



TRADE MARK EAST AFRICA



Study on Establishment of Roadside Stations (RSSs)
along the Northern Corridor

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Final Report – 2nd Volume



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1. LEGAL FRAMEWORK

We have focused on two key aspects: the strategic and environmental framework and the border regulations.

The main characteristics of these frameworks are as follows.

Strategic and environmental legal framework

Uganda

The Constitution of the Republic of Uganda, 1995

In Uganda all pieces of legislation that govern environmental protection and conservation are derived from statutes in the current constitution and ratified international conventions.

The Constitution of the Republic of Uganda declares that the State shall promote sustainable development and public awareness of the need to manage land, air, and water resources in a balanced and sustainable manner for the present and future generation.

The framework legislation on environment protection is the National Environment Act, which was enacted in 1995.

National Development Plan (NDP) 2010/11 – 2014/15

This Five-year National Development Plan with the theme “Growth, Employment and Socio-economic Transformation for Prosperity” was formulated and launched on the basis of a broader National Vision for “transforming Uganda from a peasant society to a modern and prosperous country over the next 30 years”, by improving significantly specific development indicators associated with socio-economic transformation. It is envisaged that this plan will steer the country’s economy into middle income economy by 2017.

The National Planning Agency in collaboration with the Ministry of Finance, Planning & Economic Development continuously plan and align the NDP with the annual budget by ensuring that Government of Uganda instruments as well as the legal framework are working in consonance with the NDP.

Uganda Vision 2040

This document contains the strategy to implement the National Vision for Uganda, already explained.

The main objective is increase the GPD of the country and transforming it “*from a predominantly peasant and low income country to a competitive upper middle income country*”.

The main points of this vision are:

- *Review the architecture of government service delivery system to act as a unit, harness synergies and deliver public services efficiently and effectively.*
- *Government will invest directly in strategic areas to stimulate the economy and facilitate private sector growth.*
- *Pursue an urbanization policy that will bring about better urban systems that enhance productivity, livability and sustainability.*
- *Government will pursue policies aimed at leapfrogging in the areas of innovation, technology and science, engineering, human resource development, public sector management, and private sector development.*
- *Develop and implement a National Innovation System that will help in initiating, importing, modifying and diffusing new technologies.*



- *Government will front-load investments in infrastructure targeting areas of maximal opportunities with focus on oil, energy, transport and ICT.*
- *Accelerate industrialization through upgrading and diversification to effectively harness the local resources, offshoring industries and developing industrial clusters along the value chain.*
- *To develop and nurture a national value system by actualizing a national service programme to change mind sets and promote patriotism and national identity.*
- *The vision will be implemented in accordance with existing and future agreements, standards and protocols within the framework of regional integration.*

The National Environmental Act (1995)

The National Environmental Act is the framework law on environment. It provides an instrument for sustainable management of the environment and establishes the National Environment Management Authority (NEMA) as the principal government agency for the management of environment. NEMA is mandated to coordinate, monitor and supervise all activities in the field of the environment.

The framework law had the impact of triggering amendment, enactment and harmonization of sectoral laws on environment. The affected laws include the National Forestry and Tree Planting Act 10 with a provision on EIA; the Land Act 11 under which all owners and occupiers of land are to manage it in accordance with the National Forestry and Tree Planting Act, the Mining Act, the National Environment Act, the Water Act, the Uganda Wildlife Act, the Town and Country Planning Act 12 and any other law; the Investment Code Act 13 section 19 (1) (d) that establishes the obligation to every holder of an investment license to take necessary steps to ensure that the operation of their business enterprise does not cause any injury to the ecology or the environment; the Uganda Wildlife Act 14 sections 15 and 16 of which provide for EIA, audits and monitoring of projects that may have an impact on wildlife; the Mining Act, 15 sections 108 to 112 of which require EIA, environmental audit, environmental protection standards, environmental restoration plans and environmental performance bonds in accordance with the National Environment Act; and the Local Government Act, 16 the second schedule of which outlines environmental management areas for which district councils are responsible.

The Land Act, 1998.

This law regulates the ownership of land and controls land use. Section 44 obliges any person who owns or occupies land to manage and utilize it in accordance with the Water Statute, the National Environment Statute, the Forest Act and any other law.

Section 46 of the Act requires that any use of land should conform with Town and Country Planning Act and other laws. An EIA is therefore a useful tool to guarantee that the proposed land use does not contravene any law.

The Environment Impact Assessment Regulation, n^o 13 of 1998

This regulation apply to:

- All projects included in the Third Schedule to the statute.
- Any major repairs, extensions or routine maintenance of any existing project which is included in the Third shedule to the statute.

This Third Schedule includes projects to be considered for environmental impact assessment. Thus, it includes:

1. General:



- An activity out of character with its surrounding;
 - Any structure of a scale not in keeping with its surroundings;
 - Major changes in land use.
2. Urban development including:
- Shopping centres and complexes;
 - Establishment or expansion of recreational areas.
3. Management of hydrocarbons including the storage of natural gas and combustible or explosive fuels.

However, this legislation includes an Annex 1 containing projects requiring EIA, which is similar to the Third Schedule.

Implementation of the Road Side Stations requires EIA.

The Water Statute, n° 9 of 1995

This Statute does not expressly deal with EIA but has some provisions that are related to EIA. These are contained in Division 4 of the statute and are laid out as follows: Section 22 provides for the suspension or variation of a water permit by the Executive Director where the water available in an area is or is likely to become insufficient in quality or quantity for the needs of the people using or seeking to use it. This may be done by notice in writing to the holder of the water permit for that area.

The Wildlife Statute n° 14, 1996

Section 16 of this statute requires a developer desiring to undertake a project which may have significant impact on any wildlife species or community to carry out an EIA in accordance with the National Environment Statute. Section 17 of the same statute obliges the Uganda Wildlife Authority in consultation with NEMA to carry out audits and monitor such projects that may have an impact on wildlife.

The Investment Code, n° 18, 1987

This Code empowers the Uganda Investment Authority (UIA) to, among other things, attract and coordinate all local and foreign investments in the country to enhance economic development.

Section 19 of the code requires every investment licence to take necessary steps to ensure that the operation of its business enterprise does not cause any injury to the ecology or the environment.

The Wetlands Policy, 1995

This policy provides that all proposed modifications and restorations on wetlands be subjected to EIA and that damaged wetlands be rehabilitated in accordance with the findings of the EIA.

According to Uganda's environmental legislation, the following Government agencies and Ministries will be linked directly to the implementation of the RSS:

- National Environmental Management Authority (NEMA),
- Ministry of Water and Environment (MoWE),
- Uganda National Roads Authority (UNRA),
- National Forestry Authority (NFA),
- District Land Boards in the various locations where the RSS will be constructed,



- Town and Country Planning Board in the various locations where the RSS will be constructed,
- Local Administration Structures in the various locations where the RSS will be constructed.

Burundi

In Burundi, several Ministries are involved in environmental management, but the Ministry of Water, Environment, Territorial Development and Urban Planning (MEEATU) is responsible for regulation and policy, according to Decree n° 100/186 of December 2002. Environmental management is governed by legal instruments, in particular:

Decree n° 1/010 of 30 June 2000 relating to the Environmental Code of Burundi. Article 1 of this Decree defines basic rules for environmental management and protection against all forms of degradation, so as to safeguard and promote the rational use of natural resources, combat various forms of pollution and nuisances, and thereby improve the living conditions of human beings, while respecting the balance of ecosystems. Article 34 stipulates that: “...*the construction of public structures or infrastructure such as roads, dams, dikes, bridges and airports shall be subject to the impact assessment procedure. Such structures shall be designed and built in such manner as not to irreversibly damage the environment, or cause or aggravate erosion problems*”.

Decree n° 1/008 of 1 September 1986 instituting the Land Code aims to establish the rules or rights that are recognized or may be recognized in respect of all lands within the national territory, and all that is appurtenant thereto and incorporated therein, whether naturally or artificially.

Law n° 1/6 of 25 May 1983 relates to the protection of the national cultural heritage.

Decree n° 100/24 of 31 December 1992 regulates the disposal of wastewater from domestic, artisanal, industrial or agricultural sources in order to preserve the quality of the environment and ensure public hygiene and sanitation.

Law n° 1/02 of 26 March 2012 on the Water Code in Burundi establishes the basic rules and the institutional framework for ensuring rational and sustainable management of water resources, facilities and hydraulic structures of interest.

Decree n° 100/22 du 7 October 2010 laying down with the implementation of code of the environment measures in report with the procedures of EIA

This decree determines the conditions and modalities for the implementation of the procedure of environmental impact assessment, as specified in Chapter 3 of Title II of Law n° 1/010 of June 30, 2000, on the Environment in the Republic of Burundi.

This decree contains two annexes which classifies the actions that are subject to mandatory environmental impact assessment (Annex I) and who undergo this procedure at the discretion of the Ministry of Environment. Specifically, Road Side Stations, with all the facilities that can be include in them, are not defined in the sections of both annexes.

Paragraph 1 of Annex I (according to art. 34 of Decree n° 1/010) includes “*all land development plans affecting rural or urban areas especially the ground or industrial facilities*”.

Paragraph 6 of Annex I (according to art. 107 to 111 of Decree n° 1/010) includes facilities “first class”, which in the opinion of the Ministry of Environment have a greater impact. This facility is (Art. 106 of Decree n° 1/010) “*all plants, factories, workshops, warehouses, construction sites, quarries and in general, any type of facilities...*” The art. 111 of Decree n° 1/010 provides that “*Subject to the provisions established by regulation, any request for authorization of first class facilities must be accompanied by an Environmental Impact Assessment*”.



South Sudan

This country lacks a general environmental legislation.

The Transitional Constitution of the Republic of South Sudan, 2011, deals with the environment in its article 41, with the following development:

- Every person or community shall have the right to a clean and healthy environment.
- Every person shall have the obligation to protect the environment for the benefit of present and future generations.
- Every person shall have the right to have the environment protected for the benefit of present and future generations, through appropriate legislative action and other measures that:
 - prevent pollution and ecological degradation,
 - promote conservation, and
 - secure ecologically sustainable development and use of natural resources while promoting rational economic and social development so as to protect genetic stability and bio-diversity.

All levels of government shall promote energy policies that will ensure that the basic needs of the people are met while protecting and preserving the environment.

Rwanda

The Constitution of the Republic of Rwanda of 4/6/2003 provides that:

- Every citizen has the right to live in a safe and satisfactory environment,
- Every person is obliged to protect, safeguard and ensure environment promotion,
- The State ensures environment protection,
- Every person has the right to have a private, individual or collective property (art.29 al.1);
- Private, individual or collective property is inviolable and it shall not be interfered with the exception of public interest, in cases and manner established by the law, and after payment of a fair and prior compensation. (art. 29 al. 23);
- Land ownership and other real rights governing the land are granted by the State.

The institutions in charge of the promotion of RSSs are:

- Ministry of Infrastructure (MININFRA): This Ministry is responsible for developing policies that govern infrastructure development like: roads, housing, transport, communication, energy, water and sanitation. MININFRA is also responsible for monitoring the implementation of those policies.
- Rwanda Transport Development Agency (RTDA): This newly established institution under MININFRA is charged with the implementation of the national policy on public infrastructure in particular roads, bridges, etc. RTDA will supervise the implementation of the RSSs, and undertake long term monitoring and evaluation.
- Rwanda Development Board (RDB): This board was created by the Organic Law N° 53/2008 of 2008. It aims at improving the well-being of all Rwandans by fast-tracking development, catalyzing sustainable economic growth, and creating prosperity for all. Realignment of Government institutions and functions placed the responsibility of following-up of Environmental Impact Assessment studies under the RDB's Department of Investment.



In Rwanda, institutional responsibility as regards environment and natural resources management falls under several ministries, decentralized entities (districts and sectors), local and International Non Government Organizations (NGOs), research institutions and/or higher learning institutes.

Ministry of Lands, Environment, Forests, Water and Mines (MINITERE) is responsible for land use development policies, development of environmental policies and procedures (including impact evaluation), natural resources protection, environmental legislation, biodiversity and other environmental aspects. As regards biophysical environmental management throughout the whole country, the entire responsibility is entrusted to Rwanda Environment Management Authority (REMA), a Secretary of State, whose main mission is the implementation of the national policy on environment.

REMA is also tasked to coordinate different environmental protection activities undertaken by environmental promotion agencies; to promote the integration of environmental issues in development policies, projects, plans and programmes; to coordinate implementation of Government policies and decisions taken by the Board of Directors and ensure the integration of environmental issues in national planning among concerned departments and institutions within the Government; to advise the Government with regard to the legislation and other measures relating to environmental management or implementation of conventions, treaties and international agreements relevant to field of environment as and when necessary; to make proposals to the Government in the field of environmental policies and strategies, etc.

The legislative framework of environment management was set up by the Government of Rwanda by Organic Law n° 4/2005 of April 8, 2005 establishing modes of protecting, safeguarding, and promoting environment in Rwanda. This law governs environment in the broadest sense of the term. Moreover, the country adheres to several international agreements, treaties and conventions, though management legal tools are not yet well developed. The Chapter IV of Title III of this Organic Law defines modalities of protection, conservation and promotion of the environment by prescribing the environmental impact assessments process.

The following articles are relevant to the implementation of Road Side Stations projects: 67, 68, 69, 70, 87, 88 and 89. Article 67 states that *“every project shall be subjected to environmental impact assessment, before obtaining authorization for its implementation. This applies to programmes and policies that affect the environment. An order of the Minister having environment in his or her attributions shall determine the list of projects mentioned in this organic law”*. Article 68 specifies the main points that an Environmental Impact Assessment must include. Article 69 stipulates that the environmental impact assessment shall be examined and approved by the Rwanda Environmental Management Authority (REMA) or any other person given a written authorization by the Authority. The environment impact assessment shall be carried out at the expense of the promoter.

Article 70 states that an order of the Minister having environment in his attributions establishes the list of projects for which the public administration shall not warrant any authorization without an Environmental Impact Assessment describing direct and indirect consequences of the project to the environment.

Under Title VI of this Organic Law, article 81 stipulates that the following activities are prohibited:

- Dumping or disposal of any solid, liquid waste or hazardous gaseous substances in a stream, river, lake and in their surroundings;
- Damaging the quality of air and of the surface or underground water;
- Non authorized bush burning;
- Smoking in public and in any other place where many people meet;



- Defecating or urinating in an inappropriate place;
- Spitting, discarding mucus and other human waste in any place.

For article 87, it is prohibited to construct houses in wetlands, in urban or rural areas, to build markets there, a sewage plant, a cementery and any other buildings that may damage such a places in various ways. All buildings shall be constructed in a distance of at least twenty meters away from the bank of the swamp. If it is considered necessary, construction of buildings intended for the promotion of tourism may be authorized by the Minister having environment in his or her attributions. Also, article 88 state that it is prohibited:

- To dump, make flow, dispose of and store any substance in a place where it may cause or facilitate water pollution on the national territory;
- To use natural resources in a degrading and illegal manner;
- To release into the atmosphere poisonous gases, smoke, waste, soot, dust and any other chemical substances in an illegal manner.

Article 95 announces that anyone or association that does not carry out environmental impact assessment prior to launching any project that may have harmful effects on the environment is punished by suspension of his or her activities and closure of his or her association and without prejudice to be ordered to rehabilitate the damaged property, the environment, people and the property. Falsification and alteration of documents of environmental impact assessment is punished in the same manner as what is provided for in paragraph one of this article.

Ministerial order n° 003/2008 of 15/08/2008 relating to the requirements and procedure for Environmental Impact Assessment. Article 1 stipulates that Environmental Impact Study is a systematic way to identify environmental, social and economic impacts of a project before a decision of its acceptance is made. In article 3, the developer submits an official application which includes a project brief of the proposed project to the authority. Article 4 specifies that within thirty (30) calendar days after receipt of the project brief and after its analysis, the Authority shall submit the Terms of reference to the developer for the Environmental impact study. In Article 7, upon completion of the environmental impact study, the developer shall deposit with the Authority five (5) hard copies and a soft copy of the report.

Environmental process operates within and towards the global concept of sustainable development. It is intended to achieve benchmarks an embrace commitment to international environmental conventions agreed upon in Ramsar (1971), Vienna (1985), Montreal (1990), Río (1992), Kyoto (1998), and Stockholm (2001) to all of which, Rwanda is a party.

EIA is an invaluable tool for environmental management in a trans-boundary context, playing role in information dissemination between Rwanda and neighboring countries and widening the scope of understanding of impacts beyond its borders. EIA process in Rwanda provides a pretext and basis for future international cooperation and conflict resolution concerning environmental impacts at a regional level.

Rwanda Vision 2020

This strategy defines Rwanda's route to prosperity by 2020. To achieve this, strategic actions are prescribed, which include safeguard measures for the Environment.

It champions preventive measures to mitigate the negative effects caused by socio-economic activities; it institutes the "polluter pays" principle as penal measures to safeguard the environment and makes it a requirement that Environmental Impact Assessment should be conducted for development projects.

Other Legislations include the following:

- National Land Law Number 08 of 2005; and



- Rwanda building control regulations.

Kenya

In Kenya, laws governing environmental protection and conservation are derived from statutes derived from the current constitution and ratified international conventions. These laws regulate the establishment and cooperation of development projects and their associated activities which may impact negatively on the environment, human health and socioeconomic well-being of the people who interact with such projects.

The Constitution of Kenya. The provisions of Chapter IV protect citizens from deprivation of property. It states that no property of any description and no interest in or right over property shall be compulsorily acquired, except where it is necessary for public interest. It further states that every person has also the right to a clean and healthy environment, which includes the right to have the environment protected for the benefit of present and future generations through legislative and other measures.

Chapter V of the Constitution (Land and Environment) gives provisions of protecting land, environment and natural resources. All persons are expected to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.

The Environment Management and Coordination Act, 1999 clearly makes EIA mandatory for all projects specified in the Act. The projects to be subjected to EIA are specified in the Second Schedule of the Act. Besides the schedule activities, the Act empowers the Minister for the time being responsible for environmental matters to prescribe for EIA appraisal any other activity which in his view may cause significant adverse environmental impacts.

Part II of the Environment Management & Coordination Act, 1999 states that every person in Kenya is entitled to a clean and healthy environment and has the duty to safeguard and enhance the environment. In order to partly ensure this is achieved, Part VI of the Act directs that any new programme, activity or operation should undergo environmental impact assessment and a report prepared for submission to the National Environmental Management Authority (NEMA), who in turn may issue a license as appropriate.

Part VIII section 72 of the Act prohibits discharging or applying poisonous, toxic, noxious or obstructing matter, radioactive or any other pollutants into aquatic environment. Section 73 requires that operators of projects which discharge effluent or other pollutants to submit to NEMA accurate information about the quantity and quality of the effluent. Section 74 demands that all effluent generated from point sources be discharged only into the existing sewerage system upon issuance of prescribed permit from the local authorities or from the licensee. Finally, section 75 requires that parties operating a sewerage system obtain a discharge license from NEMA to discharge any effluent or pollutant into the environment.

Section 87 Sub-section 1 states that no person shall discharge or dispose of any wastes, whether generated within or outside Kenya, in such a manner as to cause pollution to the environment or ill health to any person, while section 88 provides for acquiring of a license for generation, transporting or operating waste disposal facility. According to section 89, any person who, at the commencement of this Act, owns or operates a waste disposal site or plant or generate hazardous waste, shall apply to the NEMA for a licence. Sections 90 through 100 outline more regulations on management of hazardous and toxic substances including oils, chemicals and pesticides.

The Environmental Regulations, 2003 (Legal Notice n^o 101) states the guidelines for the EIA, which must be according with the issues and general guidelines spelt out in the Second and Third schedules including in it.



NEMA is ultimately responsible for issuing, varying or cancelling environmental impact assessment licenses, will coordinate the EIA process. NEMA is also responsible for coordinating powers over all public and private sectors. However, each sector plays a role in the implementation of the EIA Guidelines. This requires the establishment of Environmental Liaison Units (ELU's). Each sector is responsible for the costs of maintaining their ELU. For the purpose of overseeing implementation of the EIA Guidelines at Provincial and District levels, the NEMA will set up environmental committees. These committees will be close allies and strong partners at the local levels and are empowered in the Act.

The project approval process will involve decision-making at various levels and the necessary authorization will be given once all EIA requirements have been fulfilled and accepted by NEMA and the relevant lead agencies. The EIA license will be issued when NEMA are sure that an EIA has been satisfactorily conducted and a satisfactory Environmental Management Plan (EMP) has been developed.

The relevant lead agencies and NEMA will ensure that the EMP is implemented. In addition NEMA will provide a framework for conflict resolution with respect to:

- Disputes within and between Central Government departments;
- Disputes between Central Government and Local Authorities;
- Disputes involving the public sector, private enterprise and the public.

Besides the Environmental Management and Coordination Act of 1999 and the Environmental Regulation of 2003, there are several guidelines pertaining to environmental and social issues that have a direct bearing to the Road Side Stations Project. Other legislation subsequent to the Environmental Management and Coordination Act of 1999 are the Environmental Impact Assessment and Audit Regulation (2003) and the amendment of 2009. Others include:

- The Waste Management Standards (Legal Notice 121: The Environmental Management Coordination (Waste Management) Regulation, 2006);
- The Water Management Standards (Legal Notice 120: The Environmental Management Coordination (Water Quality) Regulation, 2006);
- The Environmental Management and Coordination (Noise and Excessive vibration pollution) Regulation, 2009 (Legal Notice 61);
- The Environmental Management and Coordination, Conservation of Biological Diversity Regulation, 2006;
- The Environmental Management and Coordination, Fossil Fuel Emission Control Regulation, 2006.

Other sectoral legislation can be applicable to the Road Side Stations which include the Wildlife Act Cap 376, Waste and Waste Water Act 2006; Water Act (2002); Public roads and Roads Act Cap 22, Local Government Act Cap 265, Energy Act, 2006, Agriculture Act, Cap. 318 The Public Health Act (CAP. 242), the Physical Planning Act (Cap 286) and all land-related acts that were consolidated into the Land Act 2012.

Kenya Vision 2030

This is the country's development blueprint covering the period 2008 to 2030. It aims at making Kenya a newly industrializing 'middle income country providing high quality life for all its citizens by the year 2030. The vision is based on three 'pillars' namely; the Economic Pillar, the Social Pillar and the Political Pillar. The vision 2030 comes after the successful implementation of the Economic Recovery Strategy (ERS) for Wealth and Employment Creation 2003-2007.

The Kenya Vision 2030 economic pillar aims at providing prosperity of all Kenyans through an economic development programme aimed at achieving an average GDP growth rate of 10% per annum over the next 25 years from the year 2008. The social pillar seeks to build 'a just and cohesive society with social equity in a clean and secure environment'. On the other hand,



the political pillar aims at realizing a democratic political system founded on issue-based politics that respects the rule of law, and protects the rights and freedoms of every individual in the Kenyan society.

Institutional Framework

There are many local and international NGOs involved in environmental issues in Kenya in addition to over 20 GoK agencies which include inter alia the National Environmental Management Authority (NEMA), the Department of Resource Surveys and Remote sensing (DRSRS), the Water Department, The Kenya Forest Service (KFS), the Kenya Wildlife Service (KWS) the Kenya Forestry Research Institute (KEFRI), the National Museums of Kenya (NMK), the Kenya Marine and Fisheries Research Institute (KMFRI), the Kenya Agricultural Research Institute (KARI).

Democratic Republic of Congo (DRC)

The formalisation of the EIA process into law has not been achieved in the Democratic Republic of the Congo (DRC), where it has only been formalised into the Mining Code.

The DRC has no legislation governing the practice of EIAs and normally uses the World Bank practices and procedures.

At present, there is no framework law for EIA in the DRC, however, there is a Ministerial Order n° 043/CAB/MIN/ECN-EF/2006 of 8th December 2006 which obliges all projects, old or new, to have an EIA. There is also the Law n° 003/91 of 23 April 1991 on environmental protection, and the Decree n° 86/775 of 7 June 1986 mandating impact studies on the environment.

The Law n° 11/009 of 9 July 2011 on fundamental principles relating to the protection of the environment: Chapter 6 of the Law deals with Environmental and Social Assessments. Article 51 requires all development projects which may have an impact on the environment to submit an Environmental and Social Impact Study (ESIS)

The main Directorate with responsibility for EIA is the Groupe d'Etudes Environnementales du Congo (GEEC). In ministerial Order No 044/CAB/MIN/ECN-EF/2006 of 8th December 2006, the Ministry of Environment, Nature Conservation and Tourism (MENCT) created an agency for EIA administration and approval called Groupe d'Etudes Environnementales du Congo (GEEC). A further ministerial order n° 008/CAB/MIN-EF/2007 of 3rd April 2007 amended and completed the institution of GEEC.

GEEC is a technical structure within the MoE responsible for the administration of EIA in the country. Its main objectives are:

- To conduct and coordinate the activities relating to environmental and social impact studies (ESIS);
- To define the procedure of ESIS in the DRC;
- To ensure that the execution of all projects or development programmes is undertaken according to strict environmental and social standards;
- To promote capacity building within Congolese administrative structures and within public and private investors in matters relating to ESIS;
- To promote consultation and information sharing with the public concerning the management of the environment; and
- To present an annual State of Environment report for the country.

The creation of GEEC demonstrates the political will of the DRC government to make sure that all development projects will safeguard the biophysical and social environment. The scope of GEEC extends over all projects which may impact on the environment, across all sectors, with the current exception of mining.



In summary, with the exception of South Sudan, which lacks environmental legislation, the other countries have developed, under their constitutions, an environmental legislative body more or less extensive, developing in it both the content and the conduct of the Environmental Impact Assessment (in some cases more than others). So, RSS projects developed in each of these countries will be subject to an EIA to be submitted for assessment and approval of the competent authorities in each case.

Cross Border and Transport and Trade Facilitation legal framework

The reduction in trade barriers has been one of the key elements of the EAC Customs Union and its successor, the EAC Common Market, to promote greater regional integration and allow the free movement of goods amongst its members. The goals of the Customs Union were:

- To eliminate all internal tariffs
- The establishment of a Common External Tariff (CET)
- The adoption of common documentation, procedures and processes
- The establishment of a harmonised customs information system among all the EAC members
- The elimination of non-tariff barriers

The CET was introduced in 2005 with the setting of 3 tariff bands for raw materials (0%), intermediate goods (10%) and consumer goods (25%). All internal tariffs were removed by the beginning of 2010.

With regard to procedures, documentation etc. there has been considerable progress with the establishment of SIMBA in Kenya in 2005 and ASYCUDA ++ in most of the other countries with most of them upgraded to ASYCUDA World which is fully compatible with SIMBA.

Nevertheless, levels of documentation requirements still vary between the countries of the EAC as do inspection levels. In Uganda for example, the inspection rate is 75% compared with 25% in Kenya. This serves to increase transit times on its borders. The number of documents to import a container into Burundi is still 10 compared with 7 in Kenya.

There have, as explained in previous sections of the report, been a number of initiatives to improve this situation including the establishment of OSBPs with shared customs facilities, the exchange of data through RADDEX and the movement towards e-SWS, the electronic version of the Single Window. Kenya and Rwanda are particularly advanced in this field. All of these, together with improved infrastructure, will have a very positive effect on transit times and lowering transaction costs. Further reforms are planned with a movement towards integrated risk management with profiling reducing the need for red lane inspections; the introduction of pre-clearance and post-audit; and the promotion of Authorised Economic Operators.

Although regulations were introduced in 2008 to harmonise the legal framework for axle loads, tolerance limits for overloads etc., trying to get the countries to harmonise regulations has been difficult. The maximum vehicle weight in Kenya was 48 mt, compared with 53 mt in Burundi and Rwanda and Uganda allowing 56 mt. Although a law was introduced in 2012 to set the limit at 56 tons, enforcement has remained difficult and has been open to abuse.

2. RESULTS OF THE SURVEYING FACILITIES ALONG THE NORTHERN CORRIDOR

A104: MOMBASA TO ATHI RIVER JUNCTION

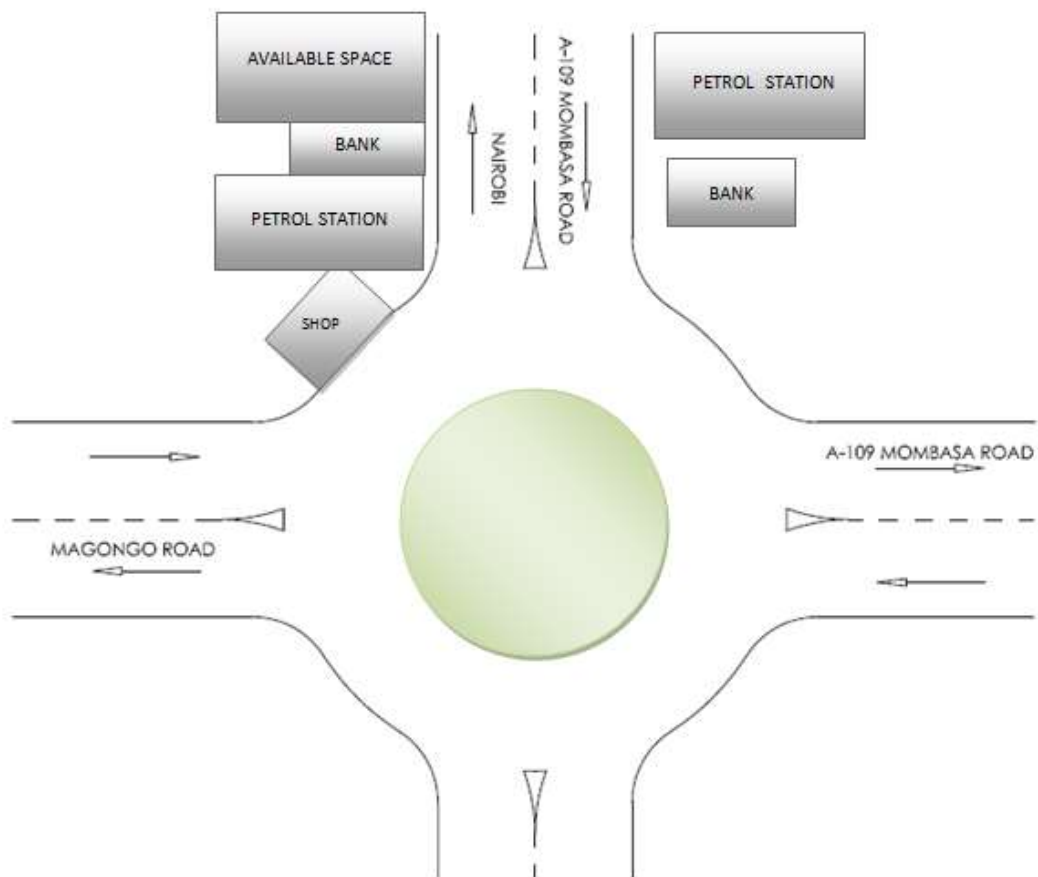
Roundabout Exit Mombasa

This is the first point with high concentration of trucks leaving Mombasa.

- Services and facilities around the proposed site:



- Cloth sales
- Shoes sales
- Restaurant
- Fruit salesmen
- Cold drinks salesmen
- Banks
- Petrol Station
- Truck cleaning





Kenol Petrol Station

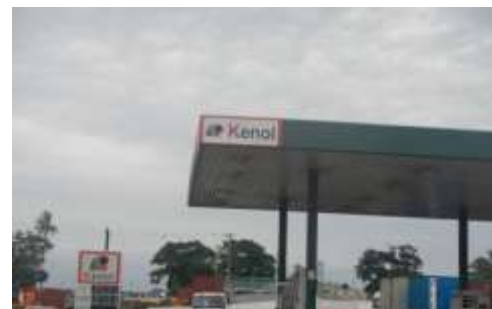
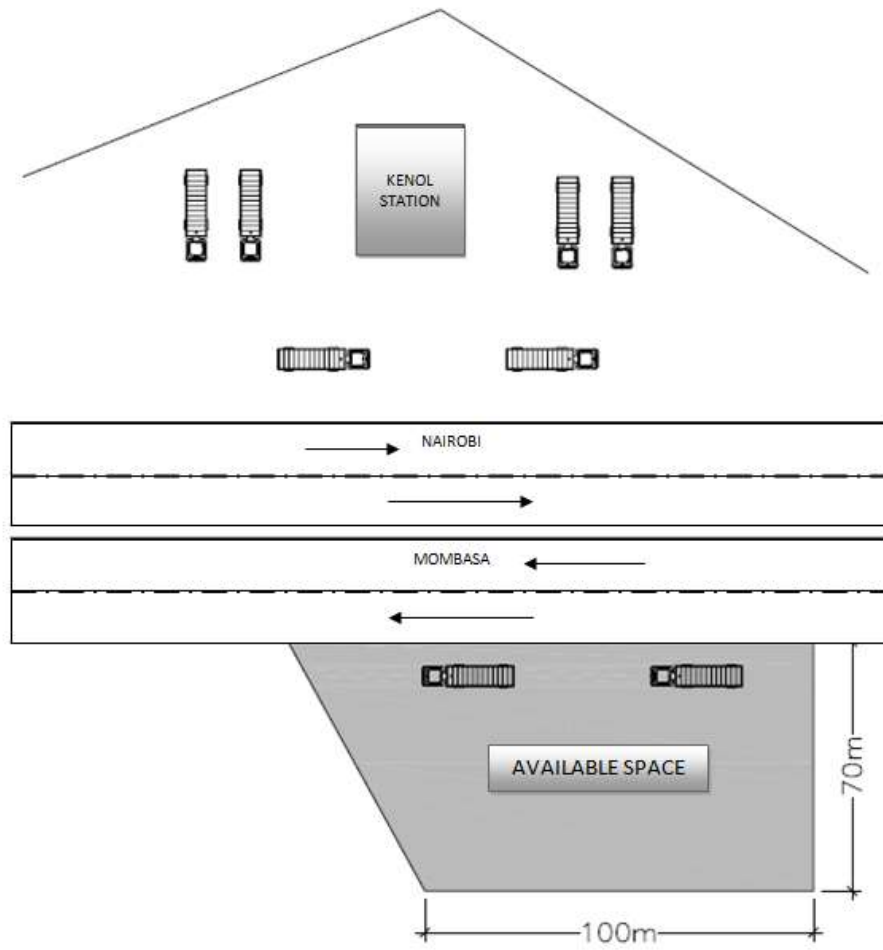
The proposed RSS site is in Changamwe Division, Changamwe District in Coast Province, and belongs to Municipality Council of Mombasa. According to the 2009 census, the population of Changamwe District was 131,552 and the number of households was 40,984. The area closed to the proposed location for the RSS is residential and commercial zones. There are no agricultural land and nature parks along the roads. A large number of carriers have Container Freight Station (CFS) along the A109 Road. There are many plants within the neighbourhood such as a refinery, an oil-fired power plant and port related industries. There are over 80 primary schools (20 public and 60 private) and 15 secondary schools in Changamwe Division. In Changamwe Division only a portion of the areas close to the roundabout, along the Old Mombasa-Nairobi Road and Airport Road have a sewage system, the remaining areas use septic tanks and pit latrines. There are three churches and a mosque in the neighbourhood, and there are two public hospitals in Changamwe Division which collectively have a mental institute, a child's hospital and medical training centre. Residents in these Locations go shopping to the market at Kongowea, and there aren't any cultural sites and monument in the Chamgamwe Division.



