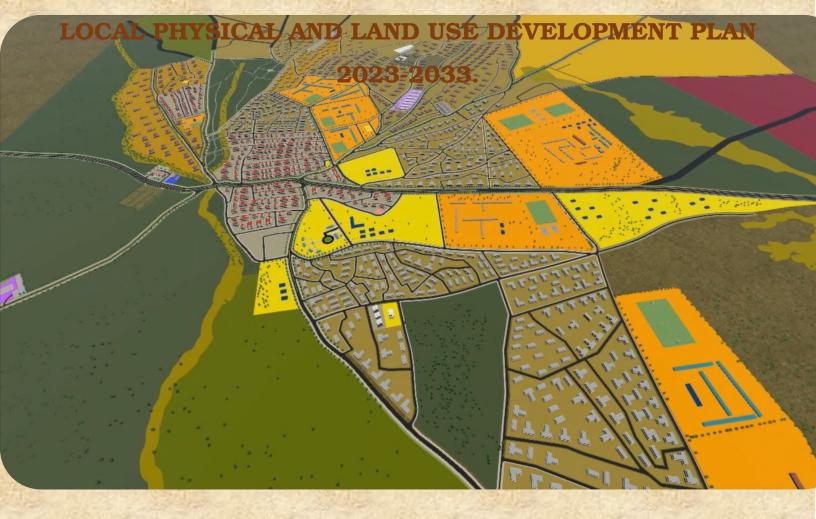


## **County Government of Wajir**

Department of Lands, Public Works, Housing & Urban Development

## **GRIFTU TOWN**



FINAL PLAN REPORT



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# **PLAN APPROVAL**

## CERTIFIED

I certify that the Plan has been prepared as per section 45 of the Physical and Land Use Planning Act, 2019 and physical planning standards and guidelines.

Signature	Date
COUNTY DIRECTOR OF PHYSICAL I	PLANNING
RECOMMENDED	
Signature	Date
COUNTY EXECUTIVE MEMBER PLANNING	OF LANDS, HOUSING AND PHYSICAL
APPROVAL	
Hansard No	Date
COUNTY ASSEMBLY	
ENDORSED	
Signature	Date

## FOREWARD



Physical and land use planning are functions assigned to county governments as outlined by the Constitution of Kenya, 2010. This function bestows counties to prepare County Integrated Development Plans (CIDPs), County Physical and Land Use Development Plans, and Local Physical and Land Use Development plans. This comes with the need to control development, spur economic growth, and guide the provision of robust infrastructure and services.

Given this context, preparing the Local Physical and Land Use Development Plan for Griftu Town is an earnest step toward achieving the county's vision of being "**A peaceful, cohesive and prosperous county, affording quality life for its citizens**." The plan focuses on improving residents' living conditions and livelihood and spurring economic development.

The plan is supported by strategic interventions in transportation, housing, governance, physical and social infrastructure provision, and environmental conservation. These interventions are supported by a raft of projects and programmes that aim to improve the living conditions in the town.

The plan has been prepared in consultation with the public at the town/grassroots level. Public participation was inclusive and involved extensive stakeholder engagement throughout the plan preparation process. The contribution of stakeholders exemplifies the spirit and vision through which this plan is anchored. This plan fits into the county's development priority and proposals for incorporation into future county-integrated development plans. The achievable benefits of the plan are only as good as its implementation.

I desire to give my commitment to the process of implementing this plan. Lastly, I call upon all stakeholders and the county's development partners to take up active roles in achieving the vision articulated in this Plan and make the Griftu Town dream of being "*An economically vibrant, environmentally sustainable and inclusive town with adequate infrastructure capable of providing quality living standards*" a reality.

H.E. FCPA AHMED ABDULLAHI, GOVERNOR.

# ACKNOWLEDGEMENTS

The preparation of this plan was made possible by the earnest effort of the Governor, H.E. Ahmed Abdullahi, and his Deputy, H.E. Ahmed Muhumed Abdi. The Department of Lands, Housing, and Physical Planning prepared the plan. I thank the Governor and his deputy for entrusting the department with successfully delivering this plan.

A special thanks go to the Lands Committee and the County Assembly for discussion and approval of this plan. I also appreciate the role played by the county executive committee members in not only providing their input and aligning their departmental aspirations to this plan but also in validating the plan. This sets a rightful tone for more straightforward implementation.

Additional gratitude goes to the planning team comprising the office of the Director of Lands, Mr. Abdullahi Adan, the county physical planner, Mr. Edward Mucheru, and the consultant, Mr. David Gichuki, who was the lead consultant in preparing the plan.

I hold special gratitude to the residents of Griftu Town, especially the elders, town and administrator, who provided understanding and leadership to enable the preparation of the plan. The residents' input throughout the plan preparation process has made the plan wholesome. With this in mind, policing of its intentions will be forthcoming during implementation.

I also wish to express my appreciation for the efforts of the town, sub-county, ward administrators, and area chiefs in fully mobilizing the community and participating during the plan preparation period.

The preparation of the plan was a lengthy and intensive process that involved many other institutions and individuals at a personal level. We thank all involved for their contribution and input to the Plan.

## SAADIA AHMED ABDI COUNTY EXECUTIVE COMMITTEE MEMBER, DEPARTMENT OF LANDS, HOUSING AND PHYSICAL PLANNING.

## **EXECUTIVE SUMMARY**

Griftu Town Local Physical and Land Use Urban Development Plan (LPLUDP) is a 10-year GIS-based plan that will guide the growth and development of the town.

Griftu Town is one of the major urban centres in Wajir County. It is the sub-county headquarters for Wajir West Sub County. The planning area covers a total of 60.83 km<sup>2</sup>.

The challenges facing the town include improper waste management, lack of land tenure security, narrow roads, and inadequate water supply. The plan aims to provide an overall integrated physical framework for the town's urban growth to promote health, safety, order, amenity, convenience, efficiency and the general economy of the town.

The plan has been prepared in line with the provisions of the Constitution of Kenya, 2010, the Physical and Land Use Planning Act, 2019, Urban Areas and Cities Act of 2011, its Amendment of 2019, and the County Governments Act, 2012. Plans and policies that have guided the development of the plan include the National Spatial Plan, 2015-2045 and the Government's Development Blue Print as outlined in The Kenya Vision 2030.

Participatory planning through stakeholder engagement with county government officials, local residents, and other relevant stakeholders (drawn from various sectors and interest groups) was carried out during the plan preparation process.

During the situational analysis phase of the planning process, an assessment of the town's development potential, opportunities and constraints was done. This was achieved through a review of both primary and secondary data along the following themes: Population, Land Use and Environment, Housing Infrastructure, Transportation, Governance and Institutional Framework and Local Economic Development. Secondary data was obtained from publications by the County Government of Wajir, among other authoritative sources. Primary data collection, on the other hand, was undertaken through focus group discussions (FGDs), key informant interviews, household surveys and field observations. To integrate the spatial aspect into the planning exercise, an aerial survey was conducted for the purposes of developing a base map for the town. This also aided in the preparation of digital topographical maps for the planning area.

The **Structure Plan** presents the land use proposals that include transportation corridors, utilities and services. These proposals have been guided by population needs, structuring elements, land suitability, and compatibility with other uses.

A **Zoning Plan** accompanies the Structure Plan to provide detailed land use regulations for specific zones within the Core Urban Area, ranging from permitted uses, minimum plot sizes, setbacks (front, side, and rear), levels (building heights), and plot coverage. A subdivision scheme plan has also been provided, highlighting both institutional and individual plot ownership. This will assist in the provision of land ownership documents for residents of the town.

Sector-specific development strategies have been proposed for Transportation, Housing, Local Economic Development, Infrastructure and Governance. These strategies outline the specific projects that will be put in place to achieve the plan's objectives.

An Implementation Framework was formulated to actualize the plan, identify and propose actors and specify timeframes. It is intended to ensure smooth, well-coordinated and result-oriented implementation of this LPLUDP.

Adopting the proposed plan coupled with the timely and coordinated implementation of the proposed projects will act towards reversing the current trend; improve the living conditions of Griftu residents, and, above all, help achieve the Vision of the community and subsequent growth of the County.

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# **LIST OF ABBREVIATIONS**

ASAL	Arid and Semi-Arid Land
ATM	Automated Teller Machine
BOG	Board of Governance
C0 <sub>2</sub>	Carbon dioxide
CBD	Central Business District
CS	Caesarian section
СТ	Computed tomography
ECD	Early Childhood Education
FGD	Focus Group Discussions
G.I. S	Geographic Information System
GoK	Government of Kenya
GWASCA	Griftu Water and Sanitation Authority
На	Hectares
HDI	Human Development Index
I.C. T	Information, Communication Technology
I.E.B.C.	Independent Electoral and Boundaries Commission
KAA	Kenya Airports Authority
KeNHA	Kenya National Highways Authority
KeRRA	Kenya Rural Roads Authority
Km	Kilometer
KNLS	Kenya National Library Service
KPS	Kenya Postal Services
KURA	Kenya Urban Roads Authority
LPG	Liquefied Petroleum Gas
LPLUDP	Local Physical and Land Use Development Plan
NGO	Non-Governmental Organisation
NMT	Non-Motorized Transport
NSP	National Spatial Plan
P/d	Per day
РТА	Parents Teachers Association
PWD	Persons living With Disability
SMEs	Small and Medium Enterprises
TORs	Terms of Reference
TSC	Teacher's Service Commission
UACA	Urban areas and Cities Act
VIP	Ventilate Improved Pit latrines
WAJWASCO	Wajir Water and Sanitation Company

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## **1 BACKGROUND**

## **1.1 Overview**

Physical and land use planning are functions assigned to county governments as outlined in the Fourth Schedule of the Constitution of Kenya, 2010. Further captured by the County Government Act, 2012, this planning function mandates counties to prepare County Integrated Development Plans (CIDPs), County Physical and Land Use Development Plans, and Local Physical and Land Use Development. This comes with the need to control development, spur economic growth, and guide the provision of robust infrastructure and services.

Preparing the Local Physical and Land Use Development Plan for Griftu Town is an earnest step toward achieving the county vision of being "*A peaceful, cohesive and prosperous county, affording quality life for its citizens*." The plan focuses on improving residents' living conditions and livelihood and spurring economic development.

The growth of Griftu Town has been uncontrolled and unregulated over the years despite having a development plan. The result is the uncoordinated and unchecked division of land, inadequate access roads, inefficient solid waste management, inadequate social infrastructure and adherence to development standards, encroachment of public spaces, and poor natural resource conservation and management, among others.

Griftu Town Local Physical and Land Use Development Plan (LPLUDP) is directed and guided by an assortment of legislations (sectoral policies and laws) as well as the population's needs in terms of infrastructure and services. The plan is a long-term plan and shall span ten (10) years, 2023-2033, to guide the town's overall development regarding land use sustainability and coordinated growth.

## **1.2 Purpose of the Plan**

Griftu Town Local Physical and Land Use Development Plan (LPLUDP) is a long-term plan that will span ten (10) years to guide the overall development of the town in terms of land use sustainability and coordinating growth.

The purpose of the Local Physical and Land Use Development Plan (LPLUDP) is to:

- i. Guide and coordinate the development of infrastructure;
- ii. Regulate the use of land and land development;

- iii. Promote urban renewal and zoning;
- iv. Provide a framework for coordinating various sectoral agencies working in the town and the county;
- v. Provide a framework and guidelines for building and work development in the town;

# **1.3 Vision and objective of the plan** Vision

The shared vision of Griftu Town was derived from sectoral vision statements provided by local residents. Below are some of the vision statements;

- An efficient a multi-modal transportation system
- A town offering standardised education and health services for all
- A town with adequate trunk infrastructure to support socio-economic development
- Decent housing supported with necessary services
- A clean and liveable town
- An economically diverse and vibrant town
- A stable, accountable, inclusive town administration



The above vision statements were summarised to give a shared vision for Griftu Town as;

# An economically vibrant, environmentally sustainable and inclusive town with adequate infrastructure capable of providing quality living standards.

### **Objectives of the Plan**

The following are the objectives of the plan;

- To optimize use of land and available resources
- To provide adequate and appropriate infrastructure to spur socio-economic development
- To conserve the environment
- To improve access to quality and affordable housing
- To promote good governance
- To provide a basis for property surveying, titling and management

## **1.4 Description of the project**

The preparation of the LPLUDP for Griftu Town was guided by the Terms of Reference (TORs). They are summarized as follows:

- Preparation of a participatory framework to guide engagement with stakeholders throughout the plan-making process and implementation. The output of this is a general vision for the town and the identification of the current development challenges and the future development aspiration for the town.
- Production of an inventory of the current situation experienced in the town in different sectors, including land suitability and availability, analysis of current and future urban development trends, socio-economy of the town, infrastructure and services and environment.
- Develop an interactive GIS-based plan for the town, showing the current situation and the proposed cadastral layer and plan in a digitally interactive format.
- An integrated urban development plan that addresses the town's existing and future challenges.

## **1.5 Guiding principles**

The following principles guided the preparation of Griftu Integrated Urban Development Plan:

- **Sustainable development:** The LPLUDP was guided by the need to harmonize social, economic and environmental aspects of development to cater to current and future generation needs.
- Livability: the plan aims to enhance the community's quality of life through improved transportation, organized development and provision of open spaces.
- **Public participation**: The Plan was prepared in compliance with articles 69(d), 174(c) and 184(1c) of the constitution and the terms of reference that outlined the formulation and operationalization of a participatory framework to guide engagement with community members throughout the project.
- **Minimal disturbance:** The plan considered the minimal impact of change on existing developments, especially when preparing the land cadastre for the town.
- **Resource maintenance and efficiency:** The plan strives for environmentally responsible, resilient energy systems and comprehensive water management systems. It also guided the development of the built environment to prevent sprawl effects.
- Intra- and intergenerational equity: The plan was guided by design for mixed-income, affordable housing and considered the design needs of the elderly, disabled, demographic change, access to good public transport and well-connected compact neighbourhoods.
- **Promotion of ecological integrity:** The Plan promotes protecting and conserving environmentally sensitive areas such as flood plains, swampy areas, etc.

## **1.6 Methodology**

The process of plan preparation followed a fourteen (14) step process of scoping of context, Visioning, Digital mapping, Studies, Analysis, Stakeholders' validation workshop, formulation of Draft Plans, stakeholders' validation workshops, final plan preparation and plan approval. All the processes were sequentially adhered to and all were validated through technical and stakeholder workshops. The methodology used in preparation of this plan is summarized in Table 1-1.

#### Table 1-1: Methodology for Plan Preparation

NO.	PHASE/STEP	ACTIVITIES/TASK
1.	Project inception	<ul> <li>Notice of intention to plan</li> <li>Start-up meetings</li> <li>Identification of stakeholders</li> <li>Developing mode of Operation/Action Plan</li> <li>Appraisal of project area/reconnaissance</li> </ul>
2.	Scoping of context	<ul> <li>Launch and preliminary visioning</li> <li>Urban study that included:         <ul> <li>Literature review</li> <li>Key informant interviews</li> <li>Stakeholder consultation</li> <li>Observation (including photography)</li> <li>Administering questionnaires</li> </ul> </li> <li>Stakeholder consultations</li> <li>Aligning the results according to the themes</li> </ul>
3.	Mapping	<ul> <li>Acquisition of digital topographical maps from Client</li> <li>Preparation of base, thematic maps</li> <li>Preparation of sub-division scheme plan</li> <li>Creation of GIS platform</li> </ul>
4.	Identification of planning issues	<ul> <li>Establishing of analysis criteria</li> <li>Analysis of the baseline information</li> <li>Sector consultations</li> <li>Visioning</li> <li>Description and illustration of status, potentials and constraints</li> <li>Establishing linkages</li> <li>Identifying emerging issues</li> <li>Validation of situational analysis findings and planning issues identified</li> <li>Realigning /reaffirming the preliminary vision established at the launch of the project</li> <li>Preparation and validation of the situational analysis report.</li> </ul>
5.	Land optimization for urban development	<ul> <li>Projection of land requirements based on population needs;</li> <li>Land site analysis</li> </ul>
6.	Preparation of land use/zoning plans	Preparation of a land use plan
7.	Formulation of land use and land management policies	Zoning regulations
8.	Preparation of a Cadastral layer and Urban Design	<ul><li>Preparation of a Scheme Plan</li><li>Identification of Urban design opportunities and</li></ul>

NO.	PHASE/STEP	ACTIVITIES/TASK
		interventions
		Urban design modelling
9.	Sector Development	<ul> <li>Formulating sector development strategies</li> </ul>
	strategies	<ul> <li>Identifying strategic actions and measures</li> </ul>
		• Identification of programs and projects to be undertaken
		to realise the strategies
10.	Implementation framework	Preparation of sector implementation strategy
11.	Capital Investment Plan	Identification of capital projects
		Costing of the capital projects
		Identification of the actors
		Funding mechanisms
12.	Stakeholder engagement	• Presentation of the plan
	(validation workshop)	Collection of comments from stakeholders
13.	Preparation of the final plan	• Incorporation of comments as raised by the stakeholders
		• Packaging of the reports for final submission
14.	Submission to the client i.e.,	Submitting the final plan to the County Government of Wajir
	County Government of Wajir	
	for approval	

## 1.7 Organisation of the Report

This report is organized into the following sections:

- i. **The Background** of the plan incorporates its purpose, vision and objectives. A description of the terms of reference, the methodology used in preparing the plan and the organization of the plan report;
- ii. **The Planning Context** outlines the project location and its physiographic characteristics in terms of climatic conditions and geological attributes, the previous planning efforts in the town and its existing functions and potential. Additionally, a review of the policy and legal background guiding the development of the plan is provided;
- iii. An analysis of the **Existing Development Situation** that highlights the population and its needs assessment, land use and suitability analysis, housing, physical and social infrastructure provision, transport, and local economic development while highlighting key issues in each sector;
- iv. The **Planning Proposals** presented as sector-based development strategies, a zoning plan and regulations, and an implementation framework;
- v. A **Capital Investment Plan** outlining the key projects that will spark transformation and socio-economic development.





# **2 PLANNING CONTEXT**

## 2.1 Overview

The planning of Griftu Town takes cognizance of different legal provisions that guide the plan's development and the expected output. This section presents an overview of the town's location and physiographic characteristics. Additionally, a review of the previous planning effort in the town is presented alongside the existing functions. Lastly, a review of existing legislation regarding policies and laws guiding the plan is presented.

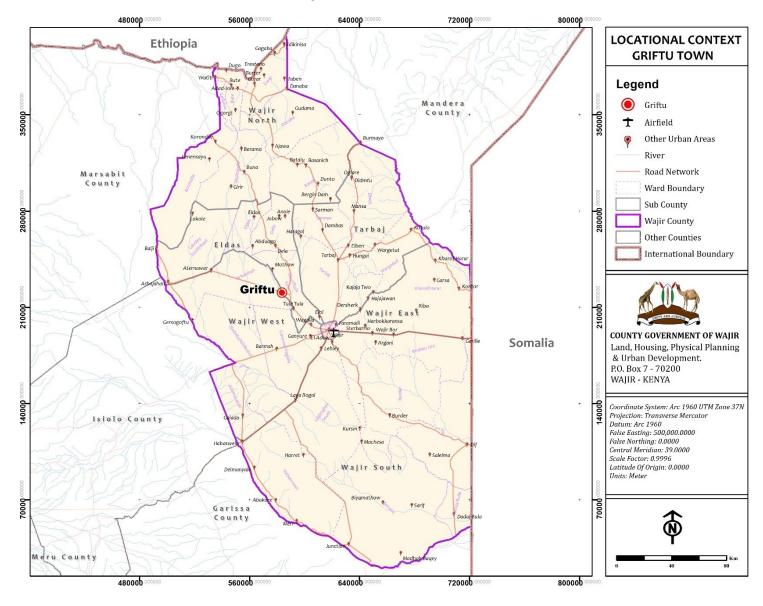
## 2.2 Location of the Town

Griftu Town lies along latitude 1.99<sup>o</sup>N and longitude 39.76<sup>o</sup>E at 300 metres above sea-level. The town is located along the Wajir-Moyale road A14, within Arbajahan Ward in the Wajir West sub-county. The town is approximately 51 km from Wajir Municipality via the Wajir-Moyale (A14) road. Griftu Town is close to various other local urban centres such as Hadado, Eldas and Tarbaj.

