(Longitude)	Y(Latitude)
17	81.07026	6.987366
18	81.07023	6.987222
19	81.07006	6.986631
20	81.06957	6.986757
21	81.06934	6.986474
22	81.06924	6.986254
23	81.06909	6.986129
24	81.06873	6.985911
25	81.06865	6.985303
26	81.06862	6.985253
27	81.06841	6.985278
28	81.06825	6.9853
29	81.06801	6.985202
30	81.06792	6.98498
31	81.06775	6.984636
32	81.06775	6.984634

No	X(Longitude)	Y(Latitude)
33	81.06758	6.984601
34	81.067	6.984714
35	81.06677	6.984818
36	81.06661	6.98484
37	81.06668	6.984442
38	81.0666	6.984264
39	81.06584	6.984736
40	81.06553	6.984707
41	81.06539	6.984569
42	81.06539	6.984562
43	81.06509	6.984421
44	81.06507	6.984427
45	81.06513	6.984621
46	81.06526	6.984805
47	81.06553	6.985145
48	81.06577	6.985426
49	81.06599	6.985748
50	81.06609	6.985937
51	81.0662	6.98618
52	81.06642	6.986287
53	81.06655	6.986373
54	81.06693	6.98632
55	81.06708	6.986299
56	81.06739	6.986295
57	81.0683	6.986789
58	81.06835	6.986851
59	81.06851	6.987413

No	X(Longitude)	Y(Latitude)
60	81.0685	6.987559
61	81.06849	6.987623
62	81.06844	6.987899
63	81.06845	6.988323
64	81.06844	6.988655
65	81.06755	6.988949
66	81.06753	6.989071
67	81.06743	6.989511
68	81.06521	6.984333
69	81.06607	6.984818
70	81.06619	6.984435
71	81.06733	6.984569
72	81.06884	6.985646
73	81.0688	6.986104
74	81.06776	6.986188
75	81.0679	6.986217
76	81.06815	6.986466
77	81.06849	6.987119
78	81.06806	6.988942
79	81.0676	6.98869
80	81.06751	6.989676
81	81.0695	6.989013
82	81.07006	6.988012
83	81.06973	6.986807
84	81.06944	6.986609
85	81.06638	6.984309
86	81.06673	6.984295

• Special paddy & low land conservation sub zone - Part 4

No	X(Longitude)	Y(Latitude)
1	81.0698	6.961077
2	81.0697	6.961145
3	81.06956	6.961237
4	81.0694	6.961345
5	81.06928	6.961426
6	81.06922	6.96147
7	81.06913	6.961525
8	81.06897	6.961636
9	81.06894	6.961655

No	X(Longitude)	Y(Latitude)
10	81.06879	6.961942
11	81.06876	6.962061
12	81.0687	6.962217
13	81.06861	6.962423
14	81.06855	6.962579
15	81.06861	6.962548
16	81.06875	6.962439
17	81.06894	6.962368
18	81.06894	6.962366

No	X(Longitude)	Y(Latitude)
19	81.06913	6.962291
20	81.06918	6.962253
21	81.06924	6.962205
22	81.06933	6.96214
23	81.06933	6.96214
24	81.06943	6.962065
25	81.06949	6.962017

No	X(Longitude)	Y(Latitude)
26	81.06955	6.961973
27	81.06967	6.961868
28	81.06972	6.961826
29	81.06988	6.961685
30	81.07002	6.961561
31	81.06994	6.961206
32	81.07009	6.9615

• Special paddy & low land conservation sub zone - Part 5

No	X(Longitude)	Y(Latitude)
1	81.06843	6.964963
2	81.06843	6.964956
3	81.06852	6.964802
4	81.06859	6.96469
5	81.06863	6.964622
6	81.06867	6.964541
7	81.06872	6.964469
8	81.06881	6.964309
9	81.06911	6.963899
10	81.06923	6.963783
11	81.06934	6.963674
12	81.0694	6.963604
13	81.06944	6.963548
14	81.06947	6.963485
15	81.06951	6.963432
16	81.06972	6.9633
17	81.06979	6.963271
18	81.06986	6.963242
19	81.06987	6.963226
20	81.06993	6.963128
21	81.07005	6.962923
22	81.07013	6.962777
23	81.07014	6.962766
24	81.07027	6.962547
25	81.07028	6.962456
26	81.07027	6.962394
27	81.07025	6.962231
28	81.07023	6.962094
29	81.07023	6.962085

No	X(Longitude)	Y(Latitude)
30	81.07023	6.962083
31	81.07019	6.961941
32	81.07015	6.961977
33	81.07008	6.962034
34	81.07004	6.962072
35	81.07	6.962106
36	81.06997	6.962128
37	81.06983	6.962237
38	81.06982	6.962237
39	81.06973	6.962298
40	81.06967	6.962339
41	81.06947	6.96248
42	81.06943	6.962504
43	81.06933	6.962571
44	81.06925	6.962625
45	81.06916	6.962688
46	81.06911	6.962738
47	81.06909	6.962765
48	81.06879	6.963162
49	81.06879	6.963164
50	81.06876	6.963208
51	81.06876	6.963212
52	81.06868	6.96333
53	81.06863	6.963405
54	81.06861	6.963427
55	81.06855	6.963664
56	81.06854	6.96371
57	81.06853	6.96375
58	81.06851	6.963825

No	X(Longitude)	Y(Latitude)
59	81.06849	6.963895
60	81.06844	6.964075
61	81.06843	6.964119
62	81.06837	6.964406
63	81.06835	6.964554
64	81.06837	6.964657

No	X(Longitude)	Y(Latitude)
65	81.06838	6.964719
66	81.06839	6.964771
67	81.06838	6.964895
68	81.06837	6.964971
69	81.06837	6.965049
70	81.06837	6.965049

• Special paddy & low land conservation sub zone - Part 6

No	X(Longitude)	Y(Latitude)
1	81.06819	6.965455
2	81.06822	6.965512
3	81.06821	6.965561
4	81.06815	6.965669
5	81.06809	6.965783
6	81.06803	6.966011
7	81.06803	6.966087
8	81.06805	6.966453
9	81.06806	6.966572
10	81.06813	6.966681
11	81.06819	6.966737
12	81.06828	6.966815
13	81.06832	6.966909
14	81.06836	6.967178
15	81.06826	6.967255
16	81.0682	6.967426
17	81.0682	6.967502
18	81.0682	6.967508
19	81.06823	6.967616
20	81.06828	6.967698
21	81.0683	6.967768
22	81.0683	6.967827
23	81.06822	6.968119
24	81.06819	6.968198
25	81.06817	6.968283
26	81.06818	6.968428
27	81.0682	6.968493
28	81.0682	6.968497
29	81.06818	6.968746
30	81.06813	6.968846

No	X(Longitude)	Y(Latitude)
31	81.06809	6.968984
32	81.06803	6.969176
33	81.06798	6.969266
34	81.0679	6.969327
35	81.0679	6.969326
36	81.06789	6.969104
37	81.06786	6.968704
38	81.06786	6.968548
39	81.06786	6.968374
40	81.06787	6.968138
41	81.06788	6.967896
42	81.06789	6.967683
43	81.06789	6.967494
44	81.0679	6.967263
45	81.06787	6.967124
46	81.06784	6.967023
47	81.06772	6.966724
48	81.06765	6.966567
49	81.06756	6.966328
50	81.06746	6.966009
51	81.06752	6.96594
52	81.06771	6.965748
53	81.06789	6.965584
54	81.06808	6.965435
55	81.06809	6.965432
56	81.06841	6.967152
57	81.06831	6.967969
58	81.06821	6.968673
59	81.06815	6.96538
60	81.0679	6.969385

• Special paddy & low land conservation sub zone - Part 7

No	X(Longitude)	Y(Latitude)
1	81.067	6.969462
2	81.06696	6.969449
3	81.06691	6.969431
4	81.06675	6.969378
5	81.06669	6.969357
6	81.06659	6.969323
7	81.06654	6.969306
8	81.06652	6.969298
9	81.06649	6.969288
10	81.06634	6.969239
11	81.06623	6.96922
12	81.06618	6.969289
13	81.06609	6.969396
14	81.06604	6.969426
15	81.06598	6.96947
16	81.06591	6.96951
17	81.06584	6.969555
18	81.0658	6.969581
19	81.06574	6.969613
20	81.06565	6.969671
21	81.06562	6.969732
22	81.0656	6.969835
23	81.06557	6.969925
24	81.06552	6.970071
25	81.0655	6.970127
26	81.06549	6.970164
27	81.06545	6.970279
28	81.06542	6.970386
29	81.06542	6.970386