Currently trucks park along the highway or in the neighbouring of Kenol petrol station if space allows. The proposed RSS is close to this site. However, the following issues arise:

- Traffic snarl ups are common in the proposed site and around the Changamwe roundabout, along Port Reitz Road, old Mombasa-Nairobi Roads and the new A109 occasioned by slow moving trucks from the port;
- Cars and light commercial vehicles have to use road shoulders due to congestion brought about by trucks parking along the routes;
- Pedestrians inconvenienced by traffic snarl ups and get exposed to risk of collisions;
- This being a densely populated area, acquisition of land will raise resettlement and compensation issues;
- The area currently has problems with solid waste and sewage disposal systems. In addition, modernisation of road drainage facilities along the highway is recommended;
- There are no indigenous and ethnic people in and around the project site. However, there are poor vendors who own stalls along the road reserve who will be affected by the project.

- Services and facilities around the proposed site:
 - Bank
 - Cold drinks sales
 - Banks
 - Petrol station
 - Truck cleaning
 - Container concentration
 - Food sales





Mariakani

Mariakani is a small town, 36 kilometres northwest of the port city of Mombasa, lying on the boundary of Kaloleni and Kinango districts in Coast Province. Most of the town's economic activities are done on the Kaloleni side due to the shift of transport preference to Mombasa-Nairobi Highway rather than the rail line and station. The town's administrative arm is located in Mariakani location of Kaloleni division of Kilifi district. It is inhabited mainly by the Durumas, Giriama and Kambas though other tribes are also present. Mariakani has a disused station on the Kenyan Railway system. The surrounding land is sparsely populated and is used for pastoralism.

This town is famous for the Mariakani weighbridge that has been a nightmare for truckers leaving the port of Mombasa. This weighbridge causes long queues of trucks as shown below.

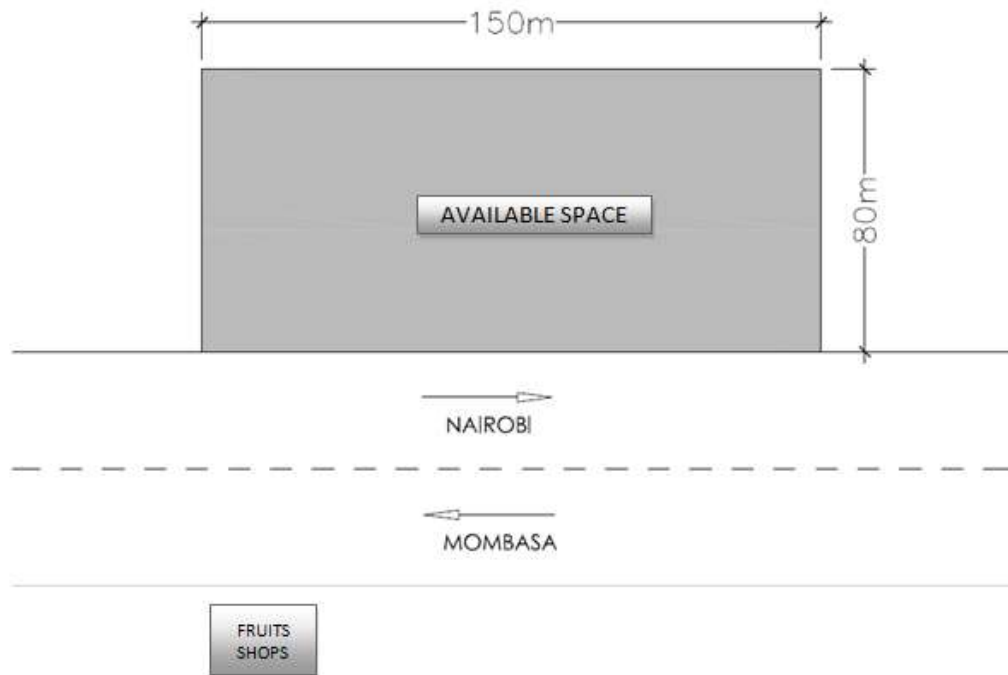
It is the activities at this weighbridge that drive the economy of this center that has permanent structures used as shops, hotels, bars, butcheries and fuel station. The piped water consumed in this town flows from the Mzima springs and is said to be fairly reliable. Other services include electricity and telecommunication by the major mobile service providers, and there is the Health Center run by the GoK, and the D.O, Chief and police post office administrative services.

Currently, the existing parking at the weighbridge caters for trucks as they wait the weighing and customs processes, but because of increased road traffic and inefficient weighing and customs system, there is a long line of trucks that extend beyond the park and use the road shoulders and reserves. This necessitates the planning for a RSS to remove the long line of trucks from the road shoulders.

The main features of his place are:

- Trucks avoid parking on the road reserve because the sandy soil is not very stable; instead they park on the road creating traffic snarl ups.
- Though Mariakani has a few hotels and lodges to cater for the truckers needs, they have to wait in the queue to clear with the weighbridge/customs so nobody can leave their trucks;
- Truckers decry the poor and slow services at the weighbridge and customs offices, these cause the long queues of trucks;
- There have been reported cases of bad accidents, unnecessary delays to other motorists which are caused by these trucks parking on the road.

- Services and facilities around the proposed site are:
 - Cold drinks sales
 - Fruit sales
 - Food sales
 - Shops
 - Weighbridge





Samburu

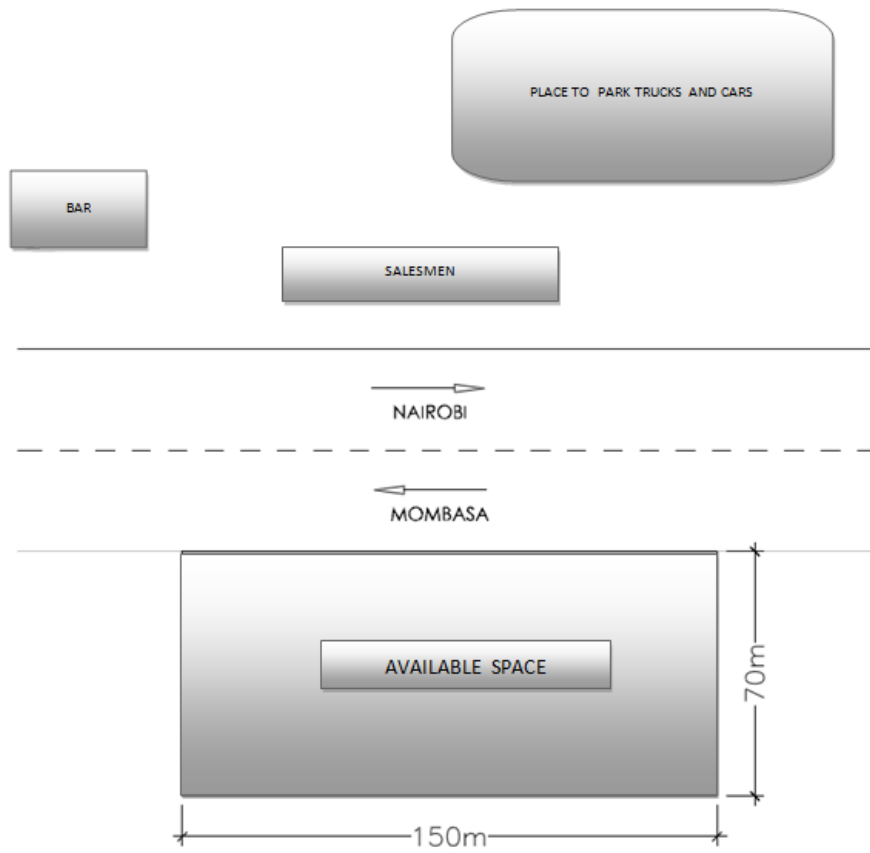
This is a busy market 55 Kilometers away from the Mombasa Island located in Samburu division of Kinango District in Kwale County. It has speed bumps erected in 2010 to regulate speeding vehicles along this busy road and it forms a junction with the road to Silaloni, Shimba Hills and Kinango. Many trailers park on both sides of the A109 road in this market center. The dominant residents are the Duruma, though other tribes namely the Kamba and Kikuyu are represented in this market center. The surrounding land is sparsely populated with pastoralists.

This one-street town is lined on both sides with permanent structures used as shops, hotels, bars, butcheries and fuel station. The piped water consumed in this town flows from the Mzima springs and is said to be fairly reliable. Other services include electricity and telecommunication by the major mobile service providers, and there is the Samburu Health Center run by the GoK, and the D.O, Chief and police post office administrative services.

The idea of creating a lorry park near this market center could be interesting because the residents state that the truckers buy food and personal provisions, lodge in their hotels, and employ watchmen to guard trucks. They argue that the economy of this center is dependent on the A109 road, and creating a lorry park will improve business here. Asked about the vices spread by the truckers, they argue that whether it is siphoning of fuel or prostitution, this is on a willing buyer-seller basis and both parties derive benefits. Being a sparsely populated area with gentle terrain, the implementation of the proposed RSS will pose very little challenges socially and technically.

Environmentally, this center faces challenges of nonexistent solid waste disposal facilities as each plot owner devices his own disposal facility, there is no town planning and there seems to be a linear expansion along the road.

- Services and facilities around the proposed site are:
 - Hotels
 - Shops
 - Fruit sales
 - Drinks kiosk
 - Vegetables sales





Taru

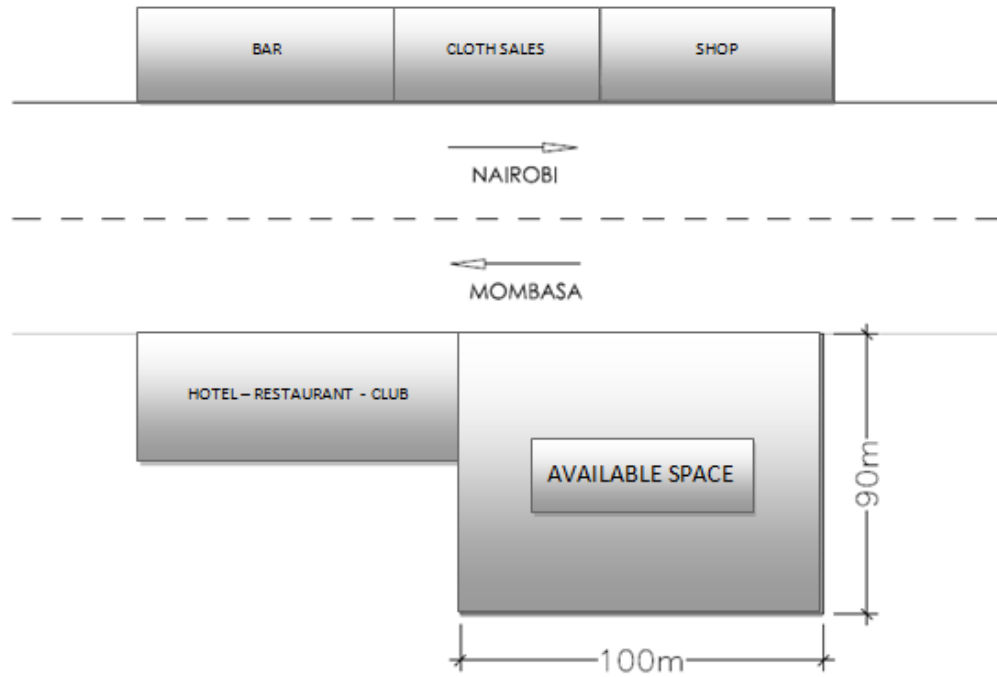
Taru is located in Magina Location of Samburu Division, 69 Kilometers from the Mombasa Island and 14 Kilometers after Samburu market center. Taru is more vibrant than Samburu even though both of them are in the same Division. It has a built market, three schools within 2 kilometer radius, electricity and telecommunication services. It gets its water from the Mzima springs. This center experienced an upsurge in growth after the establishment of the police station in 1992 to curb shifta menace in the area. The GoK is upgrading the health center in the area to cater for the rapidly increasing population in the center and the surrounding.

The Duruma, Giriama, Taita, Kikuyu and Kamba communities operate most of the businesses in this center, and the surrounding land is used for pastoralism by the locals. These people have a notion that creating a RSS park in the area will spur growth of the town in addition to creating order especially in the evenings.

The residents welcome the idea of a RSS in this town, because the truckers buy food and personal provisions, lodge in their hotels, and employ watchmen to guard trucks. Though they don't like the social vices spread by the users of the road, they seem to have resigned to fate and "say that there is nothing they can do".

This center faces challenges of nonexistent solid waste disposal facilities as each plot owner devices his own disposal facility, there is no town planning and there seems to be a linear expansion along the road.

- Services and facilities around the proposed site are:
 - Health clinic
 - Restaurant
 - Cloth sales
 - Hotel





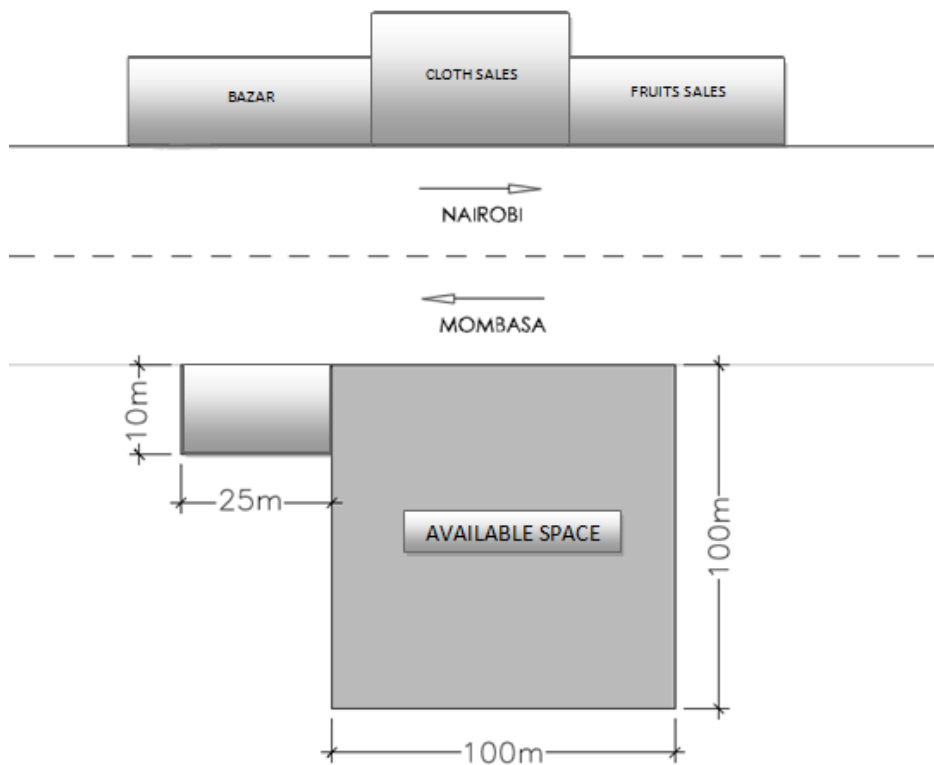
Mackinnon Road I (Meli Kubwa)

Located in Meli Kubwa sublocation, Mackinnon Road Location of Samburu district is a one street town that started as a charcoal collection center. It is 78 Kilometers from Mombasa Island, a fairly small sleepy town by day but teems with activity at night. It is served by the police stations at Mackinnon Road and Taru. It also served by a private clinic. The Duruma, Giriama, Taita, Kikuyu and Kamba communities operate most of the businesses in this center, and the surrounding land is used for pastoralism by the locals. Efforts to grow crop is frustrated by unreliable rain and marauding elephants, baboons and monkeys.

This center is masked by the dominance of Taru to the east and Mackinnon road to the west. However, it still gets a sizeable population of truckers and could be considered for location of a RSS.

Being a sparsely populated area with little economic activity, this center welcomes the proposal of establishing a RSS here because of the opportunities that will come with the RSS. This center faces challenges of nonexistent solid waste disposal facilities as each plot owner devises his own disposal facility, there is no town planning and there seems to be a linear expansion along the road. The town gets dusty in dry weather.

- Services and facilities around the proposed site are:
 - Cloth sales
 - Hotel
 - Restaurant
 - Club





Mackinnon Road II

This historical town is 80 km from Mombasa and 18 km from the proposed RSS at Taru. It started as a colonial airbase and railway town before it was converted into a detention camp. It also served as an important node in the caravan route in the pre-colonial times. This rich history should be carried over to the present times but is slowly fading off.

This center has most of the amenities that a market center could require. This market center is lined on both sides with permanent structures used as shops, hotels, bars, butcheries and Mosques. There is a police station and the piped water consumed in this town flows from the Mzima springs and is said to be fairly reliable.

The railway line runs parallel to the road on the northern side limiting the location of the proposed RSS to the south of the A109 road. The residents argue that since lorries have already established a RSS in the area, it will only be prudent to improve on the services they require. They derive benefits when the truckers use hotel facilities, buy charcoal, wines, spirits, cigarettes and other personal provisions. As far as the vices associated with the truckers are concerned, the residents argue that there is a medical facility to take care of the infections.

This center is a suitable candidate for a RSS. The implementation of the proposed RSS will most likely be located on the southern flank of the road, about three hundred meters from the market center, to avoid the railway line and petroleum pipeline on the northern flank.

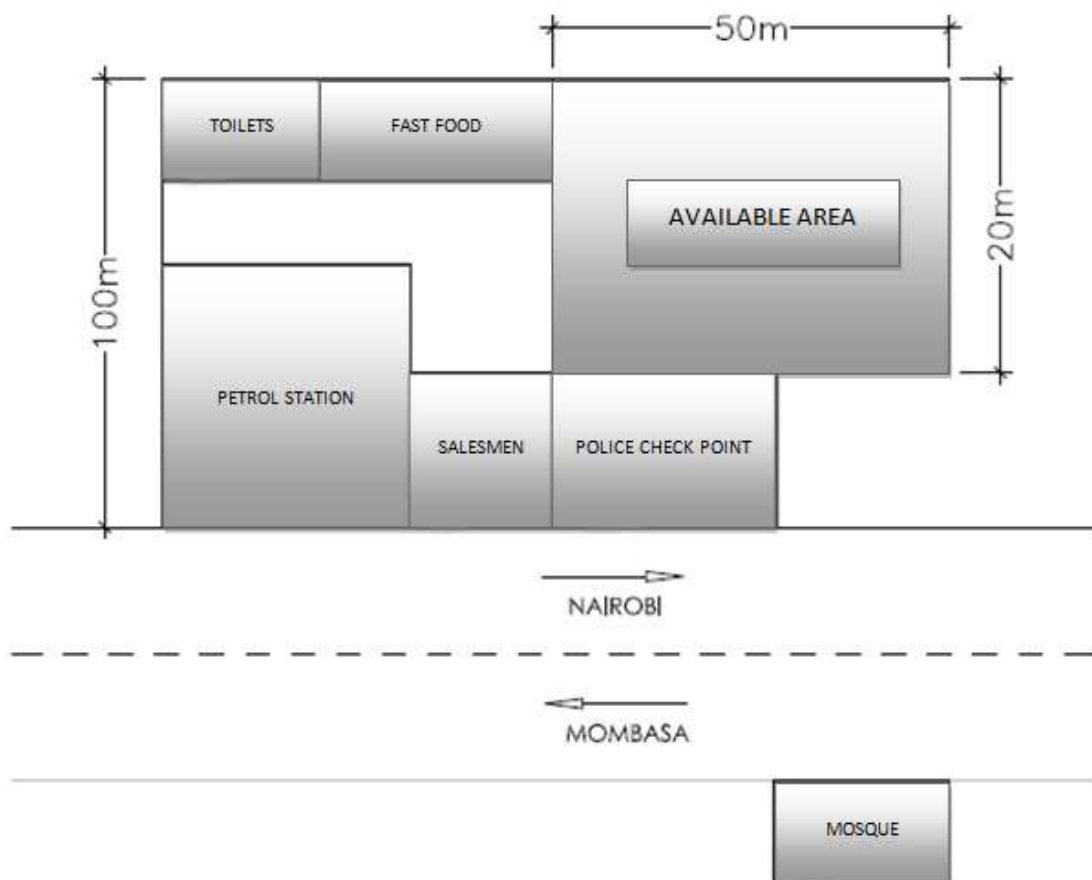
This center has a rich history that can be disseminated at a RSS to relive a history of travelers that started in the pre-colonial times.

It is also important to note that after this center, an active wildlife corridor starts which makes the 30 Km stretch between Mackinnon road and Maungu unsuitable for RSS stations. This stretch also has the diversion to Bachuma gate of Tsavo Park, and has several spring areas along the road that are important sources of water for domestic



and wild animals. However, these spring areas are also misused as sites for cleaning trucks, an issue that should be discouraged. The best way to discourage the use of these spring areas is to provide a RSS facility that has all services that a traveler will require.

- Services and facilities around the proposed site are:
 - Mosque
 - Railway station
 - Police check point
 - Petrol station
 - Car and truck services (air, water)
 - Sales
 - Oil shop
 - Information Hall
 - Restaurant
 - Hotel
 - Club
 - Bus stop





Maungu

Maungu, 117 km from Mombasa Island and 30 km from RSS at Mackinnon Road, is a vibrant center in Taveta County which is infamous for twilight girls who entertain the truck operators. However, it has a new resource center by fhi360 that is meant to encourage safe sex and eradicate prostitution in Maungu. It is also known for Wildlife Works, the company that has brought relief and employment to many families in the area by providing both permanent and casual employment to the natives.

This center has a Lorry Park under construction, an initiative of the Urban Development Department of the Ministry of Local Government. The park under construction is about 40% complete.

The project which initially began in 2006 had stalled after an estimated 13 million had been spent. The GoK took over the project from the defunct Taita Taveta County Council and is destined to complete it before handing over to the County Government. The parking yard will provide ample and secure parking to more than 200 trucks, and will be a source of revenue to the County Government. Currently, this center provides banking services, bars and restaurants, private and public health facilities, religious facilities, petrol station, public toilets, and assorted retail shops.

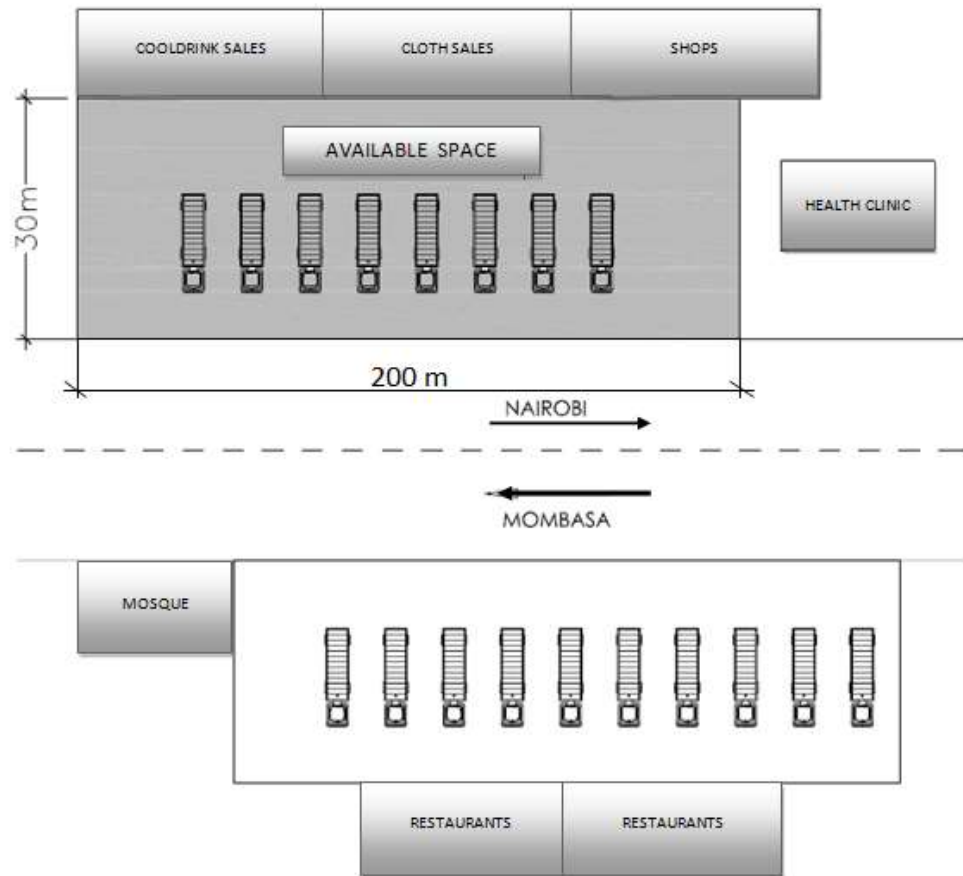
Details of the scope of works in the lorry park were not available but from the design, it appears to be a basic lorry park with perimeter fence, toilet and bathrooms.



This town has a social stigma that it is trying to shed off. The initiatives by the NGOs to provide alternative income to youth who would be lured into illicit practice is slowly gaining ground. The new RSS could complement the existing initiatives to provide a decent living to the locals, and commendable service to the travelers.

Though this town has piped water, waste disposal is into soak pits that serve part of the town. It has problems with surface drainage during the wet season.

- Services and facilities around the proposed site are:
 - Shops
 - Health clinic
 - Mosque
 - Bank
 - Salesmen
 - Fruit sales





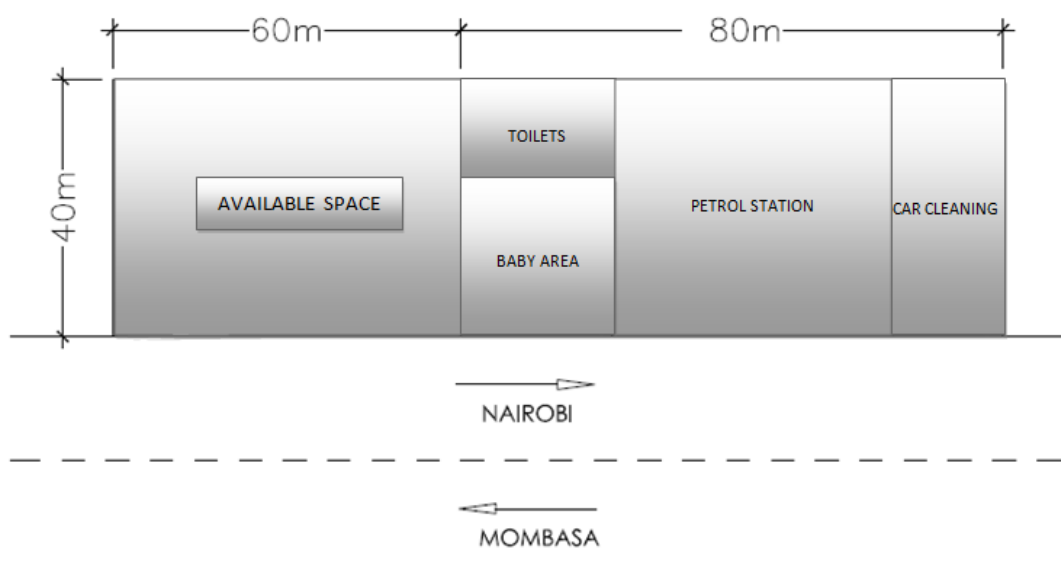
Voi

Voi which forms the capital of Taita-Taveta County in southern Kenya is 146 Kilometers from the Mombasa Island and 28 km from the proposed RSS in Maungu. It lies at the western edge of the Taru Desert, south and west of the Tsavo East National Park, and North of the Sagala Hills. Voi is a marketplace for the agricultural and meat products from the surrounding areas. The town centre consists of retail stores, markets, kiosks and a few hotels. Most lodges that service tourists for the national park are located in the suburbs at the edge of the town. A large sisal estate is located to the west of the town, and this estate has a large squatter community.

The Kenya-Uganda railway passes through Voi, and there is a junction to Taveta and Arusha in Tanzania. The A109 road passes outside the town; therefore the truckers have very little influence on this town. The A23 road to Taveta and onwards to Tanzania goes through this town. There is also the Ikanga Air Strip near this town.

The main characteristics of this place are:

- The A109 road used by bus and trucks by passes this town;
 - There is adequate land with minimal compensation/resettlement issues along the A109 road; and
 - However, it is only 28 km from the proposed RSS in Maungu and 35 km from Manyani.
-
- Services and facilities around the proposed site are:
 - Two petrol stations
 - Baby area
 - Truck cleaning
 - Toilets
 - Bar – Restaurant





Manyani

Manyani is located in Voi Division of Voi District in Taita Taveta County. It borders the Tsavo West National Park, 290 km South East of Nairobi, 196 km North West of Mombasa and 35 km from the proposed RSS at Voi. The area is usually hot and remains dry for most of the year, typical of Savannah grasslands.

This is a small market center with a mixture of semi permanent and permanent buildings. The center has telecommunication infrastructure, electricity and an aging water supply systems that is prone to failure.

The Nairobi – Mombasa railway line runs parallel to the A109 road at this market center, about 50 meters to the north. In essence, the line of shops to the north is between the railway line and the road. The entrance to the prison is on the southern part of the road reserve, and beyond it are a few kiosks that sell consumer products. This market is marked by low economic activity, and is inhabited by the Kamba, Taita and Kikuyu who mainly trade, or are engaged by the GoK agencies to offer professional services at the prison, health center and national park of the provincial administration.

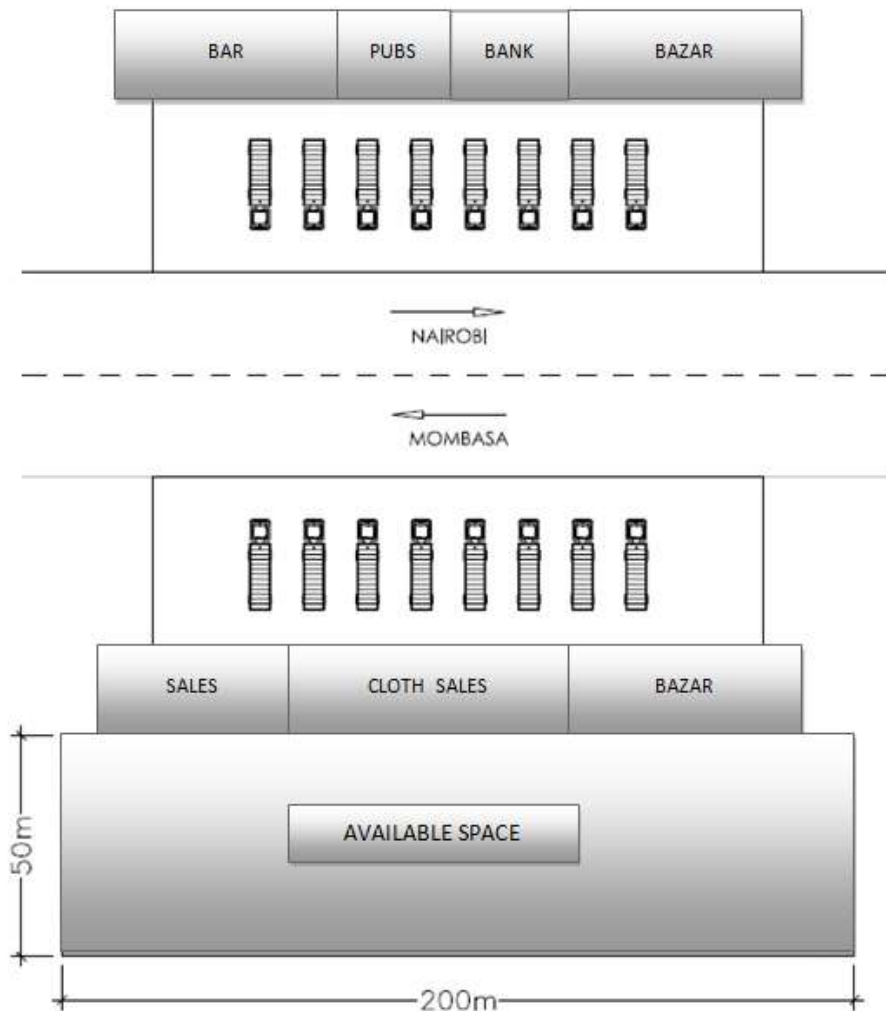
There is an already existing lorry park in the market center that can accommodate about 30 lorries. It is basically a side parking without perimeter fence. The truckers have to access to food, toilet and bathroom facilities from the hotels and lodges and pay local watchmen to take care of their trucks at night. There is no payment for parking services in this market center. There are local mechanics that take care of minor repairs and services within the town. Modernization of this park will be very welcome to this community because the truck park is a major source of income for them.

No major socio-cultural shocks are anticipated in the introduction of the new RSS, because the current interaction between travelers and local residents is cordial. It is



proposed that if this center is considered for the RSS project, then the new park should be in close proximity to the market center to avoid conflict with wildlife, as this center is actually within an active North-South wildlife corridor. In addition, there are spring areas close to the road as you leave the town towards Nairobi which locals have started using for lorry wash facilities. These areas have to be left for wildlife use only.

- Services and facilities around the proposed site are:
 - Truck parking
 - Shops
 - Bar
 - Pub
 - Bazaar
 - Bank





Mtito Andei

This town is in Kibwezi constituency, Makueni District and lies 96 km by road from Voi. It serves as the county headquarters for Mtito Andei County. The Kenya Railways line and the A109 highway between Mombasa and Nairobi run parallel through this town. The town is also served by Mtito Andei Airport which mainly serves tourists. It lies at the western edge of Tsavo National Park and two entrance gates into the park are located in the town.