## Implication of the town's location

The town has a great potential for physical and economic growth, considering the effect that major roads have in shaping a town's landscape and increasing its allure to investment opportunities.





Map 2-1: Gritu Locational Context

2 Griftu Town Local Physical and Land Use Development Plan, 2023-2033

## 2.3 Physiography

### 2.3.1 Climate

Griftu Town is characterized by hot weather and long dry spells, and the town receives an average rainfall of 240 mm per year. The rainfall is received in two rainy seasons; mainly, short rains are experienced between October and December, and the long rains are received from March to May each year. The average temperature ranges between 21°C to 42°C. The hottest months are January to March, with temperatures hitting highs of 38° C. The period succeeding the long rains (June to September) is the coldest month of the year, hitting lows of 23°C. Griftu Town receives an average of 4.5 kWh per square meter daily and averages 5-7 peak sunshine hours. The average wind speed is approximately 4.4-4.8 M/S at 50 m above ground. The range effectively falls above the minimal grid requirement of 4.5 meters per second for a grid connection system. (*www.altestore.com, 2019*).

#### 2.3.2 Altitude and topography

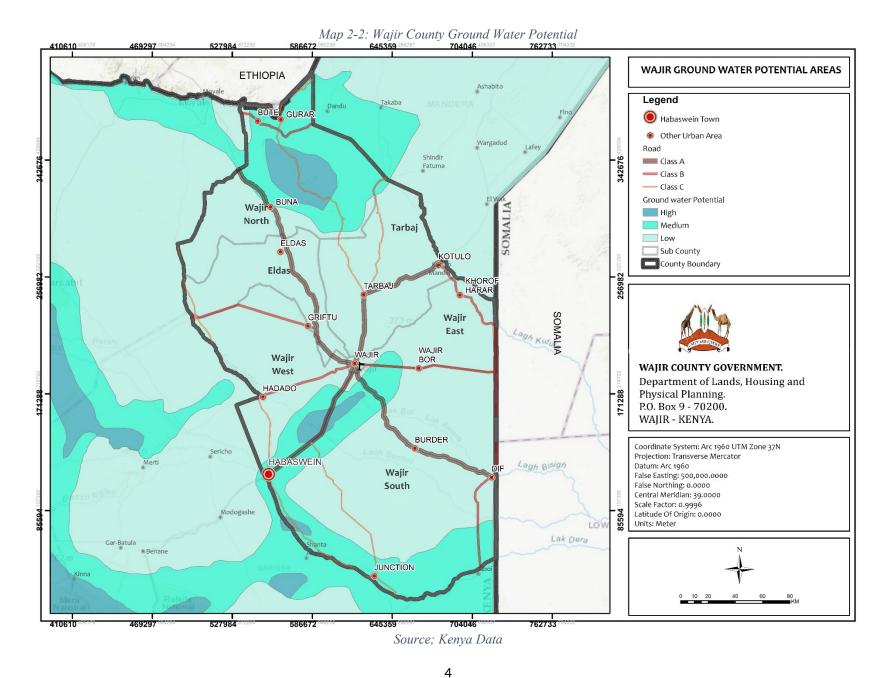
Griftu Town lies at an altitude of 314 metres above sea level and exhibits a general topography characterised by a flat and featureless plain.

#### 2.3.3 Ground water

Griftu Town has considerable groundwater potential traceable in three geological terraces within the sedimentary basin. Water is traceable within the third terrace (preceded by overlying Quaternary and Pliocene layers). The third geologic terrace comprises limestone and gypsum beds, which generally contain saline water (primarily calcium sulphate) (Krhoda, 1989), forming the underground water potential.

## Implication of the town's physiographic Potential

- The town's exposure to long hours of solar insolation translates to a high potential for solar energy harvesting, which can augment the town's supply and limit regular blackouts.
- A low groundwater potential and suppressed rainfall patterns translate to the town being water-scarce.
- A flat terrain limits the provision of infrastructure and services such as sewer and water reticulation through gravity.



Griftu Town Local Physical and Land Use Development Plan, 2023-2033

## 2.4 Previous planning interventions

Before this plan, Griftu Town had an existing development plan prepared in 2009. The plan only provided the broad land uses by colour. It did not specify the facilities, institutions, and amenities that would improve the residents' living standards.

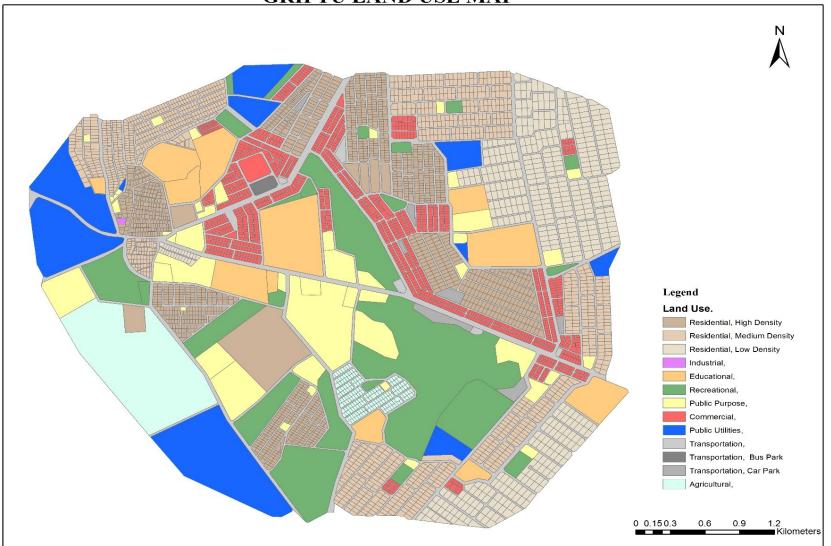
The plan was never approved and did not influence the town's development change and proper land use. However, some proposals in the plan, either through implementation or the existence of certain facilities before plan preparation, were captured, including;

- Education facilities such as Griftu mixed primary school, Bulla Forest Primary School, Hon. Khalif Girls' primary, Griftu Town Griftu Boys' Secondary, Hon.Khalifa Girls' Secondary, Griftu livestock training institution and Griftu Polytechnic
- 2. The police station
- 3. Public purpose facilities: Griftu level 4 hospital, library
- 4. Civic area: defunct administration police plot

The inadequacies in this plan and the lack of approval to give the plan a legal basis for implementation prompted the preparation of the local physical and land use development plan.

The Griftu 2009 land use plan is as presented in Map 2-3.

Map 2-3: Griftu Land Use Map, 2019



## **GRIFTU LAND USE MAP**

2 Griftu Town Local Physical and Land Use Development Plan, 2023-2033

## 2.5 Function and potential of the town The Function of the Town

#### Commercial and Service Functions

Griftu is one of the major commercial hubs in Wajir West Sub-County. It hosts a vibrant commercial centre both for residents and non-residents living within the town and its hinterlands. The main commercial activities within the town include wholesale and retail trade, mobile money transfer shops and bank merchants, an animal market, and metal fabrication, among others.

Griftu Town hosts a sub-county hospital that attracts people who settle within reach of the hospital. The location of the hospital and its sophisticated services over other facilities within the region gives Griftu an edge and, effectively, the status of a medical hub. The availability of education facilities, such as primary, secondary and tertiary institutions, plays a key role in attracting people who settle within the town.

#### Administrative functions

Griftu Town is the sub-county headquarters of Wajir West. The town is within Arbajahan/*Griftu* Ward and is the administrative seat for the town administration. Other administrative offices include I.E.B.C. offices and agricultural extension offices. The availability of the facilities within the town promotes Griftu's function as an administrative centre.

#### The Potential of the Town

#### Commercial and service potential

The town has immense commercial and service potential, driven mostly by the existence of the two sectors at a smaller scale. The potential lies once the two sectors are adequately exploited and strengthened through investments to promote them and increase their outputs. Other factors, such as a growing urban population, the availability of skilled labour, and inter- and intra- connectivity, cement commercial and service potential.

#### Transportation potential

Griftu Town is centrally located relative to Hadado, Eldas, Habaswein, Bute, Buna and Moyale towns. Numerous roads pass through the town, e.g., the Moyale-Wajir Road (A14) and Griftu-

Arbajahan Road. These roads interconnect Griftu Town to Wajir Municipality and other towns within and outside the county.

#### Industrial potential

Griftu Town has a small industrial sector comprising of metal and furniture workshops and livestock slaughtering. The town has immense industrial potential due to the availability of raw materials such as large herds of livestock. Additionally, the existence of a polytechnic that provides needed skills for the informal sector creates and strengthens the industrial potential of the town. The town's growing and youthful population provides the market and labour required to expand the industrial output of the town. The town's location is approximately 55km north of Wajir Municipality and is near Hadado, Eldas, Tarbaj, and Eldas, informing us of the market potential.

## 2.6 Policy Context Vision 2030

Vision 2030 aims to transform Kenya into a newly industrializing, middle-income country that will provide a high-quality life to its citizens by 2030. It is based on three pillars: economic, social, and political.

Specifically, the plan aims to directly achieve the intentions of the economic pillar by promoting value addition, promoting an inclusive wholesale and retail trade sector, and promoting a robust, diversified manufacturing sector and financial services.

In addressing the social pillar, the plan aims to provide a clean, secure, and sustainable environment, adequate and decent spaces for promoting housing development, and infrastructure, including schools, health facilities, water reticulation, and sanitation systems. The plan also aims to promote gender, youth, and vulnerable groups in resource distribution and improve their livelihoods.

#### National Spatial Plan (2015-2045)

The Plan was prepared within the framework of the Constitution. It seeks to achieve promises Kenyans furnished themselves under the new Constitution, such as the right to the economy, the need for balanced development across the country, the right to a clean and healthy environment, and the right to property, among others. The Plan covers the entire country and encompasses all

the 47 counties. The Plan recognizes that Kenya has various resources that must be managed concertedly.

The National Spatial Plan addresses land use and socio-economic and environmental issues to achieve balanced and sustainable spatial development and optimal land uses across the country. The Plan provides comprehensive strategies and policy guidelines to deal with rural and urban development issues, modernizing agriculture, infrastructure, energy production, mining and industry, and sustainable human settlements. The NSP forms the basis upon which lower-level plans in the country shall be prepared, including Regional Plans, County Spatial Plans, Local Physical Development Plans, and Urban Plans.

#### **National Land Policy**

The land policy proposes development control as a tool of ensuring equitable and sustainable use of land. It recognizes land-use planning as an important tool in land-use management, which can address the current challenges and create new opportunities for sustainable human settlements. The goal of Griftu LPLUDP is to; strengthen development control, upgrade informal settlement, promote sustainable and equitable use of land, protect fragile ecosystems, ensure efficiency and access to land management system and uphold principles of land policy set out in Article 60 of the Constitution.

#### **National Housing Policy**

The goal of the policy is to facilitate the provision of adequate shelter and a healthy living environment at an affordable cost to all socio-economic groups in the country so as to foster sustainable human settlements. It also aims to minimize the number of citizens living in shelters below the habitable living conditions and curtailing the mushrooming of slums and informal settlements in the major towns and urban centres. Griftu LPLUDP respects these housing policy goals by; Promoting functional, healthy, aesthetically pleasant and environmentally friendly houses and facilitating progressive realization of the right to adequate housing by all Griftu residents

#### **Integrated National Transport Policy**

The Policy identifies challenges facing the transport sector in Kenya, as is evidenced in Griftu Town such as missing links. The policy aims to attain an effective transport system within the country. The plan provides for local, regional, national, and international connectivity of Griftu Town to attain its vision and ensure efficient movement of locals and foreigners. The plan also looks into the objective of the policy, which is to develop an efficient integrated, balanced, and environmentally sound urban transport system.

#### **National Urban Development Policy**

This policy is aimed at addressing the unprecedented urbanization phenomenon Kenya is currently experiencing, which has profound impacts on the way people live, work, socialize, and do business. The rapid urban transition will likely present potential social and economic opportunities and significant challenges. The long-term goal of the Policy is to accelerate economic growth, reduce poverty, and promote equity. The policy creates a framework for sustainable urbanization and urban development by presenting three thematic areas of intervention: urban management, urban core issues, and urban advisory. **Urban Management** includes urban governance, finance, and economy; **Urban Core** comprises urban planning, land, infrastructure and climate change, housing and disaster and risk management. **Urban Advisory** encompasses social issues, marginalized groups, and cross-cutting principles; and introduces an implementation matrix.

# Sessional Paper No. 8 of 2012 on National Policy for the Sustainable Development of Northern Kenya and Other Arid Lands

The policy was developed based on the premise that the ASALs have hidden strengths and enormous resources that can be harnessed to sustain themselves and contribute to national development. This was based on the fact that the region was unfairly recognized in the country's development agenda in the past. It also recognized that the country would not achieve sustained economic growth and progress if the ASALs were not appropriately factored into national planning and development.

The policy highlights a raft of provisions that aim to ensure that the region achieves development like the rest of the country. Specifically, the policy directs the need to improve the enabling environment for development in Northern Kenya and other arid lands through infrastructure development, including roads, water, and energy, to support economic activities and enhance connectivity within ASALs and other regions. Additionally, the policy advocates the reduction of disparities in access to essential services such as education and healthcare. The plan aims to conform to the intentions of the policy through the provision of infrastructure to ensure parity of the region to the rest of the country.

## 2.7 Legal context

Griftu Town LPLUDP has been prepared in the context of different laws as highlighted in the table below.

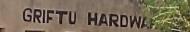
Table 2-2: Alignment with the Laws of Kenya

LAW	SECTIONS RELEVANT TO THE PLAN
The County Government	This act gives effect to Chapter Eleven of the Constitution to
Act, 2012	provide for county governments' powers, functions, and
	responsibilities to deliver services and for connected purposes.
	• Section 5 of the act states the responsibilities of the county
	government, including county planning, as provided in the
	fourth schedule of the Constitution.
	• Section 49 introduces the urban areas and cities as a tool for
	managing urban areas and cities.
	• Section 102 stipulates the principles of planning and
	development facilitation in a county.
	• Section 104 indicates the obligations to plan by the county
	• Section 107 highlights the plans that the county should
	prepare, including urban plans
	• Section 111 indicates the plans for both a municipality and a
	city.
	• Section 115 stipulates the process taken to carry out public
	participation.
Urban Areas and Cities	This act gives effect to Article 184 of the Constitution; to
Act, 2011 and Urban Areas	provide for the classification, governance, and management of
and Cities (Amendment)	urban areas and cities; to provide for the criteria of establishing
Act, 2019	urban areas, to provide for the principle of governance and
	participation of residents and for connected purposes
	• Section 5 of the act instructs on the criteria for classifying

## PART II: THE PLANNING CONTEXT

LAW	SECTIONS RELEVANT TO THE PLAN
	urban areas and cities.
	• Section 11 provides the principles of governance and
	management of urban areas and cities.
	• Section 34 gives directions on service delivery in towns.
	• Part V of the act gives objectives, contents, the process of
	adoption, and reviewing of integrated development plans for
	urban areas.
	• The first schedule of the Act lists the services to be offered
	by different categories of urban areas in the country.
	• The second schedule highlights the rights of and
	participation of residents in the affairs of their urban area.
	• The third schedule provides provisions for issues to be dealt
	with in preparation of an integrated development plan.
Physical and Land Use	This act makes provision for the planning, use, regulation, and
Planning Act, 2019	development of land and for connected purposes.
	• Section 5 of the act stipulates the principles and norms of
	physical and land use planning.
	• Section 17 stipulates the responsibility of the County
	Executive Committee Member in charge of Physical
	planning. Among these responsibilities is the formulation of
	policy on physical and land use planning and promoting the
	integration of county physical and land use planning
	functions and sectoral planning levels.
	• Sections 45-50 intricately describe a local physical and land
	use development plan: its purpose, preparation process,
	content, notices of objection and approvals as well as the
	publication of the LPLUDP.
	• Second schedule part A instructs matters that may be dealt
	with in an LPLUDP.

## PART II: THE PLANNING CONTEXT



# **3 SITUATION ANALYSIS**

## 3.1 Overview

The basis for a plan is based on understanding the area in terms of how communities live and utilize land and land-based resources. Additionally, understanding the condition of facilities that drive their socio-economic development and the capacities of water, electricity, sewerage, and solid waste management infrastructure is fundamental to bridging the development gaps in the urban area. The section below presents the findings on Griftu Town regarding the population, existing land use, transportation, housing, water and energy supply, sanitation conditions, the local economy, and urban governance.

## 3.2 **Population**

## 3.2.1 Population Size

According to the 2019, Population and Housing Census, Griftu Town had 7,935 people. The population is projected to grow to 8,479 and 10,005 in 2023 and 2033, respectively, at a county intercensal growth rate of 1.67%.

#### 3.2.2 Population structure

Griftu Town has a youthful population, with the majority, 69.5%, between the ages of 0 and 35 years. The population distribution after that steadily decreases from the age of 35 years in successive cohorts, as shown below.

On the other hand, Labo ur force; ages between 15 and 64, stands at 69% of the total population.



Griftu Town Local Physical and Land Use Development Plan, 2023-2033

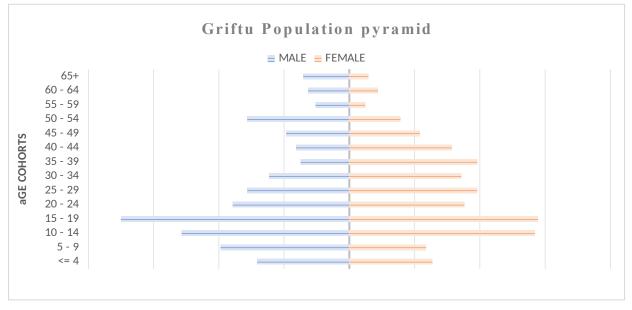


Chart 3-1: Griftu Town Population Pyramid

Source: Household Survey, 2019

**Preschool-going age (Under five years):** According to a field survey, 4% of the population is within this age cohort. There are 550 persons as of 2019, and will rise to 733 persons by 2028. They require neonatal and post-natal care to reduce infant and maternal deaths. Early childhood development facilities are essential in this age bracket.

**Primary school-going age (6-13 years):** According to field survey, 17% of the population is within this age cohort. There are 2,277 persons as of 2019, which will rise to 3,035 persons by 2028. They require proper health care, as well as recreational and educational facilities.

**Secondary school-going age (14-17 years):** According to a field survey, 13% of the population is within this age cohort. They require proper health care, as well as recreational and educational facilities.

**Female reproductive age (15-49 years):** According to a field survey, 58% of the population is within this age cohort. There are 7,590 people as of 2019, which will rise to 10,005 by 2028. The town requires employment opportunities, skill development, and educational, ICT, and recreation facilities.

**Labour force (15-64 years):** According to a field survey, 69% of the population is within this age cohort. The town requires employment opportunities, skill development, educational, ICT and recreation facilities.

**Aged population (65 and above):** According to a field survey, 2.5% of the population is within this age cohort. They require proper healthcare facilities, homes for the aged, and social care.

## **3.2.3 Population conditions in terms of Human Development Index (HDI)** Fertility

The fertility rate for Wajir County is 7.8. This is much higher than the national fertility rate of 3.9 children per woman. This implies that a woman at the childbearing age can give birth to 8 children in her lifetime. This is evidenced by the high youth population in the county and respective towns such as Eldas. The high population exerts pressure on existing infrastructure. Income

A field survey revealed that 84 % of households are self-employed, with the majority of them taking pastoralism as their main source of income. Households that are formally employed make up approximately 14 %, with most of them working in government institutions, either as teachers, administrators, or security personnel. Those employed in the informal sector cover 2 % of the total percentage.

#### **3.2.4** Population needs assessment

The town's projected population for the year 2033 is expected to reach 10,005. The needs of the urban area have factored in the population growth of the town as well as its function as a sub-county headquarters. Land requirement is an accumulation of the total land required to provide services as stipulated in the second schedule of the Urban Areas and Cities (Amendment) Act, 2019. Area needed is based on the standards specified by the physical planning handbook, among other best practices where possible.