No	X(Longitude)	Y(Latitude)
30	81.06541	6.970416
31	81.06545	6.970515
32	81.06552	6.970572
33	81.06566	6.970556
34	81.06574	6.970473
35	81.0658	6.97041
36	81.06585	6.970363
37	81.0659	6.970307
38	81.06597	6.970239
39	81.06602	6.970176
40	81.06612	6.970082
41	81.06617	6.970043
42	81.06633	6.969927
43	81.06639	6.969881
44	81.0665	6.969803
45	81.06652	6.969786
46	81.06656	6.969757
47	81.06659	6.969736
48	81.06669	6.969669
49	81.06674	6.969636
50	81.06678	6.969612
51	81.06684	6.969579
52	81.06688	6.969553
53	81.06691	6.96953
54	81.06693	6.969515
55	81.06559	6.970631
56	81.06539	6.97047
57	81.06624	6.969205

• Special paddy & low land conservation sub zone - Part 8

No	X(Longitude)	Y(Latitude)
1	81.06531	6.972205
2	81.06533	6.972209
3	81.06544	6.972095
4	81.06546	6.97204
5	81.06554	6.972037
6	81.06563	6.972034

No	X(Longitude)	Y(Latitude)
7	81.06569	6.972091
8	81.06567	6.972237
9	81.06576	6.972277
10	81.0658	6.972285
11	81.06586	6.972299
12	81.06588	6.972354

No	X(Longitude)	Y(Latitude)
13	81.06588	6.972379
14	81.06602	6.972499
15	81.06605	6.97251
16	81.06614	6.972843
17	81.06613	6.97287
18	81.06629	6.97288
19	81.06638	6.972871
20	81.06639	6.97287
21	81.0664	6.972869
22	81.0665	6.972842
23	81.06652	6.972835
24	81.06661	6.97279
25	81.06666	6.97277
26	81.0668	6.97266
27	81.06675	6.972238
28	81.06673	6.97221
29	81.06668	6.972142
30	81.06658	6.971778
31	81.06658	6.971775
32	81.06658	6.971682
33	81.06664	6.971523
34	81.06667	6.971462
35	81.06676	6.971306
36	81.06676	6.971283
37	81.06665	6.971181
38	81.06659	6.971165
39	81.06657	6.97109
40	81.06656	6.971027
41	81.06655	6.970983
42	81.06656	6.970923
43	81.06656	6.970872
44	81.0666	6.970752
45	81.06662	6.970701
46	81.06665	6.970644
47	81.06675	6.970434

No	X(Longitude)	Y(Latitude)
48	81.06679	6.970373
49	81.0668	6.97035
50	81.0669	6.970202
51	81.06688	6.970139
52	81.06681	6.970053
53	81.06674	6.970107
54	81.06665	6.970178
55	81.06644	6.970348
56	81.06628	6.970472
57	81.06619	6.970544
58	81.06608	6.970642
59	81.06602	6.970706
60	81.06592	6.97086
61	81.06587	6.970933
62	81.06578	6.97106
63	81.06569	6.971193
64	81.06562	6.971302
65	81.06556	6.971378
66	81.0655	6.971471
67	81.06531	6.971766
68	81.06527	6.971843
69	81.06526	6.971863
70	81.06525	6.971888
71	81.06522	6.971973
72	81.06519	6.972053
73	81.06517	6.972161
74	81.06542	6.972232
75	81.06566	6.972255
76	81.06588	6.972451
77	81.06616	6.972548
78	81.0657	6.972032
79	81.06691	6.972428
80	81.0666	6.971927
81	81.06677	6.971238
82	81.06691	6.970181

• Special paddy & low land conservation sub zone - Part 9

No	X(Longitude)	Y(Latitude)
1	81.06442	6.972953
2	81.0643	6.972837
3	81.06423	6.972913
4	81.06413	6.973014
5	81.06401	6.973051
6	81.06392	6.973066
7	81.064	6.97331
8	81.06417	6.973402
9	81.06393	6.973606
10	81.06375	6.973705
11	81.0636	6.973787
12	81.06345	6.973977
13	81.06339	6.974076
14	81.06342	6.974274
15	81.06356	6.974399
16	81.06364	6.974525
17	81.06367	6.974585
18	81.06369	6.974709
19	81.06365	6.974747
20	81.06344	6.9747
21	81.06335	6.974753
22	81.06321	6.974879
23	81.06329	6.97516
24	81.06337	6.975293
25	81.06346	6.975445
26	81.06349	6.975587
27	81.06356	6.97568
28	81.06372	6.975768
29	81.06381	6.975814
30	81.06392	6.975849

No	X(Longitude)	Y(Latitude)
31	81.06392	6.975844
32	81.06395	6.97579
33	81.06404	6.975618
34	81.06409	6.975502
35	81.06423	6.975243
36	81.06435	6.975116
37	81.06444	6.975029
38	81.06444	6.975026
39	81.06449	6.974984
40	81.06464	6.97482
41	81.0647	6.974753
42	81.06475	6.974516
43	81.06473	6.974346
44	81.06471	6.974265
45	81.06466	6.974073
46	81.06449	6.973672
47	81.06447	6.97364
48	81.06439	6.973433
49	81.06439	6.973256
50	81.06442	6.973122
51	81.06305	6.975026
52	81.06419	6.973383
53	81.06404	6.973552
54	81.06376	6.97322
55	81.0646	6.973821
56	81.06335	6.974212
57	81.06334	6.974158
58	81.06443	6.973013
59	81.06431	6.97282

• Special paddy & low land conservation sub zone - Part 10

No	X(Longitude)	Y(Latitude)
1	81.06454	6.975511
2	81.06463	6.975411
3	81.06469	6.975331
4	81.06483	6.975176
5	81.06483	6.975168

No	X(Longitude)	Y(Latitude)
6	81.06485	6.975144
7	81.06485	6.975143
8	81.06495	6.975014
9	81.06511	6.974723
10	81.06526	6.97466

No	X(Longitude)	Y(Latitude)
11	81.06532	6.974666
12	81.06538	6.974638
13	81.06541	6.974621
14	81.06558	6.97467
15	81.06565	6.974633
16	81.06568	6.974661
17	81.06572	6.974705
18	81.06572	6.974705
19	81.06583	6.974818
20	81.06596	6.97482
21	81.06618	6.974751
22	81.06623	6.974762
23	81.06627	6.974891
24	81.06628	6.97494
25	81.06629	6.974988
26	81.06631	6.975047
27	81.06658	6.975034
28	81.06666	6.975023
29	81.06679	6.975005
30	81.06681	6.975005
31	81.06682	6.975004
32	81.0669	6.975098
33	81.06691	6.975121
34	81.06692	6.975179
35	81.06688	6.975293
36	81.06684	6.975332
37	81.06665	6.975516
38	81.06647	6.975682
39	81.06638	6.975771
40	81.06632	6.975825

No	X(Longitude)	Y(Latitude)
41	81.06626	6.975868
42	81.06619	6.975914
43	81.06613	6.975953
44	81.06604	6.976019
45	81.06598	6.976007
46	81.06598	6.976006
47	81.06573	6.975902
48	81.06559	6.975851
49	81.06543	6.975817
50	81.06536	6.975811
51	81.06528	6.975816
52	81.06523	6.975832
53	81.06508	6.975896
54	81.06502	6.975916
55	81.06495	6.975938
56	81.06482	6.97597
57	81.0647	6.975878
58	81.06469	6.975736
59	81.06465	6.975709
60	81.06447	6.975608
61	81.06452	6.975621
62	81.06472	6.975998
63	81.0659	6.975974
64	81.06633	6.975123
65	81.0655	6.974711
66	81.06514	6.974642
67	81.06502	6.974903
68	81.06694	6.975232
69	81.06641	6.975112

• Special paddy & low land conservation sub zone - Part II

No	X(Longitude)	Y(Latitude)
1	81.06339	6.977585
2	81.06309	6.977647
3	81.06306	6.977735
4	81.06275	6.978408
5	81.06272	6.978455
6	81.06265	6.978691

No	X(Longitude)	Y(Latitude)
7	81.06252	6.978938
8	81.0625	6.978982
9	81.06243	6.979188
10	81.06254	6.979168
11	81.06258	6.9792
12	81.06278	6.979276