In 2010, the population of the town was estimated at about 4,760. Other functions served by this town include Mtito Andei town Council headquarters, headquarters of Mtito Andei County, and an active regional market. It has private and public hospitals, police station, postal and telecommunication hub. It is served with piped water and electricity, and part of the town has sewage system.

This town is an important stop for the trucks because of the long distance from Manyani. Several truck companies have a check point here, notably the PN Mashru Transporters. At present, lorries park by the roadside on small spaces that are also used by matatus and other vehicles. The truckers use services and facilities offered by the hotels and lodges where they pay. Overnight parking will cost the driver Kshs 200 payable to the night guards.

There is a large number of trucks that park in this town especially at night.

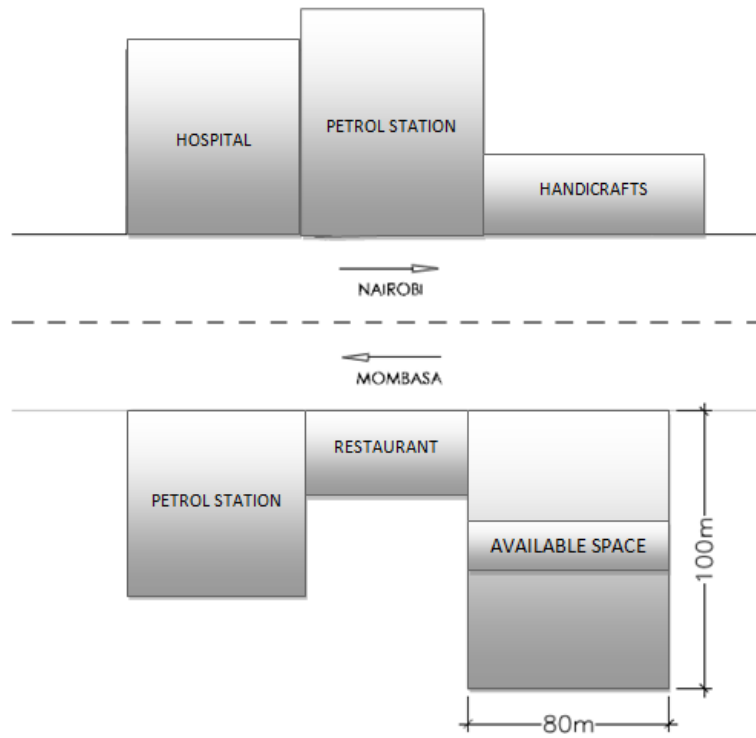
There is competition for parking space in this town, and trucks are accused of grabbing all available space (see warning below).



There is need to construct a modern RSS slightly out of the town center to curb congestion occasioned by the trucks especially at night, and reduce the risk of fire posed by the tankers that park along the road reserve. However, the location and design of the park will be constrained by physical/environmental factors that include the town itself, national parks to the South East of the Town, the Kenya Pipeline and Kenya Railways reserve and the existing A109 highway.

However, it is proposed that the RSS in this area should be designed to cater for the large number of tourists that pass through the area as well as other travelers.

- Services and facilities around the proposed site are:
 - Petrol station
 - Hospital
 - Restaurant
 - Vegetables sales
 - Truck parking
 - Bus stop
 - Hotels
 - Cafeteria
 - Bazaar
 - Toilets



Daru Salam

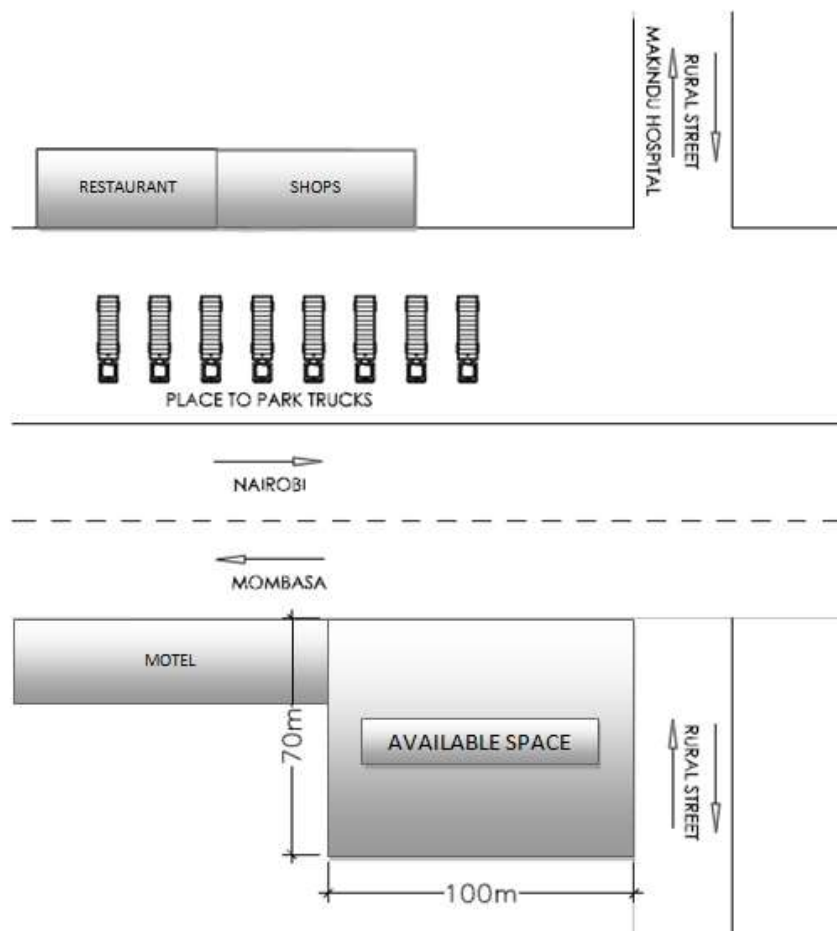
This is a private lorry park that can accommodate about 70 lorries. The park is unpaved but has compacted surface that can be muddy when wet and dusty when



dry. It has a perimeter fence with floodlights all round that ensures security on the 10 acres of land. Within the perimeter wall there are clean toilet and bathroom facilities, lodges, hotels, mobile money transfer services, internet and telecommunication. Vendors are controlled within this area.

There are no major environmental concerns here, because this facility is managed well. Establishing a public RSS in this location will have socio-economic implications to the existing investment, and could be met with resistance. Furthermore, the presence of this facility is adequate enough for trucks within this region and there is no social-economic justification for duplication of services at this location. Therefore this area should be avoided because government initiatives are not meant to outcompete or stifle private entrepreneurs. This opportunity should be given to another deserving center.

- Services and facilities around the proposed site are:
 - Hospital
 - Restaurant
 - Vegetables sales
 - Hotels
 - Petrol station





Makindu

Makindu Town is located in Makindu Location, Makindu District of Makueni County. Makindu lies approximately 356 kilometres by road, northwest of the coastal city of Mombasa. This town started as a rest camp for railway construction workers on the Kenya – Uganda Railway project. An important landmark in this town is the Sikh temple that was built at that time, still bears reminiscence to the railway building days. The temple was a place of worship and social centre for many of the workers from India. The temple is well preserved and offers lodging to travelers who stop by. The climate of the area is semi-arid, with long rain seasons between May and June, and short rains in September to October. The population is low and the residents of the surrounding area are mostly of the Kamba ethnicity that keep animals and grow legumes and maize. Makindu town has a variety of hotels and lodges, bank, bars, police station, and hospitals. It is served by road, airport and railway, and has telecommunication, electricity and piped water from Chumbe river.

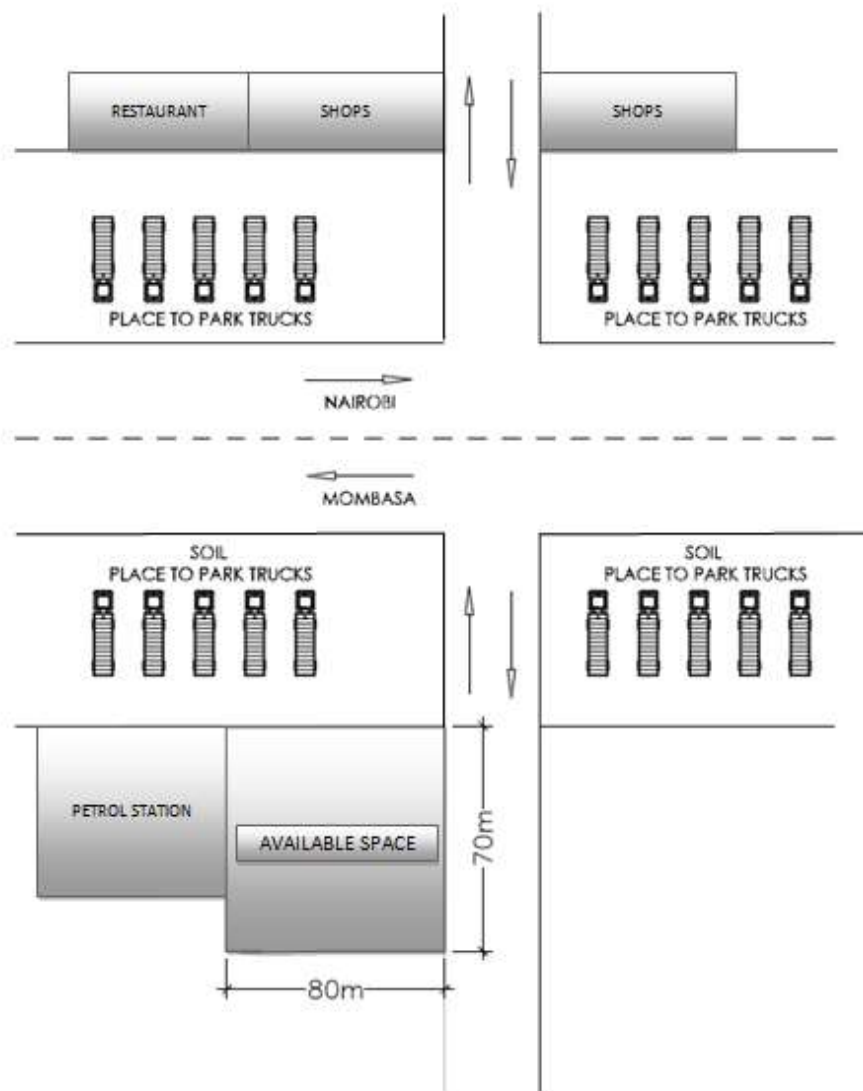
Currently, trucks use a side parking within the town that can accommodate about 10 trucks. The residents of the town attest to the fact that the economy of the town depends heavily on the A109 highway, particularly the truckers despite the negative impacts of the same. The idea of implementing a modern RSS will be welcome because it is perceived to increase the number of trucks that park in this town. There is land available here that was earmarked for a lorry park and market, but funds have never been availed for implementation.

The surrounding land is semi arid and can only support limited agricultural practice. Therefore the local residents, especially the youth migrate to other towns and cities to look for employment opportunities. The other residents eke a living as traders, carvers and pastoralists. The proposed RSS will widen economic opportunities for trade and it is welcomed.



There are concerns about the town's water supply that is fairly erratic and would need to be complemented with another source.

- Services and facilities around the proposed site are:
 - Market
 - Mosque
 - Two petrol station
 - Toilet
 - Hospital
 - Mosque
 - Restaurant
 - Vegetables sales
 - Hotels





Masimba

This small town with a rich history that dates back to the time of the construction of the Kenya-Uganda railway is about 330 Kilometers from the Mombasa Island. It is located in an area with improved rainfall and soil conditions that favour cultivation of crops and keeping of livestock. It is inhabited by Maasai, Kamba and Taita communities but other tribes from Kenya are also found here.

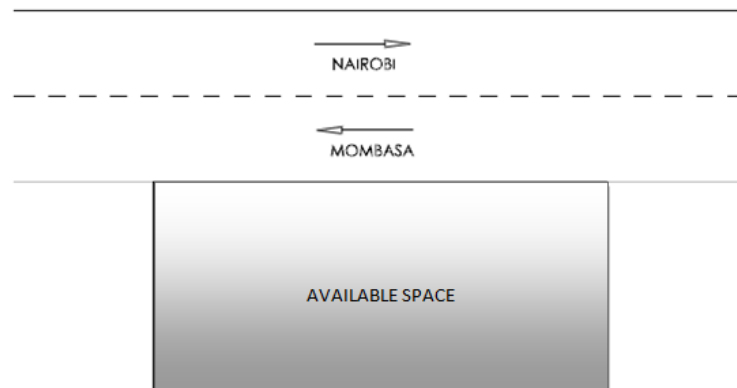
This one-street town is lined on both sides with permanent structures used as shops, hotels, bars, butcheries and fuel station. Other services include piped water, electricity and telecommunication by the major mobile service providers, and there is the GoK Health Center run by the GoK, administration and regular police offer administrative services.

Currently this town has a small paved side parking for trucks and other vehicles that pass through the town. However, at peak times during the evening, excess trucks that cannot fit there park in the line along the road reserve and in front of the shops and lodgings.

The traders in this town engage in farming and other activities as well, and their livelihood is not so heavily depended on the A109. However, they don't mind having a RSS located here because they see it as an opportunity for getting market for their produce, and opportunity for transporting their goods to far off markets. They also argue that cases of siphoning of fuel from trucks or prostitution are not so rampant.

Environmentally, this center faces challenges of nonexistent solid waste disposal facilities as each plot owner devices his own disposal facility, there is no town planning.

- Services and facilities around the proposed site are:
 - Petrol Station



Emali

Emali Town sits on the border of the Kamba and Maasai People. It started out as a place for the exchange of goods and services between the two tribes. To this day there are still market days, usually Fridays when Maasai come in with their livestock to trade. However, the town has grown from a trading center to a large vibrant town with a large population that engages in commercial activities in this town. There are banking services, religious and cultural centers, shopping malls, public and private health facilities and provincial administration. Emali town forms the junction to Wote and another to Oloitokitok, and therefore links these places to the A109. The surrounding land supports pastoralism and crop growing. Maize and horticultural products are marketed in this town. It is common to find hawkers along the road selling products to travelers.

This town is currently used as a truck stop, where the trucks park by the roadside. Some park in front of certain bars and lodges where there is parking space. The truckers pay for security services to the night guards, but when they park in front of the hotels, the institutions provide the security. There are adequate hotel, lodging, banking and telecommunication services to cater for the truckers, but parking space may not be available within town. For that reason, suitable parking could be located out of the CBD, and away from the KPC pumping station and the railway line.

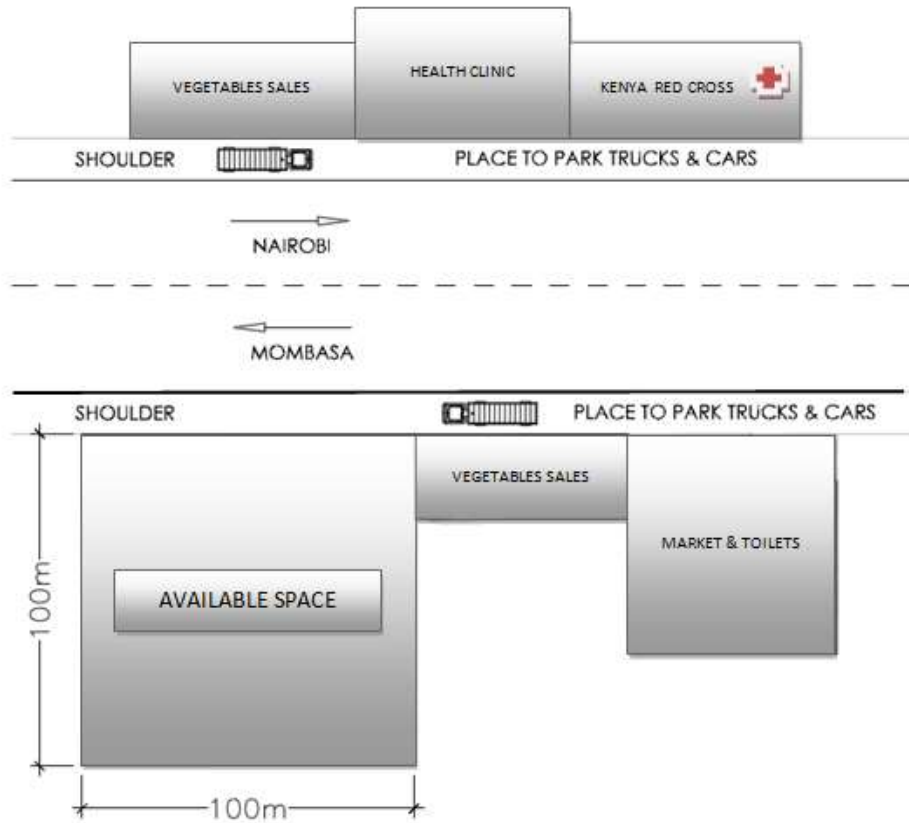
Some features of this place are:

- Parking along the road reserves poses danger to other traffic especially at night when visibility is poor;
- The trucks take up all available parking space including what is meant to be used by matatus and buses;
- Uncontrolled hawking of farm produce to travelers causes danger to traffic and the hawkers;
- There are challenges of disposing of solid waste resulting from agricultural produce and other town waste,
- The existing truck park has a very rough surface that was poorly repaired by the town council.

- Services and facilities around the proposed site are:
 - Petrol Station



- Vegetables sales
- Wellness centre
- Health clinic
- Toilets
- Market

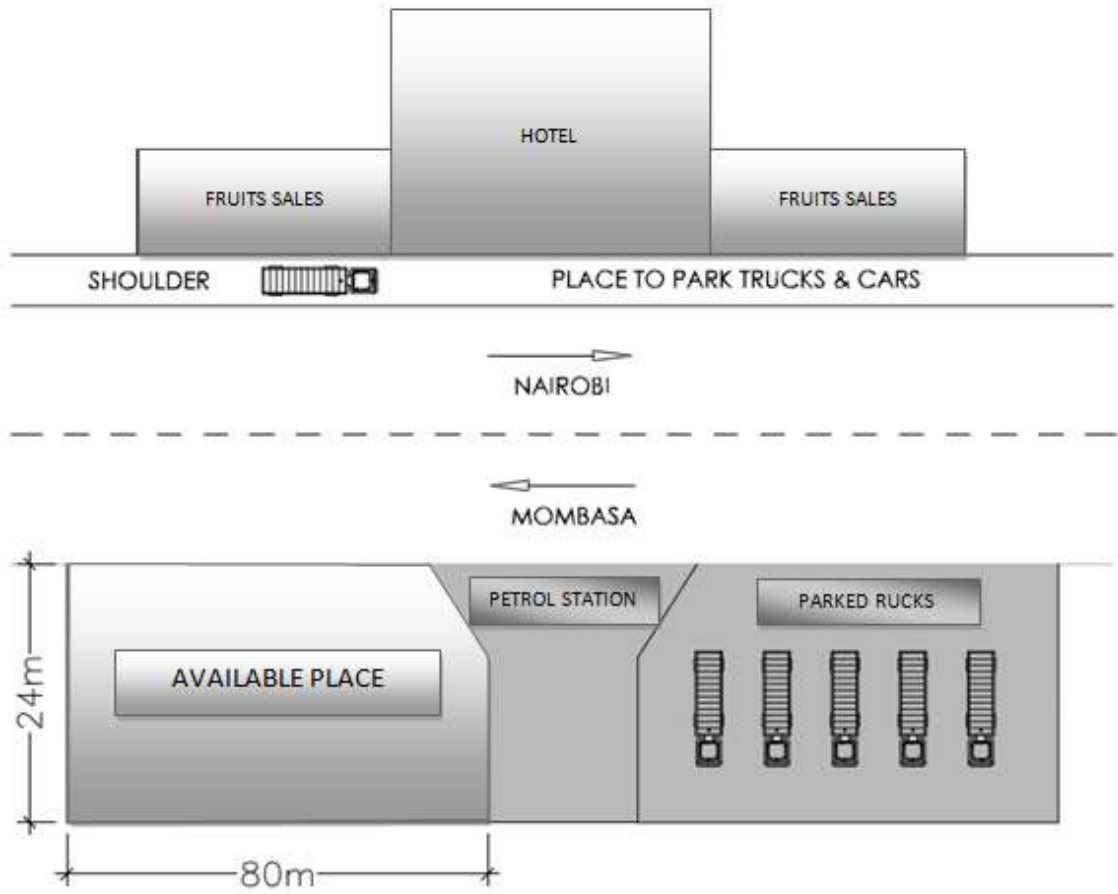




Sultan Hamud

Sultan Hamud is located 390 km from Mombasa and 116 km from Nairobi. Administratively, Sultan Hamud is a town in Nzau County Council in Kasikeu division of Makueni District and politically it is in Kilome Constituency. This vibrant town is a result of agricultural activity and mining in the neighborhood, and it's a junction town to Kasikeu in the North and Loitokitok to the south. There is significant encroachment by shops and other buildings on the road reserve in this town, making it challenging for the trucks that park by the roadside. However, a small lorry park that can accommodate about ten trucks serves the truckers currently and there is need to expand it to meet the demand.

- Services and facilities around the proposed site are:
 - Petrol station
 - Vegetables sales





Salama

In Salama there are two paved lorry parks that is currently in use, a bigger one on the right as you head to Nairobi from Mombasa that can accommodate about 50 trucks and a smaller one to the left that can cater for half the number. This center is a favourite stop for the truckers after a long steep climb on the escarpment. The trucker pays Kshs 200 for security to the night guards and the truckers use toilet and bathroom facilities in the neighbouring lodges and hotels. This market center will greatly benefit from a RSS, because the center is a favourite stop-over for trucks. The center has the capacity and the needed facilities to cater for the truckers.

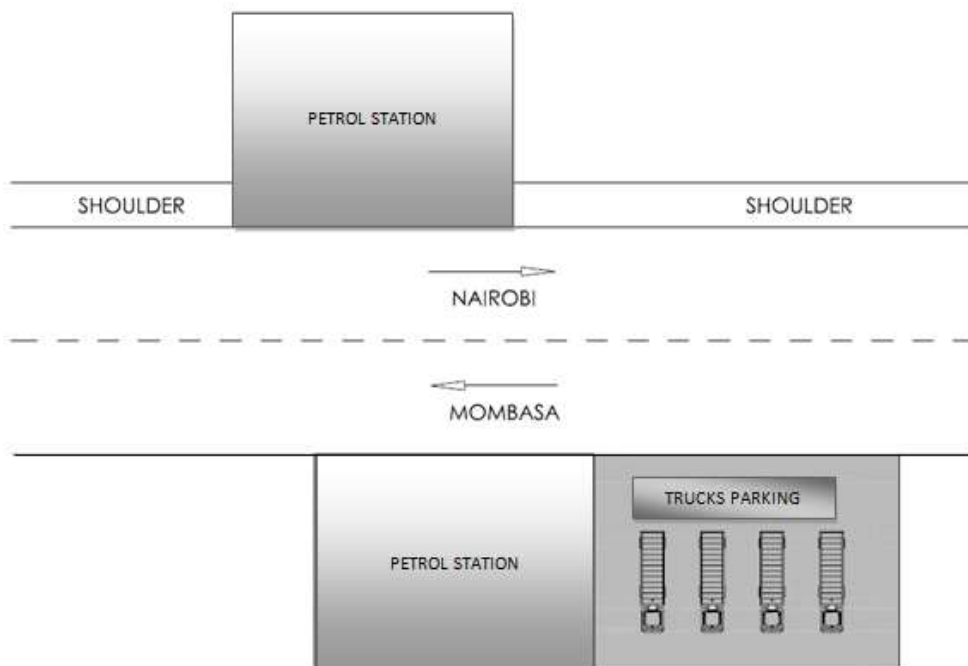
Junction to Machakos

This junction town located 61 km from Nairobi, is a favourite stop for the truckers who prefer to stop here to avoid peak hour traffic jams in the city of Nairobi. The trucker pays Kshs 200 for security to the night guards and the truckers use toilet and bathroom facilities in the neighbouring lodges and hotels. It has fairly new settlements and services found here include bars, hotels and restaurants, places of religious worship, and truck repair services.

This center is a fairly new settlement that is growing very fast, benefiting from the population in Nairobi that seeks for cheaper and convenient areas to settle. The town has no crowding problem, though the drainages, access roads, street lighting and solid waste disposal are still a challenge here.

- Services and facilities around the proposed site are:
 - Restaurant
 - Handicraft
 - Mosque
 - Petrol station

Truck parking during the night





ROUTE A109: NAIROBI TO MALABA (KENYA SECTION)

Maai Mahiu (Route B3)

There is a lorry park constructed in this town which has a wellness center that is run by a resident Doctor and is well equipped. The park is paved and can accommodate about 100 trucks. There is a public toilet about 15 meters from the RSS but is in dilapidated state with no running water. The town also faces challenges of sewage and surface runoff, especially in the wet season.

This town is a favoured parking spot because it forms arrest point after a steep descent on the escarpment. It has many affordable hotels, with bathroom and toilets with running tap water. The parking costs 100 shillings payable to the local night guards. However, the RSS shows evidence of poor maintenance, lack of waste disposal facilities and of perimeter fence.



(a) The wellness center providing medical services



(b) The deteriorating state of the parking



(c) Drainage challenges, with the existing public toilet near the park marked with an arrow

Naivasha

Naivasha is a market town in Nakuru District in Nakuru County, lying North West of Nairobi. It is 35 km from RSS at Maai Mahiu and 91 km from Nairobi, and is located on the shore of Lake Naivasha and along the Nairobi - Nakuru highway and Uganda Railway. The town had an estimated urban population of 38,366 in the year 2010. The main economic activity here is dairy farming, horticulture and tourism.

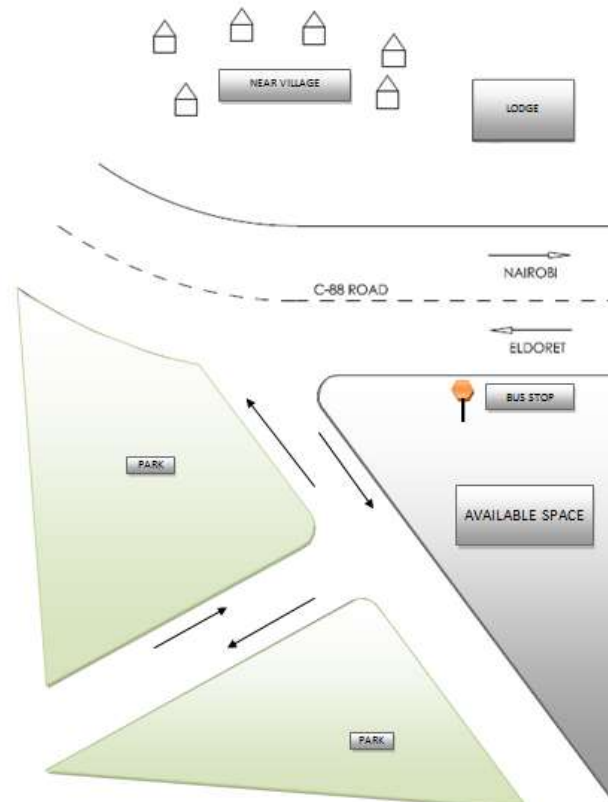
Being a large administrative, municipal, and commercial center, this town has no convenient parking for trucks, even though there are many and varied hotel and



lodges. All side parking is designated by the town council as car parks. The few trailers that have to enter into town to offload goods or for any other reason park in front of the few lodges that are endowed with adequate parking space at the front. However, most truckers avoid this town decriing the high cost of accommodation and meals.

The main features of this point are:

- Naivasha town is off the A104, therefore the major social and environmental concerns caused by the truckers is not easily quantified;
- There is concern that the trucks that park along the sides of the road near the junction to Maai Mahiu are creating traffic snarl ups and risk to other motorists;
- There is concern that buses travelling to and from Nairobi/Mombasa that get into Naivasha town to drop off or pick passengers from no designated point what is not safe especially at night.
- Services and facilities around the proposed site are:
 - Restaurants
 - Banks
 - Hotels
 - Petrol station
 - University
 - Post office





Gilgil weighbridge

There is a small lorry park at this station which was intended to cater for less than 10 trucks as they await the weighing process, but because of increased road traffic and inefficient weighing and customs system, there is a long line of trucks that extend beyond the park and use the road shoulders and reserves.

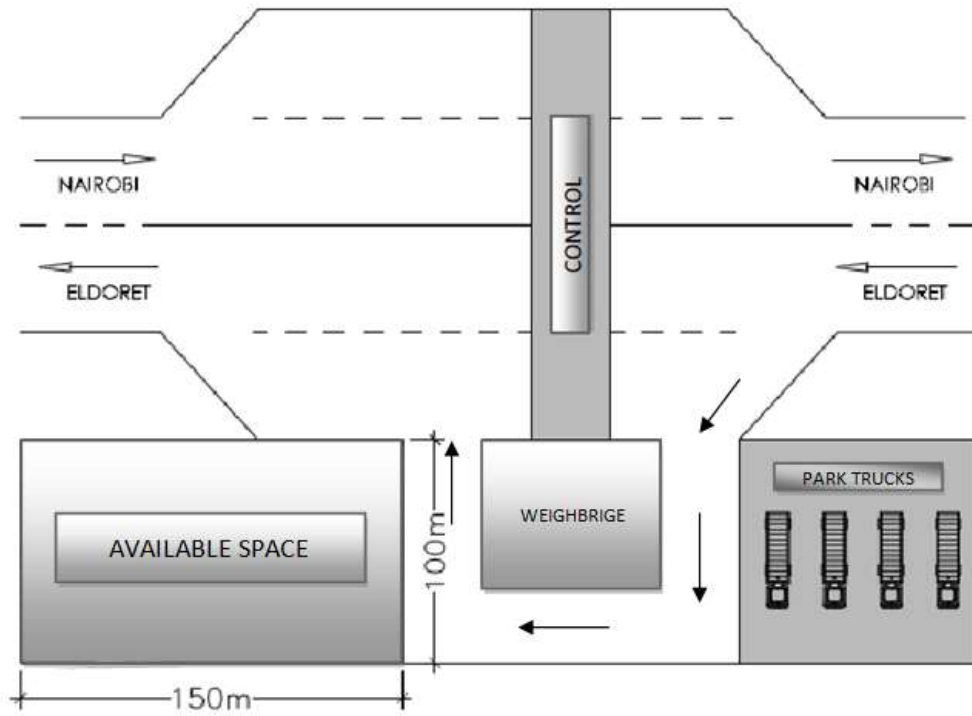
The toilet facilities that were provided at the weighbridge are run-down and in bad state, and the local center coming up near the weighbridge has no accommodation, toilets and rely on water vendors. Within the Customs area there is no rest stop, but limited temporary parking area that can only be used during the clearing process.

The large number of trucks that stop here has resulted to the upcoming of roadside kiosks and hawkers who sell foodstuff to the truckers. There are no RSS and clearly the state of affair needs to be improved.



The main features are:

- Trucks avoid parking on the road reserve in wet weather because the black cotton soil becomes sticky; instead they park along the road creating traffic snarl ups.
- There are no proper hotels and lodges to cater for the truckers needs as they await to clear with the weighbridge/customs;
- Truckers usually use toilet and bathroom facilities in the hotels and lodges, which in this case are few and in bad state;
- Truckers decry the poor and slow services at the weighbridge and customs offices as these cause the long queues of trucks;
- There is security provided by the police at the weighbridge point. But there are cases of muggings and theft of goods from trucks in the long queues behind the weighbridge.
- The traffic volume is 800 trucks with goods and 200 trucks empty per day.
- Services and facilities around the proposed site are:
 - Coal sales
 - Drink sales
 - Fruit sales
 - Food kiosks





Nakuru

Nakuru is 160 km from Nairobi. Most trucks don't stop in Nakuru because the cost of living is high; there is a problem with finding parking, security concerns and also because of the town's by-laws that prohibit stopping along certain streets.

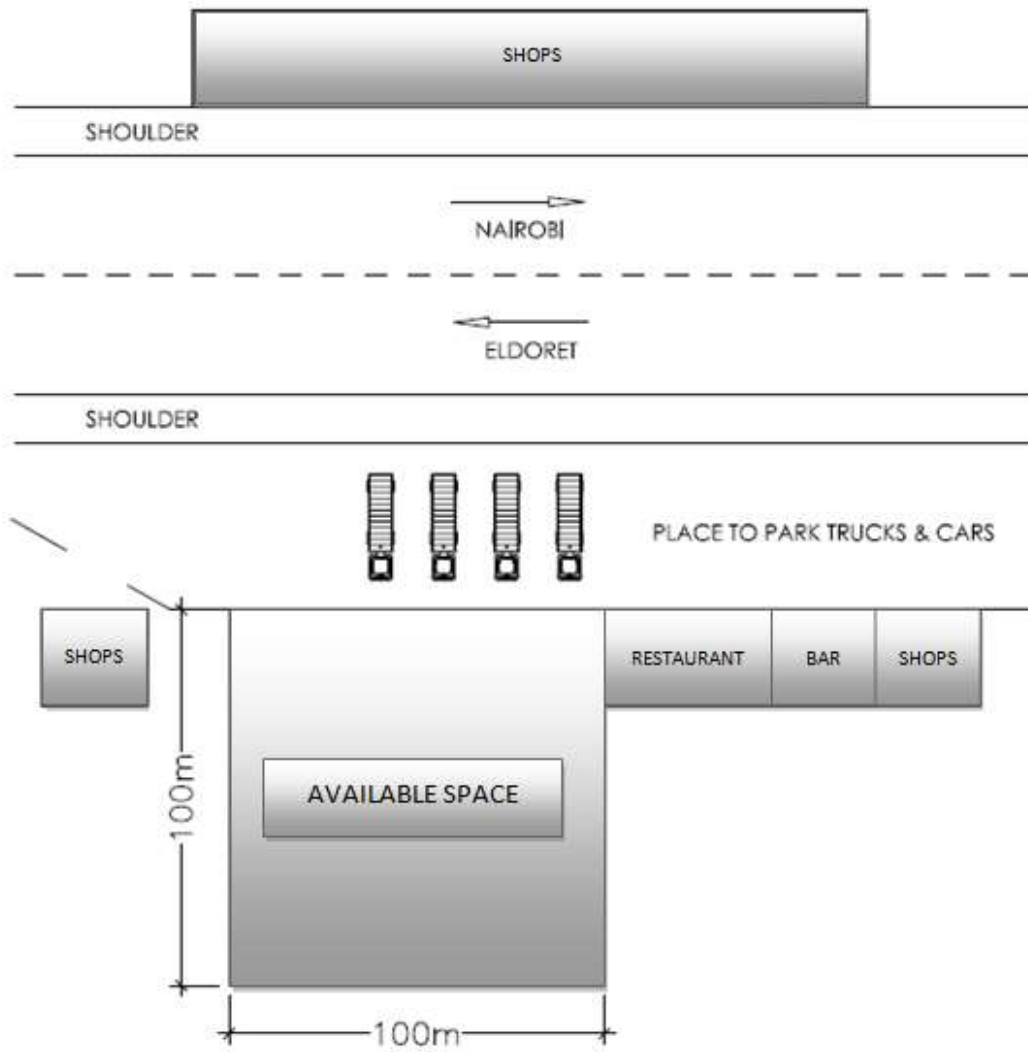
For that reason, trucks will only stop in the town to load or offload, but there are some parks in the outskirts of the CBD especially at the petrol stations that located near the start of the dual carriage way as you approach town from Nairobi. This also forms a favourite stop for the bus companies plying to various destinations in western Kenya from Nairobi or Mombasa.