Facilities	Facility/service per catchment population	Area Per Unit in Ha.	Current Number of Facilities	Current demand in number (Pop 8,479)	Projected demand in number (pop10,005)	Demand Gap (2033)	Total area (Ha)
Police Station	49,999	3	1	-	-	-	-
Town Halls	49,999	1.2	0	1	1	1	1.2
Lower court	49,999	1	0	1	1	1	1
Library	49,999	0.4	1	-	-	-	-
Post office	49,999	0.04	1	-	-	-	-
Primary	4,000	3.9	5	2	3	-	-
Secondary School	8,000	4.5	2	1	1	-	-
Vocational institution	15,000	10.2	2	1	1	-	-
Postal services	49,999	0.04	1	1	1	-	-
Religious institution	15,000	0.1	7	1	1	-	-
Community Centres	20,000	0.25	1	1	1	-	-
Level 2 (Dispensary)	10,000	1	0	1	1	1	1
Level 3 (Health Centres)	30,000	3	1	1	1	1	3
Level 4 (Sub-County Hospitals)	100,000	4	1	1	1	-	-

#### Table 3-3: Population needs assessment

Facilities	Facility/service per catchment population	Area Per Unit in Ha.	Current Number of Facilities	Current demand in number (Pop 8,479)	Projected demand in number (pop10,005)	Demand Gap (2033)	Total area (Ha)	
Child care facilities	49,999	0.1	0	1	1	1	0.1	
Animal control office	49,999	0.1	0	1	1	1	0.1	
Abattoirs	49,999	1	1	1	1	-	-	
Sports and cultural centre facilities	49,999	2	0	1	1	1	2	
	Total land Requirement							

## 3.3 Site and land suitability analysis

## 3.3.1 Existing land uses

Based on the availability of water along the seasonal river (*Lag Bor*) the town has mostly clustered around it. The land uses for the town are as shown in the table below.

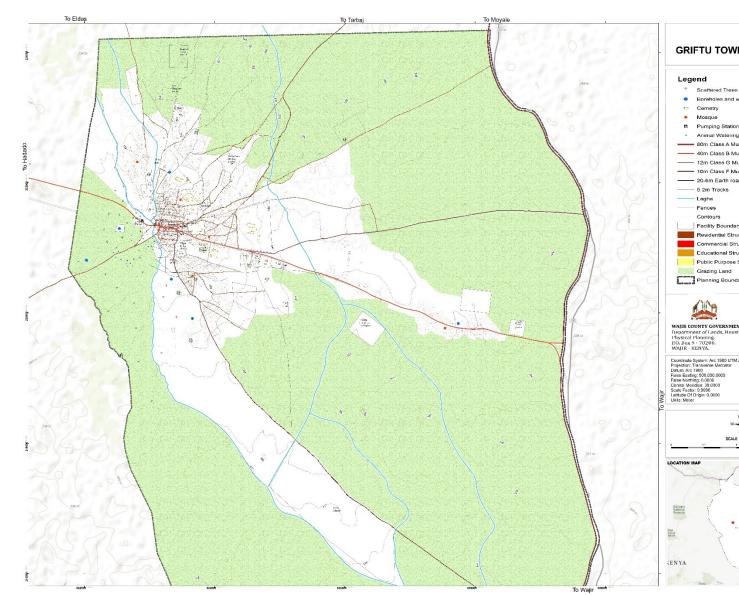
Code	Land Use	Facilities	Area (km <sup>2</sup> )	Area (Ha)	Total	Percentage (%)	
0	Residential		1.2942	129.42	129.42	1.90	
1	Industrial	Light Industry	0.0668	6.68	6.68	0.10	
2.	Educational	Existing Primary Schools	0.5464	54.64	125.34	1.84	
		Existing Secondary Schools	0.5074	50.74			
		Existing Tertiary Institution	0.1044	10.44			
		The proposed site for a Madrassa	0.0952	9.52			
3.	Recreational	Sport Complex	0.1652	16.52	16.52	0.24	
4.	Public	Existing Civic Area	0.1857	18.57	44.28	0.65	
	Purpose	Existing Health Facilities	0.1272	12.72			
		<b>Existing Mosques</b>	0.0085	0.85			
		Existing Administrative Camp	0.0474	4.74			
		Existing Post office	0.0009	0.09			
		Existing Public Baraza	0.0343	3.43			
		Existing Police Station	0.0348	3.48			
		Existing Assistant County Commissioner Office	0.004	0.40			
5.	Commercial	Existing Commercial	0.2037	20.37	27.38	0.40	
		Existing Ultra- Modern Market	0.0565	5.65			
		Existing Livestock Market	0.0136	1.36			
6.	Public Utilities	Boreholes/watering points	0.0413	4.13	8.89	0.13	

Table 3-4: Existing Land Uses in Griftu Town

Code	Land Use	Facilities	Area (km <sup>2</sup> )	Area (Ha)	Total	Percentage (%)
		<b>Existing Cemetery</b>	0.028	2.80		
		Existing Water Pan	0.0196	1.96		
7.	Transportation	Airstrip	1.6511	165.11	514.23	7.56
		Flight Funnel	0.668	66.80		
		Roads	2.8232	282.32		
8	Conservation	Riparian reserve	1.21	121	858.8	0.13
		Conservation	7.378	737.80		
9.	Agricultural	Grazing Land	34.3977	3439.77	3439.77	50.56
10	Undeveloped	Undeveloped	16.32	1,631.69	1,631.6 9	23.98
	Tot	al	68.03Km <sup>2</sup>	6,803Ha	6,803Ha	100

Map 3-4: Griftu Town Site Analysis

3.3.2



#### Land suitability analysis

Griftu Town lies along the seasonal Lag Bor, which floods during the rainy season. The seasonal floods paralyse the town owing to the volume of water channelled from upstream. The effect of this seasonal flooding is displacement and destruction of property. The effect of flooding in the town is shown below.



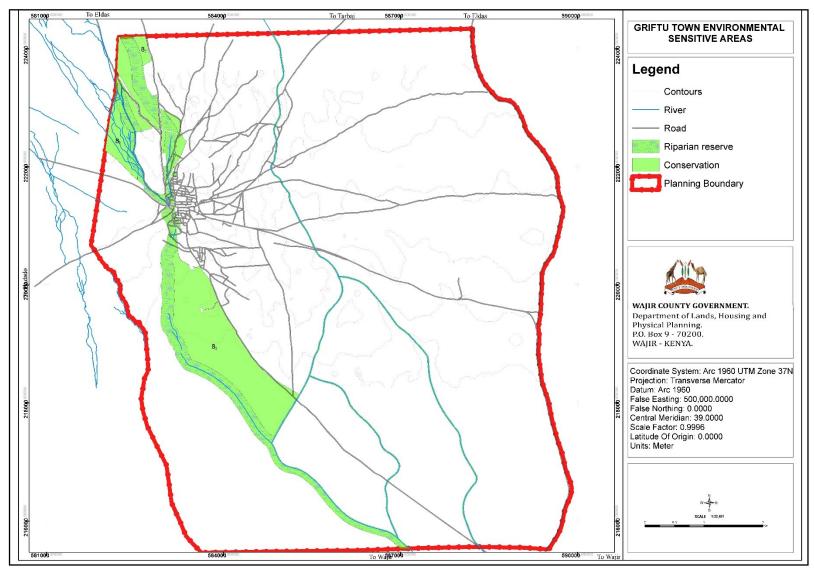
Plate 3-1: Flood-prone area in Griftu Town

Source: Field Survey, 2019

Approximately 858.8 Ha of land in the town is considered environmentally sensitive as a result of flooding of the seasonal river. However, these areas where flooding is prominent can be conserved through planting trees and seasonal irrigation agriculture.

The total planning area is 6,083 Ha. Land available for development is 3,492.66 Ha, derived from expunging environmentally sensitive areas (conservation and riparian areas) and built areas from the planning area.

Environmentally	Built area (Ha)	Total (Ha)	Planning	Total available
sensitive areas			area (Ha)	land
(Ha)				
858.8Ha	1731.54Ha	2590.34	6083	3,492.66



Map 3-5: Environmentally Sensitive Areas

Source: Field Survey, 2019

11 Griftu Town Local Physical and Land Use Development Plan, 2023-2033

#### **3.3.3** Urban development pattern

Griftu Town exhibits a linear and clustered settlement pattern. The development patterns are subject to the structuring elements discussed below;

#### Lag Bor, Flood plain and Water Ways

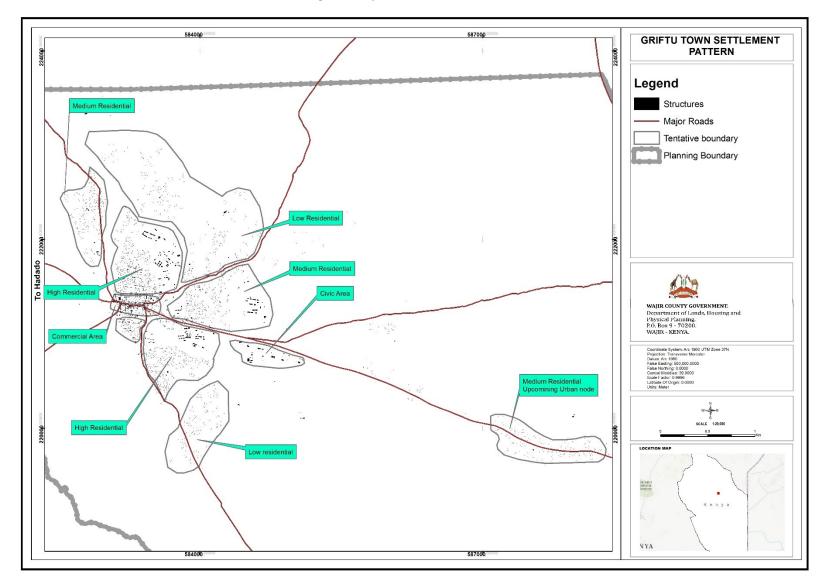
Development and growth of the town is restricted to the west by Lag Bor and the flood plain. Most of the development grows along Griftu-Eldas road, B81 road, the F5352 restricted only by Lag Bor and the flood plain. The presence of the seasonal river provides a natural recharge for ground water sources. The presence of water for domestic, crop farming and large-scale livestock rearing is a major contributing factor to clustering within the settlement.





#### Roads

The main roads structuring Griftu's town are B81, Griftu to Wajir-Moyale (G5353), Griftu -Tarbaj (F5008) and Griftu- Eldas (G5371). These roads influence a linear development pattern along the roads only restricted by the flood plain and Lag Bor.



Map 3-6: Griftu Town Settlement Pattern

Source: Field Survey, 2019

## 3.4 Assessment of development conditions

This section presents a summary of the existing situation in the town in terms of housing, physical and social infrastructure, transport, and local economic development.

## 3.4.1 Housing Housing Provision

According to field survey, 87% of residents own houses they reside in, 10% reside in rental houses and 3% are housed institutionally, such as Kenya Police quarters.

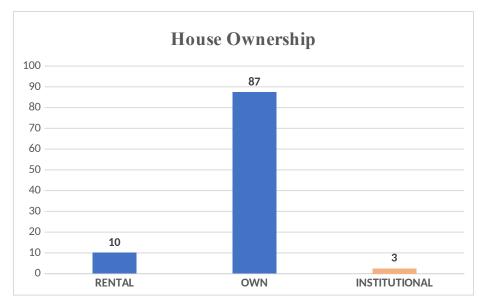


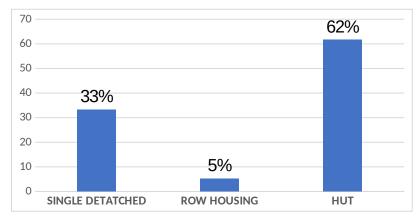
Chart 3-2: House Ownership in Griftu Town

Source: Field Survey, 2019

## **Housing Typologies**

According to field survey, 2019, most Griftu buildings are traditional (Somalia Heroi) built using locally available materials (thatch, mud and sticks). The buildings are preferred due to climate and cost. However, some modern buildings are detached and semi-detached and made using local stones, cement, and iron sheets. According to the field survey, the building typology showed that 62% of the houses within Griftu are Somali *Herios*, 33% are detached (bungalows), and 5% are row housing.

#### Chart 3-3: Housing Typologies



Source: Field Survey, 2019



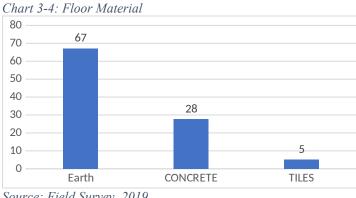




#### **Building Materials**

#### Floor Materials

According to field survey 2019, 67% have earth as a floor material while concrete contributes 28%, and tiles represent 5%, with the material used being influenced by financial wellbeing.

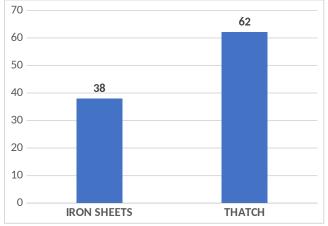


Source: Field Survey, 2019

#### **Roofing Materials**

According to a field survey in 2019, 62% of residents use grass thatch while 38% use iron sheets for roofing. The prevalent use of grass for roofing is due to the hot climatic conditions and the high cost of other roofing materials.







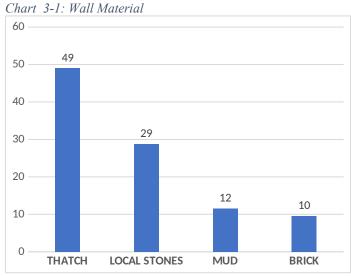




Source: Field Survey, 2019

#### Wall Materials

According to field survey 2019, grass thatch is used by 49% of the town, followed by local stones, which represents 29%, while local stones and bricks are used by 12% and 10%, respectively.



Source: Field Survey, 2019

Sticks are used to create the spherical shape of the traditional houses and make part of the wall materials.

Plate 3-5: Sticks used for construction



Source: Field Survey, 2019

#### 3.4.2 Physical Infrastructure

As presented in this section, the physical infrastructural assessment of Griftu Town was based on assessing existing capacities to establish the adequacies and gaps. The analysis provides a clear basis for making proposals to provide, upgrade and maintain infrastructure in the town. The sectors covered in this chapter include water supply, sewerage and sanitation, storm water drainage, electricity and street lighting, solid waste management, and transportation.

# 3.4.2.1 Water

### **Household Water Source**

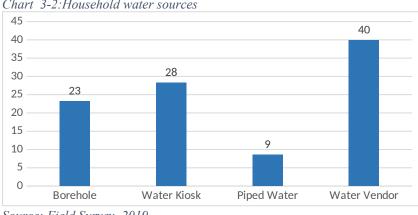
Griftu town falls within a region with low ground potential within the sedimentary basin, where water is usually struck 210 feet below ground. However, the area around the seasonal river (Lag Bor) has a lot of potential for groundwater. This area provides the water for the entire town.

Plate 3-6: Household Water Sources



Source: Field Survey, 2019

According to a field survey 2019, the main water supply methods is through water vendors, representing 40% of the total water supply, followed by water kiosks, boreholes and through piping infrastructure, represented by 28%, 23% and 9%, respectively.





Griftu has approximately eight (8) water kiosks, and each water point is in a 2 km/sq radius of the neighbourhood it serves. Water kiosks sell water in 20-litre jerry cans at two shillings and fifty cents (Ksh2.50).

Source: Field Survey, 2019

#### Plate 3-7: Water Kiosks



Source: Field Survey, 2019

#### **Piped Water Supply**

#### Coverage of Piped Water Supply

Griftu has an existing piped water network that covers the whole town. Connections are made on a household need basis. The current household connection rate is approximately 150 of 3,000 (5%) households are connected to piped water. Community water associations control water points

#### Level of Water Provision

According to field survey, 2019, 49% of residents access water at a communal level outside their plots, while 51% access water within their households.

#### Water and Liquid Waste demand

The water demand for Griftu Town estimates the daily water consumption in litres per individual for the years 2023 and 2033. The water and liquid waste demand is a pointer to the capacity of facilities that need to be constructed to service the town adequately.

Consumer Water	% Of Total	Consumption	Litres/Day	M3/Day
Demand	Population	Litres/Head/Day		
	(8,479)			
	Wa	ter Demand Projection	n For 2023	
Low income	70	75	445,148	445.15

Table 3-5: Water Projections for the town

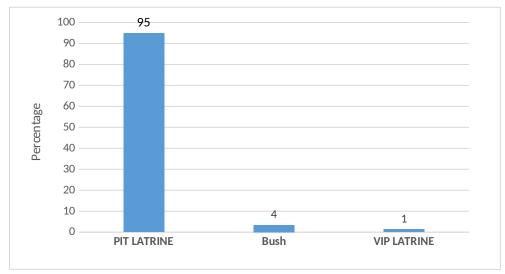
		<u> </u>	τ	
Consumer Water	% Of Total	Consumption	Litres/Day	M3/Day
Demand	Population	Litres/Head/Day		
	(8,479)			
Medium income	25	150	317,963	317.96
High income	5	250	105,988	105.99
	<b>Total domestic</b>	869,098	869.1	
Commercial and institutions	30% of total domes	stic water demand	260,729	260.73
Allowance for	20% of total domes	stic water demand	173,820	173.82
leakage				
	Total Water Dema	nd	1,303,647	1,303.65
Internal usage	5% of total domest	ic water demand	65,182.35	65.18
Total Water Requirement			1,368,829.35	1,368.83
Liquid waste	iquid waste 80% of total water demand		1,095,063.48	1,095.06
	Wate	r Demand Projection	For 2033	
Consumer Water	% Of Total	Consumption	Litres/Day	M3/Day
Demand	Population	Litres/Head/Day		
	(10,005)			
Low income	70	75	525,263	525.26
Medium income	25	150	375,188	375.19
High income	5	250	125,063	125.06
	<b>Total domestic</b>		1,025,513	1,025.51
Commercial and institutions	30% of total domes	stic water demand	307,654	307.65
Allowance for leakage	20% of total domes	stic water demand	205,103	205.1
	Total Water Demar	nd	1,538,270	1,538.27
Internal usage	5% of total domest	ic water demand	76,913.5	76.914
Т	otal Water Require	ment	1,615,184	1,615.18
Liquid waste Demand	80% of total water	demand	1,292,147.2	1,292.15

Source: Practical Manual for Water Supply Services, 2005

## **Liquid Waste Disposal**

According to field survey, 2019, 95% of residents use pit latrine, 1% use VIP latrines and 4% use the bush for liquid waste disposal.

Chart 3-3: Liquid Waste Disposal in Griftu Town



Source: Field Survey, 2019

#### **Storm Water Drainage**

Griftu Town lacks any storm drain infrastructure to receive, collect and disperse run off water. Roads within the town also lack drainage facilities. Heavy downpours upstream result in infrequent flooding in the town during the rainy season.

#### Solid Waste Disposal

According to a field survey in 2019, 56% dispose of solid waste through burning, 41% by indiscriminate dumping and 3% through composite pits. The lack of a sustainable system for the collection and disposal of waste has influenced a high number of residents who either burn or indiscriminately dump despite the obvious environmental and health challenges.

Plate 3-8: Undesignated Dumpsite



Source: Field Survey, 2019





Source: Field Survey, 2019

#### **Electricity Supply**

According to field survey, 63%, of households use electricity to light their households, 26% use others sources which include torches, firewood just to mention a few.

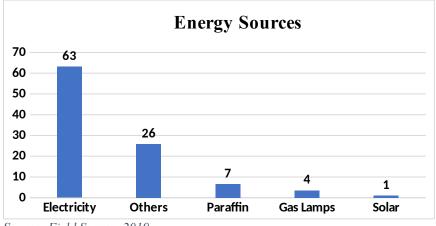


Chart 3-5: Household Energy Sources

Source: Field Survey, 2019

According to field survey, 74% are not connected to electricity mainly due to affordability (high installation costs and monthly bills) while 15% are not connected due to accessibility and 11% are not connected since it's the landlord's responsibility.

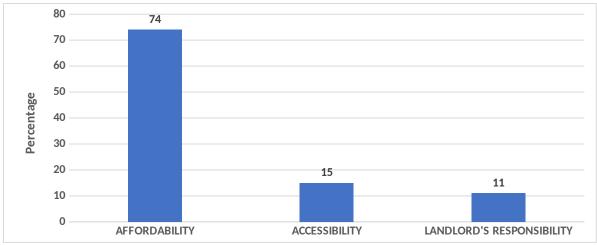


Chart 3-6: Reasons for non-connection to electricity

Source: Field Survey, 2019

#### **Postal services and ICT**

Postal Corporation of Kenya has one post office in Griftu that used to service the town and the hinterland. The post office is defaced and unfunctional. According to a field survey in 2019, 93% of locals own mobile phones, while 7% do not. Safaricom provides telecommunication services for voice and data. 8% of mobile phone users have access to the internet, while 92% do not have access to an internet connection. The national fibre optic infrastructure also serves Griftu.