No	X(Longitude)	Y(Latitude)
13	81.06292	6.979273
14	81.06292	6.97941
15	81.06291	6.979585
16	81.06291	6.979916
17	81.0627	6.979923
18	81.0625	6.979756
19	81.06228	6.979551
20	81.06175	6.979698
21	81.06175	6.979702
22	81.06175	6.979725
23	81.0615	6.980067
24	81.06151	6.980285
25	81.06151	6.980336
26	81.06151	6.980398
27	81.06162	6.980649
28	81.06169	6.980986
29	81.06196	6.981076
30	81.06208	6.981081
31	81.06213	6.981067
32	81.06233	6.98088
33	81.06236	6.980798
34	81.06321	6.981111
35	81.0634	6.981081
36	81.06355	6.981012
37	81.06353	6.98093
38	81.06373	6.980754
39	81.06391	6.980237
40	81.0641	6.980244
41	81.06414	6.98026
42	81.06432	6.980327
43	81.0644	6.980339
44	81.06442	6.980295
45	81.06449	6.980182
46	81.06468	6.979944
47	81.06482	6.979825
48	81.06484	6.979812
49	81.06505	6.979717
50	81.0651	6.979712
51	81.06517	6.979705

No	X(Longitude)	Y(Latitude)
52	81.06543	6.979649
53	81.06563	6.979456
54	81.06565	6.979423
55	81.06546	6.979205
56	81.06539	6.979215
57	81.06491	6.979279
58	81.06466	6.97927
59	81.06465	6.979267
60	81.06453	6.979247
61	81.06436	6.979133
62	81.06423	6.979027
63	81.06407	6.978949
64	81.06395	6.978934
65	81.06389	6.97884
66	81.06376	6.978686
67	81.06362	6.978518
68	81.06386	6.978274
69	81.06411	6.978335
70	81.06432	6.978437
71	81.06448	6.978568
72	81.06454	6.978582
73	81.06463	6.978592
74	81.0647	6.978556
75	81.06482	6.978504
76	81.06506	6.978397
77	81.0654	6.97847
78	81.06552	6.978605
79	81.06568	6.978695
80	81.06579	6.978457
81	81.06578	6.97838
82	81.06569	6.978178
83	81.0656	6.978108
84	81.06521	6.97801
85	81.06513	6.978009
86	81.06453	6.978069
87	81.06355	6.97792
88	81.06351	6.977777
89	81.06561	6.978759
90	81.06573	6.979188

No	X(Longitude)	Y(Latitude)
91	81.0638	6.980372
92	81.06399	6.98059
93	81.06351	6.98088
94	81.063	6.98091
95	81.0629	6.980883
96	81.06277	6.980931
97	81.06254	6.980923
98	81.0625	6.980793
99	81.06168	6.981038
100	81.06173	6.980769
101	81.06162	6.979804
102	81.06176	6.979873
103	81.06174	6.979532
104	81.06183	6.979342

No	X(Longitude)	Y(Latitude)
105	81.06219	6.979492
106	81.06238	6.979199
107	81.06281	6.979553
108	81.06304	6.979626
109	81.06299	6.979913
110	81.06303	6.978033
111	81.06297	6.977964
112	81.06311	6.977577
113	81.06375	6.978078
114	81.06408	6.978157
115	81.06365	6.978377
116	81.0636	6.978605
117	81.06485	6.978006

• Special paddy & low land conservation sub zone - Part 12

No	X(Longitude)	Y(Latitude)
1	81.06491	6.980532
2	81.065	6.980584
3	81.065	6.980585
4	81.06505	6.98061
5	81.06512	6.980616
6	81.0652	6.980622
7	81.06535	6.980538
8	81.06541	6.980479
9	81.06552	6.98045
10	81.06555	6.980445
11	81.06565	6.980443
12	81.06572	6.980443
13	81.06588	6.980443
14	81.06592	6.980311
15	81.06596	6.980182
16	81.06599	6.980154
17	81.06606	6.980185
18	81.06614	6.980217
19	81.06622	6.980248
20	81.06638	6.98042
21	81.06647	6.980503
22	81.06657	6.980595

No	X(Longitude)	Y(Latitude)
23	81.06662	6.980645
24	81.06676	6.980776
25	81.06692	6.980925
26	81.06704	6.98105
27	81.06709	6.981091
28	81.06714	6.981081
29	81.06725	6.981056
30	81.06735	6.980962
31	81.0675	6.980658
32	81.06743	6.980469
33	81.06732	6.980398
34	81.06714	6.980231
35	81.06727	6.980049
36	81.06729	6.979934
37	81.06716	6.979728
38	81.06747	6.979469
39	81.06746	6.979242
40	81.06745	6.979233
41	81.06736	6.979217
42	81.06732	6.979253
43	81.06716	6.979335
44	81.06708	6.97932

No	X(Longitude)	Y(Latitude)
45	81.06693	6.979297
46	81.06691	6.979294
47	81.06685	6.979287
48	81.06679	6.979228
49	81.06679	6.979226
50	81.06672	6.979144
51	81.06665	6.979179
52	81.06655	6.979235
53	81.06647	6.979286
54	81.06636	6.979346
55	81.06632	6.979367
56	81.06632	6.979367
57	81.06627	6.979396
58	81.06619	6.979443
59	81.06615	6.979479
60	81.06611	6.979593
61	81.0661	6.979642
62	81.06609	6.979678
63	81.06606	6.979776
64	81.066	6.979977

No	X(Longitude)	Y(Latitude)
65	81.06581	6.980098
66	81.06573	6.980139
67	81.06562	6.980152
68	81.06562	6.980152
69	81.06558	6.980156
70	81.06542	6.980176
71	81.06535	6.980187
72	81.06525	6.980244
73	81.06503	6.98038
74	81.06483	6.980483
75	81.06752	6.980745
76	81.06717	6.980308
77	81.06711	6.980323
78	81.06729	6.979854
79	81.06713	6.979854
80	81.06723	6.979615
81	81.06742	6.979538
82	81.06749	6.979328
83	81.06591	6.980443

• Special paddy & low land conservation sub zone - Part 13

No	X(Longitude)	Y(Latitude)
1	81.05046	6.987999
2	81.05084	6.988264
3	81.05086	6.988266
4	81.05106	6.988388
5	81.05165	6.988238
6	81.05188	6.988601
7	81.05189	6.988727
8	81.0519	6.98875
9	81.05195	6.988919
10	81.05201	6.988993
11	81.05218	6.98897
12	81.05255	6.988711
13	81.05267	6.988571
14	81.05272	6.98847
15	81.05276	6.988208

No	X(Longitude)	Y(Latitude)
16	81.05276	6.988179
17	81.05275	6.988116
18	81.05253	6.9878
19	81.05245	6.987818
20	81.05233	6.987851
21	81.05215	6.987658
22	81.05211	6.987565
23	81.05201	6.987351
24	81.05192	6.987394
25	81.05189	6.987411
26	81.05102	6.987688
27	81.05056	6.987776
28	81.05054	6.987779
29	81.05049	6.98779
30	81.05041	6.987881

• Special paddy & low land conservation sub zone - Part 14

No	X (Longitude)	Y (Latitude)
1	81.0627	6.976465
2	81.06274	6.976421
3	81.06276	6.976433
4	81.06282	6.976491
5	81.0629	6.976369
6	81.06296	6.976241
7	81.06358	6.976299
8	81.06359	6.976279
9	81.06363	6.976114
10	81.06366	6.975963
11	81.06374	6.975853
12	81.06388	6.975957
13	81.0639	6.976064
14	81.06393	6.976242
15	81.06399	6.976427

No	X (Longitude)	Y (Latitude)
16	81.064	6.976481
17	81.06398	6.976844
18	81.0639	6.977088
19	81.06387	6.977156
20	81.06372	6.977331
21	81.06364	6.977374
22	81.0635	6.977315
23	81.06346	6.977183
24	81.06344	6.97715
25	81.06337	6.97707
26	81.06324	6.97704
27	81.0632	6.976789
28	81.063	6.976756
29	81.06274	6.976569
30	81.06273	6.976563

• Special paddy & low land conservation sub zone- Part 15

No	X(Longitude)	Y(Latitude)
1	81.06171	6.996094
2	81.06157	6.996011
3	81.06152	6.995896
4	81.06146	6.995475
5	81.06147	6.99524
6	81.06125	6.994992
7	81.06124	6.994889
8	81.06135	6.994877
9	81.062	6.994884
10	81.06205	6.994942
11	81.06238	6.994935
12	81.06243	6.99493
13	81.06266	6.994989
14	81.06277	6.994969
15	81.0628	6.994964

No	X(Longitude)	Y(Latitude)
16	81.06281	6.994963
17	81.06303	6.994851
18	81.06311	6.994779
19	81.0633	6.994743
20	81.06341	6.994851
21	81.06324	6.994944
22	81.063	6.995053
23	81.06296	6.995072
24	81.06287	6.995114
25	81.06243	6.99545
26	81.06233	6.995526
27	81.06221	6.99563
28	81.06212	6.995704
29	81.06196	6.995874
30	81.0617	6.996098