A RSS is proposed for this area for the following reasons:

- This will serve the bus companies that transit through Nakuru;
- This will serve truckers on transit to other destinations through Nakuru that currently park in residential estates, petrol stations and road reserves; and
- This will serve the many trucks that stop in Nakuru to collect fuel from the KPC depot and no parking facility is provided.

The proposed RSS should be located on the A104 at the start of the dual carriage way as you enter the town from Nairobi not far from the KPC depot. However, it should avoid the high population area, the railway reserve, the wetland, and the road reserve.

- Services and facilities around the proposed site are:
 - Coal sales
 - Drinks sales
 - Fruit sales
 - Vegetables sales
 - Restaurants
 - Trucks parking
 - Shops
 - Petrol station
 - Truck repair
 - Security services
 - Toilets





Salgaa

It is 31 km from Nakuru to Salgaa, and 192 km from Nairobi to Salgaa. This is undisputedly the largest truck stop in Kenya. It is estimated that truck numbers can reach 300 during dry seasons when truckers park all along the roads and the designated parks. It is located in Mosop Location, Rongai District of Nakuru County. Salgaa is chosen by truckers for various reasons; the long steep escarpment climb after the town which truckers avoid after 6 pm, cheap food and accommodation, a vibrant nightlife, and located on a junction connecting routes to Elburgon and Rongai.

Salgaa town has electricity, telecommunication, piped water supply, but waste disposal is via pit latrines. It also has a police station located by the roadside and the town council offices. It has affordable and adequate hotel and lodging facilities which have in the past accommodated trucks parking here. The truckers have to use toilet or bathroom facilities available in the hotels. Salgaa also has a wellness center that is equipped and run by the GoK. However, it has no banking services and public hospital.

The existing truck park has loose surface soil that turns muddy when wet and dusty when dry. Salgaa has serious drainage problems and the town floods during peak rainy season. For that reason, truckers avoid using the designated park in wet weather.

This town is a suitable candidate for consideration for the RSS, which should be located on land currently used for parking, but additional land could be sourced for a bigger park. The residents welcome the trucker's presence because they boost the local economy.



(a) Drainage problems

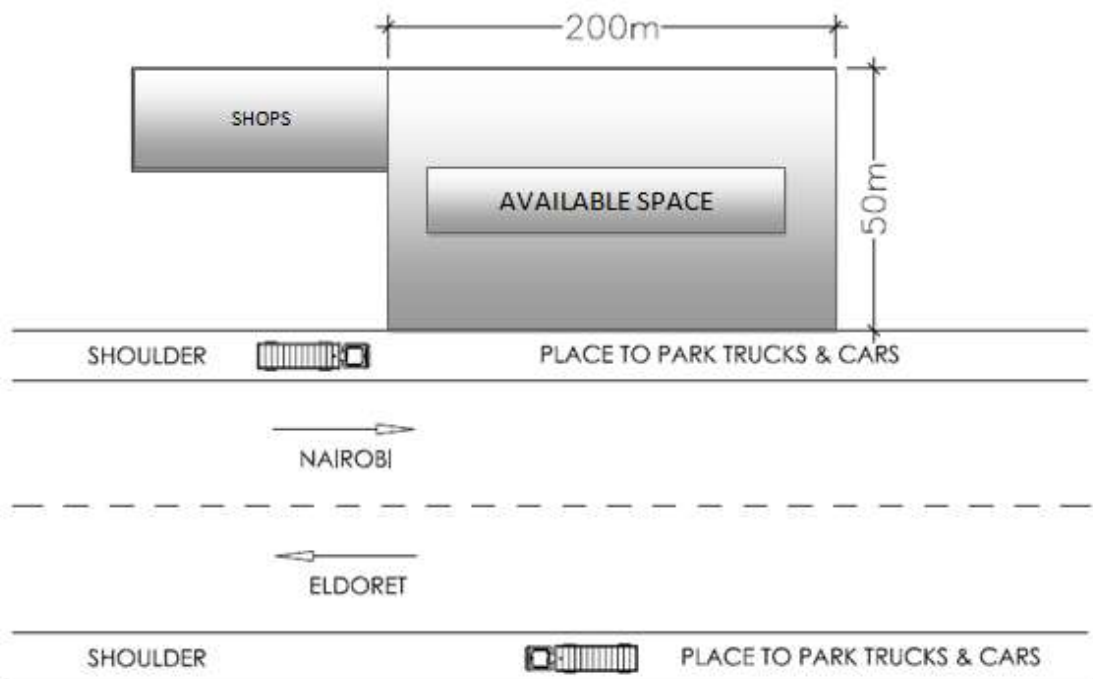


(b) Unhygienic pools of water in front of a popular facility



(c) and (d) The parking becomes wet and unusable in wet weather making lorries to park by the roadside.

- Services and facilities around the proposed site are:
 - Hotels
 - Shops
 - Restaurants





Junction to Molo Town

This junction is located 4 kilometers from town and has settlement established primarily because of its fertility and vast vegetation. It is one of the coldest places in the country.

This is another suitable location for locating a RSS, because currently it is used by approximately 5 trucks for night stopovers, after a long steep climb of the Mau escarpment. A small shopping center is coming up at this junction, and there is a defunct yard that was used by the road constructors.

Mau Summit

Mau Summit Township is 30 km from Salgaa and 60 km from Nakuru. It is located at the junction where the A104 road meets the B1 road to Kisii, Kericho, Kisumu and South Nyanza counties. The area is northwest of the Mau Forest Conservancy and is diverse in its population of farmers and entrepreneurs. The B1 is currently under construction and a lot of traffic avoids it. However, in the past, Mau Summit has been an important truck stop for vehicles destined to Uganda Rwanda, Burundi, South Sudan and Congo through the Malaba and Busia border points. It has a small lorry park opposite the T junction which can accommodate about 10 lorries. Occasionally other trucks park along the roads citing poor conditions in this lorry park during wet weather. The park has surface drainage challenges, lack of waste disposal facilities and encroachment by hawkers. The town serves the following functions: market for agricultural produce, petrol stations, hotels and lodges, truck servicing and repair.

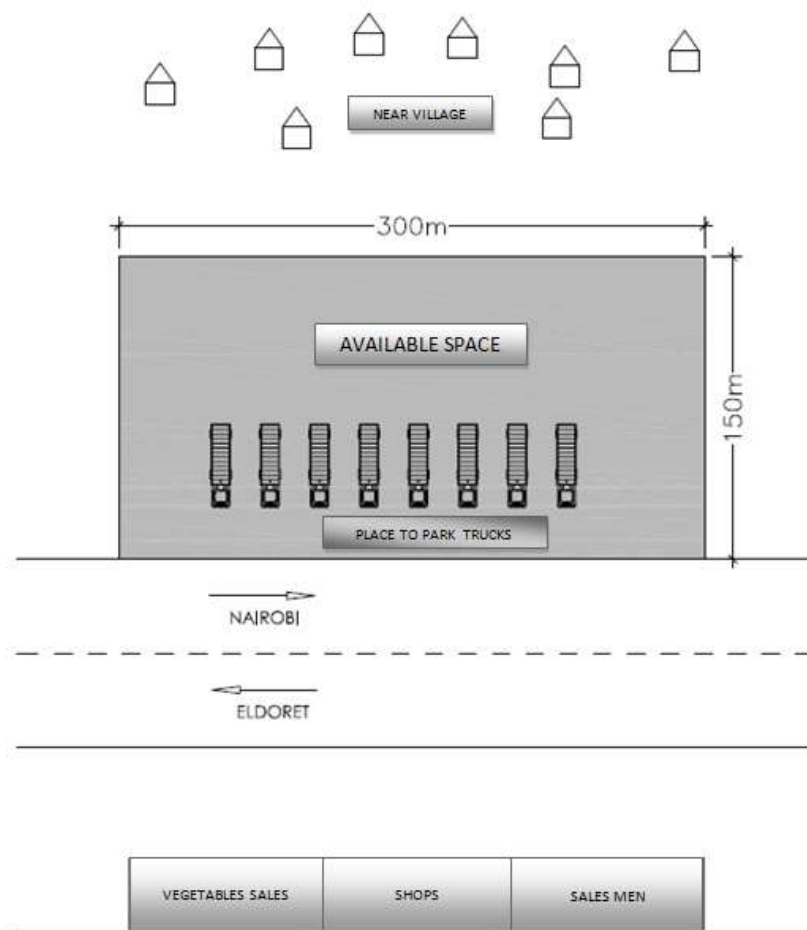
The main features of this place are:

- The existing lorry park is at the foot of a hill and is inclined at an angle making it unsuitable for parking;
- The existing park is small and excess lorries park along the A104 endangering the lives of other motorists;
- There is unplanned linear growth of the town along the A104 and B1 roads;



- The area has drainage challenges especially in wet weather;
- There is an outcry over AIDS/STI, prostitution, family break ups and other social vices which the locals attribute to the truckers. Hence there is need to provide healthcare facility to take care of this need;
- The existing lorry park should be considered for upgrading to acceptable standards. However, this should take cognisance of the fact that Mau Summit is the proposed location of the construction of grade separated interchanges between the A104 and the B1 roads, to be funded by the International Development Association (IDA) toward the cost of the Kenya Transport Sector Support Project.

- Services and facilities around the proposed site are:
 - Hotels
 - Salesmen
 - Fruits
 - Vegetables
 - Bazaar
 - Cloth sales
 - Restaurants
 - Petrol Station





Burnt Forest

This town is 56 km from RSS in Mau Summit and 116 km from Nakuru. This vibrant town with a population of about 4,925 people (KBS, 2009) is astride the Nakuru-Eldoret highway, and is famous for its delicious beef and mutton, making it a good haven for long distance truck drivers and other travelers. The Town Council of Burnt Forest was initially part of Wareng County Council until 1997. Town Council of Burnt Forest lies within the newly created Eldoret East District in Uasin Gishu County.

This town has a number of affordable and adequate hotel and lodging facilities which have in the past accommodated trucks parking here. The truckers have to use toilet or bathroom facilities available in the hotels. It also has mobile money transfer, electricity, piped water, and telecommunication. The residents welcome the trucker's presence because they boost the local economy.

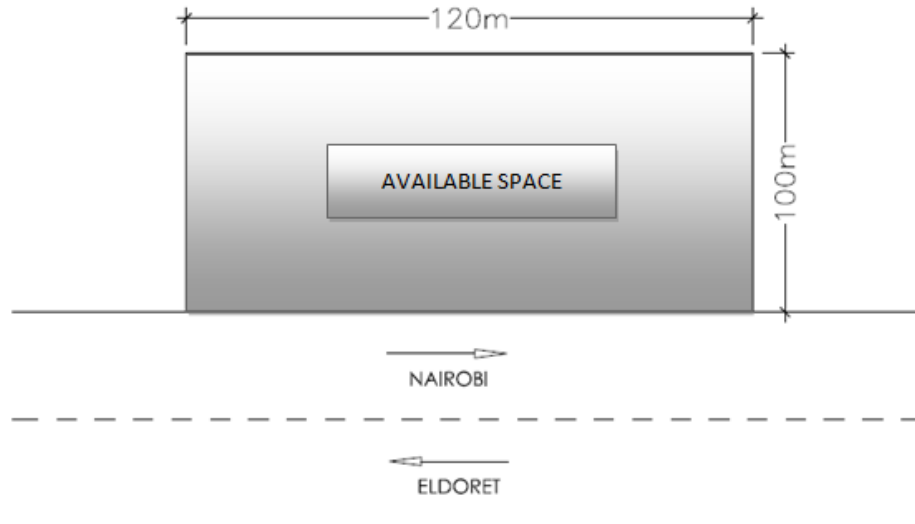
This town has a small lorry park that can accommodate about 20 lorries. However, there are potholes full of water and public toilets that serve the truckers. It also has a wellness center equipped and run by the GoK. This RSS should be rehabilitated and additional services put in place to serve the truckers better.

The main characteristics of this place are:

- This is a fragile community that is recovering from post election violence in 2008 and will benefit immensely from facilities that could enhance social cohesion;
- It is inhabited by Kikuyu and Kalenjin and other tribes, who are predominantly farmers but also engage in trade and commerce in the town;



- The ongoing road rehabilitation project seems to have overlooked drainage and lorry park in the area and this is a raising concern.



Eldoret

Eldoret is a fast growing cosmopolitan town with a population of 289,380 (2009 census). The town is governed by a Municipal Council and is politically split between Eldoret North, South and East Constituencies. It is the Uasin Gishu County headquarters, besides hosting a large produce market, Universities, an International airport and major industries that process milk textiles, wheat, pyrethrum and corn. The town has several private and public hospitals including a referral hospital, high altitude sporting facilities, and a wide array of commercial ventures. Eldoret is surrounded by a very large productive agricultural area, and for this reason has many industries and serves the needs of many farmers.

The Trans -African highway (A104) passes through the town. It is also served by the Kenya-Uganda railway which has an oil pipeline in its reserve. Because of increased traffic volumes and encroachment on the A104, traffic congestion is a problem in this town. This is made worse by the trucks that have to snarl across the town on their way to and from the west.

The main features of this place are:

- Clearly, this town needs a RSS to cater for the needs of the vehicles on transit. However, several factors will have to be considered when determining the location of the RSS. A bypass has been designed to reroute transit traffic out of the city center, and this has a bearing on the planning for the RSS.
- The RSS should be located where it will be able to cater for the many trucks that come to Eldoret KPC depot to collect fuel in addition to the trucks that transit through the town to and from the west. The trucks that park in the pipeline area have serious problem with parking because the few private and public facilities in the area cannot cope with the demand. This leads to many of them parking on the roadside and in residential areas, leading to accidents.



- There is concern about the safety of the residents when trucks park in front of hotels and bars located in residential areas. With a new RSS, this will be resolved.

Jua Kali

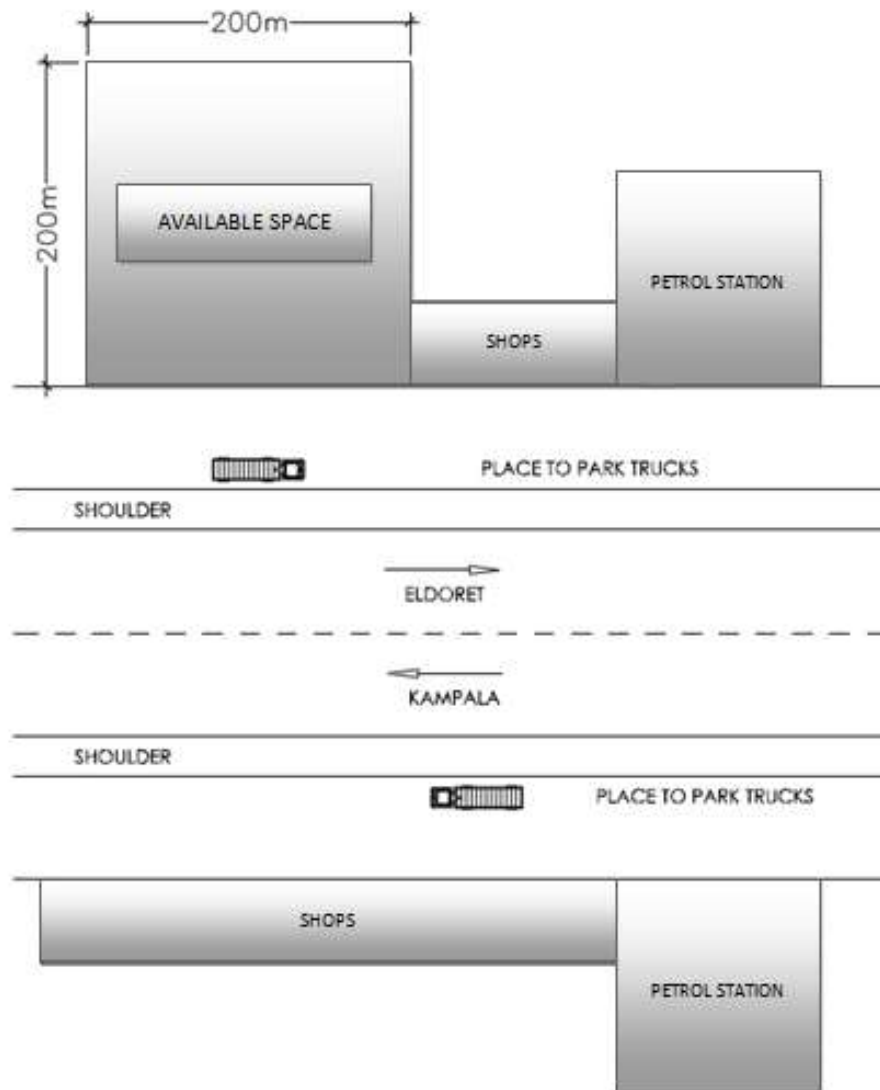
This small market center is 14 kilometers from Eldoret as you head to Malaba. It is currently a favoured truck stop outside the congestion of Eldoret town. The town is governed by County Council of Wareng and is politically in Turbo Constituency and Uasin Gishu County. This center is surrounded by a very large productive agricultural area, engaged in commercial dairy and cereal farming.

This town is a favoured stop for trucks that come to Eldoret KPC depot to collect fuel in addition to the trucks that transit through the town to and from the west. This center offers a suitable alternative to parking in Eldoret town-

The center experiences drainage problems in wet weather occasioned by the flat terrain of the area. It is anticipated that the ongoing road rehabilitation will improve the surface of the park, the drainage, provide parking facilities and improve the drainage.

The main features of this place are:

- The existing park is small and excess lorries park along the A104 endangering the lives of other motorists;
- There is unplanned linear growth of the town along the highway;
- There is an outcry over AIDS/STI, prostitution, family break ups and other social vices which the locals attribute to the truckers. Hence there is need to provide healthcare facility to take care of this need;
- Services and facilities around the proposed site are:
 - Shops
 - Fruit sales
 - Vegetable sales
 - Hotels
 - Two petrol station
 - Car workshop
 - Furniture





Webuye

This is an industrial town in Bungoma East /Lugari districts, Bungoma county. The town is home to the Pan African Paper Mills, the largest paper factory in the region, as well as a number of heavy-chemical and sugar manufacturers. The area around Webuye is fairly populated and the residents practice subsistence agriculture. The area around Webuye is home to the Bukusu and Tachoni tribes. The town has an urban population of 23,318 (2009 census).

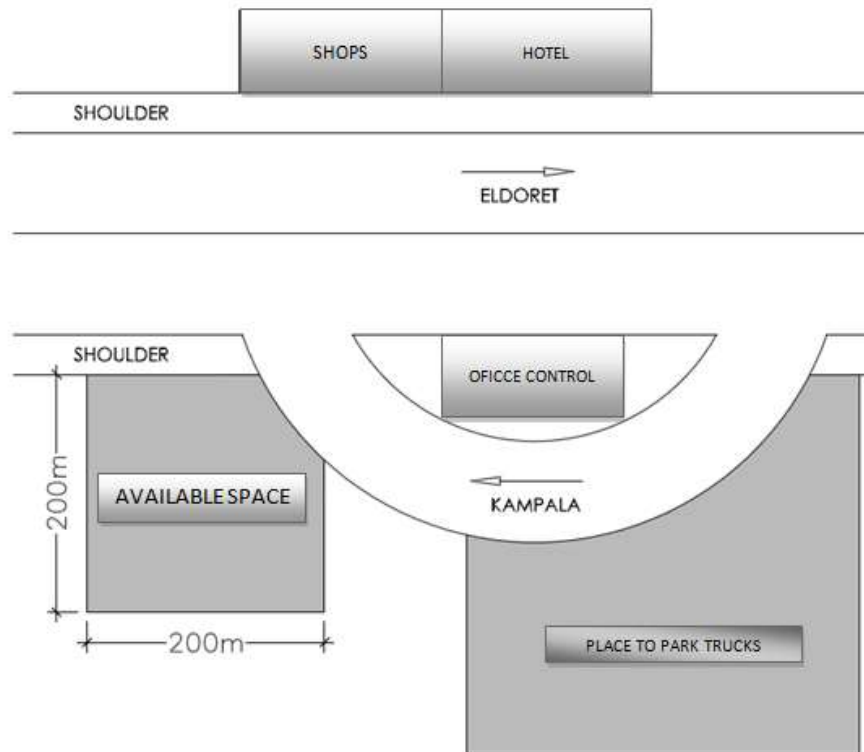
There is a weighbridge located in this town, which has a parking that can accommodate about 30 trucks. Though the inefficiency that characterises the other weighbridges in the country is reminiscent here, truck queues are not so long. It is also evident that truckers don't prefer to park in this park citing lack of security, unserviceable toilet and bathroom facilities, deterioration of the parking area and an attitude problem with the staff at the weighbridge.

However, it is notable that this is one of the well planned facilities in the country which could do well with renovation and upgrade to include missing facilities.

The main features of this place are:

- Since the collapse of the Paper factory in the town, there has been low economic activity and the demand for housing and hotels is lower. This has made truckers to venture further from their traditional stopping points along the A104 into other facilities in the town;
- Truckers decry the poor and slow services at the weighbridge and customs offices, these cause the long queues of trucks;
- The perimeter fence at the lorry park at the weighbridge is torn in many places, and bathroom and toilet facilities are not available for truckers use. Hence they prefer to park elsewhere in town;
- Webuye town center is off the A104, therefore there are not major social and environmental concerns caused by the truckers in this town;
- The traffic volume is 400 cargo trucks and 400 empty trucks per day.

- Services and facilities around the proposed site are:
 - Shops
 - Fruit sales
 - Hotel





Kanduyi (Bungoma)

Kanduyi is at the junction of the A104 road with the branch to Bungoma town, and another to Chwele. It falls under the Bungoma Municipality, Bungoma district of Bungoma county.

Kanduyi is a favoured truck stop, which use a small side parking that can hardly accommodate 5 trucks. For that reason the trucks overflow onto the road reserve, in front of the lodges and hotels, petrol stations and some use parking designed for matatus and buses.

This also forms a stop for buses and cars that stop briefly to drop and pick passengers without getting into Bungoma town. This makes this junction busy and prone to traffic snarl ups. There is need for a RSS to meet the demand of the trucks and buses at this junction.

- Bungoma town is off the A104, therefore the major social and environmental concerns caused by the truckers is experienced at this junction at Kanduyi;
- There is concern that the trucks that park along the sides of the road near the junction are creating traffic snarl ups and are a risk to other motorists;
- There is unplanned linear growth of Kanduyi along the A104 and the junctions to Bungoma and to Chwele;
- There is an outcry over AIDS/STI, prostitution, family break ups and other social vices which the locals attribute to the presence of truckers in this area;
- There is concern that buses travelling to and from Nairobi/Mombasa that don't get into Bungoma town drop off or pick passengers from no designated point here and is not safe especially at night.

Malaba

In Malaba Kenya, the following GoK agencies are represented: The Ministry of Health, The Kenya Plant Health Inspection Services (KEPHIS), The Kenya Bureau of Standards (KEBS), the Kenya Police, and the Customs and Immigration agencies. Only the Customs and Immigration agencies operate on 24/7 basis.

For a border post that handles over 1000 trucks crossing in both directions per day, there are serious infrastructure constraints which impact the operations. The access road is narrow, there is no parking. For customers seeking for service at the post there are no toilet/bathroom facilities, people queue on the veranda with no benches to sit on, there are no signs to direct people, and the facility is not friendly to the physically challenged and the aged. On the Kenyan side, there are three windows through which truckers have to pass.

Within the Customs area there is no rest stop, but limited temporary parking area that can only be used during the clearing process. RSS areas with modest facilities for drivers have been created by both private and public agencies on the Uganda side to cater for the trucking industry.

It is important to note that the World bank funded facility in Malaba that is almost 70% complete and will provide the necessary infrastructure that enable the smooth function of the border post. However, this will not have adequate parking for over 200 trucks that park at the border post. This will, however, be complemented by the lorry park in Uganda that is currently being renovated with funds from the World Bank.

All persons crossing the border, plus the truckers are not allowed to use the toilet facilities at the Customs Malaba (Kenya) side since they are reserved for the staff



only. They have to make with facilities at the hotels in the neighbourhood. However the Uganda side has newer facility that has toilet/bathroom facilities and a small waiting bay.

Socio-Economic, Cultural and Environmental Challenges faced at this border point include:

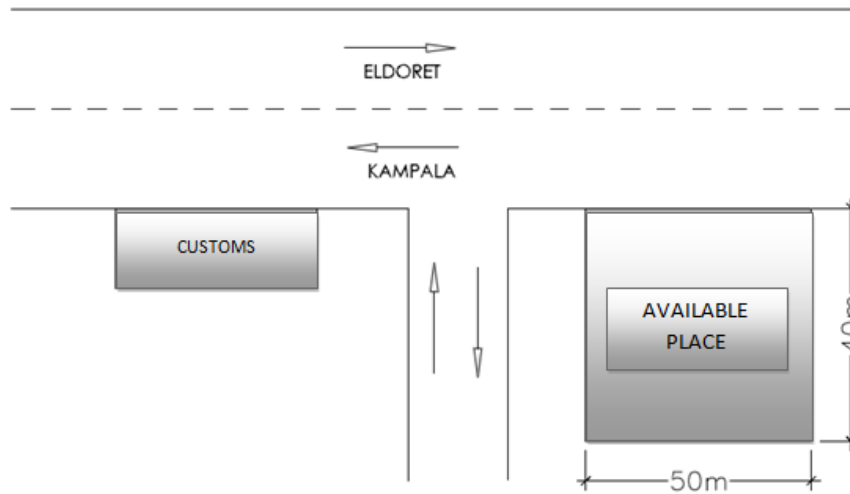
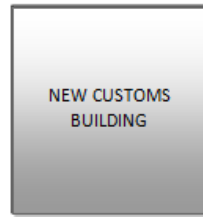
- High cross-border transaction costs lead to high cost of goods and services;
- Restrictive regulatory requirements that stifle trade e.g. uncoordinated clearance formalities, multiple certificates and permits, complex administrative procedures that keep changing frequently;
- Truckers lament that cartels working at the border frustrate the normal operations to create opportunities for them to get involved and get paid;
- Though cross-border clearance has improved in the past three years, the truckers and travellers across the border state that a lot more needs to be done. There is need for a one-stop border clearance system to be implemented;
- Clearing Agents at the border act in the interest of their paymasters, while the Border Officials have to champion the interests of the nation's economy and regional trade. This puts these organs at cross-purposes and often leads to friction;
- The Kenyan Simba System is not compatible with the Scada system in the rest of East Africa. A unified system could contribute to a faster clearance process.

Recent Initiatives to improve border/customs operations:

For two and a half years the Malaba Cross Border Traders Association and its affiliate league for the female traders has been in operation. The officials of this Joint Border Committee together with Government Officials are involved in inspecting cargo entering and exiting Kenya to cut down waiting time for transporters, ensure that the border operates for 24/7, and are now working towards transforming Malaba into a one-stop border point.

In 2012, the provincial administration and the Ministry of Transport in Kenya made an initiative to reduce the long truck queues at the border point, and for sometime the queues were gone. The local residents of Malaba town went up in arms demonstrating against this move prompting the intervention of the Ministers of Transport and Internal Security to intervene. They stated categorically that Malaba town residents (hawkers, hoteliers, car washers, watchmen, etc) benefit from the truck queues generated by the inefficiency at the border and wanted the *status-quo* maintained.

- Services and facilities around the proposed site are:
 - Shops
 - Drink sales





ROUTE A109: MALABA – KAMPALA SECTION

Busia Junction (Busitema)

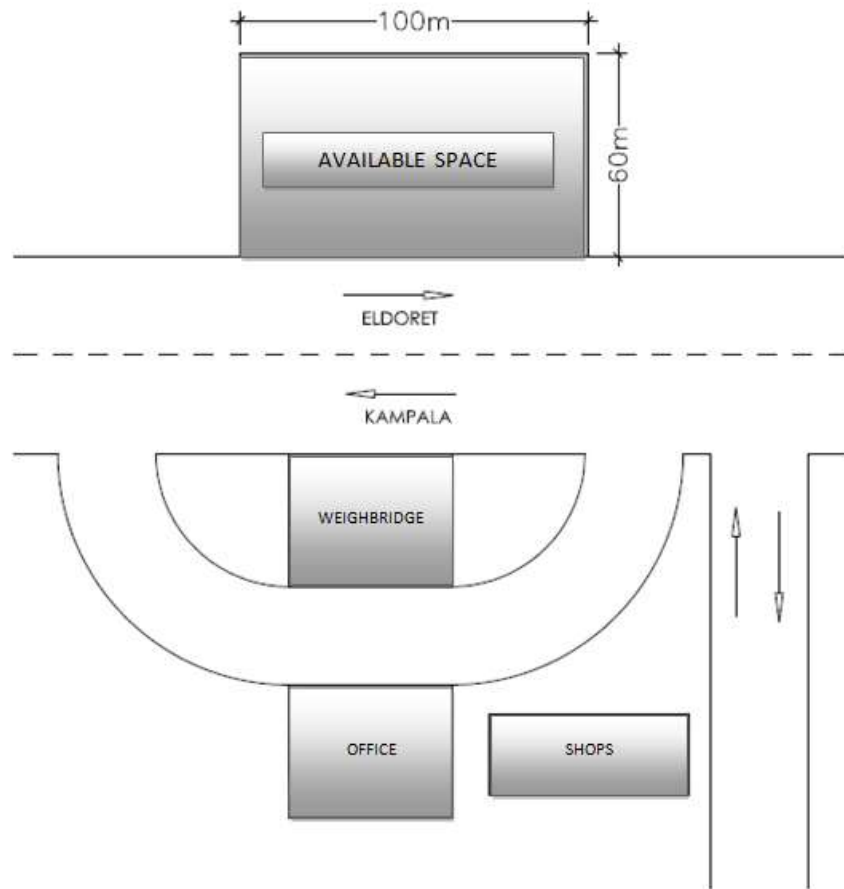
This small market center is locally known as “Corner” because it is located on the junction of the Tororo-Jinja A109 road and the branch to Busia. The area name is Busitema. It is located in Busitema Sub-County of Busia District. The junction is located approximately 13 kilometres by road, northwest of Busia, where the district headquarters are located. This location is approximately 30 kilometres by road, southwest of Tororo, the largest town in the sub-region and 43 kms from Malaba. It is at the edge of a tropical forest and currently road rehabilitation is going on here.

This center has a weighbridge and URA offices are located here. Truckers use this center because they have clear with the URA and it takes time. There is a small lorry park, but extra lorries park by the roadside. This center has affordable hotels and lodges, and the park ample security provided by the Uganda Police. However, truckers have to use bathroom and toilets in the boarding facilities. The center has running tap water, electricity, and telecommunication.

The main features of this place are:

- The locals appreciate the presence of a truck stop here because their local economy depends on it. They comment that when there is a jam with the revenue system, that is when business is much better;
- The truckers comment that the center should improve the parking facility and provide toilet, bathroom and proper perimeter fencing that will deter attacks from wild animals like monkeys and baboons;
- The truckers state that the road needs repair in this section;
- The want services expedited at the weighbridge.
- Traffic volume in the weighbridge: 200-250 trucks per day

- Services and facilities around the proposed site are:
 - Hotels
 - Drink sales





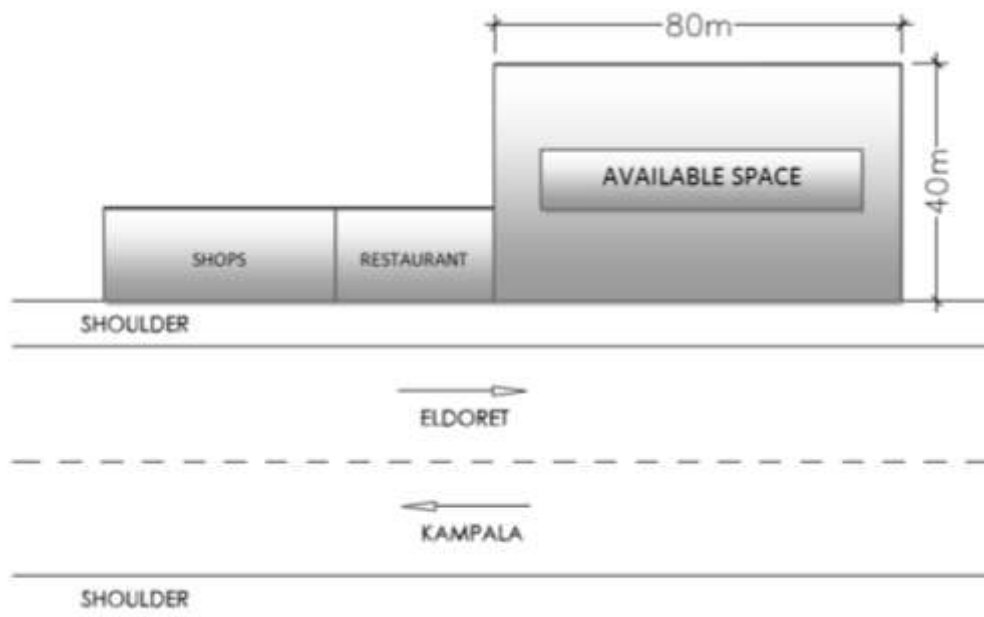
Naluwerere

Naluwerere is a market center under the auspices of Bugiri Town Council in Bugiri district, Kapianga Sub-County, Bokoli County. It is 36 km from previous RSS at Busitema and 19.7 km from RSS at Idudi. At this market center, the Kampala – Malaba road is in excellent condition having been rehabilitated recently. Other than improving the roadside drainage, the contractor also repaired road shoulders and installed road signs. Most importantly he created two linear lorry parks on both sides of the road that can accommodate about 30 lorries. The council charges between 5,000 and 3,000 shillings depending on the location on the side parking, gives receipts for the payment and provides security to the trucks.