Source: Field Survey, 2019

According to the survey, other means of communication and information dissemination within Griftu Town include radio use, accounting for 63%, newspaper 5% and television 13%.

# 3.4.3 Transportation Road Transport

The road network in Griftu Town is categorized into two parts: classified and unclassified. Field surveys established that all roads in the town are not tarmacked, are narrow, and lack drainage.

Road (Origin & Destination)	<b>Class of Road</b>	Condition	Distance
			(KM)
Wajir-Moyale	Class A14	Murram	51
Griftu-Arbajahan	Class B 81	Earth and Partly Graveled	63
Griftu- Hadado	F5007	Earth	100
Griftu- Eldas	G5371	Earth	46
Griftu-Tarbaj	Class F 5008	Earth	51
Griftu to A14(Moyale)	G5353	Earth	4.9
Griftu to A14 (Wajir)	G5352	Earth	9
(Griftu-Halumvigo road)			

Plate 3-10: Road conditions in Griftu



Source: Field Survey, 2019

## **Public Transport System**

The means of transport within Griftu are split into two: Motorized and Non-Motorized

#### 1. Motorized

These include all motor driven vehicles that ferry people and goods. The type of vehicle used is depend on the distance to be covered, urgency and the goods being carried. Some of the main means used include tuk-tuks, cars, motorbikes and public vehicles.

#### 2. Tuk-tuks

The use of tuk-tuks within Griftu is used mostly for ferrying goods such as water from the boreholes.

#### 3. Motorbikes

Motorbikes within Griftu are mostly used for accessing health facilities, transportation of goods, and personal day-to-day errands.

#### 4. Public vehicles

According to a field survey in 2019, buses, "*matatus*", Tuk-tuks, motor bikes and animal-driven carts form the major public vehicles within the town. Buses and *matatus* form the basis for intraconnectivity means of transport.

#### Status of Public Transport

The town has a few public service vehicles that traverse to and from Wajir Municipality. With the upgrading the Griftu-Wajir road to Bitumen standards, more public service vehicles are expected to improve public transportation.

#### 5. Non-motorized

Within Griftu, non-motorized transportation includes donkey carts and walking. Non-motorized transportation accounts for 61% of journeys. Animal-driven carts are the most popular means for transporting goods by households for strenuous work like fetching water and firewood.

Plate 3-11: USe of animal carts for transport in the town



Source: Field Survey, 2019

#### **Air Transport**

Griftu town has an airstrip that is located along Griftu-Arbajahan road. The airstrip lacks basic infrastructure and has not been demarcated, but the runway has been cleared.

#### **Street Lighting**

Griftu Town has solar-powered street lights along Griftu-Arbajahan (B81) road. The street lights promote security and safety. However, some street lights are not operational due to poor maintenance.





Source: Field Survey, 2019

#### Cemeteries

The town has five cemeteries that are not fenced.

Plate 3-13: An unfenced cemetery in the town



Source: Field Survey, 2019

#### 3.4.4 Social infrastructure

Social infrastructure refers to the basic services and structures that facilitate the quality of life in a neighbourhood, town, region or nation. Therefore, social infrastructure includes any

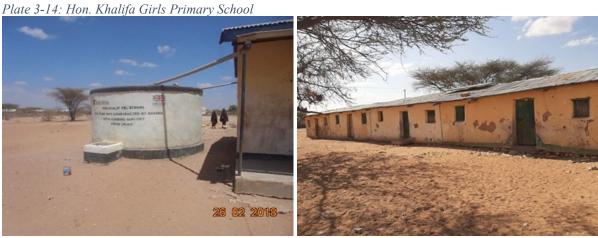
infrastructure beyond basic economic functions to make a community an appealing place to live. This section's main objective is to identify the availability and scrutinize the performance of social infrastructure, which supports the town by creating a healthy, sustainable society. Social infrastructure plays a crucial role in aiding social cohesions within urban areas and also help propel and guide economic development, including in the health and education sectors and recreation services. Additionally, this section will discuss emerging issues in the social sector, such as analysis of the enrollment rate, transition rate from one level to another level and adaptation to emerging trends in the world.

No.				Number of Teachers			Teache r –	Number of streams	Gap	
				TSC	BOG	РТА	Pupils	Pupil ratio		
1.	Haghar Primary	Available	4	3	-	1	250	1:63	1 class (1-6)	2
2.	Hon Khalif Girl's Primary	Available	3	5	2	2	380	1:32	1	2
3.	Tagwa Primary	Available	2	4	-	1	436	1:63	2	11
4.	Bula Forest Primary	Available	3	4	-	3	250	1:25	1	-
5.	Griftu Primary	Available	4	9	-	-	573	1:44	Double stream: nursery, grades A-C and class 8	10

#### **Education Facilities**

#### Pre – Primary Schools and Primary Schools

According to a field survey in 2019, only Bula Forest had attained a teacher-to-student ration of 1:25 as per the standards. A low student enrollment, dilapidated infrastructure, inadequate teaching facilities, insufficient teaching personnel and lack of perimeter fencing characterise the schools.



Source: Field Survey, 2019

Griftu has a private school (Feynus Integrated Academy) that has nine teachers, two hundred and five pupils, and single-stream classes.

Plate 3-15: Feynus Integrated Academy



Source: Field Survey, 2019 1

#### **Secondary Schools**

There are two public secondary schools in Griftu Town: Griftu Boys' Secondary and Hon.Khalifa Girls' Secondary school. The student population in these schools is relatively low due to factors such as poverty. The teacher-to-student ratio is 1:17 and 1:24 lower than the recommended 1:25.

Facility	Number of 7	<b>Feachers</b>	Number of	Teacher –	Number of
	TSC	BOG	Pupils	Pupil ratio	streams
Griftu Boys'	19	1	334	1:17	2
Secondary					

Hon Khalif Girls'	12	5	395	1:24	2
Secondary					

Plate 3-16: Griftu Boys and Hon. Khalifa Girls Secondary schools



Source: Field Survey, 2019

#### **Tertiary Education**

Griftu has two tertiary educational institutions: Livestock Training Institute and Griftu Polytechnic. The tertiary institutions are characterized by low student enrollment, poor infrastructure, and inadequate teaching equipment and personnel.

Plate 3-17: Griftu Livestock Training Institute



Source: Field Survey, 2019

**Health Care Facilities** 

According to a field survey in 2019, Griftu town has one Sub-County hospital (level 4), one health centre at Haghar and three clinics within the town. Griftu level four hospital is the most equipped and staffed within the sub-county.

Staff	Number
Doctor	2
Resident Clinical Officer	6
Nurse	10
Orthopedic	1
Gynecologist	1
Lab Technician	4
Public Health officer	2
Anaesthetist	2
Nutritionist	2
Bio Medical Engineer	1
Record officer	2
Sonographer	1
Revenue officer	1
Pharm Technician	2

Table 3-6: Staffing Levels in Griftu Sub- County Hospital

Source: Field Survey, 2019

The services and facilities within Griftu Level 4 hospital are shown in the table below.

Service	Capacity	Facilities
In-Patient	36 beds	Men ward
		Women ward
		Children ward
Out-Patient	Average of 100	Consultation rooms, pharmacy,
	persons per day	waiting bay, laboratory
Mother-Child health care		Maternity wing, Operating theatre for
		(CS operations)

Table 3-7: Capacity of Griftu Sub-County Hospital

Radiology		X-ray and Ultra-sound
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Source: Field Survey, 2019

Other supportive facilities include a kitchen for the in-patient and staff, pit latrines, incinerators for bio hazardous waste disposal, staff quarters, a generator for backup power and water storage. These facilities ensure that the hospital adequately operates and provides the required services.

Plate 3-18: Facilities in the Griftu Sub-County Hospital



Source: Field Survey, 2019

#### Reasons for the chosen treatment facility

According to the household survey, 98% of the population in Griftu Town seek medical services from the public hospitals, 1% from private hospitals and 1% from local medicine. Low cost and short distances, with an average distance of 2km against the recommended 5 km, are the main reasons for using Griftu level 4 hospital.

According to a field survey in 2019, 78% of residents preferred Griftu level 4 due to cost, 17% due to distance and 5% due to better services.

## Playground

Griftu Town has a playing ground located along Griftu-Arbajahan road. The playground is a basic open field.

Plate 3-19: Griftu Playground (unfenced)



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Source: Field Survey, 2019
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#### **Library Services**

The town has one operational library located along Griftu-Arbajahan road. The facility is not sufficiently equipped.

#### 3.4.5 Environmental Issues

The populace of Griftu Town is dependent on wood fuel for cooking energy. This affects the vegetation cover within the town and its immediate hinterland. The lack of solid and liquid waste infrastructure also direly impacts the town's environment.

#### **Energy Use**

According to a field survey, households in Griftu Town rely heavily on wood-based fuels such as firewood and charcoal, represented by 90% and 6%, respectively. These fuels produce high amounts of Carbon dioxide ( $CO_2$ ) during burning, leading to air pollution and a general reduction in biodiversity and vegetation cover.

#### **Liquid Waste Disposal**

According to a field survey, Griftu Town lacks an organized and functional sewage system to collect and treat raw sewage or dirty water from homes and business premises. Residents rely

heavily on pit latrines, gradually contaminating underground water sources and pollution during flooding.

#### **Solid Waste Management**

According to a field survey, Griftu Town lacks infrastructure and a system to collect and dispose of solid waste effectively. This leads to indiscriminate dumping within the town.

Plate 3-20: Burning of Solid Waste in the town



Source: Field Survey, 2019

#### 3.4.6 Local Economic Profile

The economy of Griftu Town is driven by pastoralism, transportation, industrialization, commerce and trade.

Pastoralists keep cattle, camel and shoats with a watering hole within the seasonal river. Crops grown along the seasonal river include maize, paw-paw and grass. The potential for intensified irrigation agriculture can be commercialized to provide fresh produce and fodder for animals. The transport sector is characterised by buses plying the Wajir-Eldas route as well as vans, motorbikes and animal carts ferrying goods and people within and outside the town. Industries in the town include the slaughterhouse, wood and metal work, masonry and automotive works.

Trade and commerce are mostly in livestock retail and general retail shops selling general household and textile goods. Financial services in the town are limited to mobile money agents. Small-scale quarrying is also done to the south of the town.

*Plate 3-21: Economic activities in the town (agriculture, metal fabrication and livestock market)* 



Source: Field Survey, 2019

#### **Potential for Local Economic Development**

- 1. Given the large herds of cattle, sheep, goats, and camel, and the establishment of a milk cooling plant in the town, possibilities of industrialization to capitalize on these assets abound.
- 2. The tarmacking of the Wajir-Moyale road in the future will enhance visibility, accessibility and investment in the town.

## 3.4.7 Urban management

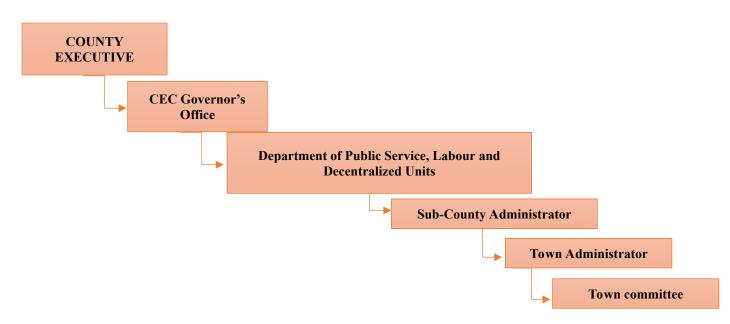
#### Governance

The management of a town is vested upon a town committee, which details the functions of a town administrator in consultation with the residents/stakeholders. The management of Griftu Town is as described below.

#### **Current Town Management Structure**

Section 31 (1 and 2) of the Urban Areas and Cities (Amendment) Act 2019 stipulates the appointment of a town administrator through the county public service board. However, his/her duties are determined by a town committee as per the Urban Areas and Cities Act section 31 (3). Within this prescribed law, Wajir County appointed a town administrator for Griftu Town, whose office is located in the town. However, the absence of a town committee to prescribe the functions of the town administrator highlights a disparity in the town's management.

The organogram for town administration in the county is as shown in the figure below.



Upon formulation of a town committee, the following are the functions that it is supposed to perform:

- 1. Oversee the affairs of a town
- 2. Formulate and implement an Integrated Plan.
- Develop and adopt policies, plans, strategies and programmes, and may set targets for delivery of services.
- 4. Control land use, land sub-division, land development, and zoning by public and private sectors for any purpose, including industry, commerce, markets, shopping and other employment centers, residential areas, recreational areas, parks, entertainment, passenger transport, agriculture, and freight and transit Adopt policies and plans.
- 5. Promote and undertake infrastructural development.
- 6. Develop and manage schemes, including site development, in collaboration with the relevant national and county agencies.
- 7. Maintain a comprehensive database and information system of the administration and provide public access to that upon payment of a nominal fee to be determined by the board.
- 8. Settle and implement tariffs, rates and tax and debt collection policies as delegated by the county government;
- 9. Monitor the impact and effectiveness of any services, policies, programmes or plans
- 10. Promote a safe and healthy environment

11. Facilitate and regulate public transport

#### **Rights of Stakeholders/Residents in Town Management**

The involvement of stakeholders in the town's planning process highlights a link between town management and public participation. The role of stakeholders in town management includes;

- Contribute to decision-making by submitting written or oral presentations or complaints to a town committee through the town administrator.
- Be informed of decisions of a town committee that affect their rights, property, and reasonable expectations.
- Be privy to regular disclosure of the state of affairs of the town, including its finances.



## **3.5** Synthesis of thematic issues

THEME	CHALLENGES	RECOMMENDATIONS
Housing	<ul> <li>Poor housing condition</li> <li>Lack of housing development plans and policy</li> <li>Inadequate housing-related services such as electricity, portable water, solid waste management and sewer</li> <li>Inadequate public housing</li> <li>Underutilization of locally available materials and modern building materials</li> <li>High cost of modern building materials due to long distances</li> <li>Lack of land ownership documents</li> </ul>	<ul> <li>Provide service infrastructure such as sewerage infrastructure, water etc.</li> <li>Formulate a housing policy for the county.</li> <li>Initiate and educate locals on the use and application of locally available materials.</li> <li>Introduce alternative affordable building materials</li> <li>Initiate the process of land allocation and registration</li> </ul>
Environment	<ul> <li>Environmental degradation by over- reliance on wood fuel</li> <li>Pollution due to lack of solid waste management</li> <li>Encroachment of riparian reserves</li> </ul>	<ul> <li>Introduction of alternative renewable energy sources e.g., solar panels and LPG.</li> <li>Afforestation to protect environmentally sensitive areas</li> <li>Structuring and integrating solid waste disposal and management</li> <li>Strict enforcement of environment laws to protect water resources, vegetation cover and rehabilitation of riparian reserves</li> </ul>
	Physical I	nfrastructure
Drainage	• Lack of storm water drainage infrastructure.	<ul> <li>Construct storm water drainage network intertwined with the road network</li> <li>Excavation of floodways that will drain water</li> </ul>
Water Supply	<ul> <li>The town lacks a water provider and the requisite infrastructure to treatment, store and distribute water.</li> <li>The town's heavy overreliance on boreholes can result in excessive and unregulated water extraction.</li> <li>Water pollution through liquid and solid pollutants</li> </ul>	<ul> <li>Create a water distribution and management authority under the town's authority</li> <li>Sensitization programs on water conservation and rain water harvesting through the introduction of water harvesting instruments</li> </ul>
Energy	<ul> <li>Unreliable electricity supply</li> <li>High cost of electricity connections and</li> </ul>	• Encourage and sensitize households to tap into solar energy by installing solar panels.

THEME	CHALLENGES	RECOMMENDATIONS
	<ul> <li>monthly expenses</li> <li>High wind and solar potential which remains untapped</li> <li>Overreliance on the national electricity grid over other sources, such as Solar energy</li> <li>Lack of alternative energy cooking sources such as LPG fuel</li> </ul>	<ul> <li>Install an electricity sub-station</li> <li>Provision of subsidies to encourage and enhance connectivity</li> <li>Encourage private sector participation in exploring possibilities that increase the supply of sustainable energy sources.</li> <li>Install and maintain solar-powered streetlights throughout the town</li> <li>Enforce regulations relating to the preservation of power way-leaves</li> </ul>
Sewer and sanitation	• Lack of sewerage reticulation infrastructure and treatment plant.	<ul> <li>Provide septic tanks at the neighbourhood level.</li> <li>Provide a sewer reticulation to cover the entire planning area.</li> </ul>
Solid Waste Management	<ul> <li>Lack of designated sanitary landfills</li> <li>Poor solid waste management system</li> <li>Air pollution resulting from the burning of solid waste</li> </ul>	<ul> <li>Establish a Sanitary landfill and leachate treatment to link with sewer treatment.</li> <li>Purchase of garbage compactors for the whole planning area</li> <li>Increase the number of solid waste receptacles within the town</li> <li>Sensitization on solid waste disposal method</li> <li>Procurement and positioning of litter bins at key places in the town to prevent littering.</li> <li>Encourage youth and community groups to collect, consolidate and dispose of solid waste.</li> </ul>
Transportation	<ul> <li>Poor conditions of the road surface</li> <li>The town lacks a bus terminal and parking facilities</li> <li>The town lacks non-motorized infrastructure such as pedestrian walkways and cycleways.</li> <li>Uni-modal transportation system (road only)</li> <li>Inadequate road transport network that limits connectivity</li> <li>Encroachment of carriageways and road reserves</li> <li>Poor air transport infrastructure</li> <li>The town lacks drainage facilities to channel water for proper town drainage</li> </ul>	<ul> <li>Upgrade all primary, secondary, local distributors and access roads (refer to table 4) to motorable standards.</li> <li>Construct a transport terminal.</li> <li>Construct proper drainage systems on both sides of major roads such as Class B 81, G5371, Class F 5008, G5352 and minor roads within the neighbourhood and town.</li> <li>Upgrading all access roads to gravel standards</li> <li>Construction of non-motorized transport infrastructure that includes walkways and cycleways</li> <li>The partnership between Wajir County government and other partners like KeNHA, KeRRA, and KURA in upgrading and maintenance of roads to standard</li> <li>Formation of a passenger welfare committee to regulate the public transport sector through the formulation of favourable policies</li> </ul>

THEME	CHALLENGES	RECOMMENDATIONS
	Social In	frastructure
Health Care	<ul> <li>Inadequacy of drug supply</li> <li>Inadequate medical personnel in Griftu Town</li> <li>Inadequate of specialist doctors</li> </ul>	<ul> <li>Establishment of more health facilities</li> <li>Provide adequate medical staff and health facilities such as beds, wards and medicine</li> <li>Expansion, maintenance and rehabilitation of existing health facilities</li> </ul>
Education	<ul> <li>Inadequate staff in education facilities</li> <li>Inadequate support infrastructure such as classrooms, electricity and water</li> <li>Undefined school boundaries</li> <li>Inadequate special needs schools</li> </ul>	<ul> <li>Equipping the education facilities by connecting them to electricity, water, and sewers, constructing laboratories, and equipping them with special learning facilities.</li> <li>Civil education on the importance of education.</li> <li>Provide adequate security in the town to create a safer working environment.</li> <li>Incentives and subsidies should be provided to attract investors and professionals in the town to assist in the education sector.</li> <li>Redeveloping and upgrading of the current polytechnic.</li> <li>Advocate for more staff in the schools.</li> <li>Encourage and facilitate participation of the private sector, religious institutions and other key stakeholders in providing education facilities and services.</li> <li>Intensify inspection and supervision to ensure proper registration in schools.</li> </ul>
Local Economy Development	<ul> <li>Power shortages within the town</li> <li>Lack land documentation</li> <li>Overreliance on livestock rearing</li> <li>Lack of proper policy to guide on resource exploitation</li> <li>Inadequate skilled labour</li> <li>Lack of proper market management</li> <li>Poor linkage within the town</li> <li>Rainfall dependent agriculture</li> <li>Drought and famine</li> <li>Low commercial activities in the existing markets</li> </ul>	<ul> <li>Enhancement of power generation and establishment of a power sub-station</li> <li>Initiate the process of land adjudication</li> <li>Invest in other sectors, such as industrialization and commerce</li> <li>Allow densification within the commercial zone to maximize the issuance of business permits.</li> <li>Establish a market management committee.</li> <li>Increase the quality and revamp technical institutions through necessary support such as staffing, equipment and facilities.</li> <li>Create access roads within the town to enhance accessibility.</li> <li>Revamping the existing markets to enhance commercial activities</li> </ul>
Governance	• Inadequate capacity of the physical planning department	• Institute a town committee to define the roles of the town administrator.