Environment Sensitive Zone**• River Reservation Sub Zone - Part 1**

No	X(Longitude)	Y(Latitude)
1	81.05109	6.983355
2	81.05146	6.983414
3	81.05238	6.984128
4	81.05304	6.985113
5	81.053	6.986061
6	81.05321	6.986297
7	81.05375	6.986795
8	81.05377	6.98822
9	81.05393	6.988547
10	81.0544	6.988817
11	81.05531	6.988039
12	81.05543	6.987537
13	81.05556	6.986743
14	81.05556	6.986738
15	81.05564	6.985871
16	81.05555	6.98457
17	81.05502	6.984174
18	81.05487	6.983745
19	81.05524	6.983189
20	81.05584	6.982778
21	81.05624	6.982522
22	81.05684	6.982311
23	81.05988	6.981364
24	81.06004	6.981409
25	81.06234	6.981347
26	81.06271	6.981257
27	81.06325	6.981352
28	81.0648	6.98047
29	81.06511	6.980749
30	81.06522	6.980966
31	81.06539	6.981233
32	81.06561	6.981319
33	81.06664	6.981711
34	81.0667	6.981953
35	81.0667	6.981969
36	81.06673	6.982323
37	81.0663	6.983107
38	81.0657	6.98317

No	X(Longitude)	Y(Latitude)
39	81.06516	6.983692
40	81.06514	6.984634
41	81.06575	6.985391
42	81.06587	6.985549
43	81.066	6.985751
44	81.06614	6.985994
45	81.06475	6.98753
46	81.0652	6.991176
47	81.06544	6.991941
48	81.06569	6.992822
49	81.06559	6.993525
50	81.06535	6.993866
51	81.06412	6.9949
52	81.0637	6.995181
53	81.0634	6.995382
54	81.06282	6.995799
55	81.06244	6.996143
56	81.06212	6.99645
57	81.06174	6.996878
58	81.06159	6.997162
59	81.06132	6.99819
60	81.06127	6.998458
61	81.06123	6.998691
62	81.06137	7.000615
63	81.06134	7.000821
64	81.06269	7.00201
65	81.06351	7.002674
66	81.0638	7.002909
67	81.06394	7.003049
68	81.06413	7.003253
69	81.06423	7.003382
70	81.0641	7.003674
71	81.06363	7.003202
72	81.0623	7.002301
73	81.06139	7.001844
74	81.06109	7.00153
75	81.06091	7.000651

No	X(Longitude)	Y(Latitude)
76	81.06109	6.999624
77	81.06095	6.999345
78	81.06075	6.999025
79	81.06071	6.998579
80	81.06085	6.997702
81	81.06111	6.996848
82	81.06147	6.996276
83	81.06162	6.99607
84	81.06219	6.99567
85	81.06241	6.995486
86	81.06295	6.995082
87	81.06327	6.994903
88	81.06356	6.994757
89	81.06358	6.994745
90	81.06443	6.994072
91	81.06534	6.99321
92	81.06508	6.991893
93	81.06499	6.991447
94	81.06469	6.990627
95	81.06548	6.989276
96	81.06546	6.989148
97	81.06533	6.988589
98	81.0654	6.988045
99	81.06474	6.987916
100	81.06452	6.987917
101	81.06424	6.987893
102	81.06405	6.987771
103	81.06392	6.987501
104	81.06488	6.986534
105	81.0654	6.986372
106	81.06573	6.986167
107	81.06513	6.98536
108	81.06484	6.984885
109	81.06461	6.984227
110	81.06529	6.982834
111	81.06562	6.982725
112	81.06435	6.981092
113	81.06423	6.981577
114	81.06291	6.9817

No	X(Longitude)	Y(Latitude)
115	81.0629	6.981702
116	81.06219	6.98184
117	81.06129	6.982028
118	81.06062	6.98195
119	81.05935	6.98203
120	81.05843	6.982458
121	81.05769	6.982519
122	81.05674	6.982773
123	81.05599	6.983143
124	81.05597	6.983161
125	81.05528	6.983844
126	81.05549	6.984071
127	81.05595	6.984408
128	81.05614	6.984788
129	81.05608	6.985729
130	81.05602	6.986206
131	81.05596	6.986923
132	81.05592	6.987058
133	81.0558	6.987613
134	81.05577	6.9879
135	81.0557	6.988081
136	81.05575	6.989145
137	81.05454	6.989289
138	81.05405	6.989019
139	81.05353	6.988764
140	81.05337	6.988646
141	81.05337	6.988103
142	81.0535	6.987423
143	81.05328	6.986869
144	81.05299	6.986657
145	81.05282	6.986467
146	81.05261	6.985974
147	81.05254	6.98558
148	81.05244	6.985029
149	81.05231	6.984795
150	81.05131	6.983819
151	81.05098	6.983682
152	81.05067	6.983288
153	81.05209	6.983783

No	X(Longitude)	Y(Latitude)
154	81.05399	6.987176
155	81.05533	6.989061
156	81.05521	6.989417
157	81.05555	6.989364
158	81.05523	6.98839
159	81.05562	6.988515
160	81.05578	6.985134
161	81.05577	6.984909
162	81.0575	6.982153
163	81.0584	6.981998
164	81.05907	6.98172
165	81.05926	6.981621
166	81.05964	6.981759
167	81.06026	6.981909
168	81.06069	6.981522
169	81.06132	6.981609
170	81.06166	6.98154
171	81.06348	6.98193
172	81.06382	6.981985
173	81.06386	6.981529
174	81.06398	6.980988
175	81.06419	6.980598
176	81.06595	6.98137
177	81.06534	6.981631
178	81.06562	6.981795
179	81.06619	6.981961

No	X(Longitude)	Y(Latitude)
180	81.0663	6.982014
181	81.06618	6.982514
182	81.06485	6.98341
183	81.06544	6.985716
184	81.06617	6.986492
185	81.06574	6.986696
186	81.06539	6.986825
187	81.06419	6.98682
188	81.06452	6.987142
189	81.06547	6.987548
190	81.06578	6.987706
191	81.0658	6.988326
192	81.06587	6.988866
193	81.0659	6.989255
194	81.06469	6.99018
195	81.06503	6.990404
196	81.06524	6.990755
197	81.06581	6.989545
198	81.06523	6.993606
199	81.06172	7.001582
200	81.0614	7.00134
201	81.06153	6.999754
202	81.0644	7.00364
203	81.06386	7.003593
204	81.06287	7.002693

• River Reservation Sub Zone - Part 2

No	X(Longitude)	Y(Latitude)
1	81.07042	6.960574
2	81.07085	6.960387
3	81.071	6.960767
4	81.07099	6.960868
5	81.0708	6.961205
6	81.0708	6.961221
7	81.07069	6.961347
8	81.0705	6.961575
9	81.06973	6.962295
10	81.06972	6.9623

No	X(Longitude)	Y(Latitude)
11	81.06951	6.96243
12	81.06942	6.962482
13	81.06932	6.962547
14	81.06931	6.962555
15	81.06872	6.963256
16	81.0685	6.963843
17	81.06846	6.964005
18	81.06845	6.964046
19	81.06841	6.964159
20	81.06839	6.964244

No	X(Longitude)	Y(Latitude)
21	81.06838	6.964297
22	81.06838	6.965004
23	81.0682	6.965351
24	81.068	6.965501
25	81.06785	6.965624
26	81.06783	6.965638
27	81.06781	6.965662
28	81.06767	6.96578
29	81.06746	6.966043
30	81.06769	6.966649
31	81.0678	6.966888
32	81.06783	6.966959
33	81.06787	6.967856
34	81.06786	6.968163
35	81.06785	6.96845
36	81.06789	6.969188
37	81.06782	6.969494
38	81.06745	6.969624
39	81.06734	6.96969
40	81.06724	6.969758
41	81.06718	6.969797
42	81.06706	6.96987
43	81.06703	6.969885
44	81.06637	6.970389
45	81.06635	6.970402
46	81.06628	6.970461
47	81.06626	6.97048
48	81.06623	6.970507
49	81.06588	6.970909
50	81.06577	6.971047
51	81.06572	6.971122
52	81.06551	6.971399
53	81.06529	6.971793
54	81.06526	6.971858
55	81.0651	6.97233
56	81.06494	6.972573
57	81.06489	6.972846
58	81.06494	6.973398
59	81.06494	6.973402