Naluwerere has a separate plot of land measuring about 10 acres just behind the shops to the south that was designated to be a lorry park but has not been fully developed. A perimeter fence and a gate were put, but have now been vandalized.

- Services and facilities around the proposed site are:

- Restaurants
- Kiosks
- Bar





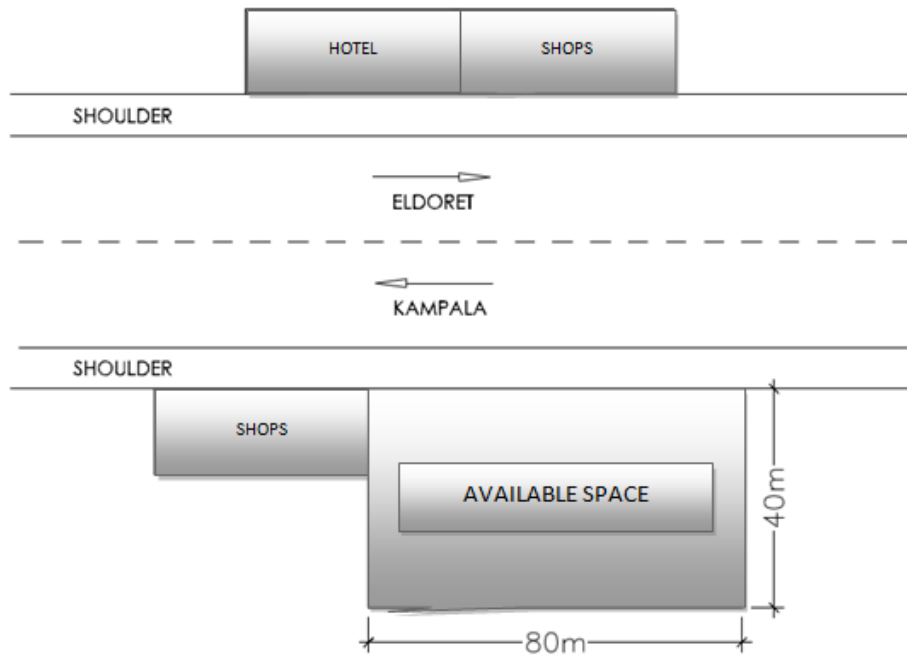
Idudi

This market centre is located in Buyanga Sub County, Iganga District in the eastern region of Uganda. Idudi is 19.7 km from RSS at Naluwerere and has a significant population ratio of Muslims to Christians.

The town is lined with protective barriers on both sides of the road, because of road surface was raised significantly above the line of shops marking the road reserve. However, there is a 200 meter side parking on the left, just before you get to the barrier from the east. The town has piped water, but waste disposal is via pits latrines and soak pits. The main road passing through the town is in excellent condition complete with drainage and road signs. However, beyond the main road, no other streets/side roads are paved.

Currently, the trucker pays Ushs 3000 for parking which are inclusive of security, and the truckers use toilet and bathroom facilities in the neighbouring lodges and hotels. This market center will greatly benefit from a RSS, because the center is a favourite stop-over for trucks. It has the capacity and the needed facilities to cater for the truckers.

- Services and facilities around the proposed site are:
 - Restaurants
 - Furniture sales
 - Bar



Lugazi

Lugazi, also called Kawolo, is a town in Buikwe District, in Central Uganda. The UBOS estimated the population of Lugazi to be approximately 35,500 in 2011. It is 27km from previous RSS at Mbiko and 45 Kms from Kampala. The following facilities are available in Lugazi town: The offices of Lugazi Town Council, the headquarters of the Roman Catholic Diocese of Lugazi, Lugazi Central Market and the headquarters of the Mehta Group of Companies that include the Sugar Corporation of Uganda Limited (SCOUL), Ugma Engineering Corporation Limited, Cable Corporation Limited and the Uganda Hortech Limited. The town is also home to the University of Military Science and



Technology, an university owned and administered by the Uganda Ministry of Defence.

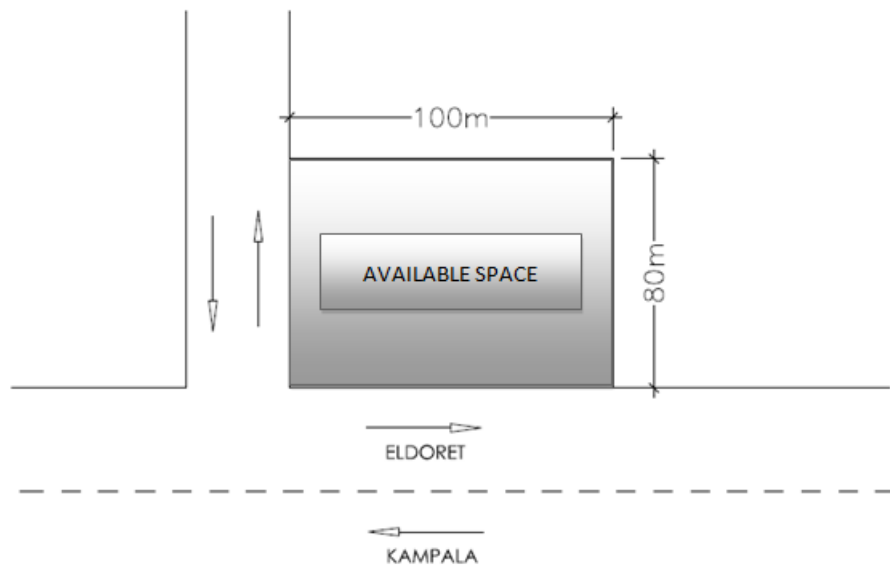
There is the Kawolo Hospital, a 200 bed public hospital, administered by the Uganda Ministry of Health, and at least five different banks in this town. The road passing through this town has been rehabilitated and is complete with drainage and signs.

Lugazi has a side parking by the roadside, which is set aside for all other vehicles except taxis and trucks. The designated lorry park is next to a taxi park and has capacity for about 50 lorries. The park has toilet charged at Ushs 200 and shower facilities charged at Ushs 1000. It should be noted that these facilities remain closed during the night and this explains the smell of urine in the lorry park. Parking costs Ushs 5000 which is inclusive of security. However, the park get gusty when dry and muddy when wet. The Park is about 200 meters from the hotels and lodges that are located in the town center, but the truckers make use of the open food kiosks that line the lorry park.

As part of the modernization plan for this lorry park, it is recommended that the open food kiosks should have improved infrastructure that should include running water and waste disposal (grey water, black water and solid waste) This will improve hygiene in the parking facility.

■ Services and facilities around the proposed site are:

- Shops
- Petrol station
- Supermarket
- Hotel
- Handicraft





KAMPALA-MASAKA-KABALE ROAD SECTION

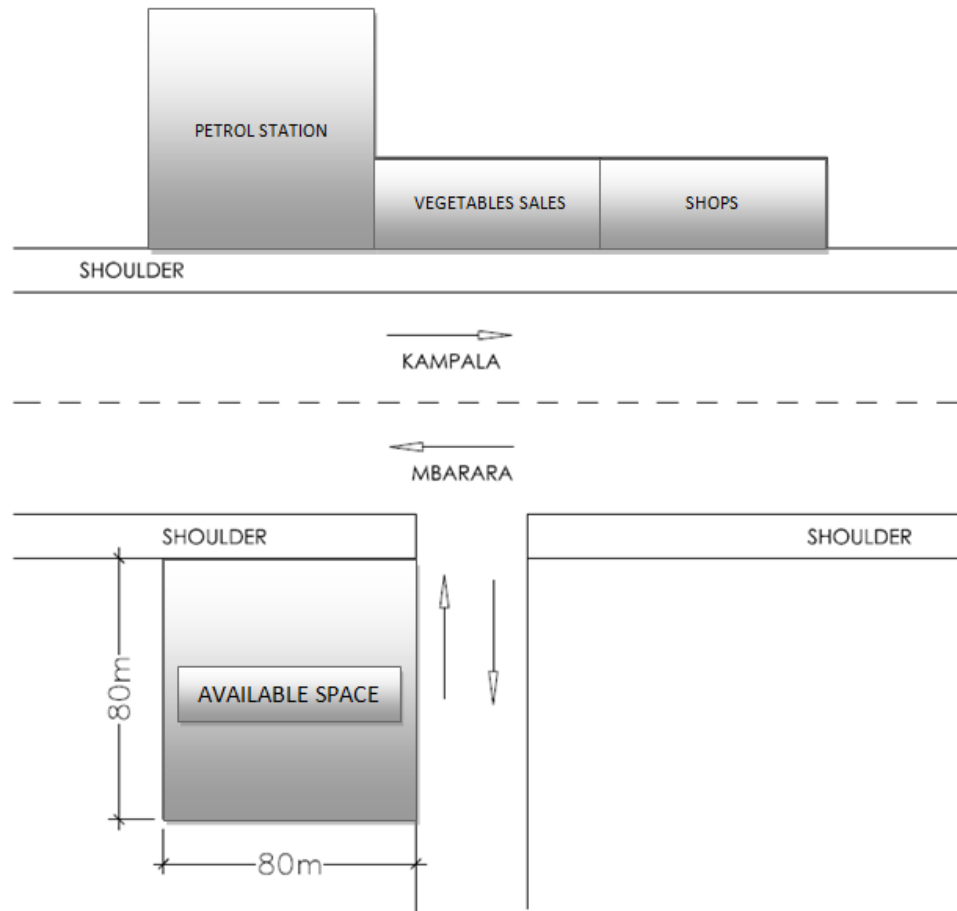
Buwama

This town is 52 kilometers from Kampala town and is located in Katunga region of Mpigi district, Buwama subcounty Maokota County. In Buwama there are two small lorry parks on both sides of the highway that can accommodate about 10 lorries each. The road was recently rehabilitated and the town drainage system and sidewalks were also constructed with the road. The parking bay here is constructed using concrete, which is rarely done. This town has bumps erected to control speeding after a spate of fatal accidents since the completion of the road. The town has piped water, a police station and a magistrate's court.

This town has in the past accommodated trucks parking here and welcomes the trucker's presence because they boost the local economy. The truckers in return consider this town as one of the safest places to park. However, the roadside parking has no toilet or bathroom facilities, nor perimeter fencing. The truckers use the hotel facilities in the vicinity.

■ Services and facilities around the proposed site are:

- Bar
- Bazaar
- Hotel
- Public phones
- Car and moto repair
- Health clinic
- Petrol Station
- Salesmen
- Vegetables sales
- Drinks sales





Lukaya

This is a fairly vibrant town located in Lukaya Town Council in Kalungu District, and is home to one of the weighbridges in Western Uganda. It is 36 kms from RSS at Buwama and 115 kilometers by road, southwest of Kampala

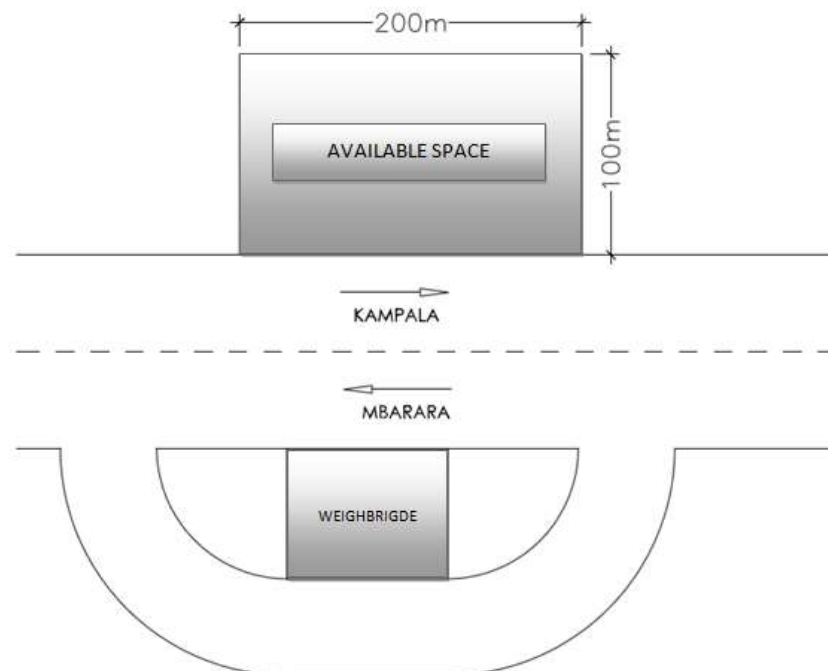
The road was recently rehabilitated and the town drainage system, sidewalks, and kerbs were also constructed with the road. It has a small private parking bay near the weighbridge station, and two other linear parking lots on either sides of the road.

This town is a favoured parking spot because it has many affordable hotels, and the private park has a perimeter wall, ample security, bathroom and toilets with running tap water. This costs the trucker 5000 Ushs. The roadside parking costs 4000 Ushs payable to the local council, but the trucker will have to use the facilities in the nearby hotels.

From Lukaya, we gathered interesting socio-economic information: the locals don't want the weighbridge there saying that it has made trucks from Tanzania to use alternative routes because of stringent weight restrictions. For that reason business has been low.

Traffic in the weighbridge is between 75 and 80 trucks per day.

- Sales and facilities around the proposed site are:
 - Hotels
 - Drink sales





Masaka road

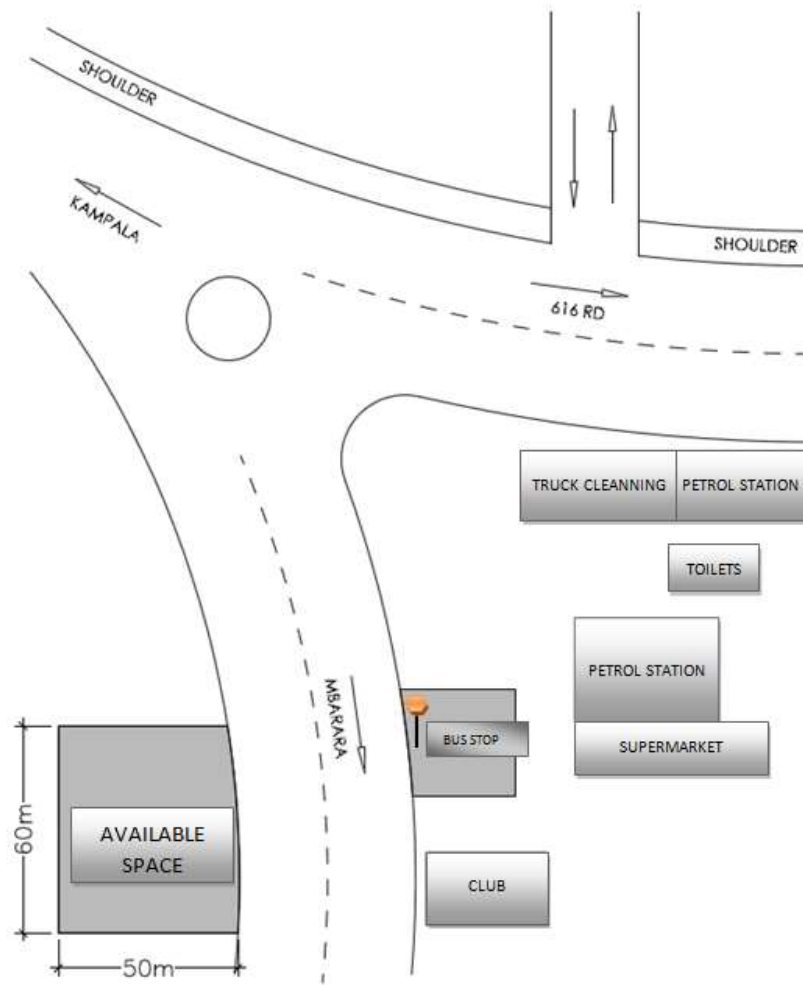
Masaka is the second largest urban center in western Uganda, and the eighth largest urban center in the whole of Uganda. This proposed RSS will be 28kms from the RSS at Lukaya, and 69Kms from next RSS at Lyantonde. Masaka is the headquarters of Masaka District and the regional hub of the Lyantonde District. It is approximately 140 Kilometers from Kampala Town, lying very close to the Equator. The UBOS estimated the population of this town to be 74,100 in mid 2011.

The residents in the district are mainly crop farmers and animal keepers, but some engage in agro-based industries for local and export markets.

This town is home to the Masaka District Administration and the Office of the Town Council. In addition, there is an army barracks for the Uganda Army, two Universities and several middle level colleges. It also hosts the headquarters of the Masaka Diocese of the Catholic Church, over ten different banks, a branch of the Central Bank of Uganda, the national Social Security Fund, private and public hospitals, orphanages and prison facilities.

Ideally, this being a large urban center, it is faced with competition for space, and this poses challenges to urban transport in general and truckers in particular. It has a bypass that diverts traffic between Kampala to the western towns, and this is what truckers use. Therefore, most of the facilities within town are unavailable to the truckers who prefer to park and use facilities in the periphery of the town.

- Services and facilities around the proposed site are:
 - Hotels
 - Petrol station
 - Shops
 - Truck and car cleaning





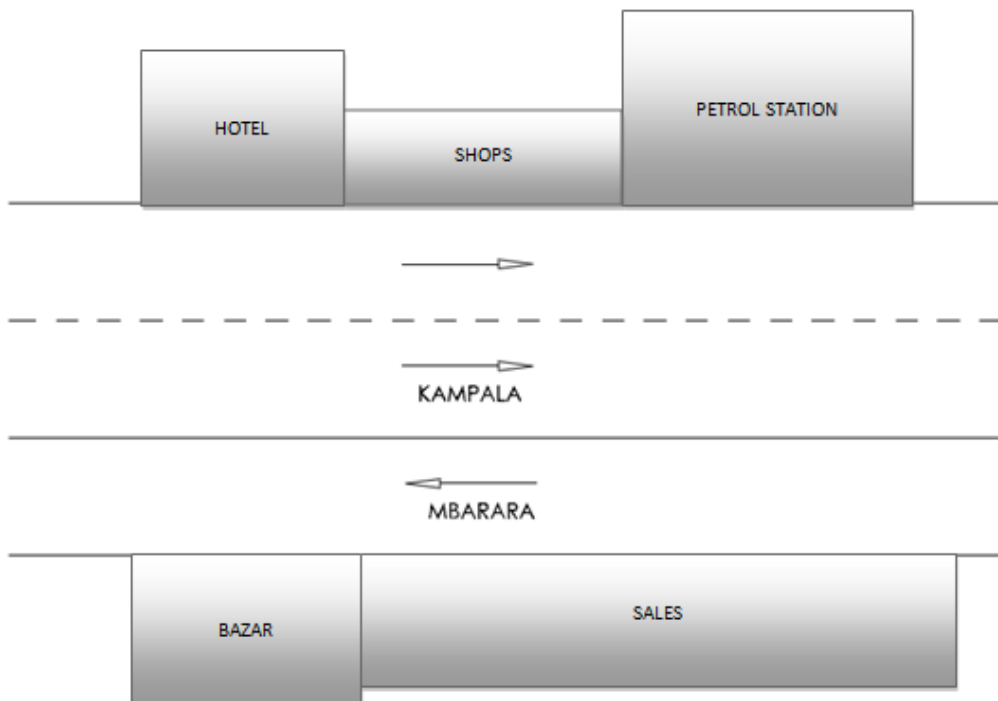
Kinoni

Kinoni Town Council manages the affairs of this small town. There is a climbing lane passing through this town that is also used as lorry parking. This possibly explains the reason why the town council erected bumps, to reduce the number of accidents resulting from a number of causes including lorries using the climbing lane as side parking, pedestrians crossing and speeding vehicles. However, the town has a separate taxi park on the right hand side as exit to Kyazanga.

The town has piped water supply, but waste disposal is via pit latrines. It also has a police station located by the roadside and the town council offices. It has affordable and adequate hotel and lodging facilities which have in the past accommodated trucks parking here. The truckers have to use toilet or bathroom facilities available in the hotels. The residents welcome the trucker's presence because they boost the local economy.

This town is a suitable candidate for consideration for the RSS, which should be located on land procured just behind the shops. This will stop the practice of trucks using the climbing lane as parking.

- Services and facilities:
 - Petrol station
 - Bazaar
 - Restaurants
 - Hotels
 - Fruit sales
 - Food kiosks
 - Drink sales



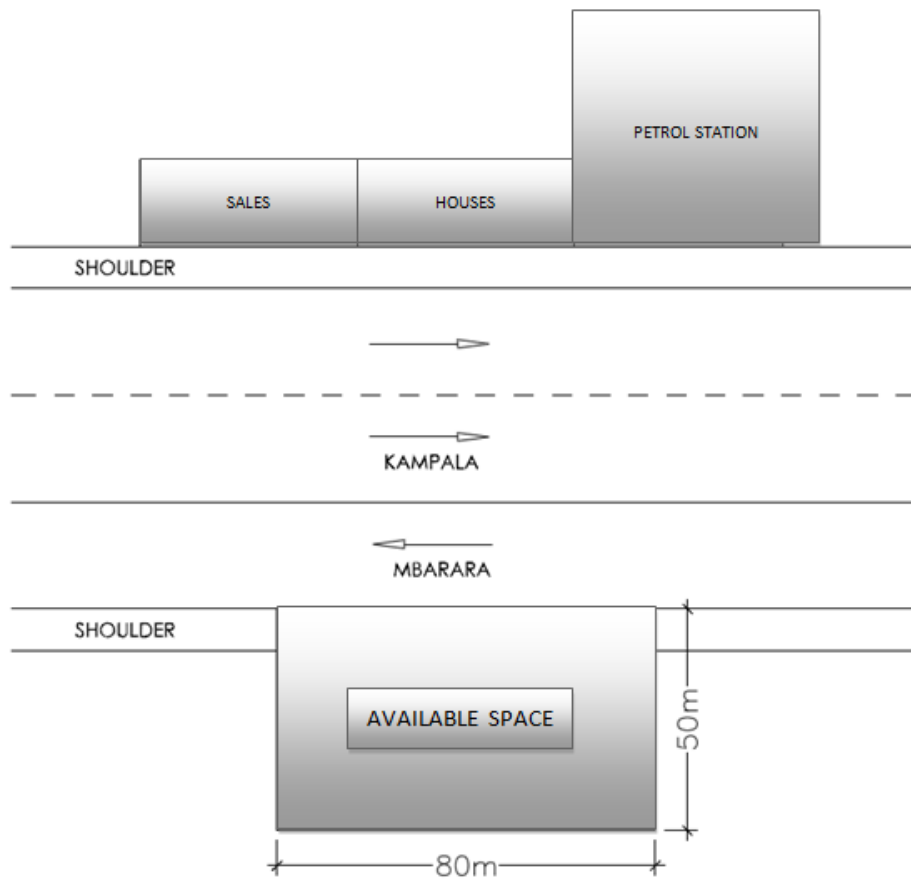


Kyazanga

This market center is under the auspices of the Kyazanga Town Council in Luwengo District. It has piped water, but waste disposal is into septic tanks and pit latrines. It has a police station and the public administration is represented by the chief and his assistant.

The center has two lorry parks on either side of the road, which are separate from the taxi park. Though it has good security for the truckers, it's capacity is limited by the small lorry parks, which offer no more than little space and police guards.

- Services and facilities around the proposed site are:
 - Petrol station
 - Bazaar
 - Restaurants
 - Hotel



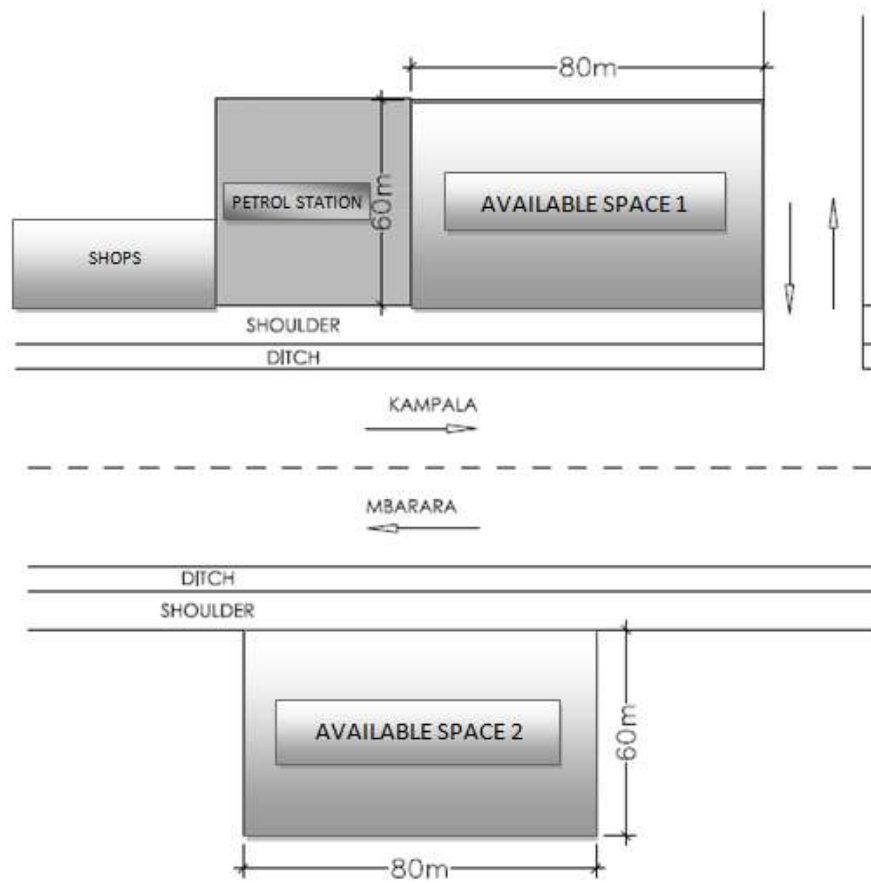
Biharwe

Biharwe is located 7 kilometres from a weighbridge and just 10 kilometres from the city of Mbarara, so it would be desirable to locate a roadside station at this point which could accommodate the truck weighing and parking facilities for trucks on their way to Mbarara.

- Services and facilities around the proposed site are:



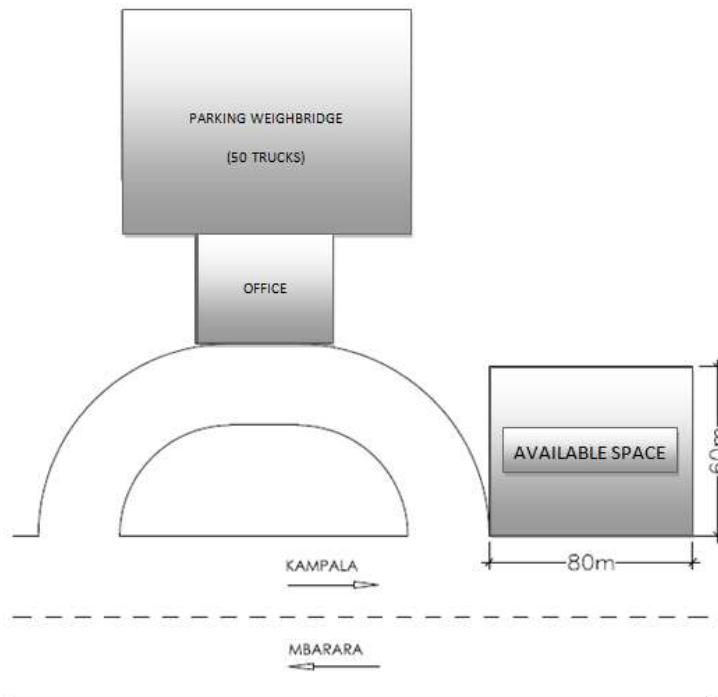
- Petrol station
- Bus stop
- Truck and car workshop
- Market





Weighbridge

Near Biharwe there is a new weighbridge recently constructed and funded by the European Union. The truck traffic in this point is between 150 and 200 per day.





Mbarara

Mbarara town is 51 Kms from RSS at Lyantonde and 12 kms from next RSS at Biharwe. It is the largest urban center in Western Uganda with an urban population of about 70,000 people, and is one of the fastest growing towns in Uganda. It is the headquarters of Mbarara District which has three municipal divisions, 14 subcounties and 2 counties. The town has the Mbarara Regional Referral Hospital, a community hospital and a children's hospital. It has offices of the Mbarara Municipal Council, the Peoples Defence Forces, and the Provincial Administration. This town is surrounded by crop growing and animal keeping activity in the surrounding farmlands, fishing in the wetlands nearby and trade.

Being a large administrative, municipal, and commercial center, this town has no convenient parking for trucks, even though they have adequate hotel and lodges. All side parking is designated by the town council as car parks. The few trailers that have to enter into the town to offload goods or for any other reason park in front of the few lodges that are endowed with adequate parking space at the front.

For that reason, the truck operators would prefer to proceed on to Ruti, three kilometers out of the town for parking and lodging services. For that reason, Ruti is considered here below.

Ruti

Ruti is a small market in the outskirts of Mbarara Town to the west. It is in Nyamitanga division of Mbarara district and is managed by the Mbarara Municipal Council. This is where most trucks park outside Mabarara town because of available space and cheaper hotel and accommodation facilities. In this town, the available parking line is on the right hand side only as you enter the town from Mabarara, because the left hand side has steep gradient making it unsuitable for parking. It is located on a road section with a bend to the right, with no bumps to check speeding vehicles.

The road section through this town has been renewed and is complete with drainage, sidewalks and signs but has no roadside furniture. This 100 m parking is paved with concrete and serves lorries to and from the east. There are no charges for parking during the day, except that during the night, the drivers have to pay US\$ 3000 per lorry to the night guards.

This fast growing suburb has new permanent structures, with the old semi-permanent structures being replaced with new ones. It has retail shops, hotels and lodges, public and private health facilities, piped water, electricity and telecommunication.

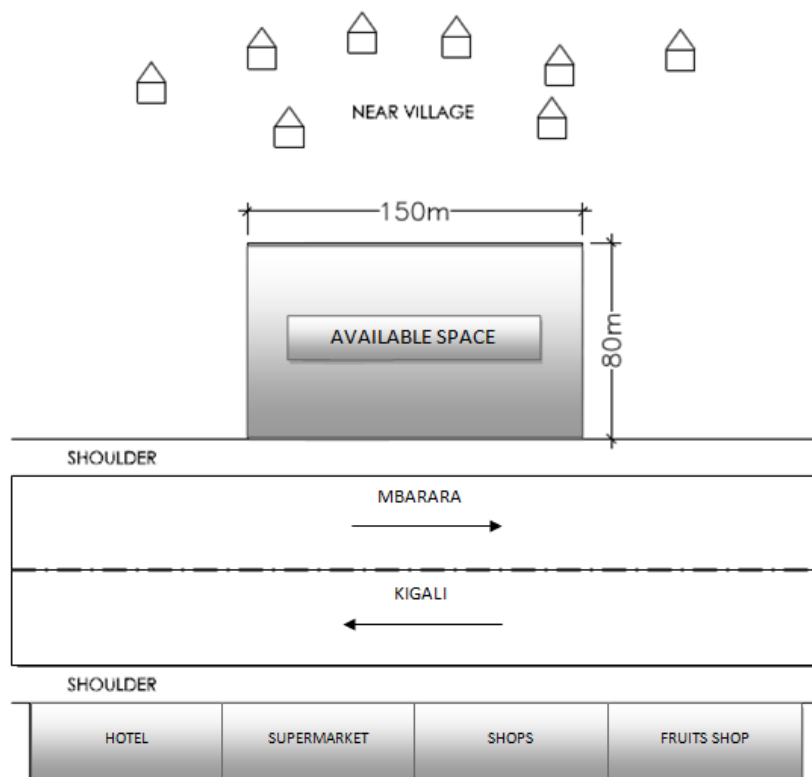
There is evidence that this center needs a larger parking, preferably just behind the line of shops.



Nyeihanga

Point located 31 kilometres from Mbarara with an appreciable concentration of trucks. It could be proposed as a roadside station.

- Services and facilities around the proposed site are:
 - Locksmithing
 - Cafeteria
 - Construction materials
 - Mosque
 - Vegetables sales





Katovu

This market center has linear parking by the roadside. The road passing through this town was recently rehabilitated, together with the drainage system, sidewalks, and kerbs. It has two small linear parking lots on either sides of the road with concrete flooring.