THEME	CHALLENGES	RECOMMENDATIONS
	<ul> <li>Lack of a development control unit</li> <li>Lack of a public participatory policy</li> <li>Inadequate resource allocation for the town</li> <li>Lack of a town committee and hence a limitation on the duties of the town administrator.</li> <li>Lack of an income generation framework</li> </ul>	<ul> <li>Institute a development control unit within the department posted in the town.</li> <li>Recruit additional qualified staff to oversee conformity to the plan</li> <li>Hold continuous professional development for county staff</li> <li>Establish a public information management system to facilitate knowledge-sharing between authorities and residents.</li> <li>Establish citizen sub-committees to safeguard the town's intentions and land uses.</li> <li>Develop parking slots within the commercial zone for revenue collection.</li> </ul>



# **4 PLAN PROPOSALS**

## 4.1 Overview

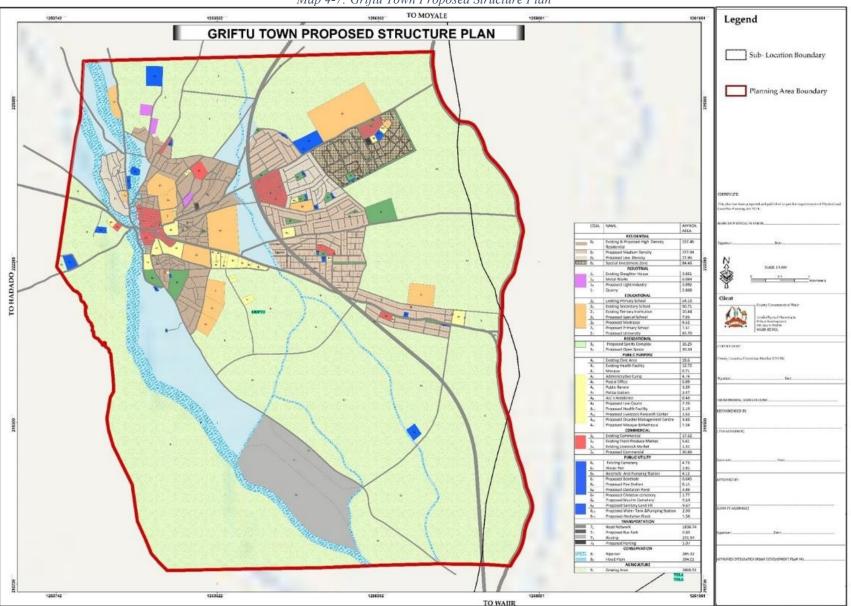
Given the challenges inherent in the town, plan proposals aim to remedy the pressing challenges by providing amenities and facilities, regularizing the existing cadastral layout, and organizing the town into complementary land uses while maintaining the environmentally sensitive areas in the town. This chapter presents the proposed land use plan, the zoning plan and the improvement strategies that contain projects geared toward improving the town.

## 4.2 Structure Plan

This plan has been organized into ten land uses to form the structure plan. These uses contain the existing facilities and proposed projects required by the end of the ten-year (10) planning period (2023-2033). The plan also shows the form, shape, urban development limits, trends, and patterns.

A few principles guide the proposals in this plan;

- i. *Land optimization/densification approach*. The densification approach is intended to concentrate the growing population within designated intervention areas. This principle will ensure efficient land use, limit urban sprawl, and reduce service provision costs.
- ii. *Sustainable development* this principle guides the identification of environmentally sensitive areas and land availability based on suitability analysis and the identification of the town's sectoral potential. The aim stipulated in sustainable development goal number 11 on sustainable cities and communities is to adequately provide services and encourage economic growth through investment in agriculture and industries and environmental protection.
- iii. *Minimal disturbance*: The Plan is prepared considering minimal change impact on the existing developments while providing adequate transportation networks and physical and social infrastructure.



Map 4-7: Griftu Town Proposed Structure Plan

2 Griftu Town Local Physical and Land Use Development Plan, 2023-2033

## **4.3 Detailed Land Use Proposals**

The planning area has been classified into nine broad land uses. These land uses contain proposals in the form of projects and facilities that will cater for the current (2023) and projected population of the town as per the year 2033. The proposals aim at maintaining order and providing an enabling environment for commercial, residential and industrial purposes. These land uses are:

#### **Residential land Use**

The existing and proposed residential land use covers an area of 2,746.44Ha, representing 10.4% of the entire planning area. These areas have different residential categories such as: high, medium and low-density housing areas, considering the varying housing needs of diverse socioeconomic groups in the town. The proposed residential areas were earmarked for various considerations such as the current residential land uses, compatibility with neighbouring land uses and the projected housing demands.

#### *i. Existing and Proposed High Density residential area-* (0<sub>1</sub> and 0<sub>2</sub>)

To accommodate the current and future population housing demand, the plan has recognized the existing and proposed high-density residential area denoted as  $(0_1)$  covers an area of 998.81 Ha (*refer to Map 4-7*). These areas are expected to house the bulk of the population and will be characterized by multi-dwelling and row housing with an average density of 22 households per hectare.

#### *ii.* Proposed Medium Residential Area- (02)

To accommodate the current and future population housing demand, the plan has recognized the proposed medium residential area  $(0_2)$  covering an area of 1046.85 Ha (*refer to Map 4 -7*). These areas will be characterized by a combination of single and multiple dwelling units with an average density of 11 household per hectare.

#### *iii.* Existing and Proposed Low Residential Area- (0<sub>3</sub>).

The existing and proposed low-density area, denoted as  $0_3$  covers an area of 700.78 (*refer* to Map 4-7). The average plot acreage will be significantly larger to influence a lower population density of 6 plots per hectare. Single dwelling households will characterise the low-density areas.

*iv. Proposed Special Investment* The proposed special Investment Zone covers an area of 84.46 Ha and is located on the northeast side of the town opposite the proposed university site. Facilities proposed in the SIZ include a commercial node, health centre, and educational and recreational centres.

#### **Industrial Land Use**

This plan recognises the immense potential industries play on the town's socio-economic development. Therefore, the plan recognises the existing industrial land use and potentials represented as proposals within the plan.

The industrial land use within the entails: -

*i.* The existing industrial land use-  $(1_1, 1_2 \text{ and } 1_4)$ .

The existing industrial land use compromise of a slaughterhouse denoted as  $1_1$  covering an area of 3.66 Ha. The land use should be maintained at the current location, the slaughterhouse, a holding bay, slaughter slab, drainage facilities, and electricity should be provided.

An existing metal workshop, denoted as 12, covers an area of 0.08 Ha, and this area should be relocated to the proposed light industry.

The plan has also recognised the existing quarry, which is denoted as  $1_4$ , and covers an area of 2.87 Ha, the current use should be maintained, exploited and serviced with utility facilities such as water, sanitary facilities and physical infrastructure such as roads. *Refer to Map* 4-7.

#### *ii.* The proposed light industry (jua kali)- (1<sub>3</sub>)

To tap on the existing potential of the town, the plan has proposed a light industry which is denoted as 3 and covers a total area of 2.09 Ha *refer to Map* 4-7. The land use should be

- Implemented as proposed,
- Provided with a 9 metres setback
- Provided with adequate collector roads measuring 18-21m and access roads measuring and 12-15m
- Provided with basic infrastructure such as electricity, water, drainage facilities, solid waste disposal facilities

#### **Education land Use**

The plan recognises the critical role education plays in the alleviation of illiteracy and imparting skills and knowledge. This plan identifies the existing education facilities within the town such as the existing primary schools, denoted as  $2_1$  which cover an area of 54.10 Ha; existing secondary schools, denoted as  $2_2$  covering an area of 50.71 Ha; and tertiary institutions, denoted as  $2_3$  covering an area of 10.44 Ha. The following improvements should be made in these facilities;

- Provide adequate collector roads measuring 18-21m and access roads measuring 12-15m
- Improve the existing facilities by providing state-of-the-art learning facilities, Classes, laboratories and libraries.
- Service this area with trunk infrastructure, including electricity, stormwater drainage infrastructure, and water and provide a sewer reticulation system.
- Increase the number of streams.

The plan recognises the need for inclusion and therefore proposes a special needs school denoted as  $2_4$ , which covers an area of 5.5 Ha. The plan also proposes a madrassa denoted as  $2_5$  and covers an area of 9.52 Ha and the proposed primary school denoted as  $2_6$  which covers an area of 1.51 Ha. A university has also been proposed, and it covers an area of 65.70Ha.

#### Refer to Map 4-7.

These areas should be;

- Provided with new infrastructure
- Serviced with trunk infrastructure including electricity, storm water drainage infrastructure, water, and sanitation facilities.

#### **Recreational land Use**

The plan aims to promote recreation and sporting activities by providing open spaces, denoted as 32, covering an area of 39.34 ha. A sporting complex has been proposed, denoted as  $3_1$ , covering an area of 16.25 Ha. *Refer to Map* **4**-7. The proposed intervention for the proposed sporting complex is that the areas should be;

• Serviced with trunk infrastructure including electricity, stormwater drainage infrastructure, water, access roads and sanitation facilities

#### **Public Purpose Land Use**

The plan recognises the importance of administration, health care, security and religion in the creation of safety, order and promotion of development. It, therefore, recognises the existing public purpose facilities and proposes others based on the needs of the town.

FACILITY	CODE	AREA (HA)
Existing civic area	41	19.6
Existing health facilities existing civic area	42	12.72
Existing religious facilities	43	0.71
Existing Administrative Camp	44	4.74
Existing post office	45	0.09
Existing Public baraza	46	3.39
Police station	47	3.47
Existing Assistant County Commissioner residence	48	0.40
Proposed law court	49	2.20
Proposed Health Facility	410	1.19
Proposed Livestock Research Centre	411	1.63
Proposed disaster management centre	4 <sub>12</sub>	3.40
Proposed mosque and madrassa	4 <sub>13</sub>	1.54

#### **Commercial Land Use**

The plan recognises the implication of commerce and trade to the socio-economic development of a town. This plan has recognized the existing commercial area denoted as  $5_1$  and covers an area of 17.52 Ha. This area currently fulfils part of the commercial demands of the town, and, with interventions such as densification of activities, redevelopment and provision of basic infrastructure such as roads, water, solid waste management infrastructure and drainage infrastructure will adequately meet future demands. Additionally, the plan seeks to promote agriculture and has therefore recognized the existing fresh produce market denoted as  $5_2$ , covering an area of 5.61 Ha and the existing livestock market  $5_3$ , covering an area of 1.35 Ha. The plan also proposes small commercial areas within the residential areas to cater for the day-

to-day commercial needs of individual neighbourhoods. The proposed commercial area is denoted as  $5_4$  and covers an area of 30.80 Ha. *Refer to Map* 4-7.

#### **Public Utility Land Use**

The plan recognises the importance of public utilities in ensuring quality of life. The plan through Map 4-7 has recognized the existing public utilities, and through needs assessment, proposals have been made to cater for future demands and needs.

Table 4-9: Facilities Proposed under Public Utility Land Use

Public Utility	Code	Area (Ha)
Existing Cemetery	61	4.73
Existing Water Pan	62	1.96
Existing Borehole and Water Pumping Station	63	4.12
Proposed Borehole	64	0.645
Proposed Fire Station	65	0.15
Proposed Oxidation Pond	66	3.89
Proposed Christian Cemetery	67	1.77
Proposed Muslim Cemetery	68	9.14
Proposed Sanitary Land Fill	69	9.67
Proposed water tank and pumping station	610	2.50
Proposed ablution blocks	611	1.56

#### **Transportation Land Use**

To provide functional connectivity and accessibility, this plan proposes the widening of existing roads to the required standards and the provision of roads with missing links. The roads have been proposed as primary, secondary, distributor and access.

The plan also proposes the development of a road network denoted as  $7_1$  to cover an area of 1838.74 Ha, a bus park along Griftu to A14 (Moyale) G5353 road denoted  $7_2$  covering an area of 0.83 Ha, an existing Airstrip denoted as  $7_3$  covering an area of 231.95 Ha and a proposed parking denoted as  $7_4$  covering an area of 1.07 Ha within the special economic zone. *Refer to Map 4-7.* 

#### **Agriculture Land Use**

This land use forms the town's hinterland, which will be used as grazing areas for livestock; the land use is denoted as  $9_1$ , covering an area of 3808.29 Ha. *Refer to Map* 4-7. Development in this area is discouraged.

#### **Conservation Land Use**

The plan appreciates the town's environmental diversity and seeks to recognise and protect these areas. Conservation land use within the town includes riparian reserve (dry river bed, water channels and its buffer), denoted as  $8_1$ , covering an area of 265.32 Ha, and an explicitly conservation area, denoted as  $8_2$ , covering an area of 394.01 Ha. These areas are for conservation purposes, and therefore, no development is to be encouraged within this land use.

## 4.4 Zoning plan

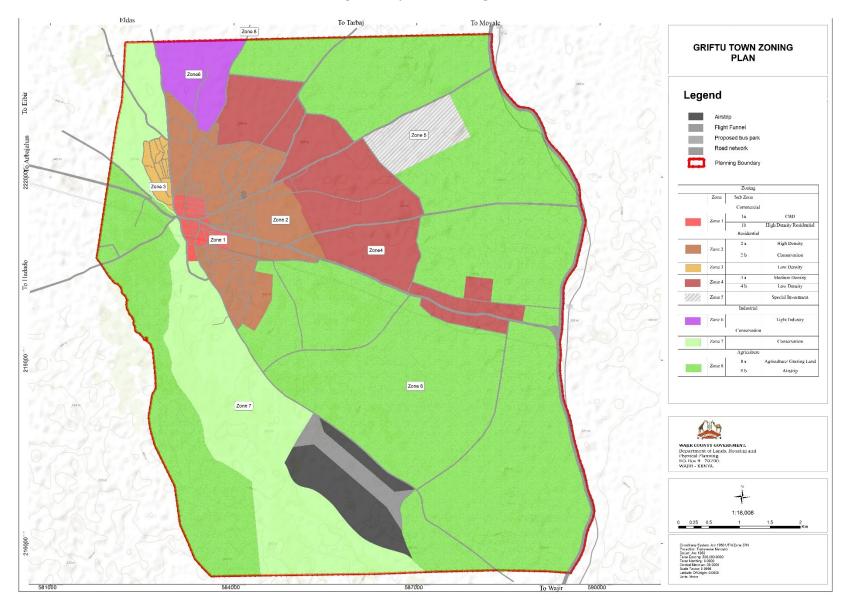
The identified planning areas is zoned into nine areas subject to the prevailing land use. The zones have specific proposed projects and facilities that are sustainable to the current population and projected 2028 population. The spatial extents and the composition of these zones are as given in Map 4-8.

The zones and proposals contained in the structure plan have been informed by a multiplicity of factors including:

- i. The existing 2009 plan, the new zoning regulations have recognized various aspects of the plan, especially government facilities and the location of the main bus terminal
- ii. The zoning plan was guided by the principle of densification, which aims to encourage efficient use of available spaces within the built-up area through compacting development within the urban area.

The population needs of the town based on the conclusions from situation analysis and guided by legislature and standards in the physical planning handbook and Urban Areas and Cities Act, 2019, gave rise to the proposal for facilities and suitable lands for facilities such as landfills, cemeteries, sanitary disposal site and industrial and related commercial activities.

Map 4-8: Griftu Town Zoning Plan



<sup>9</sup> Griftu Town Local Physical and Land Use Development Plan, 2023-2033

#### 4.4.1 Zoning regulations

This plan has utilized the existing and proposed urban character in the core area and neighbourhoods to formulate land use regulations for the town. To provide for requirements for basic infrastructure/amenities due to an increase in population or any other contingency, the plan has adopted a densification approach. Additionally, the densification approach intends to concentrate the growing population within the built-up areas to ease pressure on agricultural land in the hinterland.

#### Table 4-10: Zoning Regulations for Griftu Town

Zone	Sub Zone			Stan	dard	S		Permitted uses	Prohibited uses
		Minimum	m Setbacks		Plot	Plot			
		Plot size	F	S	R	Ratio	Coverage		
Zone 1	1 <sub>1</sub> Commercial	0.25	3	0.5	-	240	80	<ul> <li>Shops (Wholesale and retail)</li> <li>Health Facilities</li> <li>Educational Facilities</li> <li>Hotels and accommodation facilities</li> <li>Public Utilities</li> <li>High density residential</li> <li>Police station</li> <li>Hospital</li> <li>Public baraza</li> <li>Public Park</li> <li>Religious facilities</li> <li>Limited utility facilities such as telecommunication mast, water storage, water kiosks.</li> <li>Light industry activities such as laundries; dry cleansing depots, printing; packaging; light assembly furniture makers</li> </ul>	<ul> <li>Heavy and, manufacturing, and noxious industries with large waste</li> <li>Garages</li> <li>Slaughterhouses</li> <li>Sewage treatment plant/disposal work</li> <li>Water treatment plant</li> <li>Solid waste dumping yards</li> <li>Cemeteries</li> </ul>
	1 <sub>2</sub> High Density	0.045	3	1.5	1	210	70	• Mixed residential development (Flats, Row	<ul> <li>Low-density residential</li> </ul>

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Zone	Sub Zone			Stan	dard	ls		Permitted uses	Prohibited uses	
		Minimum Plot size	Seth F	acks S	R	Plot Ratio	Plot Coverage			
	residential	(15M*30 M)						<ul> <li>housing)</li> <li>Health facilities</li> <li>Educational facilities</li> <li>Day cares</li> <li>Corner shops</li> <li>Religious facilities</li> <li>Public Utilities</li> <li>Community facilities</li> <li>Educational facilities</li> <li>Civil areas</li> <li>Limited utility facilities such as telecommunication mast, water storage, water kiosks and communal septic tanks</li> <li>Light industry workshops such as workshops, laundries; dry cleansing depots, printing; packaging; light assembly furniture makers</li> </ul>	<ul> <li>development</li> <li>Industrial activities such as; large, medium</li> <li>Slaughterhouses</li> <li>Sewage treatment plant/disposal work</li> <li>Water treatment plant</li> <li>Solid waste dumping yards</li> </ul>	
Zone 2	2 1 High Density residential	0.045 (15M*30 M)	3	1.5	1	210	70	<ul> <li>Mixed residential development: (Flats, Row housing)</li> <li>Health facilities</li> <li>Educational facilities</li> <li>Corner shops and markets</li> <li>Recreational facilities</li> <li>Limited utility facilities such as telecommunication mast, water storage, water kiosks and communal septic tanks</li> <li>Community facilities</li> </ul>	<ul> <li>Low density residential development</li> <li>Large and medium industrial activities such as;</li> <li>Slaughterhouses</li> <li>Sewage treatment plant/disposal work</li> <li>Water treatment plant</li> <li>Solid waste dumping yards</li> </ul>	

Zone	Sub Zone			Stan	dard	S		Permitted uses	Prohibited uses
		Minimum Plot size		acks	-	Plot Datio	Plot Coverage		
		Plot size	F	S	R	Ratio	Coverage		
	2 2							<ul> <li>Educational facilities</li> <li>Civil areas</li> <li>Limited utility facilities such as telecommunication mast, water storage, water kiosks.</li> <li>Light industry workshops such as workshops, laundries; dry cleansing depots, printing; packaging; light assembly furniture makers</li> <li>Bus Park</li> <li>Recreation facilities</li> </ul>	• All other uses except
	Conservation							• Drainage facilities	those permitted
Zone 3	Low Density residential	0.18 (30M*60 M)	9	10	6	50	50	<ul> <li>Single dwelling residential units (Maisonettes, Bungalows)</li> <li>Public utilities</li> <li>Recreational facilities</li> <li>Health facilities</li> <li>Educational facilities</li> <li>Day cares</li> <li>Corner shops</li> <li>Religious facilities</li> <li>Community facilities</li> <li>Limited utility facilities such as water tanks and communal septic tank</li> </ul>	<ul> <li>High and medium density residential development</li> <li>Any form of industrial activities such as; large, medium and small scale</li> <li>Entertainment spots</li> <li>Malls</li> <li>Stadium</li> <li>Garages</li> <li>Slaughterhouses</li> <li>Sewage treatment plant/disposal work</li> <li>Water treatment plant</li> <li>Solid waste dumping yards</li> </ul>
Zone 4	4 <sub>1</sub>	0.045	3	1.5	1	210	70	Mixed residential	•Low density residential