No	X(Longitude)	Y(Latitude)
60	81.06497	6.973559
61	81.06502	6.973848
62	81.06504	6.973978
63	81.06505	6.974033
64	81.06505	6.974049
65	81.0651	6.974341
66	81.06511	6.974383
67	81.06511	6.97476
68	81.06507	6.974815
69	81.06501	6.974907
70	81.065	6.974924
71	81.06492	6.975047
72	81.06488	6.975091
73	81.06446	6.975614
74	81.06427	6.976049
75	81.06432	6.976266
76	81.06433	6.976606
77	81.06434	6.976861
78	81.06431	6.977033
79	81.06418	6.977322
80	81.06412	6.977415
81	81.06393	6.977765
82	81.06424	6.977729
83	81.06431	6.977718
84	81.06464	6.977643
85	81.06472	6.97764
86	81.06547	6.977654
87	81.06578	6.977671
88	81.06589	6.97772
89	81.06602	6.977806
90	81.06603	6.977816
91	81.06615	6.978016
92	81.06616	6.978065
93	81.0662	6.978237
94	81.06621	6.978474
95	81.0662	6.978529
96	81.06614	6.979394
97	81.06613	6.979545
98	81.06603	6.979843

No	X(Longitude)	Y(Latitude)
99	81.066	6.979938
100	81.06598	6.979983
101	81.06586	6.980061
102	81.06581	6.980091
103	81.06572	6.980142
104	81.06566	6.980151
105	81.0653	6.980216
106	81.06521	6.980263
107	81.06499	6.980402
108	81.06476	6.980504
109	81.06473	6.980496
110	81.06464	6.980474
111	81.06439	6.980392
112	81.06442	6.980314
113	81.06443	6.980284
114	81.06445	6.980233
115	81.06466	6.979967
116	81.06492	6.979748
117	81.06503	6.979712
118	81.06523	6.979699
119	81.06565	6.979406
120	81.06576	6.979032
121	81.06577	6.978977
122	81.06579	6.978878
123	81.06579	6.978405
124	81.06579	6.978375
125	81.06575	6.978273
126	81.06568	6.978158
127	81.06559	6.978082
128	81.06528	6.977995
129	81.06503	6.977996
130	81.06496	6.977997
131	81.06491	6.978002
132	81.0646	6.978047
133	81.06391	6.978149
134	81.06351	6.977829
135	81.06348	6.977667
136	81.06348	6.97756
137	81.06367	6.977369

No	X(Longitude)	Y(Latitude)
138	81.06376	6.977319
139	81.06389	6.977125
140	81.06395	6.976923
141	81.06398	6.976527
142	81.06391	6.976121
143	81.0639	6.975929
144	81.06399	6.975669
145	81.06415	6.975399
146	81.06418	6.975326
147	81.06475	6.974561
148	81.06475	6.974517
149	81.06475	6.974467
150	81.0644	6.97337
151	81.06442	6.97312
152	81.0645	6.972711
153	81.06452	6.972575
154	81.06477	6.972037
155	81.06482	6.971931
156	81.06494	6.9717
157	81.06505	6.97151
158	81.06506	6.971483
159	81.06508	6.971455
160	81.06508	6.971447
161	81.06529	6.971114
162	81.06622	6.970028
163	81.06668	6.969678
164	81.06696	6.969502
165	81.0675	6.96797
166	81.06751	6.967878
167	81.06752	6.967198
168	81.06743	6.966991
169	81.06728	6.966664
170	81.06717	6.966328
171	81.06714	6.966198
172	81.06711	6.966075
173	81.0671	6.966052
174	81.06711	6.965868
175	81.06721	6.965691
176	81.06725	6.965658

No	X(Longitude)	Y(Latitude)
177	81.0675	6.965416
178	81.06751	6.965409
179	81.06788	6.965074
180	81.06795	6.964994
181	81.06789	6.96427
182	81.06791	6.963996
183	81.06795	6.963497
184	81.06799	6.963394
185	81.0682	6.963017
186	81.06828	6.962913
187	81.06839	6.962774
188	81.0684	6.962757

No	X(Longitude)	Y(Latitude)
189	81.06864	6.962533
190	81.06876	6.962443
191	81.06895	6.962364
192	81.06912	6.962281
193	81.06935	6.962131
194	81.06964	6.96191
195	81.06989	6.961699
196	81.06989	6.961698
197	81.07042	6.961114
198	81.07043	6.961104
199	81.07055	6.96099
200	81.07047	6.960668

Environment Sensitive Zone

• Scrub and Forest Sub Zone - Part 1

No	X (Longitude)	Y (Latitude)
1	81.04291	6.998587
2	81.04266	6.997644
3	81.04248	6.996971
4	81.04203	6.995409
5	81.04175	6.994432
6	81.04088	6.991461
7	81.04045	6.989986
8	81.03998	6.988402
9	81.03964	6.987253
10	81.03904	6.985314
11	81.03864	6.984155
12	81.03808	6.982518
13	81.04094	6.98154
14	81.04194	6.981523
15	81.04222	6.981867
16	81.04216	6.982727
17	81.04215	6.983105
18	81.04287	6.984731
19	81.04294	6.985501
20	81.04134	6.987215
21	81.04167	6.988619
22	81.04187	6.989627

No	X (Longitude)	Y (Latitude)
23	81.04181	6.990293
24	81.0423	6.990945
25	81.04232	6.990958
26	81.04296	6.991534
27	81.04297	6.991548
28	81.04358	6.992959
29	81.04335	6.993925
30	81.0435	6.994185
31	81.04438	6.994598
32	81.0447	6.995175
33	81.04403	6.995283
34	81.04451	6.996806
35	81.0443	6.997118
36	81.04447	6.99772
37	81.04406	6.998695
38	81.04373	6.999169
39	81.03777	6.981594
40	81.03873	6.981577
41	81.04129	6.986213
42	81.04115	6.98655
43	81.04376	6.992476
44	81.04415	6.996347

No	X (Longitude)	Y (Latitude)
45	81.0434	6.999336
46	81.04417	6.99829
47	81.04128	6.992826

No	X (Longitude)	Y (Latitude)
48	81.04253	6.984083
49	81.04245	6.985541

• Scrub and Forest Sub Zone - Part 2

No	X(Longitude)	Y(Latitude)
1	81.05288	7.012303
2	81.05337	7.012498
3	81.05384	7.012689
4	81.0542	7.012465
5	81.05416	7.012264
6	81.0541	7.012116
7	81.05395	7.011921
8	81.05382	7.011749
9	81.05378	7.011609
10	81.05374	7.01129
11	81.05358	7.010936
12	81.05263	7.00948
13	81.05235	7.009225
14	81.05222	7.009063
15	81.05206	7.008312
16	81.05211	7.00809
17	81.05221	7.007634
18	81.05226	7.007276
19	81.05228	7.007162
20	81.05236	7.006858
21	81.05252	7.006389
22	81.05254	7.006111
23	81.05254	7.005763
24	81.05253	7.00519
25	81.05254	7.004775
26	81.05256	7.004624
27	81.05257	7.00452
28	81.05264	7.003981
29	81.05276	7.003447
30	81.05265	7.003362
31	81.05233	7.003174
32	81.05229	7.003364

No	X(Longitude)	Y(Latitude)
33	81.05222	7.003644
34	81.0522	7.003781
35	81.05216	7.004063
36	81.05207	7.00449
37	81.05185	7.005007
38	81.0518	7.005363
39	81.05176	7.005642
40	81.05173	7.005905
41	81.05174	7.006119
42	81.05175	7.00643
43	81.05178	7.006784
44	81.05179	7.006977
45	81.05181	7.007579
46	81.0518	7.007812
47	81.05177	7.008332
48	81.05177	7.008769
49	81.05178	7.009086
50	81.05182	7.00945
51	81.05197	7.009903
52	81.05202	7.010044
53	81.05213	7.01036
54	81.05217	7.010475
55	81.05231	7.010886
56	81.0524	7.011153
57	81.05242	7.011239
58	81.05254	7.01163
59	81.05268	7.012189
60	81.0543	7.012871
61	81.05253	7.005408
62	81.052	7.004708
63	81.05322	7.010209
64	81.05341	7.010644

• Scrub and Forest Sub Zone - Part 3

No	X(Longitude)	Y(Latitude)
1	81.06078	7.012876
2	81.06111	7.013262
3	81.06156	7.013884
4	81.0619	7.014117
5	81.06223	7.014097
6	81.06244	7.014085
7	81.06273	7.014062
8	81.06356	7.013946
9	81.06396	7.013841
10	81.06404	7.013783
11	81.06406	7.013616
12	81.06412	7.013056
13	81.06414	7.012851
14	81.06414	7.012768
15	81.0642	7.012225
16	81.06423	7.011869
17	81.06417	7.011475
18	81.06415	7.01134
19	81.06414	7.011321
20	81.06413	7.011221
21	81.06399	7.010436
22	81.06399	7.01036
23	81.06396	7.010096
24	81.06395	7.010093
25	81.06393	7.009857
26	81.06391	7.00963
27	81.06391	7.009623
28	81.06391	7.009578
29	81.06392	7.009436
30	81.06394	7.009189
31	81.06397	7.00879
32	81.0644	7.007802
33	81.06445	7.00764
34	81.06452	7.00746
35	81.06457	7.007312
36	81.06463	7.007153
37	81.06467	7.006991
38	81.06479	7.006014