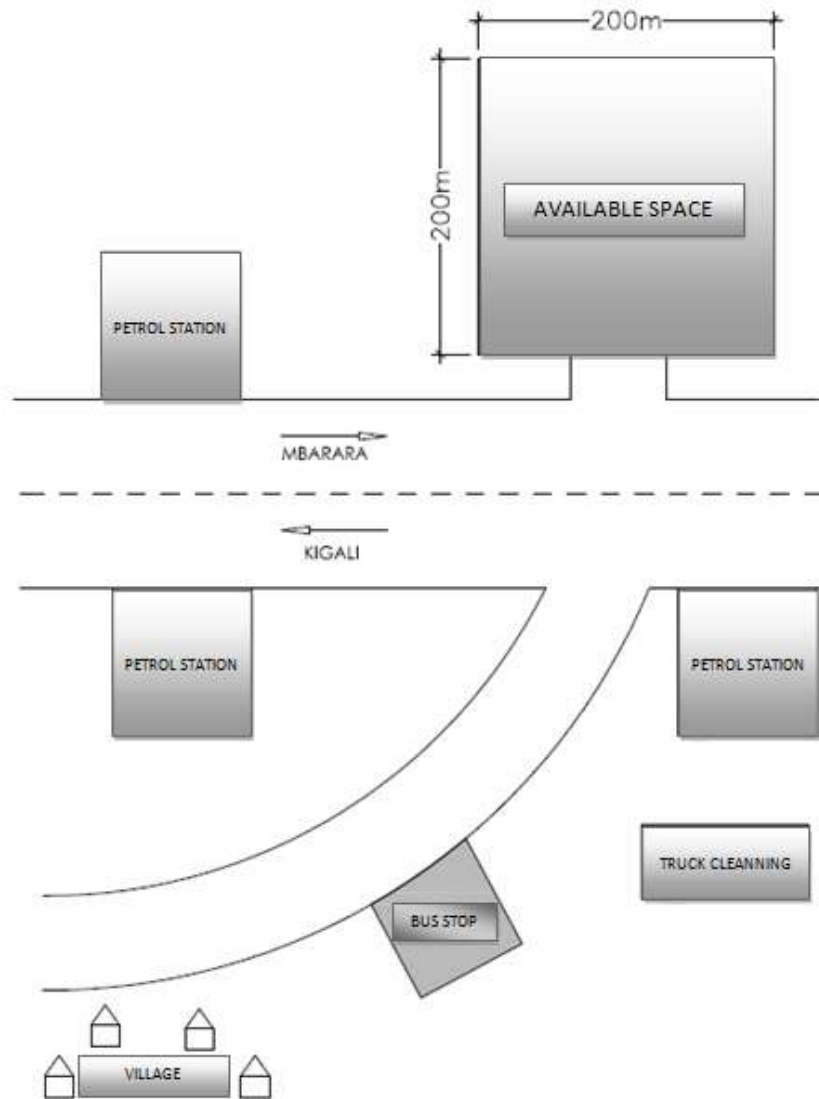
Currently, this town is not a favoured parking center because it is a small market center with few permanent shops, some of them closed and several kiosks. It lacks adequate facilities to cater for the truckers casting doubt on its suitability to host a modern RSS. The center is managed by the Katovu Town Board, and its police station occupies one of the shops in the street front.

Ntungano

Ntungamo district borders Mbarara district to the east. This district is named after Ntungamo Town which is the administrative, commercial and municipal headquarter, and stands out as the largest sub-region in the Ankole sub-region. Ntungamo Town is 66 kilometers south-west of Mbarara, and the Uganda Bureau of Statistics (UBOS) estimates the population as 24,750 (mid 2011). Ntungamo is 54 kms from RSS at Biharwe, 75 kms from RSS at Kabale, 29 kms from RSS at Mirama Hills, 70 km to RSS at Ishaka.

The town has at least 4 petrol stations, 5 different banks represented, a mixed variety of hotels and lodges that cater for all classes of visitors, tap water, sections of the town are covered by sewage system. There is a large cathedral, police station in addition to a prison in the neighbourhood. Private and public medical services are also available. Unfortunately, this town has no lorry park, and currently, the trucks park by the roadside. They still get charged 4000 Ushs as parking fee but the drivers have to pay watchmen to guard the trucks. Other trucks go to other sections of the town and park in front of hotels and lodges. From a socioeconomic standpoint, this town is very suitable for a RSS.

- Services and facilities around the proposed site are:
 - School
 - Bank
 - 3 petrol station
 - Catholic church





Lyantonde

This is a sizeable town that is the administrative, municipal, and commercial center of the Lyantonde District in South-Central Uganda, with a resident District Commissioner and other administrative officers in the Office of the President. It has several banks, wholesale shops, recreational facilities, modern hotels, garages, piped water and sewage system. The town has an estimated population of about 9,000 people in 2011 (UBOS). It is 51 kilometers from Mbarara and 69Kms from previous RSS at Masaka, and 53 km from next RSS at Biharwe.

The town has a small lorry park along the main road and an alternative parking is in front of the lodges and hotels located outside the town center.

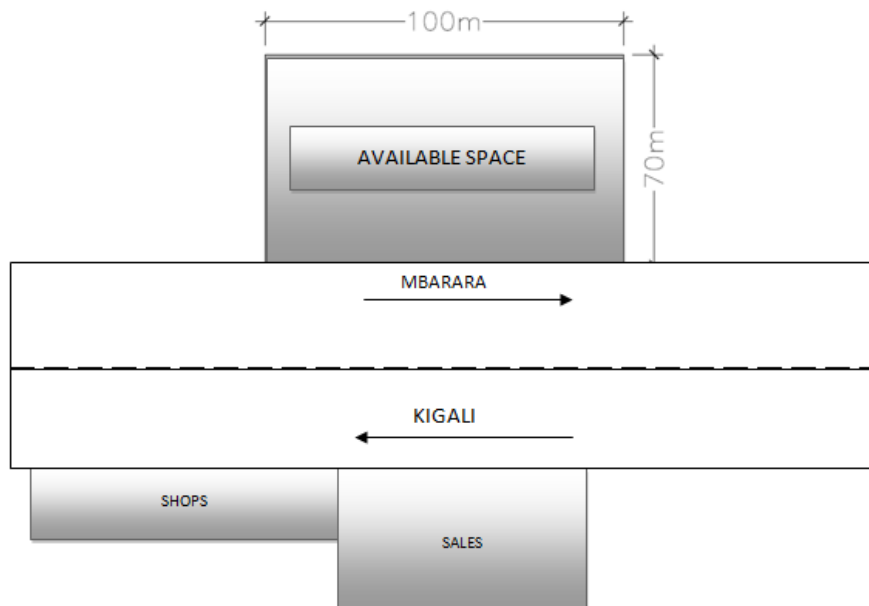
Rubaare

Rubaare town is found in Rubaare Sub-County of Ntungamo District in Rushenya County. It is approximately 85 Kilometers by road from Mbarara Town. This town is managed by the Rubaare Town Council.

Rubaare has telecommunication infrastructure, electricity and piped water, but waste drains into septic tanks and pit latrines. Though it does not have any banks, it has several mobile money transfer facilities. The road section passing through this town has been rehabilitated by Reynolds Construction Company and they are in the stage of working on drainages. The company has provided two side parking that can accommodate about 10 trucks each. On average, about 10 trucks park in this town every evening and are accommodated in the hotels and lodges in this town. However, like it is in many other towns, the existing park does not have any facilities and the truckers have to use facilities and services that hotels and lodges have to offer.

The main characteristics of this place are:

- The contractor is yet to finalize on drainage, signage, and roadside furniture in this section of the road in this town. The residents feel that he is dragging his feet;
- The residents want speed bumps erected in this town;
- The trench dug along the road is hindering access into the shops lining the road, and the residents want foot bridges to each of the shops.
- Services and facilities around the proposed site are:
 - Furniture sales
 - Shops
 - Drink sales



Kabale

Kabale town is 83 km from Bunagana and 20 kms from Katuna. It is located in Kabale Municipality and forms the headquarters of the Kabale District in Western Uganda. The town is at the foot of green interlocking and heavily cultivated hills with spectacular valleys. It is a busy administrative, commercial and municipal hub. This time is home to the Bakiga, but there are the Toro and Banyarwanda also represented. Over 90% of the locals are Christians, but there are a sizeable population of Muslims and Animists as well. It has adequate hotel and accommodation facilities that are affordable, in addition to running water and sanitation facilities, private and public health facilities.

Truckers find this a convenient stop after winding through steep escarpment slopes on their way to Rwanda and Burundi. It has a sizeable lorry park on the left as you approach the town from Mbarara, which can accommodate about 50 lorries on the road reserve, just in front of the shops. However, this is not paved and becomes muddy when wet and dusty when dry. It is clearly noticeable that hotels and lodges are concentrated close to the lorry park, ostensibly to take advantage of the market offered by the truckers. The park does not offer any other services except security which is provided to the trucks after they pay 4000 shillings to the local council. For all

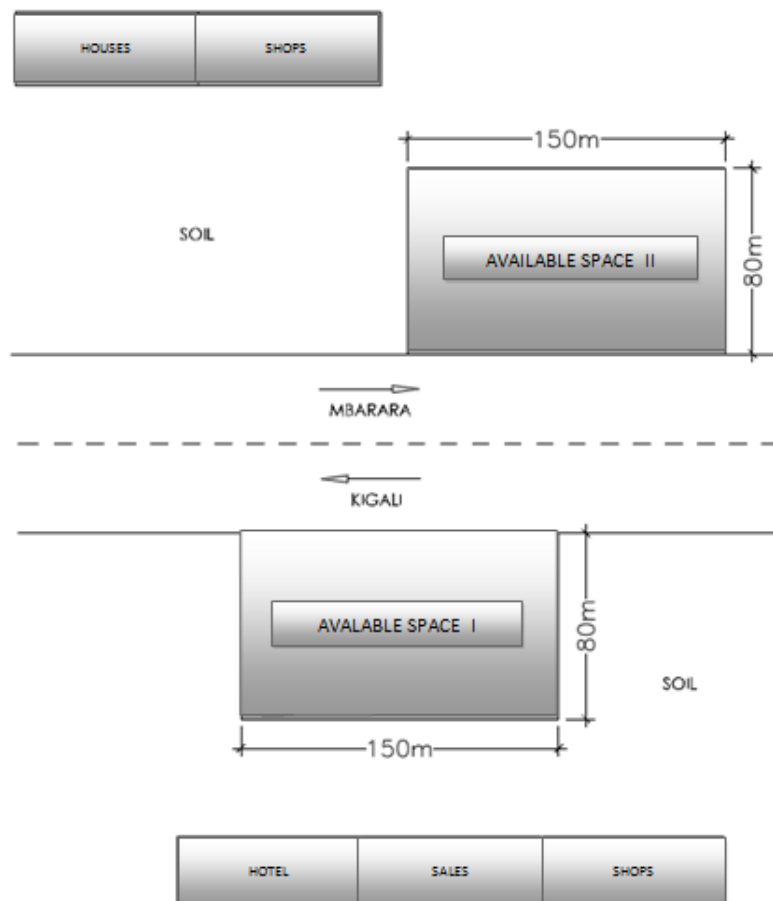


other facilities and services, the truckers have to pay and use them at their places of abode.

This town is suitable for a RSS considering availability of already existing space and the demand for the service.

Other characteristics of this place are:

- The road rehabilitation started just outside the town, and the residents felt that it should have started from the towns streets;
- The lorry park should be paved to improve the surface and other facilities like toilets and bathrooms provided;
- Service and facilities around the proposed site are:
 - Hotels
 - Construction materials
 - Shops
 - Bazaar

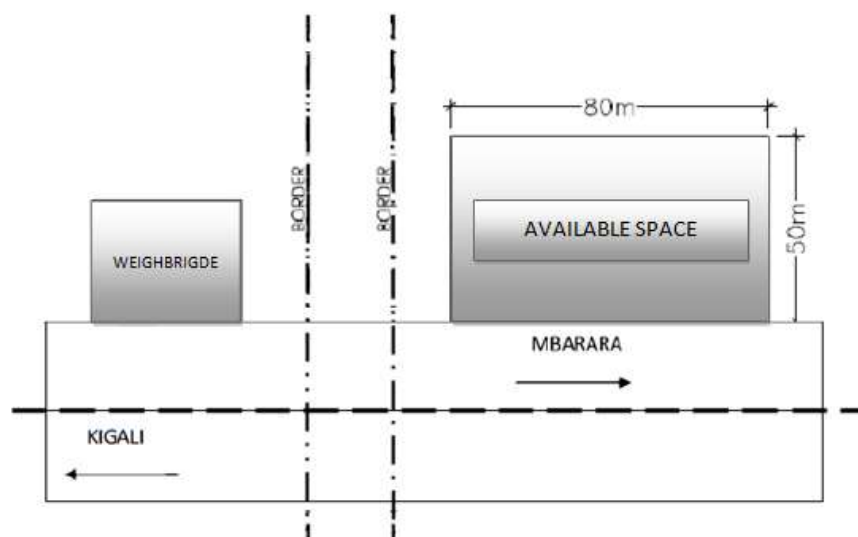




Gatuna

Gatuna is one border post between Uganda and Rwanda. At the border there is a concentration of parked trucks waiting to undergo the migration and customs checks. It would be a good idea to have a roadside station so that trucks can wait to carry out these checks comfortably and safely.

- Services and facilities around the site are:
 - Hotels
 - Restaurants
 - Health clinic
 - Toilets
 - Bank







RWANDA: GATUNA – KIGALI -AKANYARU ROAD SECTION

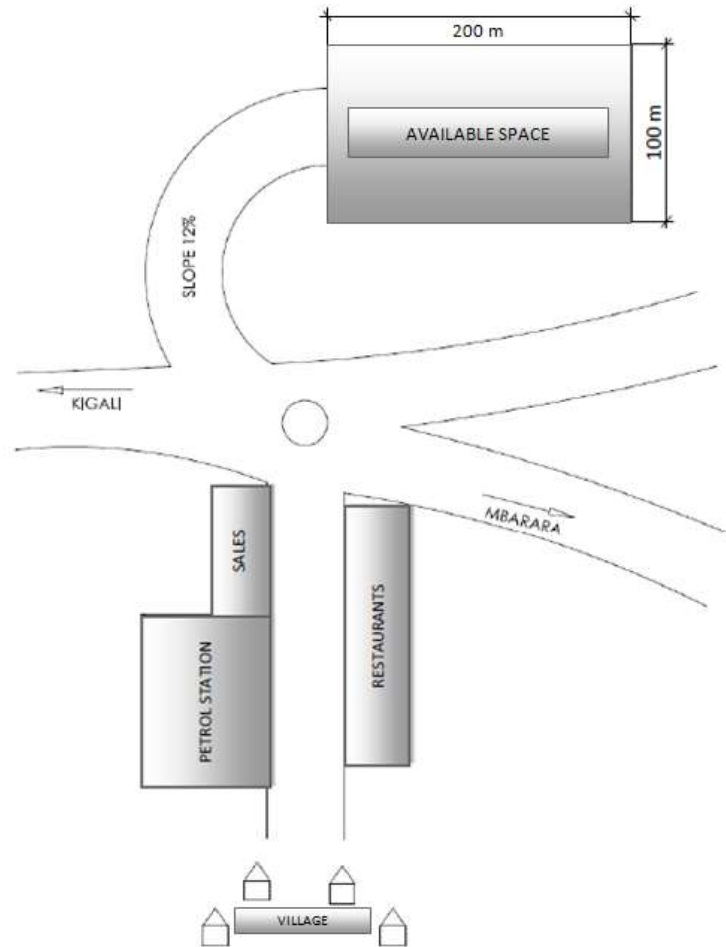
Rukomo

Rukomo is a sector in Gicumbi district in the North Province of Rwanda. This hilly district is located due-north of Kigali, straddling the major road from Kigali to Gatuna. Currently there is no truck stop here, except for a taxi park that is used by commuter vehicles to drop and pick passengers. There is a bank, bars and restaurants, bureau office, line of shops, and other offices for the sector in addition to a petrol station that has repair facilities. It is located 20 Km by road from Gatuna border and 32 Kilometers to Kigali.

Currently, lorries park by the roadside, next to a T-junction. The parking has capacity for a maximum of five trucks, but is currently under renovation by the company rehabilitating the Kigali-Gatuna road.

This town is a suitable candidate for the RSS because it is in the middle of a steep descent through a hilly terrain.

- Services and facilities around the proposed site are:
 - Tea factory
 - Restaurants
 - Hotels
 - Petrol station
 - Bank
 - Bureau office
 - Bar
 - Salesmen



Nyacyonga

■ Study on Establishment of Roadside Stations (RSSs) along the Northern Corridor ■



Nyacyonga is located in Gasabo district of Kigali Province. The district occupies the northern half of Kigali province, which had its boundaries extended under local government reorganisation in 2006. This district extends to the outskirts of the Kigali urban area and includes large areas of the city itself. Gasabo district is divided into 15 sectors and Nyacyonga is in Jabana sector.

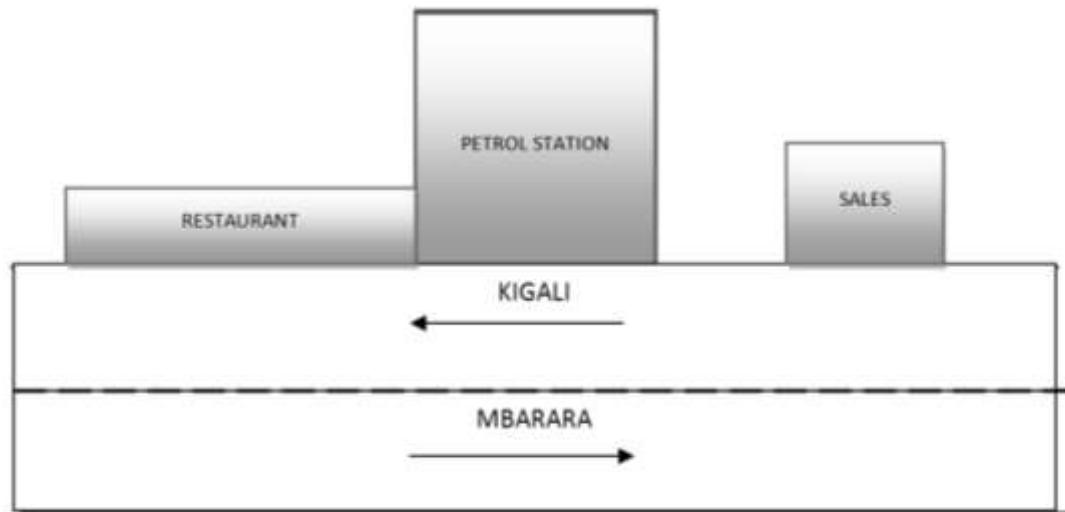
Currently Gasabo district has got 10 health centers and one serves the Nyacyonga area. The locals have a rich culture that is expressed through traditional dancing, songs and other folk demonstrations. Other than agricultural practise, the residents make baskets, jewelry and weaving in traditional ways.

Nyacyonga town is about 67 Km from Gatuna border point and 10 kms away from Kigali City. It has electricity and telecommunication services. In addition, the market center is vibrant economically with bars, shops and hotels. Oilcom (Rwanda) is setting up a fuel depot just outside the town to attest to this fact. The section of the road passing through this town has been done by the Strabag Construction Company, but drainages, sidewalks, roadside furniture, signs and walkways are yet to be done.

Currently, lorries park by the roadside, next to a T-junction where passenger vehicles and motorcycles pick passengers. The parking is on the right side only as you head to Kigali, because the left side has a steep valley that is covered with sugarcane plantation and greenhouses. The parking has capacity for a maximum of five trucks, but they have to compete for space with other smaller trucks and vans that carry goods locally.

This town is a suitable candidate for the RSS because it is an important resting point for the trucks after a steep 60 kilometer descent through hilly terrain. It has the capacity to accommodate the truckers, and provide for their needs. Besides, being 10 Km away from Kigali, it will be strategic for the trucks that have to deliver goods to the capital, but cannot find convenient parking within the city.

- Services and facilities around the proposed site are:
 - Bus stop
 - Bar
 - Restaurant
 - Hotel
 - Petrol station



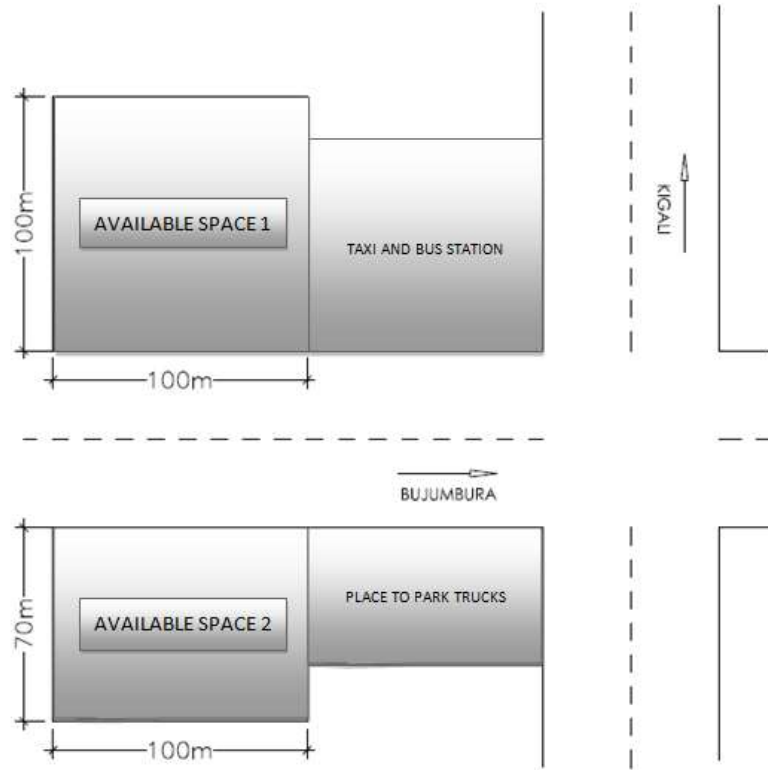
Kigali

In Kigali there is a considerable concentration of buses and minibuses, as well as of parked trucks. It could be thought to create a roadside station at the entrance to the city, though there does not appear to be sufficient space for this.

- Services and facilities around the proposed site:
 - Health clinic
 - Bus station
 - Restaurants
 - Hotels
 - Food and Drink kiosks



- Banks
- Toilets

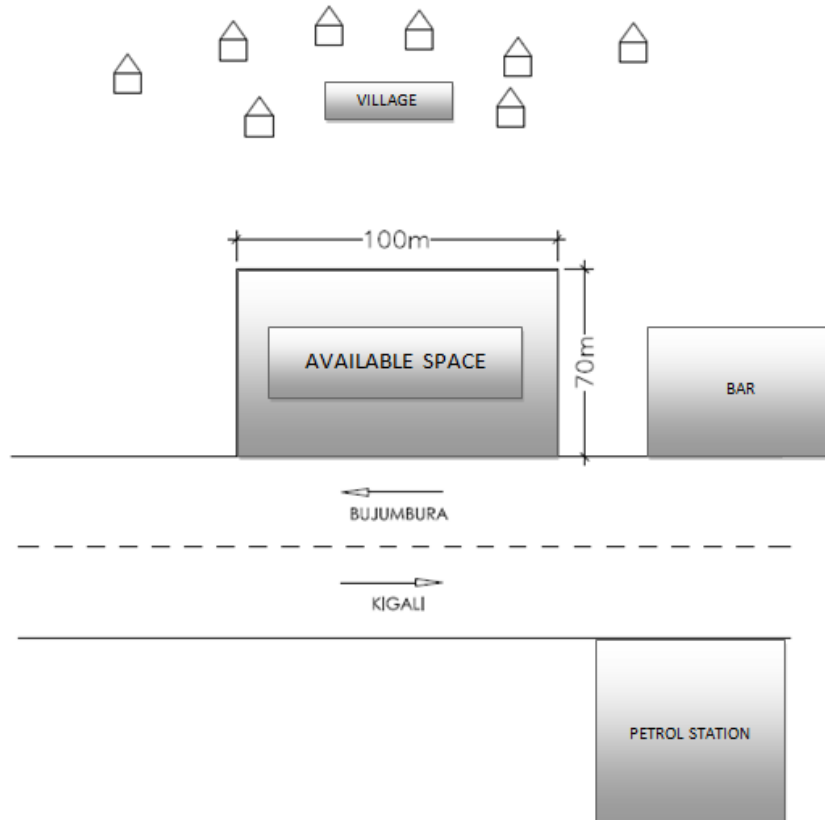




Ruhango

At this point there indeed exists sufficient space for creating a roadside station, though the traffic in this section is much less than in the previous sections. Ruhango is 18 Kms south of Muhanga, and 62 Kms north of Huye.

- Services and facilities around the proposed site:
 - Hotels
 - Restaurants
 - Bank
 - Kiosks
 - Fast food

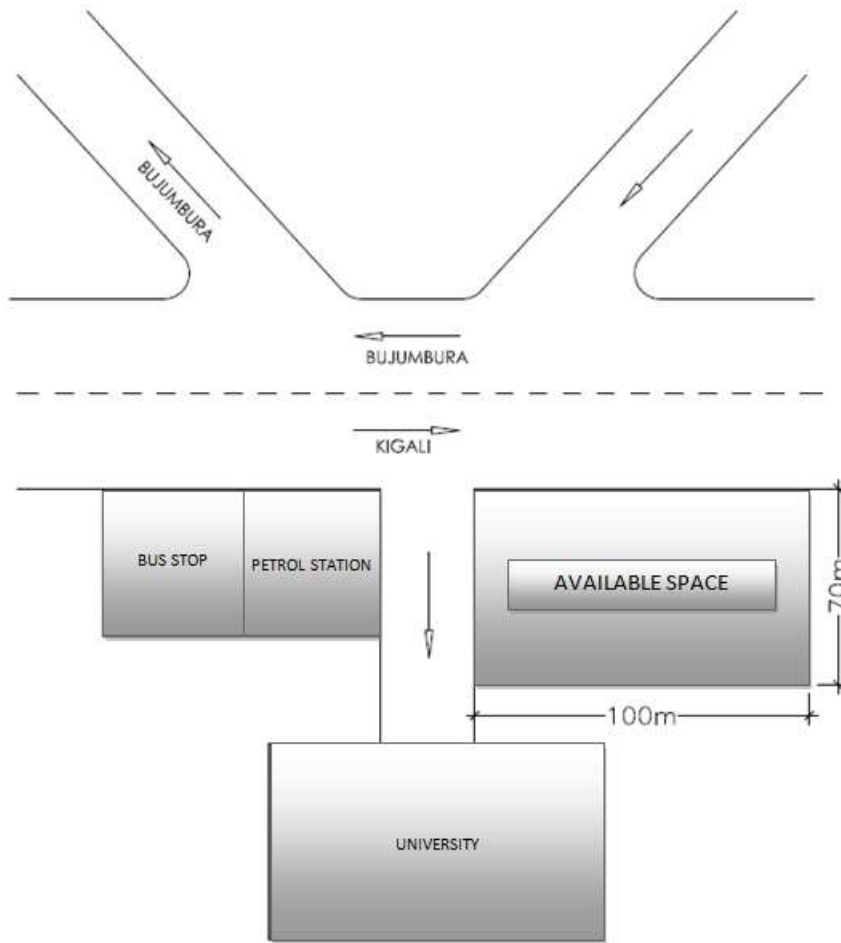




Butare

Butare is one of the most important towns on this route. There exists a slight concentration of trucks and sufficient space for locating a roadside station.

- Services and facilities around the proposed site are:
 - Hotels
 - Restaurants
 - Bank
 - Kiosks
 - Fast food
 - Coffee factory
 - School
 - University
 - Petrol station



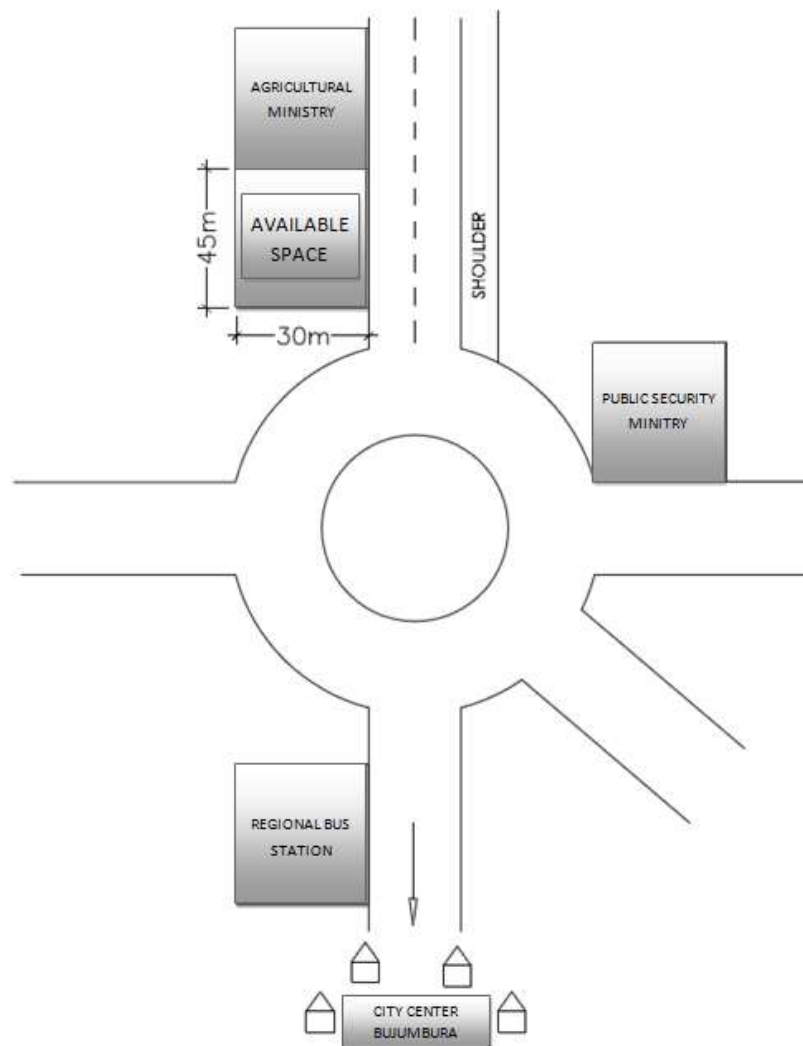


AKANYARU – BUJUMBURA ROAD SECTION

Bujumbura

In Bujumbura there does indeed exist a concentration of trucks and buses in the station which would justify the location of a roadside station. There is limited space for it.

- Services and facilities around the proposed site are:
 - Truck and car cleaning
 - Drink sales
 - Vegetables sales
 - Restaurants
 - Banks
 - Kiosks
 - Fast food
 - Bureau office





D.R.C. ROAD SECTION

Bukavu

Bukavu is a city in eastern DRC that can be approached from Cyangugu in Rwanda. Bukavu was beautiful villas and beautiful gardens sloping down to the shores of Lake Kivu. It has a subtropical climate and beautiful peninsulas that project into the lake Kivu, and the Ruzizi River that flows from it. Bukavu is an important transport hub and gateway to eastern DRC. However the road links to Goma, Kisangani and other towns have deteriorated badly.

This town is heavily infested with M23 militia who interfere with social, economic and administrative functions of this town. For that reason, trucks cannot operate at daytime unhindered, and must get armed escort to cross through town. The only “safe” parking is near the main post office where the local police provide guard. However, cases of pilferages are still rampant because of the militia.

Goma

Goma is a small city on the northern shores of Lake Kivu. It is the capital of North Kivu province. Goma can be accessed through Gisenyi in Rwanda. It is only 1 km from the Rwandan border and 3.5 km from Gisenyi, therefore there is a lot of interaction between the Congolese and Rwandese across the border.

Goma has an International Airport that accepts commercial charter flights and also a passenger line travels from Nairobi and the East African region. Part of the Northern Corridor linking Goma to Bukavu and Kisangani is in bad state due to wars and lack of maintenance. The city no longer exudes the vibrant nightlife and African cuisine that it was known due to internal conflicts.

At Goma parking is provided near Customs office at the border with Rwanda, and there is also another parking in town. This modest parking has security provided at a fee, and the truck drivers use hotel and lodging facilities in the neighbourhood.



Goma faces the following challenges:

- Comparatively, Goma used to be a fairly safe town with economic activities and truckers could stay here as long as their visa allows. However, in May/June 2013 insurgency by the M23 militia has brought unrest.
- Goma lies about 15 km south of the crater of the active Nyiragongo Volcano. It has suffered catastrophes as a result of this volcano.
- Goma also lies at the shores of Lake Kivu identified as having huge quantities of dissolved gas held at pressure in its depths. It is anticipated that a limnic eruption could occur at any time, releasing tons of toxic gas.

Uvira

Uvira is a small city of an estimated 64,000 people in Sud-Kivu Province in the Democratic Republic of Congo. This town is 32 Km from the Burundi border and 120 km from the city of Bukavu, the Provincial capital of Sud-Kivu. Uvira is located at the extreme north end of Lake Tanganyika and has a lake port called Kalundu at the southern end of the town, which provides links by boat to towns in Tanzania, and to Bujumbura in Burundi. Residents of Uvira are predominantly Roman-Catholic.

This town has parking for trucks at Ofida Customs point. Here security is provided by the local customs officials in collaboration with Mai Mai militia at a cost. The truckers use toilet and bathroom facilities provided in the hotels available within this town. The existing lorry park could be suitable for upgrade into a RSS facility.

The following smaller towns also have parking that provides the much needed service along the northern corridor.

Namoya: This is a place with a very small population of less than 1000, located in the State/Province of Maniema which borders North Kivu and South Kivu to the East. Namoya is an active gold mining center that is 420 kilometers by road inside Congo from Uvira border. It is connected by a loose surface road that turns muddy when wet and dusty during the dry season. This road passes through difficult terrain in a wet tropical jungle. This poses challenges considering that the road takes long period before servicing. The long stretch is infested with unruly youth that necessitates that truck companies have to get armed escort to their destination.

Between Uvira and Namoya there are no designated truck stops, but truckers often find a convenient clearing along the road near a school or shops. There are no hotels and lodges and the truckers and their escorts have to find water and cook before resting for the night. Favourite stops are at Baraka and Katamabanga which the truckers suggest could be considered for RSS.

Baraka: Baraka is a town in Fizi territory of Sud Kivu province. It has three municipalities and the Kibembe is the predominant language here. Baraka has been long an urban model for the province. At least two truck companies and other multinational agencies including the UN mission to Congo have regional offices at Baraka where they organize for logistics into Congo.

Kasongo is a town and in Maniema Province, 350 Km east of the provincial capital of Kindu, in the Democratic Republic of the Congo. It is east of the Lualaba River. Kasongo's population was approximately 63,000 peoples three years ago. The town is served by Kasongo Airport, one of the largest airports in Congo which offers flights within Congo and international flights. The roads in the province are in poor state, and the town and its inhabitants were severely affected by internal strife. There are a number of humanitarian organizations working in the area.



EXTENSION TO JUBA (SOUTH SUDAN)

Route of the road: Mbale – Soroti – Lira – Gulu – Atiak – Nimule - Juba.

UGANDA

Lira Town

This RSS is located adjacent to the Soroti-Lira highway within the town centre on the RHS. On the site were parked three trailer trucks, two diesel trucks, ten light trucks and two cars. The site's surroundings include buildings and telecommunication masts, as captured in the photographs. The ground has a gentle slope with red soil. The only public amenity is three pit latrines serving the public. There is no water supply, no street lighting and no perimeter security fencing. The site is triangular in shape and area is too small. Lira is 70 Km from RSS at Kamudini and 172 km from RSS at Kumi



Station has no perimeter fence and is located on open ground within town centre.