Zone	Sub Zone			Star	ıdard	ls		Permitted uses	Prohibited uses
		Minimum Plot size	Setb F	acks S	R	Plot Ratio	Plot Coverage		
	Medium Density Residential	(15M*30 M)						<ul> <li>development: (Flats, Row housing)</li> <li>Health facilities</li> <li>Educational facilities</li> <li>Day cares</li> <li>Corner shops</li> <li>Recreational facilities</li> <li>Religious facilities</li> <li>Community facilities</li> <li>Limited utility facilities such as water tanks and communal septic tank</li> </ul>	development • Industrial activities such as; large, medium • Slaughterhouses • Sewage treatment plant/disposal work • Water treatment plant • Solid waste dumping yards
	4 <sup>2</sup> Low Density residential	0.18 (30M*60 M)	9	10	6	50	50	<ul> <li>Single dwelling residential units (Maisonettes, Bungalows)</li> <li>Public Utilities</li> <li>Recreational facilities</li> <li>Health facilities</li> <li>Educational facilities</li> <li>Daycares</li> <li>Corner shops</li> <li>Religious facilities</li> <li>Community facilities</li> <li>Limited utility facilities such as water tanks and communal septic tank</li> </ul>	<ul> <li>High and medium density residential development</li> <li>Any form of industrial activities such as; large, medium and small-scale</li> <li>Entertainment spots</li> <li>Malls</li> <li>Stadium</li> <li>Garages</li> <li>Slaughterhouses</li> <li>Sewage treatment plant/disposal work</li> <li>Water treatment plant</li> <li>Solid waste dumping yards</li> </ul>
Zone 5	Special Investment	0.18	6	2	3	130	65	• Single dwelling residential units (Maisonettes,	• High and medium- density residential

Zone	Sub Zone			Star	ıdard	ls		Permitted uses	Prohibited uses	
		Minimum	Setbacks		Plot	Plot				
		Plot size	F	S	R	Ratio	Coverage			
	Zone	(30M*60 M)						<ul> <li>Bungalows)</li> <li>Playgrounds</li> <li>Health facilities</li> <li>Educational facilities</li> <li>Daycares</li> <li>Supermarket</li> <li>Religious facilities</li> <li>Community facility</li> <li>Limited utility facilities such as water tanks and communal septic tank</li> </ul>	<ul> <li>development</li> <li>Any form of industrial activities such as; large, medium and small-scale</li> <li>Entertainment spots</li> <li>Malls</li> <li>Stadium</li> <li>Garages</li> <li>Slaughterhouses</li> <li>Sewage treatment plant/disposal work</li> <li>Water treatment plant Solid waste dumping yards</li> </ul>	
Zone 6	Industrial	0.045	3	1.5	2	65	65	<ul> <li>Warehouses/Go downs</li> <li>Showrooms</li> <li>Banks/ ATM Machines</li> <li>Shops</li> <li>Hotels</li> <li>Utility infrastructure</li> <li>Clinic</li> <li>Green space</li> </ul>	All other uses except those permitted	
Zone 7	Conservation area							<ul><li>Recreation facilities</li><li>Drainage facilities</li></ul>	• All other uses except those permitted	
Zone 8	Grazing land	8 1 Agricultur al						<ul> <li>Agricultural activities</li> <li>Public Utilities</li> <li>Public purpose facilities</li> <li>Recreational facilities</li> </ul>	All other uses except those permitted	
		8 <sub>2</sub> Air Strip						<ul><li>Staff quarters</li><li>Health facility</li></ul>	All other uses except those permitted	

Zone	Sub Zone			Stan	ldard	S		Permitted uses	Prohibited uses
		Minimum	Setbacks			Plot	Plot		
		Plot size	F	S	R	Ratio	Coverage		
								<ul> <li>Duty free shops</li> <li>Restaurants, hotels and Eateries</li> <li>Security and firefighting facilities.</li> <li>Utilities such as water storage, power.</li> </ul>	

## 4.5 Subdivision scheme plan

The subdivision scheme plan is a requirement as per the Terms of Reference. The plan initiates the process of preparation of a comprehensive and interactive cadastral system to be used for:

- Preparation of a Land Information System
- Generation of a plot register for the town which will aid the process of providing title deeds to the residents
- Provision of land ownership documents
- Preparation of a valuation role

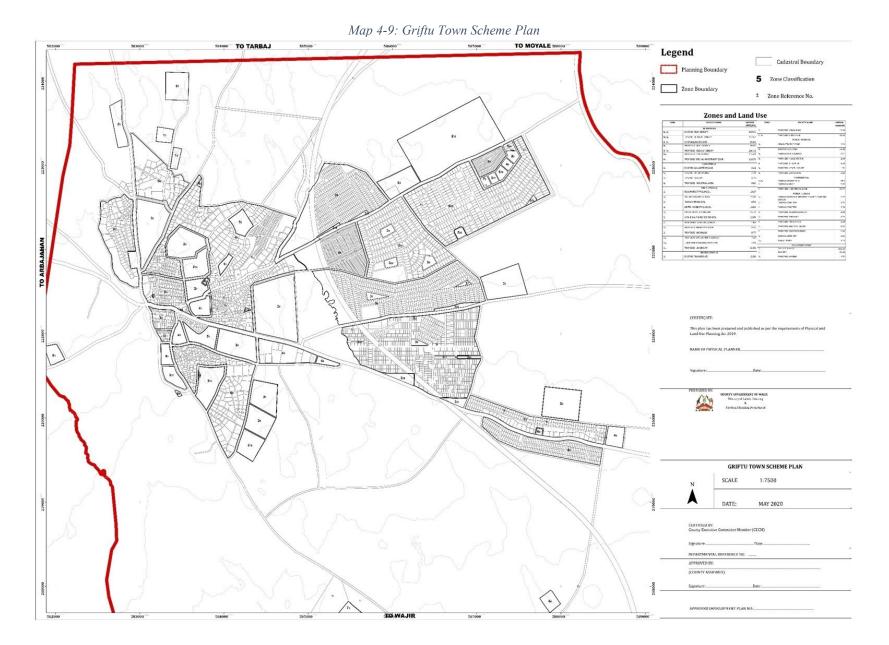
The following factors were considered during the development of the scheme plan.

- Regularization of the existing properties.
- Projected population increase from 2023-2033.
- Balanced distribution of services.
- Creation of order, safety and aesthetics.
- Zoning regulations prescribed the plot sizes for different zones in the town as follows;
  - High Density:15\*30 for
  - 20\*45 for Medium Density
  - 30\*60 for Low Density
- Population consideration is used to determine the number of plots within the town.

Table 4 -11 summarises the scheme in terms of plots created, plots regularised, and the total number of plots and buildings affected due to access provision and road reserves.

Table 4-11: Components of Griftu Town Scheme Plan

Town	Plots Created	Plots Regularized	Total Plots	Building Affected
GRIFTU	<mark>3899</mark>	1722	<mark>5621</mark>	<mark>682</mark>



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## 4.6 Urban design

Urban design is the arrangement and restructuring of buildings, public spaces, transport system, services and amenities. Urban design in these areas aims to give a particular urban form shape and character and inherently make urban areas functional and attractive in line with urban planning standards.

#### **Design** areas

The areas chosen for design within Griftu town is the core urban area. This includes roads/streets, commercial areas, residential areas, public purposes and utilities, and recreational areas.

# 4.6.1 Rationale for design interventions Environmental reason

Griftu Town is annually affected by flooding, especially during heavy downpour. This has resulted in perennial flooding, disrupting the town's socio-economic growth and development. This plan seeks to solve the annual flooding through various interventions such as creating a water channel and constructing the missing road link. Design interventions are needed to rehabilitate the site along the channels to restore the natural aesthetic appeal of the land through landscaping, beautification by greening and provision of recreational facilities.

#### **Economic reason**

The plan recognises the importance of a vibrant economy to a town. The plan has proposed a raft of measures such as a special investment zone to settle potential investors in the town. The special investment zone will be designed using the place making concept, which seeks to create public spaces that promote people's health, happiness and well-being.

#### 4.6.2 Design opportunities

Design opportunities in Griftu Town include undeveloped spaces that could be developed into recreational parks, landmarks such as schools and the police station, streets and roads and riparian reserves. Street scaping, planting trees on road reserves, and provision of non-motorized infrastructure could make the town more functional and attractive. Non-motorized infrastructure is key in the provision of alternative transit systems and, therefore, is of critical value in urban design. The map below presents the design opportunities in the town.

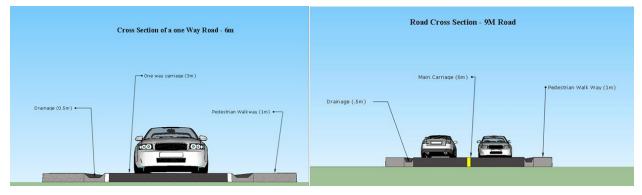
#### 4.6.3 Sample design interventions 1. Roads/Streets

Urban roads need to be designed in a manner that people are provided with spaces where they can safely walk, cycle, drive, take transit, and socialize. Designing urban roads and streets to cater for easy and comfortable movement of people will help reduce/eliminate urban problems like traffic, accidents and will even ease the accessibility within urban areas.

All access roads (9 and 12m) and local distributor (15 to 18m) roads will be single carriage ways.

Service lanes (roads with a 6m width) are the back streets within the commercial areas. They shall have a three (3) metre carriageway with a drainage channel of 0.5m. Walkways will cover a total of one (1) metre. This shall facilitate movement around buildings in commercial back lanes in terms of handling goods upon delivery. Street lights (solar powered) can be installed along the walkways. The visual representation of is as depicted in the Plate 4-22.







Local distributor roads shall have a width of between fifteen (15) to eighteen (18) metres. These roads shall distribute traffic from roads of greater functionality and width (secondary and primary roads). The roads shall be single carriageways of 7 metres split by road marking to direct traffic and a shoulder of one (1) m. Drainage channels of one (1) metre on either side of the roads shall be installed. A pedestrian walkway and cycle path, each of one (1) metre, shall also be constructed. Avenue tree planting covering a total width of 1.5 metres is allocated in order to promote greening to provide shade along these roads and improve the aesthetic appeal of the roads and town. The graphic representation of the aforementioned description is shown in Plate 4-23.

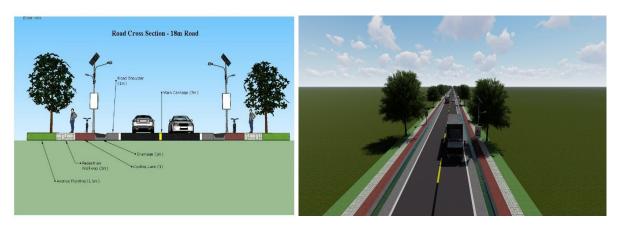


Plate 4-23: Cross-sectional design for 15m road

Source: Geodev (K) Ltd design department

The outermost lanes within roads in the CBD will be used for on-street parking. This will help reduce the amount of space required to provide parking facilities, enhance pedestrian safety, and generate revenue for the town through parking fees.

The proposed main road, Moyale-Wajir (A14) road, has a proposed reserve (width) of 60m. The model for designing these roads shall incorporate a dual carriageway (two lanes) of seven (7) metres each. The carriageways shall be separated by a median of six (6) metres, which shall be utilized for street lighting. A cycle lane and walkway, each 1.5 metres long, shall be constructed after the construction of road drainage (on either side of the road) of 1.5 metres. Service lanes of 7 metres each shall also be provided, as shown in Plate <u>4-24</u>.

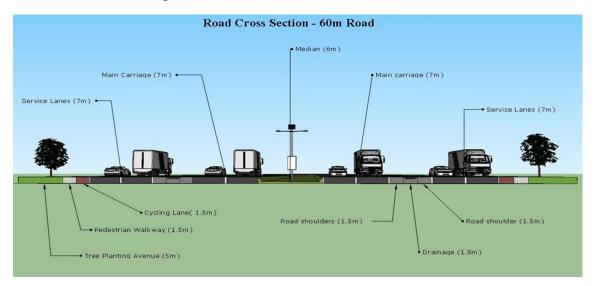


Plate 4-24: Cross-sectional design for 60m road

Source: Geodev (K) Ltd design department

#### 2. Commercial Areas

Commercial areas need to be designed in such a way that they promote order, clarity and aesthetic appeal. Abundant landscaping can integrate the built environment with natural features and express a welcoming feeling. Proper signage and building forms enable motorists to assimilate information quickly and locate their destinations. Order is important as a means of reducing stress, by enabling people to understand where businesses are located in relation to one another and providing predictability.

Clearly organized parking areas and readily accessible pedestrian path networks shall be established in commercial areas to encourage safe vehicle and pedestrian movement and enhance the overall shopping experience.



*Plate 4-25: Sample commercial street with on street parking and walkway* 

Source: Geodev (K) Ltd design department

Commercial blocks shall also be established after defining a setback of 6 metres from the road reserve to allow for organised on street commercial activities without affecting pedestrians and cyclists.

Plate 4-26: Sample organised on street commercial activity



Source: Geodev (K) Ltd design department

#### **3. Recreational Parks**

Recreational parks are key in creating an all-inclusive urban environment that provides opportunities for social activities while promoting personal health and wellness.

The proposed sports complex is designed to accommodate recreational use by providing benches and training grounds. The stadium shall accommodate both indoor and outdoor sporting activities. These include a basketball court, football, volleyball and netball pitch. Indoor sporting facilities will include a gym and tennis court. These facilities will all have changing rooms and washrooms.

Parks shall be evenly distributed in urban areas to equally serve the entire resident population and provided with special amenities like toilets, benches and proper land scaping.

Plate 4-27: Toilets, smoking area and benches in a recreational park



Source: Geodev (K) Ltd design department

Plate 4 -28 presents a sample visualization of a proposed urban park to be constructed in Griftu Town.





Source: Geodev (K) Ltd design department

## 4.7 Urban improvement strategies

Urban betterment strategically targets the key sectors to spur economic growth and improve living standards without compromising the town's environment. These sectors contribute directly and indirectly to the town's population, which is the main beneficiary of the plan. The strategies are sector-led, targeting transport, infrastructure (Physical and Social), the local economy, environment and urban governance

#### 4.7.1 Housing strategy

Housing development is essential for the obvious social-economic impacts on Griftu Town residents. The main objective of the housing strategy within Griftu Town is to bridge the gap between demand and supply, improve housing conditions, build capacity to construct modern housing and densify residential zones to forestall urban sprawl.

#### **Strategies**

Adequate, affordable and quality housing.

#### Objective

To provide quality housing in the town

#### **Proposed Projects and Programmes**

- Initiate the process of land allocation and registration
- Provide the residential areas with services such as sewer, access roads, solid waste management facilities and infrastructure
- Revive brick-making activities
- Redevelop the core area of the town to incorporate modern buildings encompassing aesthetic designs.
- Develop a housing policy for the investment zone
- Hire more qualified staff in the Department of Housing.
- Enforce the stipulated zoning rules and building standards
- Establish and connect households to neighbourhood septic tanks

#### 4.7.2 Local economic Development Strategy

The local economic development policy for Griftu Town is critical for its role in unlocking the economic potential within Griftu and keeping it in sync with the economic pillar of Vision 2030. The economic development strategy aims to create a framework to improve the town's regional

competitiveness and strive to meet the Sustainable Development Goals of "No poverty" through creating jobs.

#### **Strategies**

Promoting the economy of the town

#### Objective

To enhance economic activities and competitiveness of the town.

#### **Proposed Projects and Programmes**

- Provide the slaughterhouse with necessary facilities including holding bay, slaughter slab, water, electricity and drainage facilities along Griftu-Eldas road (see table 4)
- Provide the milk cooling plant with refrigeration facilities, a perimeter wall, water, electricity and drainage
- Establish a light industrial area within the town to include workshops (for furniture, metal work and garage), warehouse, shops, showrooms, and exhibition stalls.
- Establish of animal control centre
- Provide the livestock and fresh produce market with water, electricity, access road and drainage to initiate commercial activities.
- Fence the fresh produce market
- Construct more fodder storage facilities
- Construction of cattle crushes to promote animal health to help increase production
- Provide land documents to unleash the economic potential of Griftu centred on credit availability.
- Introduction of economic help groups
- Merging of economic help groups to form a Co-operative society
- Modernize quarry activities by providing stone crushing machine.
- Impact stone miners with skill training, demarcating the area for public use, providing utility and sanitary facilities

#### 4.7.3 Transportation strategy

The transportation strategy aims at creating an effective and efficient transport system in Griftu Town. With the aim of facilitating local internal circulation within the planning area and with

the neighbouring towns, hinterland with the aim of promoting trade, economic growth, enhance connectivity and accessibility.

#### Strategy

Promoting an integrated, and efficient transport system.

#### Objective

To provide an integrated and inclusive transportation system.

#### **Projects and Programmes**

- Formulate a county transport policy to improve on safety and mobility and introduce standards in the sector.
- Provide local distributor and access roads within the residential neighbourhood and commercial area
- Upgrade Class B 81 roads (Griftu-Arbajahan roads) to (gravel in the first phase (short term) and tarmac in the second phase (medium term) to the recommended standards and width of 45 m.
- Upgrade and elevate Class G5371 (Griftu-Eldas) road, F5008 (Griftu-Tarbaj) and Class F5008 (Griftu to Tarbaj road) to motorable standards (bitumen) with the recommended width (15-30m).
- Expand all inter-connector roads to (9-15m) and pave to motorable standards
- Construct a bridge over the water channel for Griftu-Arbajahan road (B81).
- Create a link road to connect Griftu Eldas G5371 road to G5353 (Griftu-Halumvigo road) and elevate the roads with hardcore and earth.
- Landscape all the streets by incorporating trees and street furniture as well as provisions for walkways and cycle ways to improve on user safety.
- Provide for NMT paths such as pedestrian walkways, cyclist tracks on all roads within the town
- Upgrade A14 road to bitumen standards
- Construct a bus park along Griftu to A14 (Moyale) G5353
- Provide on-street parking facilities along the following roads Class B81 roads (Griftu-Arbajahan roads), Class F 5008 (Griftu to Tarbaj road) and Class G5371 road (Griftu-Eldas)
- Construct a perimeter wall around the air strip boundary and pave the landing strip

- Service the air strip with electricity, drainage infrastructure, an ablution block and pave the landing strip
- Install road signage along all roads within Griftu
- Embark on street naming

#### 4.7.4 Physical infrastructure strategy

The strategy aims at guiding the improvement of physical infrastructure that will lead to the enhancement of the quality of life and economic prosperity through provision of adequate, reliable and sustainable physical infrastructure

1. Water

#### Strategy

Adequate safe and potable water to all.

## Objective

To provide and supply adequate, clean and safe water for human and animals consumption.

#### **Project and Programmes**

- Establish Griftu Water and Sanitation Company (GWASCO) as a subsidiary of Wajir Water and Sanitation Company (WAJWASCO).
- Recruit and train technical staff to manage water supply system within the town.
- Sink more boreholes along the area of the Lag Bor to maximize on the ground water potential of the area.
- Construct earth dams on the eastern side of the town to maximize the short heavy rainfall periods for provision of water to livestock.
- Expand and repair the existing water reticulation system within the town.
- Establish a water treatment plant and storage tanks.
- Diversifying water sources by encouraging water harvesting through sensitization and provision of water storage tanks

#### 2. Sanitation

#### Strategy

Promoting a healthy and sanitary environment.

## Objective

To create an effective waste management system for Griftu Town.