No	X(Longitude)	Y(Latitude)
39	81.06474	7.005819
40	81.06474	7.005794
41	81.06468	7.005552
42	81.06462	7.005302
43	81.0645	7.004989
44	81.06446	7.004901
45	81.06434	7.004517
46	81.06435	7.003762
47	81.06392	7.003667
48	81.06387	7.003842
49	81.06398	7.00436
50	81.064	7.004818
51	81.06396	7.004979
52	81.06393	7.005996
53	81.06393	7.00634
54	81.06396	7.0066
55	81.064	7.006868
56	81.06391	7.007002
57	81.06311	7.007199
58	81.06299	7.007372
59	81.06297	7.007408
60	81.06276	7.007757
61	81.06264	7.007959
62	81.06234	7.008382
63	81.06225	7.008393
64	81.06212	7.008262
65	81.06199	7.00812
66	81.06141	7.00772
67	81.06134	7.007757
68	81.06132	7.0078
69	81.06126	7.007903
70	81.06106	7.008266
71	81.06084	7.008711
72	81.06076	7.008895
73	81.06078	7.009351
74	81.06078	7.009354
75	81.06077	7.009501
76	81.06076	7.009731

No	X(Longitude)	Y(Latitude)
77	81.06069	7.010287
78	81.06063	7.010596
79	81.06033	7.012163
80	81.06031	7.012256

No	X(Longitude)	Y(Latitude)
81	81.06024	7.012531
82	81.06171	7.014128
83	81.06398	7.008551
84	81.06059	7.009179

• Scrub and Forest Sub Zone - Part 4

No	X(Longitude)	Y(Latitude)
1	81.04795	7.003641
2	81.04808	7.003764
3	81.04817	7.003871
4	81.04822	7.004001
5	81.04829	7.00417
6	81.04834	7.004289
7	81.04847	7.004561
8	81.04857	7.004673
9	81.04874	7.004862
10	81.0488	7.004924
11	81.04905	7.004964
12	81.04914	7.004964
13	81.04925	7.00495
14	81.04938	7.004932
15	81.04956	7.004909
16	81.04986	7.004655
17	81.04983	7.004541
18	81.04978	7.004314
19	81.04977	7.004219
20	81.04976	7.004097
21	81.04974	7.003833
22	81.04973	7.003744
23	81.04972	7.003582

No	X(Longitude)	Y(Latitude)
24	81.04971	7.003447
25	81.04971	7.003335
26	81.04953	7.003182
27	81.04949	7.003147
28	81.04933	7.003135
29	81.04925	7.003137
30	81.04912	7.003133
31	81.04899	7.003112
32	81.04889	7.002974
33	81.04877	7.002843
34	81.04865	7.002812
35	81.04854	7.00274
36	81.04848	7.002733
37	81.04833	7.002851
38	81.04824	7.002921
39	81.04786	7.002894
40	81.04799	7.002867
41	81.0481	7.002988
42	81.04786	7.002735
43	81.04787	7.003301
44	81.04782	7.003504
45	81.04784	7.003089

Annexure No 02 - Summary of Approved Uses in Development Zones

Use		Environment Sensitive Zone	Low-Density Residential Zone	Medium-Density Residential Zone	Health Service Zone	Higher-Density Mix Development Zone
Residential	Residential Houses		3	3	3	3
	Hostels		3	3	3	3
	Housing Schemes			3	3	3
Health	Government Hospitals				3	
	Private Hospitals				3	3
	Medical Consultation Centres				3	3
	Laboratory Services			3	3	3
	Pharmacies		3	3	3	3
	Medical Centers		3	3	3	3
	Massage Parlors				3	
Education	Government and Semi-Government Schools					3
	International Schools			3		3
	Technical Colleges		3	3		3
	Vocational Training Institutes		3	3	3	3
	Montessori Schools		3	3		3
	Institutes of tertiary Education		3	3		3
	Private Tuition Classes			3		3
Institutes	Government Offices		3	3	3	3
	Government Office Complexes			3		3
	Banks, Financial Institutes		3	3	3	3
Social Services	Indoor Sport Centres		3	3	3	3
	Open Air Theatres			3		3
	Community/Cultural Centres		3	3		3
	Libraries		3	3	3	3
	Day Care Centres		3	3	3	3
	Elders'Homes		3	3		
	Salons/Beauty Parlors		3	3	3	3
	Cinema Theatres			3		3
	Physical Fitness Centres		3	3	3	3
	Funeral Palor				3	

Use		Environment Sensitive Zone	Low-Density Residential Zone	Medium-Density Residential Zone	Health Service Zone	Higher-Density Mix Development Zone
Commercial	Retail Shops		3	3	3	3
	Wholesale Shops			3		3
	Fish Markets			3		
	Processed Meat Shops			3		
	Building Material Shops(Selling cement, steel rods and pipes)		3	3		
	ii. Other Building Materials (Sand, Metal)		3	3		
	Liquor Shops		3	3		3
	Warehouses/Stores		3	3		3
	Bakeries		3	3		3
	Petrol Filling Stations			3		
	Gas filling and electric car charging centres			3		3
	Motor Spare Parts including vehicle body parts		3	3		
	Furniture Shops			3		3
	Super markets			3	3	3
	Laundry				3	
Tourism	Tourist Hotels		3	3		3
	Restaurants		3	3	3	3
	Holiday Homes		3	3	3	3
	Reception Halls		3	3		3
	City Hotels		3	3	3	3
	Motels		3	3		3
Motor Traffic	Motor Vehicle Trading Centres			3		3
	Motor Vehicle Repairing Garages			3		
	Motor Vehicle Service Centres			3		3
	Common Motor vehicle Parks		3	3	3	3
Industries	Non-Polluting Handy Craft manufacturing/Cottage Industries		3	3		3
	Building Material manufacturing centres including brick laying		3	3		
Leisure & Entertainment	Children's Parks		3	3	3	3
	Parks		3	3	3	3
	Open Areas		3	3	3	3
	Landscaped Areas		3	3	3	3

Annexure No 03 -Zone Factor Calculation

Table no 1: The assumptions made in determination of the zone factors depending on the conditions of each zone

Zone	Assumptions made
Health Service Zone	i. The current service beneficiary population of the Badulla Hospital complex could be doubled by the year of 2030
	ii. The Badulla Hospital Complex could be the main health service providing Centre after it being promoted to be a Teaching Hospital.
	iii. The Medical Faculty and the National Nurses Training Institute of the Uva-Welassa University will be further developed.
	iv. The vacant land adjoining the Badulla Hospital Complex may be made use of for expansion of the Hospital complex increasing the performance capacity.
	v. Private health service providers may be concentrated around the Hospital complex.
Higher - Density Mix Zone	i. The District and regional Offices of the institutions spread chaotically within the Badulla Town may be concentrated within the Mix Development Zone where the administrative functions are already centered.
	ii. The functional role of the Badulla Town played as a service centre for the benefit of the sub centres of Passara, Meegahakiwula, Wevalhinna and Atampitiya would sustain unhindered in the future.
	iii. The Badulla Town will be developed as a commercial town only next to the Bandarawela Town.
	iv. The current residential demand would prevail as it is and the Badulla town will be able to meet such demand in the future
Administrative cum Residential Zone	i. Further Development of higher education institutes.
	ii. Growth of current educational institutions
	iii. Current low-income housing areas may be developed in to better housing schemes.
	iv. Residential Development with a higher density
	v. Currently underutilized lands may be gradually taken over for development of administrative activities
Medium-Density Residential Zone	i. Further expansion of administrative functions will be undertaken with limitation.
	ii. This zone could be considered as the best zone for residential development.
	iii. This zone will develop as a mix zone for education, administration, residential and commercial activities.
Low-Density Residential Zone	i. Limited constructions in lands of steep slopes.
	ii. There will be a limited expansion in densely populated residential areas.
Conservation and Sensitive Zone	i. Limit the constructions.
	ii. Will prevail as the environmental conservation zone