Atiak Town

When insecurity in northern Uganda was at its peak, this town located some 40km from the border has previously been the immigration check point for all road traffic heading to South Sudan through Nimule Township. This was the point from which all vehicles proceeding to the South Sudan border used to assemble in order to be provided with military escort. There is no particular site set aside for parking trucks. They were parked along the road, in convoy formation, as they awaited the journey.

The insecurity situation has hence improved and the immigration offices have been moved to Elegu Atiak at the border point whose infrastructure facilities are presently under construction.



This location is recommended as a holding ground in view of the availability of abundant land, loamy and sandy silt soils, rolling terrain and water supply is sourced from boreholes.

Elegu Atiak (Border Post)

This is the new location for the permanent border point to South Sudan and presently the necessary infrastructure facilities are being put in place including permanent buildings for offices, security and other services as captured in the photographs. The development of parking infrastructure for trucks is being executed through private individuals who are charging Uganda shillings 10,000.00 per day.

There were 23 six axle trucks, 5 fuel tankers and 17 small trucks parked at the station at the time.

The following services and facilities are being provided by the developers:

- Amenities include washrooms with toilets and showers
- Fire fighting equipment
- Security includes six policemen and soldiers
- 2 standby generators for lighting
- Chain link perimeter fencing with flood lights
- Fuel station is in place.

Other services the park developers are planning to put in place soon include the construction of building for kitchen operations for the drivers, a mosque in view that majority of the drivers faith is Islam, washing bay for washing trucks, spare parts shop and a workshop/garage.

The site is generally flattish with black cotton soils and there is a problem with drainage. There is a river to the northern side flowing westwards into which storm water can be directed.

The main road is an earth road with a thin layer of gravel and is heavily potholed.

The development has received NEMA certification.

The estimated daily traffic flow is 200 to 250 trucks per day.

The customs controls in place are the ASYCUDA (Automated System for Customs Data) system.

Procedures in place are as follows:

- A customs officer picks documents from the driver and marries them with the physical truck to check registration number plate, container number, customs seals.
- Check users charge (road toll for foreign registered trucks).
- Check if the truck has Transit Goods License.
- The documents are then stamped and as the truck proceeds to the South Sudan border, the checking or release officer records the details in the transit register and subsequently reconciles in the ASYCUDA system. This completes the transit process.
- Time taken is estimated between 10 to 15 minutes for each truck.



In the Ugandan part of the Uganda/South Sudan border it is being developed a new construction, involving:

- Cut to spoil of black cotton soil
- Rockfill
- Gravel filling and compaction areas of 90,000 m² and 60,000m² respectively.



SOUTH SUDAN

Nimule Town

This is the border post and the trailer park is located on the left side of the highway. The site is congested with loaded trailer trucks, light trucks and cars parked awaiting registration and clearance. Apparently the fuel tankers are parked elsewhere within the town. There is available land westwards for expansion of the present site including provision of facilities. The town is sited at the banks of perennial river Nimule and a water supply system can be initiated to provide the required water for the town and also to the expanded new RSS. Security is good as it is provided by the soldiers and there is also a police station. Being the border town in South Sudan on the Uganda/South Sudan border it is recommended for a new expanded RSS site. There are several fuel stations, hotels and lodges. The soils are sandy silt with gravel observed in the outskirts of the town.

Juba City

This site is the holding ground for trailer trucks and is located on the right side of the main road at some 20 km from Juba city. This RSS is under the administration of Central Equatorial Revenue Authority of the Central Equatorial State.

The site is open ground without any perimeter fencing. The ground slopes gently northwards. The soils are sandy silt and the ground is heavily potholed as shown in the photographs. There is abundant land for expansion. There is no electricity supply



from the national grid and no water supply. Pit latrines are provided. Offices, food kiosks and shops are constructed using roofing sheets to walling.

Trucks were parked on one lane of the main road and light trucks were carelessly parked on the sides.



THE NTUNGAMO – MIRAMA HILLS/KAGITUMBA – KAYONZA – KIGALI ROUTE

Ntungano

Ntungamo district borders Mbarara district to the east. This district is named after Ntungamo Town which is the administrative, commercial and Municipal headquarter, and stands out as the largest sub-region in the Ankole sub-region. Ntungamo Town is 66 kilometers south-west of Mbarara, and the Uganda Bureau of Statistics (UBOS) estimates the population as 24,750 as at mid 2011.

The town has at least 4 petrol stations, 5 different banks represented, a mixed variety of hotels and lodges that cater for all classes of visitors, tap water, sections of the town are covered by sewage system. There is a large cathedral, police station in addition to a prison in the neighbourhood. Private and public medical services are also available.

Currently, the road from Mbarara to Kabale passing this town is under construction, and the contractor for the Ntungamo-Mirama hills road is mobilizing to start work. Unfortunately, this town has no lorry park, and currently, the trucks park by the roadside. They still get charged 4000Ushs as parking fee but the drivers have to pay watchmen to guard the trucks. Other trucks go to other sections of the town and park in front of hotels and lodges.



Constraints to the Establishment of the RSS:

There are no major socio-economic constraints to the establishment of the RSS. However, the following environmental concerns should be considered.

- In designing the RSS, consideration should be taken about the ongoing road construction that has a component of Side parking for trucks.
- The Ntungamo-Mirama Hills road has been redesigned and the junction from town has been redesigned. This should also be considered in the design for the RSS.
- The town is bordered by a river to the south which is currently being considered by Habitat for rehabilitation. Any developments that infringe on this fragile ecosystem will meet stiff opposition.



Fig: The western edge of the road where cutting was done



Figs: The eastern edge where filling was done over a marshland. This is the proposed site for a RSS.

Mirama Hills/Kagitumba Border Post

The small town of Mirama Hills is located in Ntungamo District in South western Uganda. It is 30 Kilometers from Ntungamo the district headquarter along a dusty road. The town is flanked to the south by the River Muvumba which also forms the border, and the Mirama Hills to the north.

This small town has few wooded kiosks and a small taxi park. The border post has electricity, telecommunication and internet facilities. The residents draw water from



the river, and waste disposal is via pit latrines. Mirama hills is a sharp contrast to Kagitumba on the Rwandan side in many ways:-

Facility	Mirama Hills	Kagitumba
Custom Offices	Temporary tin huts	Permanent office structures
Goods Inspection shed	Not available	Available
Roads	Permanent all weather	Loose surface road
Electricity and internet	Available	Available
Taxi park	Taxis use the road side	Taxi park available
Shops/restaurants	Few, Small and temporary	Slightly more and few are permanent

As a border post, Mirama Hills requires a secure truck station. A contractor is on site constructing a one-stop border post and has also hoarded a site that is designated for a truck station. However, it was not possible to get details of the design of the truck station and the upgrade of the link road from Mirama Hills to Ntungamo. Facility improvements are also being undertaken on the Kagitumba side.

Because of the interventions at Kagitumba/Mirama Hills aimed at upgrading the border post and the upgrade of the access road from Ntungamo to Mirama Hills, it is not prudent at this time to prescribe any more developments until the final blue prints of these developments are assessed to determine the scope of works. It is only then that any more developments could be proposed.



Fig: The taxi park at Mirama hills



Fig: Inside the hoarded area designated for lorry park



Socio-Economic and Environmental Constraints:

Even though the border town lays in-between two natural barriers, this poses no significant hindrance to the expansion of the town as the land in-between is sufficient. The traders and money changers who operate in Mirama Hills will appreciate to have the border facility improved to stimulate trade.

However, with the current interventions of the Trade Mark East Africa in Mirama Hills and Kagitumba it will not be prudent at this juncture to prescribe any RSS investments at these locations because these measures are adequate and timely.

Kabarore Town

This town is 65 kilometers south of Kagitumba by road. It is almost midway between Kagitumba and Kayonza. Kabarore is located in Kabarore sector of Gatsibo district in Eastern Province of Rwanda. This town has a linear settlement pattern along the main road and has the district headquarter, police station, fuel stations, micro-finance institutions, health facilities and educational institutions. In addition, the town has telecommunication, piped water and electricity, but has no sewage. There are adequate recreational, hotel and lodging facilities in this town. The road section passing through this town is in good condition.

Kabarore is favoured to host the RSS over its neighbours Gabiro and Rugarama. This is because, although Gabiro has large swaths of land with low population, the land belongs to the Army barracks which makes this place inaccessible. On the other hand, Rugarama to the south lies at the edge of an irrigation scheme. Therefore the outward expansion of the town is restricted even though it has a roadside parking.

The proposed site for the RSS is on the left hand side of the road as you exit Kabarore town center towards Rugarama. The site is on private land currently under cereal crops, bananas and trees.

Existing socio-economic and environmental constraints:

Land holding is generally small in this area and a number of families will have to be compensated to cede land for the development.

Kayonza

Kayonza town is the headquarter of Kayonza district, located in Eastern Province of Rwanda. Eastern province has the second lowest poverty index in the country with the principal income being tourism and staple crop production. This province is the bread basket of the country and has the largest average land holdings. Land use comprises crop production, livestock keeping, fishing and forestry.

Kayonza district is one of the seven districts constituting the Eastern Province, with an estimated 1,954 km² of land. The land has many gentle hills and slopes whose altitudes vary between 1400 to 1600m a.s.l. It experiences a wet tropical climate with two rainfall maximas and temperatures varying between 18°C to 26°C. The district has a population density of 179 persons per km² and an annual growth rate of 5.2%.

Kayonza town is located at the confluence of the Central Corridor from Tanzania through Rusumo and the Northern corridor from Uganda through Mirama Hills/Kagitumba. It is 115 km south of the Kagitumba border post and 75km east of Kigali. This town is major hub in the transport routes into Kigali from the east because it carries a large volume of trucks buses, taxis and cars. It is also an active trading center, with maize, rice and soya processing factories. Other industries in this town include motor vehicle repairs, hotels and restaurants, financial and insurance services and administrative and support services.



Kayonza town is used as an overnight rest stop for trucks mainly from Rusumo in Tanzania. However, there is no designated truck stop and most park by the road shoulders and use hotel bars and lodges available in town. There are three petrol stations, administrative services, entertainment and market facilities.

Status of RSS Facilities:

A public-private partnership between the Kayonza District and a local resident has led to the establishment of a RSS that is under construction. The truck stop with capacity for 40 trucks is equipped with a modern restaurant, fuel station, entertainment hall, bar, lodging facilities, and a perimeter fence. There are retail outlets on site in addition to piped water, electricity and internet.



Fig: General view of the RSS from the Main road.



Fig: The fuel station



Fig: Repair garage



Fig: Garden at the backyard of the RSS



Fig: The bar facility at the RSS

Environmental and Social Status of the town:



Kayonza town deserves commendation for this private-public initiative that gives rise to the facility that is considered to be adequate for trucks within this region. There is no social-economic justification for duplication of services at this location. Therefore this area should be avoided because this RSS initiative is not meant to out-compete or stifle private entrepreneurs. This opportunity should be given to another deserving center.

Rugende

Rugende is an outskirts of Kigali City, estimated to be 24 kilometers East on the highway to Kayonza and Rusumo. It is in Rugende sector of Rwamagana district in the western Province of Rwanda. This area has experienced spectacular growth with the upcoming of new modern housing units in the neighbourhood.

Status of Existing RSS:

There exists a fenced-off yard measuring about 1 Ha on the right side of the road as you approach Kigali that is designated as a truck park. This site was reclaimed from the neighbouring marshlands and has loose surface soil that turns muddy when wet and dusty when dry. The truck yard at Rugende has a capacity for 20 trucks, but has serious drainage problems and the site gets muddy during peak rainy season. For that reason, truckers avoid using the designated park in wet weather.



Fig: A general view of the truck station



Fig: Status of the perimeter fence



Fig: Section of the RSS overgrown with grass



Fig: Status of the guard's office

Though the perimeter fence is poor and broken as seen in photograph above, and there are no guards here, Rwanda is famed to be the safest country for the truckers. Though the parking is free, there are no toilets, no bathrooms, and no hotels, no



recreational facility, no lodging, no internet, no electricity, no safe drinking water, no garage or fuel station. There is evidence on site that the drivers cook, sleep, bathe and defecate on site. The truck stop is in a secluded place far from human interaction. See photo below



The RTDA is erecting kerbs along the highway bordering the park prevent the trucks from damaging the shoulders as they get off and back to the road.

Socio-Economic and Environmental Constraints:

The proposed site is already in use as a truck station, and the local community which resides more than 200 meters from the site has very little interaction with the users of the facility. Therefore the community really have no objection to the upgrade of the station.

The existing truck station was reclaimed from a wetland that borders it to the north. Though there is still plenty of room for expansion, an EIA must be done to ascertain the impacts.

B1: MAU SUMMIT – KERICHO – KISUMU - BUSIA ROAD SECTION

Tegunot Trading Centre

This site is located 9kms from Mau Summit and 48 kms from Kericho Town. It is a junction centre 4km from Londiani Urban centre. Administratively, Tegunot Centre is found in the Tegunot Sub-location, Londiani Location, Londiani Division of the Londiani District. There is another road under construction from Londiani to Muhoroni which joins the B1 (Mau Summit-Kericho) road at Tegunot.

Socio- Economic and Environmental issues:

The land surrounding Tegunot is sparsely populated with multi-ethnic composition of about 4500 people, the average household is estimated at 4.32. The land is freehold



title and the ongoing road project is expected to change land use from agricultural to residential and commercial.

Present Initiatives:

Tegunot is earmarked for the establishment of a 320m side parking, opposite the junction of the road to Londiani, on the Left hand side of the road heading to Kericho. This parking is devoid of many amenities as shown in the map. It only has parking for impounded trucks, ablution block, and weighbridge facility. There is adequate land behind the parking that can be acquired from the private owners for establishment of complementary facilities if there is need.



The rehabilitated road to Muhoroni



Site clearance for the side parking

Chepseon Trading Centre

This centre is located 28.4km from Kericho town (and 28.6km from Mau Summit). It is administratively located in Chesinende Sub-location, Chepseon Location, Chepseon Division of Kipkelion district.

Socio-Economic and Environmental Issues:

It has an estimated population of 7,000 people and an average household estimated at 4.32. Land in the neighbourhood is under freehold title though the Chepseon market is under the Kipkelion urban Centre thus the land is leasehold. Trading centre occupies approximately 2km².

The road project straddles an area which is agriculturally very rich. The area enjoys high rains, very fertile soils (Red Volcanic) and is adjoined to the Mau Forest which stretches from Mau Summit to Kericho. The main land use along the road corridor is forest conservation, tea growing, livestock keeping and production of such crops such as maize, potatoes, vegetables and pyrethrum.

Present Initiatives:

A new RSS is under construction behind the shops at Chepseon. This facility has Access roads, Market stalls, Market offices, ablution blocks, impounded trucks parking area, Information center, car parks and a police post.

Though the design seems to meet some requirements of an RSS, it is biased towards small cars; that is the parking is designed for small cars.



Ongoing road rehabilitation

Brooke Bond Trading Centre

This market center is located at the entrance of the Unilever Tea Company Limited, what was previously known as Brooke Bond Tea Company. The center is in the Ainamoi constituency within Kericho Township, in Kericho district of Kericho County. This market center is 4km from Kericho town.

Socio-Economic and Environmental Issues:

The town is bordered to the south by large scale tea farms belonging to the Unilever tea company, but to the north, there are small scale private farms. Within the market center the land is leasehold and the long linear trading center is bounded by the B1 highway and two service roads.

Present initiatives:

The service road to the south that is used for entry and exit to the Unilever factory has for a long time been used for parking as well. The current road project intends to improve this service road by expanding it to incorporate a linear parking that is 600 m long. However, because of the steep terrain just after the road, there is no provision for other facilities.

However, the Market center is bound by the B1 road and the service road to the North. There is a portion of undeveloped land belonging to the KeNHA which can be available for further road developments in that area. There is a pedestrian underpass linking the service roads on the north to the service road on the South.

It is proposed that this space be utilized for ablution facilities, information center, etc for this particular parking.



The existing southern service road that also serves as parking.



The market center as seen from the southern service road across the highway.



Awasi Town

Awasi is a small urban centre that serves as a urban functions, while on the other hand, as fulfilling some rural functions. They are believed to be capable of coordinating development activities in the rural areas through a set of social, economic and administrative linkages.

The town has piped water supply, but waste disposal is via pit latrines. It also has a police station located by the roadside and the town council offices. It has affordable and adequate hotel and lodging facilities which have in the past accommodated trucks parking here. The truckers have to use toilet or bathroom facilities available in the hotels. The residents welcome the truckers' presence because they boost the local economy.

Current Status:

The SBI Construction Company has provision for a parking facility which will be constructed at the location where the current market is situated. The designs are, however, biased towards parking for small cars, and it lacks many other amenities.



The left flank of the road



The right flank of the road



The existing market that will be converted into parking.

Nyamasaria Market

The ongoing road construction has provision for a RSS at Mowlem area, just before Nyamasaria Market in Central Kolwa of Kisumu East District in Kisumu County. The proposed site is located on a bend, on the RHS of the highway as you approach Kisumu from Kericho. This area got its name from a camp that was set up here many years back by a construction firm.



Yala town

Yala town is located in Yala Division of Gem district in Siaya County. This town is close to River Yala and is 42 Km from Kisumu and 72Km from Busia. It is strategically located near the B1 highway and the railway track to Butere from Kisumu.

Yala town serves as an administrative, commercial and municipal hub. It has adequate hotel and accommodation facilities that are affordable, in addition to running water and sanitation facilities, private and public health facilities. There is a university, a bank, National Cereals and Produce Board, and a railway station.

Truckers find this a convenient stop after winding through escarpment slopes on their way to Busia.

Current status:

There is no designated truck park in the town, and the trucks park along the road shoulders. However, the town council has been toying with the idea of establishing a lorry park and welcomes the initiative to establish an RSS in this location. Their plan is to establish an Inland Container Depot where transshipment of cargo from road to railway can be done.

The proposed location (0.08862^o, 34.53941^o) is owned by the Council and is currently used as an open air market.



The existing market

Sega town



Sega town is found in Ugenya district of Siaya County. It is 30 kilometers from Busia and 85 Km from Kisumu. This local town with about 10,000 people, has two secondary schools, a polytechnic, Police post many shops, and weekly open-air market.

This town is a favourite truck stop along the B1, and upto 30 trucks park by the roadside in the evenings. It has a number of affordable and adequate hotel and lodging facilities which have in the past accommodated trucks parking here. The truckers have to use toilet or bathroom facilities available in the hotels. It also has mobile money transfer, electricity, piped water, and telecommunication. The residents welcome the truckers' presence because they boost the local economy.

Current Status:

There is evidence that this center needs a larger modern parking, preferably just behind the line of shops.



The selected site for Segal RSS

Busia town

This border post is located in Busia district of Busia County. It has an urban population of 51,981 according to the 2009 census. Ethnically Busia town is dominated by the Luhya and the Iteso, but there is also a substantial population of other Kenyans including the Luo and Kikuyu. The main economic activity in Busia town is cross-border trade with neighbouring Uganda. The economic activity in the environs of the town is fishing and peasant agriculture that produces cassava, millet, sweet potatoes, beans, maize and sugarcane.

Ongoing Initiatives:

Trade Mark East Africa obtained funding from development partners to institute a complete reconfiguration of the border processes including construction of physical facilities and roads of the new border station at Busia. So far, the immigration block is complete and has been commissioned, but the KRA offices, staff canteen and staff houses are still under construction. The construction of other auxiliary facilities is yet to start.

The new design removes the existing lorry park from the current location. This is inline with the request of the immigration and KRA officials who have always wanted that it be moved out of the area to avert disaster. However, relocation to the temporary site at the airstrip was halted by a court case as part of the airstrip had already been grabbed and sold to private developers.



Consultation with the CEO in charge of Lands, Housing and Urban development revealed that the County Government is currently negotiating for land for parking at Korinda junction (0.44443°, 34.1446°), two kilometers outside town. A plot measuring 1.4 Ha has been identified and the process of acquisition is ongoing. This plot is 10m from the road reserve, but the opposite end is abit swampy and would require filling to make it suitable for a RSS. However, this process has slowed down since the County Government is waiting for allocation of funds from the Central Government. Interestingly though, the County Government intends to acquire more land to establish a dry Inland Container Depot near the RSS facility.

Busia town needs a RSS rather urgently because the ongoing upgrade of the border post will do away with the existing lorry park, yet plans for the new park are still at infancy. This delay will hamper the optimal functioning of the OSBP.



UPDATE OF THE SURVEYING OF EXISTING FACILITIES – YEAR 2014

A new field trip was performed at the beginning of 2014 in order to update and improve the selection of RSSs.

Summary of findings and decisions

The team started by surveying RSSs identified during the previous trip in each visited country. Thereafter the team had meetings with Roads Authorities to discuss and agree on the final RSS locations:

KENYA

The team was joined by Eng. Warui Gichuri from KeNHA for the sites visits from Mombasa to Kisumu.

In the consultative meeting with KeNHA on 28th January 2014, the following issues were discussed and decisions taken.

- **New developments**

The team noted that since the commencement of the study some RSS locations have been taken by developers and are therefore no longer available. For example for Nakuru, the site has since been taken by a developer. A suitable new relocation is yet to be identified. For Maungu the Ministry of Local Authorities has started developing shops and has built a small parking for trucks. The new developments have to be taken into account when TYPESA is designing final RSSs.

- **Weighbridges**

KeNHA has formulated a policy that prohibits all other activities within 2 km radius of the weighbridges. This explains why all other activities including hawking, recreation and wellness centers have been expelled from within the weighbridge premises.

For that reason, no RSS will be allowed near the weighbridges. This implies that no RSSs will be developed near Mariakani, Mlolongo, Gilgil, and Webuye. The team was also informed that Immigration department is relocating trucks parkings from the border posts, and are working on an expedited system where trucks clear and leave the post within the shortest time possible.

- **Road safety around RSSs**

The RSSs should be designed on alternate sides of the highway to minimize on trucks turning on the highway to get into the RSS.

- **Suitability of the RSS location in Changamwe**

The first RSS at Kenol petrol station in Mombasa was ruled out as unsuitable for the following reasons:-

- The land will be too expensive to procure because an investor will consider other uses for the same land that could give better returns.
- It is too close to the city center and the local authority has legislation barring trucks from parking in this area. It is proposed that the RSS be relocated after Jomvu.
- KeNHA has plans to create a by-pass to the Dongo Kundu area which will render this RSS obsolete. This plan is set for implementation by mid 2014.
- KeNHA reiterates that the road reserve along the A109 road is 60 meters, but the reserve reduces within built up urban areas. This should inform on the design of the RSS which should be off the road reserve.

- **The following observations were raised on the Nairobi-Busia section:**



- During the site visit conducted by the team, it was found that the proposed RSS at Naivasha and that one at Gilgil were close, about 28 Kilometers apart. Considering this distance, and the fact that the KeNHA had stated that a weighbridge could not be located within 2 kilometer radius of any weighbridge, it was proposed that the Gilgil RSS be removed and the RSS at Naivasha be relocated from the current proposed site to another site, about 2 Kilometers from the junction of the A104 and Moi Avenue roads.
- At Salgaa, land has been procured by KeNHA for the construction of a new RSS. This land is about 20 acres, and is 2 kilometers before the existing lorry park. However, no further details are available.
- At Mau Summit, the KeNHA has designed road side parking near the Police Station, on both sides of the road. This will be implemented as part of the ongoing road rehabilitation project.

In conclusion KeNHA has no objection to the selected locations subject to the above comments.

UGANDA

The team was joined by Representatives of Resident Eng. from Mbale and Gulu for the sites visits respectively on the Mbale-Soroti and from Gulu- Pakwach sections.

In the consultative meeting with the UNRA Director of Planning at Kampala on 3/2/2014 the following resolutions were arrived at:

- UNRA supports in principle the establishment of RSS along Ugandan Roads, and the Northern Corridor in particular.
- The Director reiterated that the location of the RSSs should be demand driven.
- The director further stated that UNRA will procure land outside of the road reserve for establishment of road infrastructure on PPP basis.
- He advised that RSSs should be established outside of the built up areas in the urban centers.
- He directed the planning officer to provide the Consultants with traffic and accident data, and offered to assist where need arises.
- The consultants were informed that in Uganda the reserves along the Northern Corridor are 44 meters.

In conclusion UNRA has no objection to the selected locations subject to the above comments.

RWANDA

The team was joined by Eng. Peter Mugabo from RTDA for the sites visit.

The consultative meeting with RTDA was held on 6/2/2014, and the hosts were the Road safety Engineer, the In charge of RSS in RTDA, and the Acting Head of Planning. The following resolutions were arrived at:

- In Rwanda the reserves along the Northern Corridor are 44 meters.
- It was agreed that the following towns along the Northern Corridor be considered for RSS; Rukomo, Nyacyonga, Muhanga, Huye, Ryabega, Kitabi and Rugende. Kayonza was indicated as being under implementation.
- The Strategic transport Master plan for Rwanda was given to the consultants for further reference.

DRC



Following consultations with the Technical Divisions Director of the Office of the Congolese Roads in North Kivu Province based at Goma, the following issues were clarified:

- In Congo the reserve is 50 meters.
- North Kivu Province has a total of 1,709 kilometers of road, out of which 803 Kilometers form part of the Northern Corridor Road. Only 71 Kilometers are tarmac but in a state of disrepair.
- It was agreed that the following towns be considered for RSS:
 - Beni
 - Nia Nia
 - Komanda
 - Kisangani
 - Bunagana
 - Bukavu

BURUNDI

Consultations were done with the Director General of the Office des Routes on 10/2/2013. The following issues were clarified:

- The meeting was informed that in Burundi the road reserve is 48 meters along the Northern Corridor, but within the built up areas this had been breached.
- Burundi supports Kayanza and Bugarama as RSSs. The latter is to take care of trucks coming into town which are not allowed to move between 6pm and 6 am.
- The meeting was informed that all Burundi is preparing a new Master Plan for the Roads, in which RSS will be incorporated, to take care of the period upto 2025.
- Currently the Director General of Transport is undertaking a study for two RSS in the outskirts of town, one to the North and the other to the south.
- The meeting was informed that if RSS are located far from the urban centers, then, there will be no access to utility services like electricity and water.



3. APPROVED ROADSIDE STATIONS

After all this process, 67 RSSs have been finally approved. The description of these RSSs is as follows.

KENYA: A104 ROAD SECTION- MOMBASA TO NAIROBI

MIRITINI

Miritini is a suburb of Mombasa located 11 kilometers from the city of Mombasa. It is located in Changamwe Constituency and in 2009 it had a population of 132,692 people.

KeNHA has obtained a loan from JICA to develop the traffic route to Mombasa's South Coast towards Tanzania. This is expected to alleviate congestion in the Likoni area and facilitate the logistics from a new container terminal to be constructed at the Dongo Kundu and Kipevu areas. The Dongo Kundu Free trade Zone will provide the necessary infrastructure to develop the Mombasa free trade zone similar to the one in Dubai. These developments will be served by the development of the 5.7km Kipevu Link Road and 19.8km Mombasa Southern Bypass (Dongo Kundu Bypass). The two roads join-up and exit the Mombasa island at Miritini as shown in the diagram below.



Fig: Map showing proposed developments by KeNHA in Mombasa

It is important to also note that the County government also has plans to develop a new commuter railway system from Miritini to Mombasa Central Business District in the near future.

TARU

Taru is located in Magina Location of Samburu Division, 69 Kilometers from the Mombasa Island and 14 Kilometers after Samburu market center. Taru is more vibrant than Samburu even though both of them are in the same Division. It has a built market, three schools within 2 kilometer radius,



electricity and telecommunication services. It gets its water from the Mzima springs. This center experienced an upsurge in growth after the establishment of the police station in 1992 to curb shifta menace in the area. The GoK is upgrading the health center in the area to cater for the rapidly increasing population in the center and the surrounding.

The Duruma, Giriama, Taita, Kikuyu and Kamba communities operate most of the businesses in this center, and the surrounding land is used for pastorism by the locals. These people have a notion that creating a RSS park in the area will spur growth of the town in addition to creating order especially in the evenings.

Current Status:

The residents welcome the idea of a RSS in this town, because the truckers buy food and personal provisions, lodge in their hotels, and employ watchmen to guard trucks. Though they don't like the social vices spread by the users of the road, they seem to have resigned to fate and "say that there is nothing they can do".

This center faces challenges of nonexistent solid waste disposal facilities as each plot owner devices his own disposal facility, there is no town planning and there seems to be a linear expansion along the road. Being a sparsely populated area with little economic activity, citing of the proposed RSS will pose very little challenges socially.

The proposal of having a RSS at Taru is boosted by the fact that the first RSS at Kenol Junction just off the Mombasa Island has been relocated to Miritini, about 10 kilometers ahead, and that the second RSS at Mariakani near the weighbridge has been be relocated away from this site.

MACKINNON ROAD

This historical town started as a colonial airbase and railway town before it was converted into a Mau Mau detention camp. It also served as an important node in the caravan route in the pre-colonial times.

This center has most of the amenities that a market center could require. This market center is lined on both sides with permanent structures used as shops, hotels, bars, butcheries and Mosques. There is a police station and the piped water consumed in this town flows from the Mzima springs and is said to be fairly reliable.

The railway line runs parallel to the road on the northern side limiting the location of the proposed RSS to the south of the A109 road. The residents argue that since lorries have already established a RSS in the area, it will only be prudent to improve on the services they require. They derive benefits when the truckers use hotel facilities, buy charcoal, wines, spirits, cigarettes and other personal provisions. As far as the vices associated with the truckers are concerned, the residents argue that there is a medical facility to take care of the infections.

This center is a suitable candidate for a RSS. The citing of the proposed RSS will most likely be located on the southern flank of the road, about three hundred meters from the market center, to avoid the railway line and petroleum pipeline on the northern flank.

Current status of the RSS:

This center has a rich history that can be disseminated at a RSS to relive a history of travelers that started in the pre-colonial times.

It is also important to note that after this center, an active wildlife corridor starts which makes the 30 Km stretch between Mackinnon road and Maungu unsuitable for RSS stations. This stretch also has the diversion to Bachuma gate of Tsavo Park, and has several spring areas along the road that are important sources of water for domestic and wild animals. However, these spring areas are also misused as sites for cleaning trucks, an issue that should be discouraged. The best way to discourage the use of these spring areas is to provide a RSS facility that has all services that a traveler will require.

MAUNGU

Maungu, 117 km from Mombasa Island, is a vibrant center in Taveta County which is infamous for twilight girls who entertain the truck operators. However, it has a new resource center by fhi360



that is meant to encourage safe sex and eradicate prostitution in Maungu. It is also known for Wildlife Works, the company that has brought relief and employment to many families in the area by providing both permanent and casual employment to the natives.

This center has a Lorry Park under construction, an initiative of the Urban Development Department of the Ministry of Local Government. The park under construction is about 40% complete. The project which initially began in 2006 had stalled after an estimated 13 million had been spent. The GoK took over the project from the defunct Taita Taveta County Council and is destined to complete it before handing over to the County Government. The parking yard will provide ample and secure parking to more than 200 trucks, and will be a source of revenue to the County Government. Currently, this center provides Banking services, Bars and Restaurants, Private and public health facilities, religious facilities, Petrol Station, public Toilets, and assorted retail shops.



Fig: Photos showing the progress of the work at Maungu lorry park.

Current Status:

Though this town has piped water, waste disposal is into soak pits that serve part of the town. It has problems with surface drainage during the wet season

This town has a social stigma that it is trying to shed off. The initiatives by the NGOs to provide alternative income to youth who would be lured into illicit practice is slowly gaining ground. The new RSS could complement the existing initiatives to provide a decent living to the locals, and commendable service to the travelers.

Proposed development for the RSS:

Details of the scope of works in the lorry park were not available but from the design, it appears to be a basic lorry park with perimeter fence, toilet and bathrooms. However, the consultative meeting with the KeNHA on 27/01/2014 highlighted that this park is small and the design aimed at providing market stalls for local traders. It was suggested that additional land should be acquired next to the existing facility for construction of additional facilities proposed for a medium sized RSS.

VOI

Voi which forms the capital of Taita-Taveta County in southern Kenya is 146 Kilometers from the Mombasa Island. It lies at the western edge of the Taru Desert, south and west of the Tsavo East National Park, and North of the Sagala Hills. Voi is a marketplace for the agricultural and meat products from the surrounding areas. The town centre consists of retail stores, markets, kiosks and a few hotels. Most lodges that service tourists for the national park are located in the suburbs at the edge of town. A large sisal Estates is located to the west of the town, and this estate has a large squatter community.

The Kenya-Uganda railway passes through Voi, and there is a junction to Taveta and Arusha in Tanzania. The A109 road passes outside the town, therefore the truckers have very little influence on this town. The A23 road to Taveta and onwards to Tanzania goes through this town. There is also the Ikanga Air Strip near this town.



Current status:

The A109 road used by bus and trucks by-passes the town center. The proposed RSS at Voi is 28 km from the proposed RSS in Maungu and 35 km from Manyani. KeNHA has plans in the pipeline to establish a lorry park in the area. There is adequate land with minimal compensation /resettlement issues along the A109 road.

MANYANI

Manyani is located in Voi Division of Voi District in Taita Taveta County. It borders the Tsavo West National Park, 290 km South East of Nairobi and 196 km North West of Mombasa. The area is usually hot and remains dry for most of the year, typical of Savannah grasslands.

This is a small market center with a mixture of semi permanent and permanent buildings. The center has telecommunication infrastructure, electricity and an aging water supply supply systems that is prone to failure.

The Nairobi – Mombasa railway line runs parallel to the A109 road at this market center, about 50 meters to the north. In essence, the line of shops to the north is between the railway line and the road. The entrance to the prison is on the southern part of the road reserve, and beyond it are a few kiosks that sell consumer products. This market is marked by low economic activity, and is inhabited by the Kamba, Taita and Kikuyu who mainly trade, or are engaged by the GoK agencies to offer professional services at the prison, health center and national park of the provincial administration.

There is an already existing lorry park in the market center that can accommodate about 30 lorries. It is basically a tarmacked side parking without perimeter fence. The truckers have to access to food, toilet and bathroom facilities from the hotels and lodges and pay local watchmen to take care of their trucks at night. There is no payment for parking services in this market center. There are local mechanics who take care of minor repairs and services within the town. Modernization of this park will be very welcome to this community because the truck park is a major source of income for them.