## **Project and Programmes**

- Establish Griftu Water and Sanitation Authority (GWASCA) as a subsidiary of Wajir Water and Sanitation Company (WAJWASCO).
- Recruit and train technical staff to manage sewer within the town.
- Provide septic tanks at the neighbourhood level.
- Construct a sewerage reticulation system covering the whole town.
- Establish oxidation ponds to the southern end of the town. .
- Construct public toilets within the commercial, residential and industrial areas.
- Install skips and solid waste receptacles within the town and its neighbourhoods.
- Provide proper solid waste management infrastructure in the town including trucks/tractors, waste skips and transfer stations.
- Establish a sanitary landfill at the proposed site and demarcate the site
- Purchase garbage compactors
- Provide solid waste receptacles within the CBD and neighbourhoods
- Sensitize the community on proper solid waste disposal method
- Enroll youth and community groups to collect, consolidate and dispose solid waste
- Hire more town cleaners

## 3. Storm Water Drainage

#### Strategy

Effective storm water drainage.

## Objective

To provide a robust storm water drainage network.

## **Project and Programmes**

- Provide storm water drains along all roads and interlink the proposed roads with drainage facilities to existing water channels.
- Construction of dykes within the drainage system to slow the speed of run-off water and control erosion.
- Construct a water channel (canal) along Lag Bor past B81 road to the Airstrip.
- Construct an embankment that runs parallel to Griftu-Eldas road, the proposed link road (for G5371 and F5352) and Griftu A14 (Griftu-Halumvigo road).

#### 4. Electricity and Energy

#### Strategy

Constant and steady power supply.

#### Objective

To achieve a constant and steady supply of electricity.

#### **Project and Programmes**

- Encourage use of solar energy by subsidizing solar power equipment in the county.
- Develop a policy that encourages use of solar panels within households
- Install solar and wind-powered street lighting
- Construct a wind and solar harvesting plant to promote use of renewable energy at household and commercial levels in the town.
- Encourage small scale power generation from wind and solar power for diversification of electricity providers.
- Introduce solar installation and repair course at the polytechnic through electrical engineering
- Install flood lights within the neighbourhoods (*Bulas*)
- Establish a wind and solar power generation plant.

#### 4.7.5 Social infrastructure strategy

The purpose of this strategy is to ensure that the social infrastructure which include health care and educational facilities are easily accessible and provide world class services. The strategy will seek to ensure that dilapidated facilities are upgraded and provided with requisite infrastructure to improve Griftu Town's social well-being.

## 1. Educational Facilities

#### Strategy

Provision of quality education.

#### **Objective**

To provide quality education through training and research.

#### **Project and Programmes**

• Employ more teachers for all primary schools Haghar Primary (2), Hon Khalif Girl's Primary (2), Tagwa Primary (11) and Griftu Primary (10).

- Build new facilities and renovate the existing ECD in all primary schools.
- Construct new and renovate class rooms for all primary schools.
- Set up a special needs school for PWD.
- Demarcate and fence Haghar Primary, Hon Khalif Girl's Primary, *Bula* Forest and Tagwa primary school.
- Service all schools with trunk infrastructure such as water and storage tanks, sanitation facilities and staff quarters.
- Equip the library with learning materials, computers, electricity, water, and sanitation facilities.
- Rejuvenating the existing polytechnic and tertiary institutions by providing learning facilities such as learning machines, books, hiring more tutors etc.
- Reintroduce school feeding program.
- Regular maintenance of solar installation within schools.
- Initiate a ttree-plantingprogram in all schools.

# 2. Health Facilities

### Strategy

Affordable and accessible health care.

# Objective

To provide universal healthcare to all.

# **Project and Programmes**

- Equip Haghar dispensary with all necessary medical equipment
- Provide pre-natal and post-natal childcare services at Haghar dispensary
- Demarcating and fencing Haghar Dispensary
- Service Haghar health facility with services such as water storage tanks, electricity, access road.
- Hire medical personnel and support staff at Haghar dispensary
- Hire specialist such as oncologists in line with the cancer prevention and control(amendment) bill, 2019
- Procure modern medical equipment such as CT scan for Griftu level 4
- Procure an ambulance to serve the town

# **3.** Community Facilities

# Strategy

Modern community facilities.

### Objective

To provide appropriate and adequate community facilities.

### **Project and Programmes**

- Designate a new cemetery at the proposed site (as captured in the structure plan)
- Modernize and equip the existing library and connect it with the existing fibre optic cable backbone.
- Demarcate and fence the Public Baraza
- Fence and upgrade the post office by renovating the main building, constructing drainage infrastructure, and providing water and electricity.

# 4. Recreational Facilities

### Strategy

Furnishing the town with appropriate recreational facilities.

# **Objective**

To provide adequate recreational facilities

### **Project and Programmes**

- Establish a recreation park opposite the current Griftu polytechnic and install benches and other related infrastructure.
- Construct a modern sports complex and service it with infrastructure such as electricity, ablution block, water and drainage.
- Create an access road to serve the sporting complex
- Demarcate and fence the sporting complex
- Full enforcement of environmental conservation laws to protect environmentally sensitive areas.
- Demarcate and install benches and camp sites at the forest along Griftu-Arbajahan roads for recreation.
- Establish green spaces along roads (Class B 81 roads (Griftu-Arbajahan roads), Class F5008 (Griftu to Tarbaj road) and Class G 5371 road (Griftu-Eldas) and provide recreation benches.

### 4.7.6 Environmental management strategy

The purpose of the strategy is to minimize the impacts of human and natural activities on the environment, improve the aesthetic value of urban places, climate change mitigation and improve solid waste management and water and sanitation.

#### Strategy

Conserving the environment and promoting sustainability.

#### **Objective**

To protect and conserve the environment

#### **Projects and programmes**

- Conserve and protect the environmentally sensitive areas around the seasonal river (Lag Bor).
- Promote the use of environmentally friendly energy sources including LPG, biogas and energy saving stoves/*jikos*.
- Strict enforcement of deforestation and regulation of the forest along Griftu –Arbajahan road
- Initiate a tree planting program within the town, forested areas and along Griftu-Eibir and Griftu-Eldas roads.
- Provide subsidies to promote the use of alternative renewable energy sources e.g., solar panels and LPG
- Strict enforcement of environmental laws regarding water resources and forest
- Establish green spaces along roads (Class B 81 roads (Griftu-Arbajahan roads), Class F5008 (Griftu to Tarbaj road) and Class G 5371 road (Griftu-Eldas).
- Conserve environmentally sensitive areas, including the proposed water channel and existing lagha, by creating a 100m reserve and a 30 buffer for the existing water channels through landscaping and tree planting.

# 4.7.7 Urban governance strategy Strategy

Enhance local management, participatory governance and institutional capacity of the town.

**Objective** 

To enhance governance, cohesion and participatory decision-making within the town

### **Project and Programmes**

- Establish a town committee to guide the development of the town.
- Recruit additional qualified staff such as planners, surveyors, land valuers, and GIS experts to oversee conformity to the plan and development control and help with town administration.
- Establish a revenue collection framework.
- Establish a public information management system to facilitate information sharing between local authorities and residents.

# **4.8 Implementation Framework**

### Overview

This chapter provides strategies to inform the implementation of proposals and ensure that all the proposals are implemented in the manner proposed and within the period indicated in the strategies. It also proposes prioritising projects and provides ways and means for easing funds. The overall implementation of the Integrated Strategic Urban Spatial Development Plan will be absorbed by the identified existing institutions, which will require strong leadership and coordination.

A timeframe for each action indicates the expected implementation time, i.e. immediate, continuous, short-term, medium-term or long-term. It identifies the relevant institutions that are crucial to the implementation of the various action programmes.

### 4.8.1 Strategic projects

To rejuvenate and transform an area through critical projects with higher multiplying effects. The projects play a crucial role in jump-starting the local economy of Griftu Town. These projects are categorized into;

### 4.8.1.1 Facilitative projects

These are projects/programmes which enable the productive sector to operate effectively and efficiently.

### Water and Sewer Supply

- Establish Griftu Water and Sanitation Authority (GWASCA) as a subsidiary of Wajir Water and Sanitation Company (WAJWASCO).
- Recruit and train technical staff to manage water supply system within the town.

### Transport

- 1. Primary, Secondary, distributor roads and access roads should be widened and improved from earth to paved (bitumen and cabro).
- 2. Construction of a bus park along G5353 Road
- 3. Provide NMT lanes such as pedestrian walk ways, cyclist tracks on all roads within the town

### Energy

1. Develop a policy to encourage use of solar panels within households

2. Encourage use of solar energy by subsidizing solar power equipment in the county.

# 4.8.1.2 Productive projects

Productive are projects those which produce goods and services directly and lead to generation of employment and income.

# Industrial

- 1 To provide the slaughter house with necessary facilities including holding bay, slaughter slab, water, electricity and drainage facilities along Griftu-Eldas road.
- 2 Establish a light industrial area within the town to include workshops (for furniture, metal work and garage), warehouse, shops, showrooms, and exhibition stalls.
- 3 Provide the milk cooling plant with refrigeration facilities, a perimeter wall, water, electricity and drainage.
- 4 Construction of cattle crushes to promote animal health thus increase production

# Commerce

- Upgrade the primary and secondary roads such as Griftu-Arbajahan, Griftu-Eldas and Griftu-Tarbaj to bitumen standards while improving the local distributor and access roads from earth to gravelled or cabro standards.
- 2. To provide requisite infrastructure to the transport sector thus enhancing the efficiency that would promote the town's economic growth, such as the development of a bus park.

# 4.8.1.3 Perceptive projects

Perceptive projects are those that improve the image and beauty of the town, have the potential to attract investors and give the town a unique identity.

# **Design and Redevelopment**

- 1. Redevelopment of the core area in the town will incorporate modern and multi-storey buildings encompassing aesthetic designs that incorporate solar energy harvesting.
- 2. Conserve environmentally sensitive areas such as Lag Bor on the western and southern and water channels through buggering and tree planting
- 3. Landscape all the streets by incorporating trees and street furniture as well as provisions for walkways and cycle ways to improve on user safety.

# **Green Spaces**

1. Establish reserves for Lag Bor and the water channels in order to promote greening of the town.

2. Conserve environmentally sensitive areas such as Lag Bor on the western and southern and water channels through buffering and tree planting

### 4.8.1.4 Quick wins

Projects enumerated below as quick wins are those projects that can be achieved immediately preferably within a period of 100 days. These projects have high perceptibility and serve the purpose of rallying support for subsequent planning activities. They also require low funding:

- 1. Establishment of Griftu Town Committee to handle its mandate as enshrined in the Urban Areas and Cities act.
- 2. Installation of solid waste receptacles within the main activity areas (CBD and residential areas)
- 3. Urban beautification project by planting drought resistance tree
- 4. Repairs and installing of street lights within the CBD and along all roads within the residential areas.
- 5. Restore county administrative offices through renovation.
- 6. Deploy and hire more support staff.

### 4.8.1.5 Capacity building

The projects should be instituted immediately and continuously to enhance the technical ability of driving the implementation agenda during the planning period. These projects will include:

- 1. The formation of a Town Committee for Griftu Town.
- 2. Employ and sensitize the town's technical and support staff
- 3. Provide adequate resources to enhance implementation of the plan
- 4. Periodic public education, sensitization and awareness creation.
- 5. Formation of community-based development committees.
- 6. Formation of a market committee to manage the existing markets

### 4.8.2 Short terms projects

Projects identified are short-term actions achievable within a period of (1 - 3 years). These projects also serve the immediate needs of the community, less costly, does not involve many actors and form a basis for medium and long-term projects:

#### 4.8.3 Medium term projects

Projects enumerated here below are medium term actions achievable within a period of (4 - 6 years), require more collaborators than short term, require more inquiry before commencement, acquisition of land and need wider consultations among all the involved partners.

#### 4.8.4 Long term projects

Projects enumerated here below are long term (7-10 years) actions expected to have been achieved by the end of the planning period, require phasing, feasibility studies, major capital investments, donor funding, and wider consultation.

#### 4.8.5 Financing framework

The implementation of Griftu Town LPLUDP requires the best elements of organization and management. The capability of authorities to implement the plan greatly inclines on their financial stability. This provides the fundamental basis for having a well-organized and coordinated departmental structures and organizations. The financing framework has explicitly been outlined in the Capital Investment Plan.

### 4.8.6 Community Participation Framework

The main aim is to improve the effectiveness and validity of implementation processes and to increase the acceptability of plan proposals and decisions. This will fully involve the community in investment choices and management decisions.

- 1. Formation of community-based development and management committees up to the village units.
- 2. Active NGOs to participate in civic governance.
- 3. Community members to set up community police areas in all the residential neighborhoods. Community members to form phone tree communication mechanisms.
- 4. The donor community through registered NGOs and CBOs to develop riparian reserves as nature trails
- 5. Public to continuously monitor developments in Griftu Town and within their neighborhoods
- 6. Residents to comment on public notices informing them of proposed developments within their neighborhoods and cooperate appropriately
- 7. Formation of community-based development committees up to the village units
- 8. Formation of community-based development management committees.

# 4.8.7 Implementation Log Frame

Table 4-12: Project Implementation Framework

OBJECTIVE	PROJECTS	IMPLEMENTING AGENCY	TIME FRAME
	GOVERNAN	CE	
To enhance	• Establish a town committee to guide the	County Government through the	Immediately and
governance,	development of the town.	• Department of	Continuously
cohesion and	Hire additional support staff	Public Service, Labour and	
participatory	• Establish a revenue collection framework	Decentralised Units	
decision	• Establish a public information management system	• Department of	
making within	to facilitate sharing of information between local	Finance and Economic Planning	
the town	authorities and residents Such as public notice		
	boards and alert messages		
	TRANSPORT		

OBJECTIVE	PROJECTS	IMPLEMENTING AGENCY	TIME FRAME
To promote inter and intra connectivity	<ul> <li>Formulate a county transport policy in order to improve on safety, mobility and introduce standards in the sector.</li> <li>Provide local distributor and access roads within the residential neighbourhood and commercial area</li> <li>Construct a bus park along G5352 Road</li> <li>Construct a perimeter wall around the air strip boundary and pave the landing strip.</li> <li>Install road signage along all roads within Griftu</li> <li>Embark on street naming</li> <li>Upgrade Class B 81 road (Griftu-Arbajahan road) to (gravel at first phase (short term) and expand it to the recommended width of 45 m.</li> <li>Reclaim and widen road reserves to recommended Class specific widths</li> <li>Construct a storm water drainage system on all roads and interlink them to the water channel</li> <li>Provide for NMT such as pedestrian walk ways, cyclist tracks on all roads within the town</li> <li>Establish parking areas along the access roads and within the neighbourhood</li> <li>Provide on street parking facilities along the following roads Class B 81 (Griftu-Arbajahan road), Class F (Griftu to Tarbaj road) and Class G (Griftu-Eldas).</li> <li>Upgrade the following roads to motorable standards (paved, graveled and cabro surfaced) with the recommended width (9-30m) Class F (Griftu to</li> </ul>	<ul> <li>County Government through the</li> <li>Department of Roads Transport and Public Works</li> <li>Department of Lands, Housing and Physical Planning</li> <li>Ministry of Transport, Infrastructure, Housing &amp; Urban Development Through KeRRA and KAA</li> </ul>	Short term by 2025 Medium Term from 2026-2028

OBJECTIVE	PROJECTS	IMPLEMENTING AGENCY	TIME FRAME
	<ul> <li>Tarbaj road) and Class G road (Griftu-Eldas) and all inter-connector roads</li> <li>Landscape all the streets by incorporating trees and street furniture as well as provisions for walkways and cycle ways to improve on user safety.</li> <li>Upgrade Class B 81 road (Griftu-Arbajahan road) to (tarmac at second phase (medium term) to the recommended standards and width of 45 m.</li> <li>Establish all proposed roads that cut across water channels</li> <li>Upgrade A14 road to bitumen standards</li> <li>Upgrade the airstrip to a proper functional facility with all the required amenities</li> </ul>		Long Term from 2029 - 2033
	HEALTHCA	RE	
To provide universal healthcare	<ul> <li>Equip Haghar dispensary with all necessary medical equipment</li> <li>Provide pre-natal and post-natal childcare services at Haghar dispensary</li> <li>Hire specialist such as oncologists in line with the cancer prevention and control(amendment) bill, 2019</li> <li>Service Haghar health facility with services such as water storage tanks, electricity, access road.</li> <li>Hire medical personnel and support staff at Haghar dispensary</li> <li>Demarcating and fencing Haghar Dispensary</li> </ul>	<ul> <li>County Government through the</li> <li>Department of Public Health, Medical Services and Sanitation</li> <li>Department of Lands, Housing and Physical Planning</li> </ul>	Short term by 2025
	• Procure modern medical equipment such as CT scan		Medium Term from

OBJECTIVE	PROJECTS	IMPLEMENTING AGENCY	TIME FRAME
	<ul> <li>for Griftu level 4 and equip it with adequate staff and facilities</li> <li>Procure an ambulance to serve the town and its hinterlands</li> </ul>		2021-2023
	EDUCATIO	N	
To provide quality education through training and research	<ul> <li>Employ more teachers for all primary schools; Haghar Primary (2), Hon Khalif Girl's Primary (2), Tagwa Primary (11) and Griftu Primary (10)</li> <li>Demarcate and fence Haghar Primary, Hon Khalif Girl's Primary, Bula forest and Tagwa Primary.</li> <li>Reintroduce school food program</li> <li>Regular maintenance of solar installation within schools</li> <li>Initiate a tree planting program in all schools</li> <li>Build and renovate the existing ECD facilities in all schools</li> </ul>	<ul> <li>County Government through the</li> <li>Department of Education, Youth, Culture, Gender and Social Service</li> <li>Department of Lands, Housing and Physical Planning</li> <li>National government through the Ministry of education</li> </ul>	Short term by 2025
	<ul> <li>Equip the library with learning materials, computers, electricity, water, and sanitation facilities</li> <li>Rejuvenating the existing polytechnic and tertiary institutions through provision of learning facilities such as learning machines, books, hiring more tutors etc.</li> <li>Service all schools with trunk infrastructure such as water and storage tanks, sanitation facilities and staff quarters.</li> <li>Set up a special needs school for PWD.</li> <li>Construct new class rooms for all primary schools</li> </ul>		Medium Term from 2026-2028 Long Term from 2029-2033

OBJECTIVE	PROJECTS	IMPLEMENTING AGENCY	TIME FRAME
	LOCAL ECON	OMY	
To enhance economic competitivene ss of the town	<ul> <li>Provide the slaughterhouse with necessary facilities including a holding bay, slaughter slab, water, electricity and drainage facilities along Griftu-Eldas road</li> <li>Provide the milk cooling plant with refrigeration facilities, a perimeter wall, water, electricity and drainage</li> <li>Provide the livestock market and fresh produce with water, electricity, access road and drainage to initiate commercial activities.</li> <li>Fence the fresh produce market</li> <li>Impact stone miners with skill training, demarcating the area for public use, providing utility and sanitary facilities</li> <li>Establish an animal control centre</li> <li>Provide land documentation to unleash the economic potential of Griftu centred on credit availability</li> </ul>	<ul> <li>County Government through the</li> <li>Department of Agriculture, Livestock &amp; Fisheries</li> <li>Department of Lands, Housing and Physical Planning</li> <li>Department of Trade, Tourism, Cooperative and Wildlife</li> </ul>	Short term by 2025
	<ul> <li>Establish a light industrial area within the town to include workshops (for furniture, metal work and garage), warehouse, shops, showrooms, and exhibition stalls.</li> <li>Construct more fodder storage facilities</li> <li>Construct of cattle crushes to promote animal health</li> <li>Merge economic help groups to form a Co-operative society</li> <li>Modernize quarry activities by providing stone</li> </ul>		Medium term from 2026- 2033

OBJECTIVE	PROJECTS	IMPLEMENTING AGENCY	TIME FRAME
	crushing machine.		
	HOSING		
To provide quality affordable housing in the town	<ul> <li>Develop a county housing policy</li> <li>Hire more qualified staff in the department of housing</li> <li>Provide the residential areas with services such as access roads, solid waste management facilities and infrastructure</li> <li>Revive brick making activities at the housing department.</li> <li>Initiate the process of land allocation and registration</li> <li>Enforce the stipulated zoning rules and building standards</li> <li>Establish and connect households to neighbourhood septic tanks</li> <li>Redevelop the core area of town to incorporate modern buildings encompassing aesthetic designs.</li> </ul>	<ul> <li>County Government through the</li> <li>Department of Lands, Housing and Physical Planning</li> <li>Department of Roads Transport and Public Works</li> <li>Public Service, Labour and Decentralised Units</li> </ul>	Short term by 2025 Medium Term from 2026-2028 Long term from 2029-2033
	ENVIRONME	INT	
To protect and conserve	• Conserve environmentally sensitive areas such as Lag Bor and water channels by establishing a 30-	<ul><li>County Government through the</li><li>Department of Water, Energy,</li></ul>	Short term by 2025