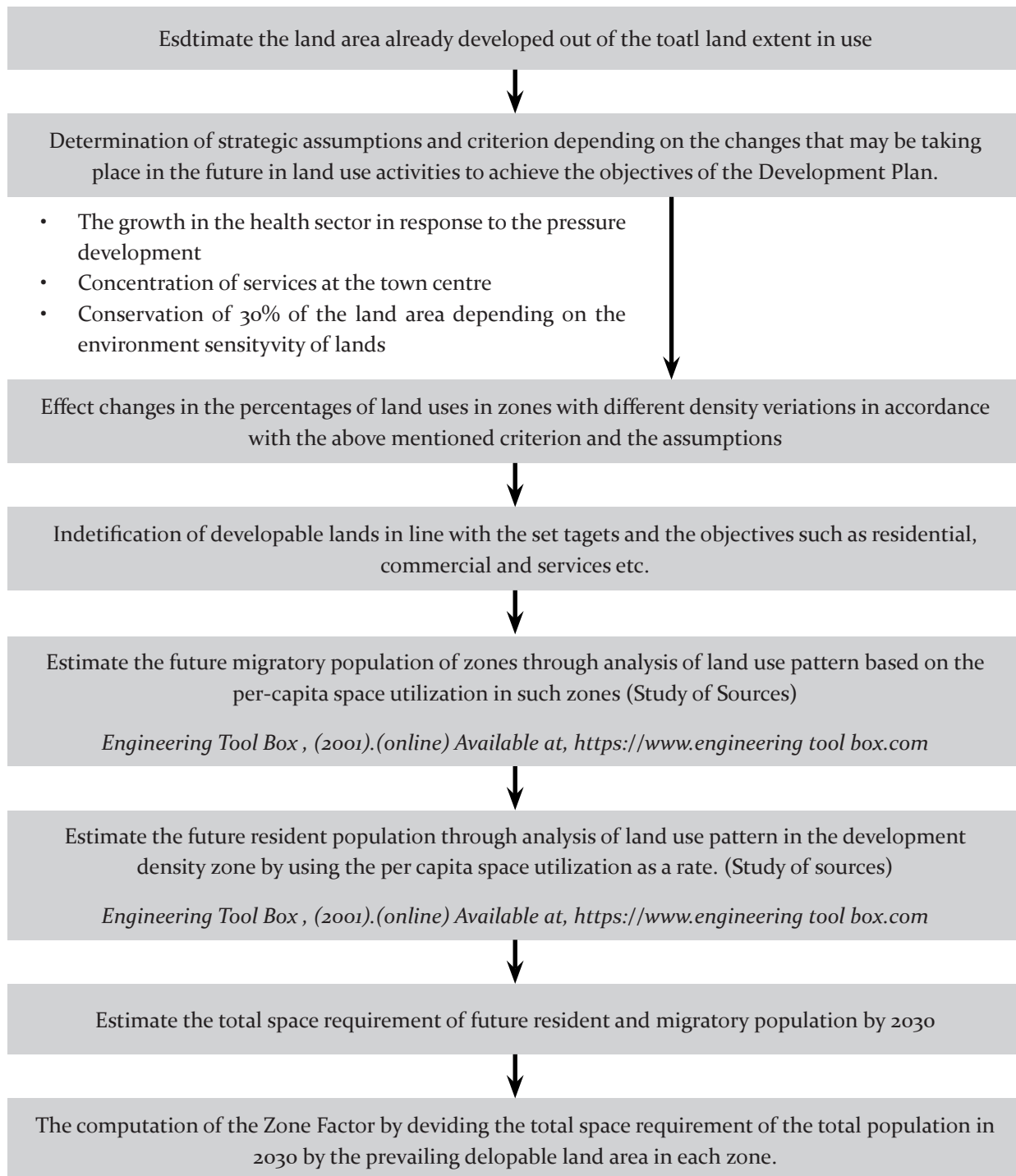
The resident and migratory population of each zone has been forecast based on the assumptions listed in the Table no 01, and then the lands required for the target population was computed by each zone. The per capita land requirement of each zone based on the forecast population of each zone has been computed as demonstrated in the Table no 02.

Table no 02: Per Capita land requirement of each zone

Zone	Estimated Migratory Population	Estimated Per Capita land extent (Sqm)	Description
Health Services	30,000	15	Land extent required for patients
Higher-Density Mix Zone	50,000	10	Land extent required for institutional services
Administrative cum Residential Zone	7,500	10	Lands required for Institutional and Commercial services
Medium-Density Residential Zone	30,000	15	Lands required for Institutional and Commercial services.
Low-Density Residential Zone	10,000	10	Lands required for Commercial and Educational Services

The lands available in each zone for development were estimated excluding the lands of the Environmental Conservation and Sensitive Zones. The zone factor was then computed by dividing the total land area required for development to meet the needs of the target population by the currently prevailing developable lands in each zone.

The process of computing the Zone Factor



Computation of Zone Factor

$$\text{Zone Factor} = \frac{\text{Future prospective space requirement}}{\text{currently available land area}}$$

The zone factor so computed will offer the developers in each zone a fair share of the space they developed

	Contributory Factors Use Zones	Land Extent (Acres)	Target Population by 2030	Migratory Population	Land extent required for residential use	Land extent required for migratory population	Total Land Extent required (SQM)	Total Land Area Required (Acres)	Current Developable Land Extent	Zone
1	Health Services Zone	67.49	1600	30000	80000	300000	380000	93.90	45.85	2
2	Higher-Density Mix Use Zone	330.59	16966	50000	848300	500000	1348300	333.17	220.07	1.5
3	Administrative Cum Residential Zone	39.63	2580	7500	129000	75000	204000	50.41	36.29	1.3
4	Medium-Density Residential Zone	1178.11	24545	30000	1227250	450000	1677250	414.46	941.00	0.5
5	Lower-Density Residential Zone	537.43	10156	10000	507800	100000	607800	150.19	445.00	0.4
6	Conservation and Sensitive Environment Zone	457.50								
	Total	2610.75	55,847	120,000					1688.21	

Annexure No 04- Archeological Monument list of Badulla MC

No	Monument Name	GN Division
1	Muthiyanganya Raja maha Viharaya	Badulla East
2	St. Marks Church	Badulla East
3	Kathragama Devalya and Paththini Dewalaya	Badulla East
4	Welekade old Market	Badulla Central
5	Salu sala -Building	Badulla East
6	District Secretaries quarters	Badulla East
7	Old building of Prison	Badulla East
8	Simon Peris Hall	Badulla East
9	Quarters of the Governs' secretary	Badulla East
10	Chief Minister quaters	Badulla East
11	Kachariya quarters' 4	Badulla West
12	Irrigation Department quarters 2	Badulla West
13	Old building of Badulla provincial Hospital	Badulla Central
14	Old District secretariat office complex	Badulla Central
15	Badulla Court Complex	Badulla Central
16	Badulla Municpal Council Building	Badulla Central
17	Badulla Chief Police inspector quarters	Badulla Central
18	Badulla Judges Bungllow	Badulla Central
19	Badulla Railway Station and Quarters	Kanupelella
20	Building Materials Corporation	Kanupelella
21	Thaldena Walawwa	Kailagoda
22	Health Directors' Office, Mahiyanganaya Road	Kailagoda
23	Rose Bank Building	Kailagoda
24	Building Of Health Education Unit	Kailagoda
25	No 132 Old Walawwa	Kailagoda
26	Tomb of Thisahami	Badulupitiya
27	Botanical Garden	Badulupitiya
28	Race Course Ground- Old Tank	Badulupitiya
29	Handrail Bridge to Andeniya	Badulupitiya
30	Kothalawala Walawwa	Hindagoda

No	Monument Name	GN Division
31	Uva Hotel	Badulla Central
32	Welekade Methodist Church	Badulla Central
33	Paddy Marketing Boards Building	Kailagoda
34	Dimbulana Walawwa	Kailagoda
35	An old well near Thaldena Walawwa	Kailagoda
36	Old Building of Visakha College	Badulupitiya
37	Browns Building	Hingurugamuwa

Annexure No 05- Muthiyanganaya Development control Zone
Figure No 1 : Muthiyanganaya Development Control buffer zone



Annexure No 06 - Definitions for Permitted Uses in Density Zones

In these guidelines, unless the content otherwise requires;

1. **“Access Road”** means any street used as a means of access to a building or a plot of land; of whether or where such building or plot of land contains a right of way over it or not.
2. **“Authority”** means the Urban Development Authority established by virtue of the Urban Development Authority Act No. 41 of 1978 as amended.
3. **“Building”** means any construction made using permanent raw materials including walls and roof.
4. **“Building Line”** means the line up to which a building will be permitted to extend.
5. **“Developer”** means the owner of the land or person who has been authorized to carry out the Development Activity.
6. **“Development Activity”** has the same meaning as in the Law.
7. **“Existing Lot”** means a lot sub divided before the area declared as an urban development area.
8. **“Factory”** means a building or part of a building use for the manufacture or production or repair of any article.
9. **“Floor”** includes a horizontal platform forming the surface of a storey constructed using, timber, stone, concrete, steel or other substance
10. **“Height”** means a vertical clear distance between two points mentioned in the regulations.
11. **“Local Authority”** means any Municipal Council, Urban Council, Pradeshiya Sabha or any other statutory body established under the 13th amendment to the constitution and are governed by the Provincial Councils Act 1987.
12. **“Lot”** means the entirety of any land which has been demarcated by boundary marks or enclosed within boundary wall or fences.
13. **“Owner”** means is an individual whose name is registered in the Assessment Registry of the Local Authority and one who is capable of proving his title/ ownership to a particular property by producing relevant documents.
14. **“Permissible Floor Area”** means maximum floor area permissible for construction and it can be single or multi-storied.
15. **“Planning Committee”** means the committee appointed by virtue of section 8(b) of act no 4 of 1982 of Urban Development Authority Law;
16. **“Plot Coverage”** means the percentage of total plinth area of a building in relation to the total land area in the plot where building situated
17. **“Preliminary Planning Clearance”** means a set of guidelines designed by the Authority to evaluate the criteria complied by the developer in respect of a development activity.
18. **“Proposed Road Width”** means the width of the future street which may be proposed via Development Plan
19. **“Public Building”** means a building or part thereof used or constructed or adapted to be used as a school, shop, office, hospital or place of public resort, not being a church, chapel, mosque, temple, or other place where public worship is or religious ceremonies are performed;
20. **“Public Street”** means any street over which the public have a right of way and has become vested in a relevant Institute under any Law or by operation of any Law and includes the drain or footway attached thereto;

21. **“Relevant Authority”** means such Local Authorities that exercise powers so delegated by the UDA under Section 23(5) of the Urban Development Authority Act No. 41 of 1978 as amended).
22. **“Relevant Institute”** means the government or corporation established under the Act for the particular subject.
23. **“Religious Places”** means a building or a defined or enclosed place used or constructed or adopted to be used either regulatory or occasionally as a church, chapel, mosque, temple or other place where public worship is or religious ceremony are performed.
24. **“Residential Unit”** means a dwelling unit consisting of a, kitchen, bedroom, bathroom or toilet used or proposed to be used for a single family.
25. **“Street Line”** means a line or lines defined on one or both sides of any existing street, to show its future width or to show the width of a future street as sanctioned by the Relevant Authority or Relevant Institution
26. **“Temporary Building”** means a building which is permitted by the relevant authority to remain for a specified period, at the expiration of which the building shall be demolished.
27. **“Warehouse”** means large building where raw materials or manufactured goods may be stored prior to their distribution for sale
28. **“Zone Factor”** is a tool introduced to guide the development to optimize the utility of the developable lands and infrastructure and to regulate the form of the physical environment and distribution of the development density as envisaged in the development plan.

Annexure No 07- Stakeholder List

- Officers who participated and contributed for the stakeholder meeting held for making the Badulla Development Plan

No.	Name	Position	Institution
1.	Mr. K. Sathis Kumara	Chief Station Master	Railway Department
2.	Mr. D.M.S. Kumara	Chief Engineer	Lanka Electricity Board
3.	Mr. I. Ariyawansa	GramaNiladhari	Badulla Divisional Secretary Office
4.	Mr. G. W. N. Nimalasiri	Land Use Planning Officer	Land Use Planning Policy Planning Department
5.	Mr.H.M.A.S. Herath	Administrative officer	Provincial General Hospital - Badulla
6.	Mrs. Deepa Punchihewa	Agrarian Development Officer	Agrarian Services Department
7.	Mr. K.R. Gajanayake	Administrative officer	Social Service Department
8.	Mr. E.M.I.G. Thennakon		Badulla Police
9.	Mr. W.R. Wimaladasa	Technical Officer	Road Development Authority - Badulla
10.	Mr. A.P. Abeykon	Architect	Provincial BuildingDepartment
11.	Mr. D.M. Ravendra Dhanapala	Regional Engineering Buildings Badulla	Regional Engineering Office Pinarawa, Badulla
12.	Mr. E.I. Jayasekara	Geologist	N.B.R.O
13.	Mr. R.M.W.P Rathnayake	Scientist	N.B.R.O
14.	Mr. C.A. Herath		Municipal Council, Badulla
15.	Mr. L.H.A. Ruwanwella	Administrative GramaNiladari	Badulla Divisional Secretary Office
16.	Mr. D.S. Vithanage	Sports Officer	Badulla Divisional Secretary Office
17.	Mr. H.M.N. Sanjeewa	Technical officer	Municipal Council, Badulla
18.	Mr. G.N Hemal		Divisional Secretary Office
19.	Mr. M.R. Kumara	Development Officer	Archeological Office
20.	Mr. H.M.N. Wijeythunga	Deputy Secretary	Chamber of Commerce
21.	Mr. M.M.G.K. Muhandiram	Chief Engineer	Road Development Authority, Bandarawela
22.	Mr. H.M.C.K. Bandara	GramaNiladari	Divisional Secretary Office, Badulla
23.	Mr. Roshan Rajapaksha	Deputy Superintendent of Police	Badulla
24.	Mr. S.P. Atthanayake	Officer in charge	SLTB, Badulla
25.	Mr. D.M. Piyadasa		Badulla Depot
26.	Mr. H.M. Mahindapala		Prison, Badulla

No.	Name	Position	Institution
27.	Mr. L.M.P.B. Lankadhikari	Prison guards	Prison, Badulla
28.	Mr. W.M.C. Weerasinghe	Assistant District Secretary	District Secretary Office, Badulla
29.	Mrs. Geetha Pathiranawasam	Provincial Sports Director	Sports Department
30.	Mr. B.M.C.R.B. Basnayake	Senior Environment Officer	Central Environment Authority
31.	Mrs. M.C. Madhushika	Scientist	N.B.R.O
32.		Deputy Director of Education	Badulla Zonal Education Office
33.	Kasun Athukorala	Development Officer	Municipal Council, Badulla
34.	Mr. D.M. Piyasiri	Revenue inspector	Municipal Council, Badulla
35.	Mr. R.W. Kumara	Public Health Inspector	Municipal Council, Badulla
36.	Mr. C. Sanjeewa	Engineer	National Water Supply and Drainage Board
37.	Mr. P.C Wanniarachchi	Engineer	National Water Supply and Drainage Board
38.	Mr. A.H. Nimal	Chief Engineer	National Water Supply and Drainage Board

• **Officers of UDA Head Office assisted in developing the Badulla Development Plan**

	Division	Name of Officer	Position
1	Development Planning Division	Mr. Lalith Wijayarathna	Former Director
2		S.K.P.Christeen	Town Planner
3	Research and Development Unit	Mr. Janak Ranaweera	Unit Head / Director
4		Mr. Isuru Biyanwala	Planning Officer
5		Mr. Lakshan Dissanayake	Town Planner
6	Geological Information Systems Division	Mrs. Senani Somasekara	Director
7		Mrs. Hasini Hapuarachchi	Computer Assistant / GIS Technical Assistant
8	Environment and Landscape Division	Mrs. Renuka Munasingha	Assistant Director

- **Officers of the UDA Uva Provincial Office assisted in developing the Badulla Development Plan.**

	Name of Officer	Position
1	Mrs. H.K.P. Perera	Accountant
2	Mr. N.D.C. Weerawardhana	Finance Assistant
3	Mrs. A.H.A.O. Thusara	Town Planner
4	Mr. A.M.M.P. Kumara	Town Planner
5	Mr. A.D.M.L.L.B. Senevirathna	Technical officer
6	Mrs. R.P. Mahanama	Clerk
7	Mr. A.J.M.N.B. Nawela	Clerk
8	Mrs. P.C. Sharmalee Coray	Clerk
9	Mrs. K.V. Rekha Nilmini	Typist (English)
7	Mrs. H.K. Nissansala	Computer Operator
11	Mr. D.M.N. Niroshana	Driver
12	Mr. A.S.K. Weerakon	Driver
13	Mr. R.M. Jayasinghe	Office work assistant
14	Mr. A.A.J. Perera	Office work assistant
15	Mr. W. Duglas Silva	Office work assistant
16	Mrs. D.M. Kusumawathi	Women security guard
17	Mr. L.H. Saranadasa	Labor
18	Ms. Purni Tennakon	Trainee Typist
19	Mrs. Srimathi Rathnayake	Sanitary worker

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Urban Development Authority

6th and 7th Floors, "Sethsiripaya",
Battaramulla. Sri Lanka.

+94 112 873 637
info@uda.gov.lk