OBJECTIVE	PROJECTS	IMPLEMENTING AGENCY	TIME FRAME
the environment	<ul> <li>metre buffer and planting trees</li> <li>Strictly enforce deforestation regulation of the forest along Griftu –Arbajahan road</li> <li>Initiate a tree planting program within the town and the forest.</li> <li>Strict enforcement of environmental laws regarding water resources and forest.</li> <li>Install skips and solid waste receptacles within the town and its neighbourhoods</li> <li>Create a flood way along lag Bor past B81 road to the Airstrip</li> <li>Establish a proper solid waste management system</li> <li>Provide subsidies to promote use of alternative</li> </ul>	<ul> <li>Environment and Natural Resources</li> <li>Department of Lands, Housing and Physical Planning</li> </ul>	Medium Term from 2026-2028
	renewable energy sources e.g. solar panels and LPG WATER AND SAN	ΠΤΑΤΙΩΝ	
To provide and supply adequate, clean and safe water for human and animals consumption	<ul> <li>Establish Griftu Water and Sanitation Company (GWASCO) as a subsidiary of Wajir Water and Sanitation Company (WAJWASCO).</li> <li>Appoint a water steering committee.</li> <li>Recruit and train technical staff to manage water and Sewer system within the town.</li> <li>Construct public toilets in commercial, residential and industrial areas within the town</li> </ul>	County Government through the	Short term by 2025
To create an effective liquid waste management	<ul> <li>Expand and repair of the existing water reticulation system within the town.</li> <li>Provide elevated water storage tanks next to identified water kiosk (see structure plan)</li> </ul>	Physical Planning	Medium Term from 2026-2028

OBJECTIVE	PROJECTS	IMPLEMENTING AGENCY	TIME FRAME
system for Griftu Town.	<ul> <li>Provide septic tanks at the neighbourhood level.</li> <li>Purchase of Exhausters</li> <li>Construct a sewerage reticulation system covering the whole town.</li> <li>Construct an oxidation pond.</li> </ul>		Long term from 2029-2033
To achieve a constant and steady supply of electricity. To tap the potential of renewable energy sources	<ul> <li>ELECTRICITY AND</li> <li>Install solar and wind powered street lighting</li> <li>Install flood lights within the neighbourhoods (Bulas)</li> <li>Encourage use of solar energy by subsidizing solar power equipment in the county.</li> <li>Encourage small scale power generation from wind and solar power</li> <li>Introduce solar installation and repair course at the polytechnic through electrical engineering</li> <li>Encourage small scale power generation from wind and solar power to diversification of electricity providers.</li> <li>Introduce solar installation and repair training at the polytechnic</li> </ul>	<ul> <li>County Government through the</li> <li>Department of</li> <li>Water, Energy, Environment and</li> <li>Natural Resources</li> <li>Department of Roads, Transport and Public Works</li> <li>Department of Education, Youth, Culture, Gender and Social Services</li> </ul>	Short term by 2025 Medium Term from 2026-2033
	• Establish a wind and solar power generation plant		Long term from 2029-2033
	STORM WATER DI	RAINAGE	
To provide a storm water drainage network	• Provide storm water drains along all roads and interlink the proposed roads with drainage facilities to existing water channels	<ul> <li>County Government through the</li> <li>Department of Lands, Housing and Physical Planning</li> <li>Department of Roads, Transport and</li> </ul>	<ul> <li>Medium Term from 2026-2028</li> <li>Long term from 2029-2033</li> </ul>

OBJECTIVE	PROJECTS	IMPLEMENTING AGENCY	TIME FRAME
	<ul> <li>Construct dykes within the drainage system to slow the speed of run-off water and control erosion</li> <li>SOLID WASTE MAN</li> </ul>	Public Works	
To create an effective solid waste management system for Griftu Town	<ul> <li>Establish a sanitary landfill at the proposed site</li> <li>Provide solid waste receptacles within the town</li> <li>Sensitize the community on proper solid waste disposal method</li> <li>Hire more town cleaners</li> <li>Enroll youth and community groups to collect, consolidate and dimense solid waste</li> </ul>	<ul> <li>County Government through the</li> <li>Department of Water, Energy, Environment and Natural Resources</li> <li>Department of Public Service, Labour and Decentralised Units</li> </ul>	Short term by 2025
	<ul> <li>consolidate and dispose solid waste</li> <li>Purchase garbage compactors</li> <li>Provide solid waste receptacles within the town</li> </ul>		Medium Term from 2026-2028
To provide appropriate and adequate community facilities	<ul> <li>Designate a new cemetery at the proposed site (as captured in the structure plan)</li> <li>Modernize and equip the existing library and connect it with the existing fiber optic cable backbone.</li> <li>Demarcate and fence the Public Barraza and provide it with an ablution block</li> </ul>	<ul> <li>County Government through the</li> <li>Department of Public Service, Labour and Decentralised Units</li> <li>Department of</li> </ul>	Short term by 2025
	RECREATIONAL FA	CILITIES	
To provide proper adequate	<ul> <li>Establish recreational parks at strategic points as proposed</li> <li>Demarcate and install benches, camp sites at the</li> </ul>	<ul><li>County Government through the</li><li>Department of Roads, Transport and Public Works</li></ul>	Medium Term from 2026-2028

OBJECTIVE	PROJECTS	IMPLEMENTING AGENCY	TIME FRAME
recreational facilities	forest along Griftu-Arbajahan roads for recreation.	<ul> <li>Department of Water, Energy, Environment and Natural Resources</li> <li>Department of Lands, Housing and Physical Planning</li> </ul>	
	Construct a modern sports complex and service it with infrastructure such as electricity, ablution blocks, water and drainage.		Long term from 2029-2033



# **5 CAPITAL INVESTMENT PLAN**

### Overview

A capital investment plan is a tool, spanning several years that identifies capital projects for investment based on priority and scale of impact to better the society. Capital investment planning includes capital investment by the government or private sector through public-private partnerships (PPPs). It inter-relates asset management and financial management. A CIP is, therefore, a link between spatial planning aspects and financial capacities and realities. In order for a capital investment plan to prove its effectiveness over time the following are the key considerations:

- i. The local government needs to have the responsibility and authority to plan and make capital investments for a set of specified functions.
- ii. The local government should have economic autonomy that enables it to raise funding for its capital investment either through local taxes, fees, and other local sources or through borrowing or involving the private sector, i.e., influencing outside funding.
- iii. The local government should have the authority to independently carry out its budgeting process in order to align the capital investment plan to the local budgeting cycle.

The considerations mentioned above are characteristics of the devolved governance system in Kenya, thereby underlining the need for implementable capital investment plans that are linked to the annual local budgeting process. The CIP is intended to provide practical and realistic guidance regarding the next steps in implementing the capital development aspects of this plan.

To be realistic, this CIP is built upon two principles:

- i. Affordability within the current budgetary conditions and
- ii. Effectiveness in responding to the aspirations and expectations of the people of Griftu.

# 5.1 Criteria for selection of capital projects

The process began with enlisting all the projects and programmes proposed in the Griftu LPLUDP. A selection criterion was undertaken based on the importance/urgency of each project. The projects selected were then valued against the subsequent benefits to the town's development

and the ability to adequately achieve the plan's objectives. This ability/capacity is indicated by the attributes listed below.

- Improving the quality of life
- Economic productivity, creation of employment and investment opportunities
- Number of people positively impacted by the project

# Improving the quality of life

The projects selected within this plan are primarily based on building base/trunk infrastructure, which shall form an enabling environment for local capital investment in the town, thereby improving the quality of life.

# **Economic productivity**

The projects selected shall form the platform for supporting the overlying land uses and subsequently boost the town's economy and livelihood. The projects offer the highest potential for boosting productivity within the town. The over-arching effect of improved production shall lead to employment creation and increased investment.

# Number of people positively impacted by the project

The projects have the potential to positively impact the largest number of people within the town and its hinterland either through increased productivity, wellness, employment creation or income generation. This is based on the presumed notion that the larger the number of beneficiaries as a result of the implementation of a certain project, the higher the chances that the project promotes the achievement of preset objectives.

# 5.2 Selected capital investment projects and framework

After a critical assessment of all the projects that will be required for the implementation of the urban plan for Griftu Town, the following capital investment projects were selected:

SECTOR	PROJECT
Land Management	• Survey and titling of plots resultant from the scheme plan

SECTOR	PROJECT
Transport	• Upgrade the A14 road to bitumen standards.
	• Upgrade Griftu-Arbajahan road (B81) to Bitumen standards.
	• Upgrade Griftu-Eldas road (G5371), and Griftu-Tarbaj road (F5008) to
	bitumen standards.
	• Construct a bridge on Griftu-Arbajahan road (B81).
	• Construct a bus park along Griftu to A14 (Moyale) G5353
	• Upgrade the landing strip to gravel standards.
Water	Drill two more boreholes
	• Expand and repair the existing water reticulation system.
	• Construct a water treatment plant and high-capacity water storage tanks
Sanitation	• Design and construct a sewerage reticulation system (trunk sewer line
	and oxidation ponds).
	Construct a sanitary landfill.
Storm Water	• Construct dikes along the flood prone areas on the Eastern side of the
Drainage	Town.
	• Construct an embankment running parallel to Griftu-Eldas road, the
	proposed link road (for G5371 and F5352) and Griftu - A14 (Griftu-
	Halumvigo road)
Energy	• Develop a wind and solar power generation plant
Education	Construct a primary and secondary school
	• Renovate the existing ECDE
	• Construct and renovate the existing class rooms for all primary schools
	• Construct a special needs school for PWD
<b>Community Facilities</b>	• Construct a community centre that will include social hall and offices.

# Table 5-13: Capital Investment Framework

PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
Survey and provide title deeds of the plots resulting from the scheme plan.	<ul> <li>Survey</li> <li>Creation of a plot register</li> <li>Beaconing</li> <li>Titling</li> </ul>	5,994 plots	Kshs119,880,000	<ul><li>National government</li><li>County Government</li></ul>
Upgrade Wajir-Moyale (A14) road to bitumen standards. • Griftu-Eldas road (G5371) • Griftu-Tarbaj road (F5008)	grade to base-level	The lengths of the roads are: • 10.34km • 9.05km • 4.56km • 5.87km	<ul> <li>Kshs620,400,00 0</li> <li>Kshs543,000,00 0</li> <li>Kshs273,600,00 0</li> <li>Kshs352,200,00 0</li> </ul>	<ul> <li>i. National government</li> <li>ii. KeNHA</li> <li>iii. KRB</li> <li>iv. County Government through the Department of:</li> <li>Roads, Transport and Public Works</li> <li>Lands, Housing and Physical Planning</li> </ul>
Construct a bus park along Griftu to A14 (Moyale) G5353	<ul> <li>ESIA</li> <li>Clearing and Excavation</li> <li>Cut and fill from subgrade to base level</li> <li>Tarmacking</li> <li>10 stalls</li> <li>12Waiting bays</li> <li>2Toll stations</li> </ul>	• 0.83Ha	Kshs194,000,000	<ul> <li>i. Development Partners</li> <li>ii. Public Private Partnerships</li> <li>iii. County Government through the Department of:</li> <li>Roads, Transport and</li> </ul>

PROJECT	DESCRIPTION OF WORKS	NUMBEROFUNITS	ESTIMATED COST	FINANCING OPTIONS
	• 2 Ablution blocks			<ul><li>Public Works</li><li>Lands, Housing and Physical Planning</li></ul>
Upgrade and elevate Griftu- Eldas (G5371) road, Griftu- Tarbaj (F5008) to bitumen standards	<ul><li>grade to base level</li><li>Tarmacking</li></ul>		Kshs162,000,000	<ul> <li>i. KURA</li> <li>ii. KERRA</li> <li>iii. County Government through the Department of</li> <li>Roads, Transport and Public Works</li> <li>Lands, Housing and Physical Planning</li> </ul>
Upgrade Griftu-Arbajahan road (B81) to bitumen standards and construct a road on the area prone to season flooding	Engineering Survey	9.05km • Length of cross section for	Kshs.15,000,000 (@kshs.60,000,000 per 1km)	<ul> <li>i. KeNHA</li> <li>ii. KRB</li> <li>iii. County Government through the Department of:</li> <li>Roads, Transport and Public Works</li> <li>Lands, Housing and Urban Development</li> </ul>
Upgrade the airstrip to gravel standards.	<ul> <li>Construction of drainage channels</li> <li>Construction of Passenger Terminal Building and Offices</li> <li>Fine grading and</li> </ul>		Kshs.1,790,458,000	<ul> <li>National Government</li> <li>County Government</li> <li>KAA</li> <li>Development Partners/Donors</li> </ul>

PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
	<ul> <li>gravelling of runway</li> <li>Apron for aircraft parking</li> <li>Perimeter Fencing</li> </ul>			
Drill two (2) more boreholes	<ul> <li>Hydrogeological survey</li> <li>Drilling of boreholes</li> <li>Procurement of Water Pumps and solar panels for energy production</li> </ul>	2 boreholes	Kshs8,000,000 (@Kshs4,000,000)	<ul> <li>i. Development Partners/Donors</li> <li>ii. County Government through the Department of</li> <li>Roads, Transport and Public Works</li> <li>Water, energy, environment and Natural Resources</li> </ul>
Construct a water treatment plant and high-capacity water storage tanks	<ul> <li>Construction of a water treatment facility</li> <li>Construction of a high- capacity storage tank</li> </ul>			<ul> <li>i. National Government, through the NGCDF</li> <li>ii. Development Partners/Donors</li> <li>iii. County Government through the Department of</li> <li>Roads, Transport and Public Works</li> </ul>

PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
				<ul> <li>Water, energy, environment and Natural Resources</li> <li>Public health, Medical services and sanitation</li> </ul>
Design and construct the sewerage system for the town (trunk sewer lines and oxidation ponds)	<ul> <li>Hydrogeological Survey</li> <li>ESIA</li> <li>Construction of trunk lines.</li> <li>Excavation, Compaction and lining of oxidation ponds.</li> </ul>	<ul> <li>Length of trunk sewer lines;16km</li> <li>Construction of 2 Ha of oxidation ponds</li> </ul>	Kshs640,000,000 Kshs7,000,000	<ul> <li>i. Development Partners/Donors</li> <li>ii. Public Private Partnerships</li> <li>iii. County Government through the Department of</li> <li>Roads, Transport and Public Works</li> <li>Water, Energy, Environment and Natural Resources</li> <li>Public Health, Medical services and sanitation</li> </ul>
Construct a sanitary landfill.	<ul> <li>Hydrogeological survey</li> <li>ESIA</li> <li>Excavation</li> <li>Compaction and base lining with clay</li> <li>Compaction of the</li> </ul>	Development of 2Ha of the sanitary landfill in a phased based process. ( <i>Costing done is for</i> <i>the development of</i> 2Ha)	Kshs110,000,000s	<ul> <li>i. Development Partners/Donors</li> <li>ii. County Government through the Department of:</li> <li>Public health, Medical</li> </ul>

PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
	final layers.			<ul> <li>Service and Sanitation</li> <li>Roads, Transport and Public Works</li> <li>Water, Energy, Environment and Natural Resources</li> </ul>
Construct dikes to demarcate the flood prone areas and protect the built-up areas		Length of dike along the edge of the flood plain-13.89km	Kshs.840,000,000 ( <i>1km</i> @ <i>Kshs.60,000,000</i> ) (Cost estimated is for 14km)	<ul> <li>i. National government</li> <li>ii. Development Partners/Donors</li> <li>iii. County Government through the Department of:</li> <li>Roads, Transport and Public Works</li> <li>Lands, Housing and Physical Planning</li> </ul>
Develop a wind and a solar power generation plant	<ul> <li>Wind and solar energy assessment</li> <li>ESIA</li> <li>Perimeter fencing</li> <li>Solar panels installation</li> <li>Installation of wind Turbines</li> </ul>	Power Plant to produce an equivalent- 23,544kW/hr per day	Kshs160,000,000	<ul> <li>i. Development Partners/ Donors</li> <li>ii. Rural Electrification and renewable energy corporation</li> <li>iii. KPLC</li> <li>iv. County Government through the Department of:</li> <li>Roads, Transport and</li> </ul>

PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
Construct a primary school	• ESIA	30	Kshs21,700,000	Public Works <ul> <li>Water, Energy,</li> <li>Environment and</li> <li>Natural Resources</li> <li>i. National</li> </ul>
	<ul> <li>Construction of:</li> <li>✓ Grade 1-8 (3 streams per class)</li> <li>✓ 2 units for a staffroom and offices</li> <li>✓ 3 Ablution blocks</li> <li>✓ A Library</li> </ul>		(Kshs700,000 per classroom)	<ul> <li>Reational Government through the NGCDF</li> <li>ii. Development Partners/Donors</li> <li>iii. County Government through the:</li> <li>Department of Roads, Transport and Public Works</li> <li>Department of Education, Youth, Culture, Gender and Social Services</li> </ul>
Construct a secondary school	<ul> <li>ESIA</li> <li>Construction of :</li> <li>Forms 1-6, 3 streams per class</li> <li>3 Laboratories</li> <li>10 dormitories</li> <li>1 Library</li> </ul>	39 Classrooms	Kshs27,300,000 (Kshs700,000 per classroom/unit of construction)	<ul> <li>i. National Government through NGCDF</li> <li>ii. County Government through the department of</li> </ul>

PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
Renovate the existing ECDE Centre	<ul> <li>7 Ablution Blocks</li> <li>Construction of 3 classrooms</li> <li>Construction of an ablution block</li> <li>Construction of a staffroom and offices</li> <li>Perimeter Fencing</li> </ul>	5 units for classrooms, ablution block, staffrooms and offices	Kshs3,500,000 (Kshs700,000 per classroom)	<ul> <li>Roads, Transport and Public Works</li> <li>Lands, Housing and Physical Planning</li> <li>Education, Youth, Culture, Gender and Social Services</li> <li>National Government through NGCDF</li> <li>County Government through the department of</li> </ul>
				<ul> <li>Roads, Transport and Public Works</li> <li>Lands, Housing and Physical Planning</li> <li>Education, Youth, Culture, Gender and Social Services</li> </ul>
Construct and renovate the existing class rooms for 5 primary schools <i>(each school has one stream except Tagwa and Griftu primary)</i>	<ul><li>Demolition and Construction of :</li><li>7 Classrooms</li></ul>	7 Classrooms	Kshs4,900,000 (Kshs700,000 per classroom)	<ul> <li>iii. National Government through NGCDF</li> <li>iv. County Government through the</li> </ul>

PROJECT	DESCRIPTION OF WORKS	NUMBER OF UNITS	ESTIMATED COST	FINANCING OPTIONS
Construct a special needs school for PWD	<ul> <li>i. ESIA</li> <li>ii. Construction of:</li> <li>Grade 1-8 &amp; Form 1-6 (14 classrooms)</li> <li>3 Laboratories</li> </ul>	35 Classrooms	Kshs24,500,000 (Kshs700,000 per classroom/unit of construction)	department of • Roads, Transport and Public Works • Lands, Housing and Physical Planning • Education, Youth, Culture, Gender and Social Services i. National Government through NGCDF ii. County Government
	<ul> <li>S Laboratories</li> <li>10 dormitories</li> <li>1 Library</li> <li>7 Ablution Blocks</li> <li>Fencing</li> </ul>			<ul> <li>through the Department of:</li> <li>Roads, Transport and Public Works</li> <li>Lands, Housing and Physical Planning</li> <li>Education, Youth, Culture, Gender and Social Services</li> </ul>
Construct a community centre that will include 1 social hall and 4 offices.	<ul> <li>Construction of:</li> <li>A social hall</li> <li>4 offices</li> <li>2 ablution blocks</li> </ul>	7units	<ul> <li>Kshs.2,100,00</li> <li>0</li> <li>Kshs2,800,000</li> <li>Kshs1,400,000</li> </ul>	County Government through the: • Department of Roads, Transport and Public Works

PROJECT	DESCRIPTION	OF	NUMBER	OF	ESTIMATED	FINANCING OPTIONS
	WORKS		UNITS		COST	
						• Department of
						Education, Youth,
						Culture, Gender and
						Social Services