Proposed RSS:

No major socio-cultural shocks are anticipated in the introduction of the new RSS, because the current interaction between travelers and local residents is cordial. The proposed RSS should be in close proximity to the market center to avoid conflict with wildlife, as this center is actually within an active North-South wildlife corridor. In addition, there are spring areas close to the road as you leave the town towards Nairobi which locals have started using for lorry wash facilities. The proposed RSS will forestall this problem so that these areas will be left for wildlife use only.

MTITO ANDEI

This town is in Kibwezi constituency, Makueni District and lies 96km by road from Voi. It serves as the county headquarters for Mtito Andei County. The Kenya Railways line and the A109 highway between Mombasa and Nairobi run parallel through this town. The town is also served by Mtito Andei Airport which mainly serves tourists. It lies at the western edge of Tsavo National Park and two entrance gates into the park are located in the town.

In 2010, the population of the town was estimated at about 4,760 persons. Other functions served by this town include Mtito Andei town Council headquarters, headquarters of Mtito Andei County, and an active regional Market. It has private and public hospitals, police station, postal and telecommunication hub. It is served with piped water and electricity, and part of the town has sewage system.

This town is an important stop for the trucks because of the long distance from Manyani. Several truck companies have a check point here, notably the PN Mashru Transporters. At present, lorries park by the roadside on roughly murramed space that is also used by Matatus and other vehicles. The truckers use services and facilities offered by the hotels and lodges where they pay. Overnight parking will cost the driver Kshs 200 payable to the night guards.

Current Status of Parking:



There is competition for parking space in this town, and trucks are accused of grabbing all available space (see warning below)



Fig: A signboard at Mtitio Andei

Going by the large number of trucks that park in this town especially at night, there is need to construct a modern RSS slightly out of the town center to curb congestion occasioned by the trucks especially at night and reduces the risk of fire posed by the tankers that park along the road reserve. However, the location and design of the park will be constrained by physical/environmental factors that include the town itself, National Parks to the South East of the Town, the Kenya Pipeline and Kenya Railways reserve and the existing A109 highway.

However, it is proposed that the RSS in this area should be designed to cater for the large number of tourists that pass through the area as well as other travelers.

MAKINDU

Makindu Town is located in Makindu Location, Makindu District of Makueni County. Makindu lies approximately 356 kilometres by road, northwest of the coastal city of Mombasa. This town started as a rest camp for railway construction workers on the Kenya – Uganda Railway project. An important landmark in this town is the Sikh temple that was built at that time, still bears reminiscence to the railway building days. The temple was a place of worship and social centre for many of the workers from India. The temple is well preserved and offers lodging to travelers who stop by.

The climate of the area is semi-arid, with long rain seasons between May and June, and short rains in September to October. The population is low and the residents of the surrounding area are mostly of the Kamba ethnicity who keep animals and grow legumes and maize.

Makindu town has a variety of hotels and lodges, bank, bars, police station, and hospitals. It is served by road, airport and railway, and has telecommunication, electricity and piped water from Chumbe river.

Currently, trucks use a side parking within town that can accommodate about 10 trucks. The residents of the town attest to the fact that the economy of the town depends heavily on the A109 highway, particularly the truckers despite the negative impacts of the same. The idea of implementing a modern RSS will be welcome because it is perceived to increase the number of trucks that park in this town. There is land available here that was earmarked for a lorry park and market, but funds have never been availed for implementation.

Current Situation:

The surrounding land is semi arid and can only support limited agricultural practice. Therefore the local residents, especially the youth migrate to other towns and cities to look for employment opportunities. The other residents eke a living as traders, carvers and pastoralists. The proposed RSS will widen economic opportunities for trade and it is welcomed by the local residents.

There are concerns about the town's water supply that is fairly erratic and would need to be complemented with another source.



SULTAN HAMUD

Administratively, Sultan Hamud is a town in Nzau County Council in Kasikeu division of Makueni District and politically it is in Kilome Constituency. This vibrant town is a result of agricultural activity and mining in the neighborhood, and it's a junction town to Kasikeu in the North and Loitokitok to the south.

There is significant encroachment by shops and other buildings on the road reserve in this town, making it challenging for the trucks that park by the roadside. However, a small lorry park that can accommodate about ten trucks serves the truckers currently and there is need to expand it to meet the demand.

Current Status:

- Parking along the road reserves poses danger to other traffic especially at night when visibility is poor;
- The trucks take up all available parking space including what is meant to be used by matatus and buses;
- Uncontrolled hawking of farm produce to travelers causes danger to traffic and the hawkers;
- There are challenges of disposing of solid waste resulting from agricultural produce and other town waste.

Proposed RSS:

The existing side parking for ten trucks is so small, and its location has been encroached by hawkers. This compromises the security of the trucks and cargo, and poses danger to the local residents. A suitable location outside the CBD is proposed for the RSS.

MACHAKOS JUNCTION

This junction town is a favourite stop for trucks that prefer to stop here to avoid peak hour traffic jams in the City of Nairobi. The trucker pays 200 for security to the night guards and the truckers use toilet and bathroom facilities in the neighbouring lodges and hotels. It has fairly new settlements, and services found here include bars, hotels and restaurants, places of religious worship, and truck repair services.

The center is a fairly new settlement that is growing very fast, benefiting from the population in Nairobi that seeks for cheaper and convenient areas to settle. The town has no crowding problem, though the drainages, access routes, street lighting, and solid waste disposal are a still a challenge here.

Ongoing Initiatives:

The existing side parking cannot cope with the truck numbers that stop in this town, creating a need for a RSS. The KeNHA has acquired land for dualising the highway through this town. It also has plans to acquire land for a new interchange to replace the current turn-off. These new developments, and the rapid expansion of the town, inform on the design of the new RSS. It is proposed that the new RSS should be on the RHS as you head into Machakos Junction from Mombasa, about 1.5 kilometres from the existing turn off.

A 109 ROAD SECTION: NAIROBI - MALABA

MAAI MAHIU

There is a lorry park constructed in this town which has a wellness center that is run by a resident Doctor and is well equipped. The park is paved with cabro tiles and can accommodate about 100 trucks. There is a public toilet about 15 meters from the RSS but is in dilapidated state with no running water. The town also faces challenges of sewage and surface runoff, especially in the wet season.

This town is a favoured parking spot because it forms arrest point after a steep descent on the escarpment. It has many affordable hotels, with bathroom and toilets with running tap water. The



parking will cost him 100 shillings payable to the local night guards. However, the RSS shows evidence of poor maintenance, lack of waste disposal facilities, perimeter fence.

Current state of the Parking:



Fig: The wellness center providing medical services and the deteriorating state of the parking



Fig: Drainage challenges, with the existing public toilet near the park marked with an arrow

Proposed intervention:

The existing facility is medium sized, and can serve the current traffic volume along this route. However, certain essential facilities like security for trucks, toilets, surface repair etc need to be put in place. There is some little space on the western edge of the parking facility that can be used to provide these additional services.

NAIVASHA

Naivasha is a town in Nakuru County, close to the shores of Lake Naivasha. The town lies on the north-east edge of the lake. This town is linked to the Uganda Railway; and it is at the junction of the Nairobi -Nakuru highway (A104) and the Maai Mahiu-Naivasha highway. The 2009 census estimated the town population as 181,966 persons. Naivasha is 35 km from RSS at Maai Mahiu and 91 km from Nairobi.

Naivasha is an agricultural town, with many large-scale crop farms, horticulture and dairy farms. In addition, it is also a popular tourist destination with many attractions in the surrounding.

Current situation:

Naivasha town is a favourite truck and bus stopping point along the A104. A popular stop for cars and buses is at Delamere's, just next to the interchange. Trucks however, park in front of the many lodges that are available in this town.

Proposed Location:



The proposed RSS at Naivasha town, and the proposed RSS at Gilgil were close, about 28 Kilometers apart. Considering this distance, and the fact that the KeNHA has stated that a weighbridge cannot be located within 2 kilometer radius of any weighbridge, it was proposed that the Gilgil RSS be removed and the RSS at Naivasha be relocated from the current proposed site to a new site.

The new site is about 2 Kilometers from the junction of the A104 and Moi Avenue roads. The proposed location is on the RHS as you leave Naivasha heading to Nakuru, 2 kilometers after the junction of the Moi road and the A104. This RSS location is meant to serve the traffic that will use the Maai Mahiu road and those that use the A104. The private land is currently occupied by a tree grove.

NAKURU

Nakuru is the capital of Nakuru County and the fourth largest urban center in the country. It has an estimated 307,000 persons in 2009. It is an active industrial, educational, tourism and agricultural town, and the A104 passes through this town. It is 160 km from Nairobi. Most trucks don't stop in Nakuru because the cost of living is high, there is a problem with finding parking, security concerns and also because of the towns by-laws that prohibit stopping along certain streets.

For that reason, trucks will only stop in town to load or offload, but there are some will park in the outskirts of the CBD especially at the petrol stations that located near the start of the dual carriage way as you approach town from Nairobi. This also forms a favourite stop for the bus companies plying to various destinations in western Kenya from Nairobi or Mombasa.

A RSS is proposed for this area for the following reasons:

- This will serve the bus companies that transit through Nakuru;
- This will serve truckers on transit to other destinations through Nakuru and currently park in residential estates, petrol stations and road reserves; and
- This will serve the many trucks that stop in Nakuru to collect fuel from the KPC depot and no parking facility is provided.

Location for the Proposed RSS:

The proposed RSS should be located on the RHS of the A104 just before the start of the dual carriage way as you enter the town from Nairobi. The proposed location is on private land opposite a watering point.

SALGAA

This is undisputedly the largest truck stop in Kenya. It is estimated that truck numbers can reach 300 during dry seasons when truckers park all along the roads and the designated parks. It is located in Mosop Location, Rongai District of Nakuru County. Salgaa is 31 km from Nakuru and 192 km from Nairobi.

Salgaa is chosen by truckers for various reasons; the long steep escarpment climb after the town which truckers avoid after 6 pm, cheap food and accommodation, a vibrant nightlife, and located on a junction connecting routes to Elburgon and Rongai.

Salgaa town has electricity, telecommunication, piped water supply, but waste disposal is via pit latrines. It also has a police station located by the roadside and the town council offices. It has affordable and adequate hotel and lodging facilities which have in the past accommodated trucks parking here. The truckers have to use toilet or bathroom facilities available in the hotels. Salgaa also has a wellness center that is equipped and run by the GoK. However, it has no banking services and public hospital. The existing truck park has loose surface soil that turns muddy when wet and dusty when dry. Salgaa has serious drainage problems and the town floods during peak rainy season. For that reason, truckers avoid using the designated park in wet weather.



This town is a suitable candidate for consideration for the RSS, which should be located on land currently used for parking, but additional land could be sourced for a bigger park. The residents welcome the truckers presence because they boost the local economy.



Fig: Drainage problems



Fig: Unhygienic pools of water in front of a popular facility



Fig: The parking becomes wet and unusable in wet weather making lorries to park by the roadside.



Future RSS Location:

The land acquired by the KeNHA is located 3 kilometers before the present parking. It is on land that had been parceled for sale as plots by a private developer. It has no water but mains electricity is about 20 meters away. There has been apathy expressed about the new location and there is concern that the truckers may not move to the new location.

However, the land is big enough for the construction of a large RSS. It is also important to note that Total Kenya has plans for equipping and running a wellness center here, and that the Arab Bank is planning to put up a modern trauma hospital in this town.



Fig: The site acquired by KeNHA for the new lorry park



MAU SUMMIT JUNCTION

Mau Summit Township is located at the junction where the A104 road meets the B1 road to Kisii, Kericho, Kisumu & South Nyanza counties. The area is northwest of the Mau Forest Conservancy and is diverse in its population of farmers and entrepreneurs. The B1 is currently under construction and a lot of traffic avoids it. However, in the past, Mau Summit has been an important truck stop for vehicles destined Uganda Rwanda, Burundi, South Sudan and Congo through the Malaba and Busia border points. It has a small lorry park opposite the T junction which can accommodate about 10 lorries. Occasionally other trucks park along the roads citing poor conditions in this lorry park during wet weather. The park has surface drainage challenges, lack of waste disposal facilities and encroachment by hawkers. The town serves the following functions; Market for agricultural produce, Petrol stations, hotels and lodges, truck servicing and repair.

Current Status of the Park:

- The existing lorry park is at the foot of a hill and is inclined at an angle making it unsuitable for parking;
- The existing park is small and excess lorries park along the A104 endangering the lives of other motorists;
- There is unplanned linear growth of the town along the A104 and B1 roads;
- The area has drainage challenges especially in wet weather;
- There is an outcry over AIDS/STI, prostitution, family break ups and other social vices which the locals attribute to the truckers. Hence there is need to provide healthcare facility to take care of this need;

Proposed RSS Location:

Mau Summit needs a RSS, going by the number of trucks that park in this town. However, this should take cognisance of the fact that Mau Summit is the proposed location of the construction of grade separated interchanges between the A104 and the B1 roads, to be funded by the International Development Association (IDA) toward the cost of the Kenya Transport Sector Support Project. Therefore, KeNHA has already made arrangement to relocate the current track station 300 meters before the junction, opposite the current location of the police station and provincial administration offices. However, further details were not available as at the time of preparing this report.



Fig: The provincial administration offices Mau Summit.
The new site for the Park is opposite this facility.



BURNT FOREST

This vibrant town with a population of about 4,925 people (KBS, 2009) is astride the Nakuru-Eldoret highway, and is famous for its delicious beef and mutton, making it a good haven for long distance truck drivers and other travelers. The Town Council of Burnt Forest was initially part of Wareng County Council until 1997. Town Council of Burnt Forest lies within the newly created Eldoret East District in Uasin Gishu County. It is 56 km from RSS in Mau Summit and 116 km from Nakuru.

This town has a number of affordable and adequate hotel and lodging facilities which have in the past accommodated trucks parking here. The truckers have to use toilet or bathroom facilities available in the hotels. It also has mobile money transfer, electricity, piped water, and telecommunication. The residents welcome the truckers presence because they boost the local economy.

This town has a small tarmaced lorry park that can accommodate about 20 lorries. However, there are potholes full of water and public toilets that serve the truckers. It also has a wellness center equipped and run by the GoK. This RSS should be rehabilitated and additional services put in place to serve the truckers better.

Current status of the Park:

- This is a fragile community that is recovering from post election violence in 2008 and will benefit immensely from facilities that could enhance social cohesion;
- It is inhabited by Kikuyu and Kalenjin and other tribes, who are predominantly farmers but also engage in trade and commerce in the town;

Proposed Location of the RSS:

As part of the ongoing road rehabilitation works, KeNHA will establish a truck park just next to the police station, on both sides of the road. This side parking will mainly provide parking space without any added services. The proposed parking could be augmented to with additional facilities to provide better services to the truckers.



Fig: The current truck park with the Wellness Center

JUA KALI

This small market center is 14 Kilometers from Eldoret as you head to Malaba. It is currently a favoured truck stop outside the congestion of Eldoret town. The town is governed by County Council of Wareng and is politically in Turbo Constituency and Uasin Gishu County. This center is surrounded by a very large productive agricultural area, engaged in commercial dairy and cereal farming.



Environmental and Social Concerns:

- This town is a favoured stop for trucks that come to Eldoret KPC depot to collect fuel in addition to the trucks that transit through the town to and from the west. This center offers a suitable alternative to parking in Eldoret town;
- The center experiences drainage problems in wet weather occasioned by the flat terrain of the area. It is anticipated that the ongoing road rehabilitation will improve the surface of the park, the drainage, provide parking facilities and improve the drainage;
- The existing park is small and excess lorries park along the A104 endangering the lives of other motorists;
- There is unplanned linear growth of the town along the highway;
- There is an outcry over AIDS/STI, prostitution, family break ups and other social vices which the locals attribute to the truckers. Hence there is need to provide healthcare facility to take care of this need;

WEBUYE

This is an industrial town in Bungoma East /Lugari districts, Bungoma county. The town is home to the Pan African Paper Mills, the largest paper factory in the region, as well as a number of heavy-chemical and sugar manufacturers. The area around Webuye is fairly populated and the residents practice subsistence agriculture. The town has an urban population of 23,318 persons according to the 2009 census.

There is a weighbridge located in this town, which has a parking that can accommodate about 30 trucks. Though the inefficiency that characterises the other weighbridges in the country is reminiscent here, truck queues are not so long. It is also evident that truckers don't prefer to park in this park citing lack of security, unserviceable toilet and bathroom facilities, deterioration of the parking area and an attitude problem with the staff at the weighbridge.

However, it is notable that this is one of the well planned facilities in the countries which could do with renovation and upgrade to include missing facilities.

Environmental and Social Concerns:

- Since the collapse of the Paper factory in the town, there has been low economic activity and the demand for housing and hotels is lower. This has made truckers to venture further from their traditional stopping points along the A104 into other facilities closer to the town;
- Truckers decry the poor and slow services at the weighbridge and customs offices, these cause the long queues of trucks;
- The perimeter fence at the lorry park at the weighbridge is torn in many places, and bathroom and toilet facilities are not available for truckers use. Hence they prefer to park elsewhere in town;
- Webuye town center is off the A104, therefore there are not major social and environmental concerns caused by the truckers to this town.

Proposed RSS Location:

KeNHA has passed a policy that no RSS should be established near their weighbridge facilities, therefore the existing lorry park at Webuye cannot be considered for upgrade. A totally new site is proposed 1.2 kilometers from the junction of the A104 and A1 roads towards Bungoma, on the RHS. This site is currently under sugarcane plantation.

MALABA

Malaba is a contiguous border town between Uganda and Kenya. Malaba in Kenya is in Teso District in Busia County. The town is located on Northern Corridor, approximately 477 kilometers by road, west of Nairobi, and 60 kilometers from the proposed RSS at Webuye. The town is also



served by a railway that is hardly used, and the highway into town is seriously encroached by developers, and there is no parking for trucks.

The OSBP facility under construction in Malaba is almost 70% complete, and it will provide the necessary infrastructure that will support the smooth function of the border post. However, this will not have adequate parking for over 200 trucks that park at the border post. Currently, trucks park along the main highway complicating traffic flow to the border town

Ongoing Initiatives:

A private developer has established a private lorry park near the Town Council Offices, but the facility is not in use because he needs to compact the surface with murram for stability of the trucks. Once complete the facility will be able to cater for about 40 trucks, and this is inadequate for the numbers that pass through this town. The ongoing construction of the OSBP is set to demolish some old scattered buildings and consolidate them into a complex, creating room for a yard for about 30 trucks. This will be used for inspection and temporary stop as the trucks wait to clear into Uganda.

Therefore Malaba requires a bigger RSS, and the proposed site is between Amagoro the District headquarter and Malaba town, about 4.5 Kilometer from the old toll station. This area is sparsely populated and less developed because of the challenges of Black Cotton Soil on constructions. This is private land and the process of acquisition shall be used.

B1: KISUMU – BUSIA ROAD SECTION

YALA

Yala town is located in Yala Division of Gem district in Siaya County. This town is close to River Yala and is 42 Km from Kisumu and 72Km from Busia. It is strategically located near the B1 highway and the railway track to Butere from Kisumu.

Yala town serves as an administrative, commercial and municipal hub. It has adequate hotel and accommodation facilities that are affordable, in addition to running water and sanitation facilities, private and public health facilities. There is a university, a bank, National Cereals and Produce Board, and a railway station.

Truckers find this a convenient stop after winding through escarpment slopes on their way to Busia.

Current status:

There is no designated truck park in the town, and the trucks park along the road shoulders. However, the town council has been toying with the idea of establishing a lorry park, and welcomes the initiative to establish an RSS in this location. Their plan is to establish an Inland Container Depot where transshipment of cargo from road to railway can be done.

The proposed location (0.08862^o, 34.53941^o) is owned by the Council and is currently used as an open air market.



Fig: The existing market



Fig: The proposed location of the RSS

SEGA TOWN

Sega town is found in Ugenya district of Siaya County. It is 30 kilometers from Busia and 85 Km from Kisumu. This local town with about 10,000 people, has two secondary schools, a polytechnic, Police post many shops, and weekly open-air market.

This town is a favourite truck stop along the B1, and upto 30 trucks park by the roadside in the evenings. It has a number of affordable and adequate hotel and lodging facilities which have in the past accommodated trucks parking here. The truckers have to use toilet or bathroom facilities available in the hotels. It also has mobile money transfer, electricity, piped water, and telecommunication. The residents welcome the truckers presence because they boost the local economy.

Current Status:

There is evidence that this center needs a larger modern parking, preferably just behind the line of shops.



Fig: The selected site for Sega RSS

KORINDA JUNCTION -BUSIA



This border post is located in Busia district of Busia County. It has an urban population of 51,981 according to the 2009 census. Ethnically Busia town is dominated by the Luhya and the Iteso, but there is also a substantial population of other Kenyans including the Luo and Kikuyu. The main economic activity in Busia town is cross-border trade with neighbouring Uganda. The economic activity in the environs of the town is fishing and peasant agriculture that produces cassava, millet, sweet potatoes, beans, maize and sugarcane.

Ongoing Initiatives:

Trade Mark East Africa obtained funding from development partners to institute a complete reconfiguration of the border processes including construction of physical facilities and roads of the new border station at Busia. So far, the immigration block is complete and has been commissioned, but the KRA offices, staff canteen and staff houses are still under construction. The construction of other auxiliary facilities is yet to start.

The new design removes the existing lorry park from the current location. This is inline with the request of the immigration and KRA officials who have always wanted that it be moved out of the area to avert disaster. However, relocation to the temporary site at the airstrip was halted by a court case as part of the airstrip had already been grabbed and sold to private developers.

Consultation with the CEO in charge of Lands, Housing and Urban development revealed that the County Government is currently negotiating for land for parking at Korinda junction (0.44443^o, 34.1446^o), two kilometers outside town. A plot measuring 1.4 Ha has been identified and the process of acquisition is ongoing. This plot is 10m from the road reserve, but the opposite end is abit swampy and would require filling to make it suitable for a RSS. However, this process has slowed down since the County Government is waiting for allocation of funds from the Central Government. Interestingly though, the County Government intends to acquire more land to establish a dry Inland Container Depot near the RSS facility.



Fig: Proposed location of the RSS in Busia marked in red.

Busia town needs a RSS rather urgently because the ongoing upgrade of the border post will do away with the existing lorry park, yet plans for the new park are still at infancy. This delay will hamper the optimal functioning of the OSBP.

UGANDA



ROAD EXTENSION TO NORTHERN UGANDA AND SOUTH SUDAN

KUMI

Kumi town is the main municipal, administrative and commercial center of Kumi District in Eastern Uganda's Teso sub-region. It is located approximately 54 kilometers by road, southeast of Soroti, and 62 kilometers by road, northwest of Mbale. It is estimated that the district population in 2010 was approximately 231,000 persons. Kumi town has a Central Market, a 200 bed public hospital, the main campus of Kumi University, and several banks. It is served by road and railway.

Proposed RSS:

The land identified for the RSS in this town is located on the RHS, 2.5 kilometers from the Kumi town center, adjacent to the branch off to Jehova Witness church. It is opposite the construction yard for the J.W. Opolot Construction Company yard. The private land is approximately 15 acres, vacant, and in close proximity to power and water supply lines.



Fig: Proposed site

LIRA

Lira city is the municipal, administrative and commercial capital of Lira District. This city is connected to a railway station of the Uganda Railways network. However, it is currently not working. The town is also served by the Lira Airport. In 2011, UBOS estimated the mid-year population of Lira at 108,600 persons.

Current status of parking:

The current lorry park is within the central business district, close to a roundabout in town. It is approximately 8 acres in area and has a compressed laterite flooring that turns muddy when wet and dusty when dry. It is not fenced, has no defined entry and exit, is bordered by fast food kiosks and a garage on one end.





Fig: The current lorry park in town

Proposed Site:

The current location of the lorry park in town is not in tandem with the town's future expansion plans. Therefore, the proposed site is located outside the built up area, about 4 kilometers from the city center. The location is on raised elevation, on the LHS as you head out of town towards Kamdini. This private land is opposite the road to Fountain Comprehensive High School, on a site that is currently bushy.



Fig: The proposed RSS site

KAMDINI

This junction town is located at the confluence of the Gulu- Masindi road and the Gulu-Arua road. Kamdini is located in Aber Sub-county of Oyam County in Apac District. The neighbourhood of Kamdini practices subsistence agriculture and pastoralism as the major economic activity. The URA has a checkpoint within this town. This town has electricity and a piped water supply system, but no sewerage service. No other vital statistics are available for this small town. Kamdini is 65 Km from RSS at Gulu, 70 Km from RSS at Lira and 11 km from junction at Karuma.

Current status of parking facilities:

Many trucks park on the road reserves and use the available hotels and lodges for food accommodation bathroom and toilet facilities. Two small private parking facilities are available in this town, but only the details of one could be found. Agan Parking is on the LHS as you approach the town from Lira, just after the URA checkpoint. It has capacity for 5 trucks, with a poorly maintained fence and dusty ground. It could be considered for Public-Private partnership if it has adequate room for expansion. Alternatively, a suitable site was identified on the LHS just before the URA checkpoint. This site is opposite a pine tree grove.

GULU

Gulu is the largest city in Northern Uganda. It is the commercial and administrative centre of Gulu District, located approximately 320 km by road from Kampala. The estimated population is over 150,000 persons. The town is served by Gulu Airport and a railway line. The town has over 10 banks, a sport stadium, an army barrack, and a university. Gulu is 120 Km to Nimule

The Karuma-Gulu road is tarmac, though in bad state. It covers 75 Kilometers between the two towns. The Gulu-Nimule Road (A104), covers a distance of approximately 120 kilometres to the border with South Sudan through Amuru and Atiak Districts. This is a gravel-surfaced, two-lane road even though it is major link between Uganda and South Sudan. During the rainy season, the road becomes impassable. However, it is now undergoing upgrade.

The Proposed RSS:

Being a major hub in the Northern Corridor into Southern Sudan, this town requires an RSS. The proposed site is on the LHS as you approach the town from Kamdini, because the opposite side



has a 33KV power transmission line, just before you get into the densely populated area. It is on a raised elevation, about 600 meters from the proposed bypass to Nimule. This land is private and the process of acquisition has to be instigated.

ELEGU

Elegu is a small town in northern region at the Uganda-South Sudan border, with an estimated population of 5,000 persons. Administratively, it is located in East Moyo County of Adjumani District. This town was reclaimed from a marshy wetland that fed River Onyama, and gained prominence when the border post was shifted here from Libia. Even though River Onyama is close by, its waters is polluted, and a borehole owned by the Uganda Police Force, is the only source of clean water in the town. The state of the road through the town is set to improve with the ongoing construction of the A104 to Gulu. Elegu is 123 km from RSS at Gulu.

Status of Parking:

The demand for parking space in Elegu is necessitated by the large number of trucks that transit into South Sudan. However there are two major constraints to parking in this town:

- This town is prone to flooding, and the soils are fairly unstable for heavy trucks.
- Cross border skirmishes occasionally flare up for a number of reasons, and truck drivers park on the Uganda side until the situation cools off. This necessitates the need for RSS.

KARUMA

Karuma is located in Kiryandongo District of Bunyoro sub-region in Western Uganda. Karuma is located approximately 110 kilometers by road, northeast of Masindi and approximately 70 kilometers south west of Gulu. This town borders the Murchison National Park to the North, and the Victoria Nile to the east from where tourists can see a series of natural rock formations that cause the waters to ripple, giving the river a white foamy appearance.

The Government of Uganda has plans of constructing a large modern city at the site of the current town, to boost tourism in the region. The construction of the largest hydropower project in Uganda, with a planned capacity of 600 MW is ongoing in the outskirts of the town.

Current status of Parking facilities:

The town is a favoured stop for buses and trucks from Kampala to Pakwach and Gulu, and onward to neighboring states. A long line of trucks line the RHS of the road as one drives from Kampala to Gulu/Pakwach for about 200 meters. Others park in front of lodges available in this town. The trade and commerce that is vibrant at this town is attributed to the trucks and buses that ply this route, and the construction workers in the upcoming dam.

However, this town lacks piped water, electricity, and sewerage services which will be essential for the establishment of a proper RSS.

PURONGO

This town is located in Nwoya, Gulu in Northern Uganda. It is located 50 kilometers from the junction at Karuma and 65 kilometers from Pakwach. It is served by road and railway that run parallel to each other. The shops in this town are all on the RHS of the road. The town is not connected to mains electricity and has neither piped water nor sewerage. The local population and peasant farmers and pastoralists, and submit their crop to the grain silo at Lolim, 13.5 km to the east. Because of the sparse population of the area, there is plenty of land that can be acquired for the RSS cheaply, and extend backwards for 30 meters to the railway reserve.

PAKWACH

Pakwach is located along the western bank of the Albert Nile, in Nebbi District. It is a large town in Northern Uganda, located approximately 110 kilometers by road southeast of Arua and 115 kilometers by road, southwest of Gulu. Pakwach forms the country's railhead on the northern truck. The Uganda Bureau of Statistics (UBOS) estimated the mid-year population of Pakwach at 22,300 in 2011.



Pakwach serves the following functions; It is the administrative headquarter of Pakwach Town Council, it has several tourist lodges that cater for visitors to the Murchison Falls National Park, it hosts the Pakwach Central Market, it hosts the Faculty of Fisheries and Aquaculture of Muni University, many commercial outlets and banks. It is important to note that this town is set to be a major oil producing town in Uganda.

Current Parking site:

The current lorry park is located behind the line of shops on the left hand side of the main street in Pakwach. This site has a capacity for 30 trucks, and has earthen floor that turns muddy when wet and dusty when dry. The site is surrounded by residential housing, shops and a petrol station. The local town council charges Kshs 5,000 Uganda shillings for parking per day and provides security for the trucks overnight. This current site poses a serious risk to the surrounding shops and houses should the liquid cargo catch fire, and does not have room for expansion to meet the parking demand beyond 2015.



Fig: The Existing Lorry Park

Proposed Location:

The field visit of 30th January 2014 identified a suitable location one kilometer outside the town center, on the left hand side of the road. This location is currently used as grazing land and has some cassava crop. It is conveniently at the fringe of town, and the land is under private ownership. This is the closest location because the town has a long linear presentation along the Arua road.



Fig: Photos of the proposed site along the Arua road

ARUA

Arua is a border town approximately 190 kilometres by road west of Gulu, approximately 110 kilometers by road northwest of Pakwach. Arua is the capital of Arua District and the Offices of Arua Town Council are located here. In 2011, the UBOS estimated the population of the town at



59,400 people and the dominant tribe here is the Lugbara, but the Kakwa tribe also has a significant presence.

Arua is served by the second busiest airport in Uganda, a branch of the Ugandan Railways that has largely been non-functional, and an upgraded trunk road. This town serves the following functions; it is home to at least 10 major financial institutions in Uganda, four universities, a large referral hospital, large distilleries, tourist hotels, currency center for the Uganda Central Bank, radio and TV broadcast stations.

Arua is an important base for NGOs working in the West Nile sub-region or serving Western Equatoria in Southern Sudan or northeastern Congo DRC. It has become increasingly important as a commercial supply centre and transport route as the Yei–Juba Road has opened up and supplies come into Juba from the south on the Kaya Highway rather than through Khartoum.

Present Parking:

Currently, trucks to Arua and those on transit to South Sudan park at a small parking lot provided within the town, and in other locations within the town where space allows. These locations are mainly in front of hotels and lodges and on road shoulders.

The main road from Pakwach branches off 4kms before Arua to Aru in South Sudan. It is recommended that the new RSS be located just the Arua-Aru branch off, approximately 4 km from Arua.

ORABA

Oraba is the furthest town to the northwestern corner of Uganda, few kilometers from the tripoint where South Sudan–Uganda–DRC International borders meet. Oraba is located in Koboko District, West Nile sub-region, in Northern Uganda. It is situated directly across the border from the town of Kaya in South Sudan. Oraba is approximately 18 kilometers by road, northwest of Koboko - the district headquarter, and 70 kilometers from Arua.

Oraba houses the offices of Oraba Town City Council, the Oraba Central Market and several commercial outlets that serve cross-border trade. However, trade and commerce activities in Oraba are masked by the much bigger Kaya town across the border in South Sudan.

Current state of Parking:

The transit traffic destined for South Sudan parks in this town, close to the border point. The designated parking is small, and gets dusty when dry and muddy during the wet season. Because of the poor state, trucks have a tendency to park by the road reserves where space allows.

MIGEERA

Migera is located in Nakasongola District of Western Uganda.



Fig: The favourite petrol station in town that serves as a bus/truck stop. The existing Side parking in town.



Proposed RSS Location:

Migera town is located on a raised area, with the road sloping out of town on both ends. Therefore the proposed site 200 meters from the town centre, faces the challenge of creating a side exit for trucks on a section of the road where trucks will be speeding. An alternative site is proposed behind a small petrol station that is not operational, on the LHS of the road as one exit to Kampala.



Fig: Proposed site for the new RSS

A109: MALABA-KAMPALA ROAD SECTION

BUSITEMA (Busia Junction)

This small market center is locally known as “Corner” because it is located on the junction of the Tororo-Jinja A109 road and the branch to Busia. The area name is Busitema. It is located in Busitema Sub-County of Busia District. The junction is located approximately 13 kilometres by road, northwest of Busia, where the district headquarters are located. This location is approximately 30 kilometres, by road, southwest of Tororo, the largest town in the sub-region. It is at the edge of a tropical forest and currently road rehabilitation is going on here.

This center has a weighbridge and KRA offices located here. Truckers use this center because they have clear with the URA and it takes time. There is a small lorry park, but extra lorries park by the roadside. This center has affordable hotels and lodges, and the park ample security provided by the Uganda Police. However, truckers have to use bathroom and toilets in the boarding facilities. The center has running tap water, electricity, and telecommunication.

Environmental and Social Issues:

- The locals appreciate the presence of a truck stop here because their local economy depends on it. They comment that when there is a jam with the revenue system, that is when business is much better;
- The truckers comment that the center should improve the parking facility and provide toilet, bathroom and proper perimeter fencing that will deter attacks from wild animals like monkeys and baboons;
- The truckers state that the road needs repair in this section;
- The want services expedited at the weighbridge.
- The traffic volume at the weighbridge is 200 – 250 trucks per day.

Proposed Location:

The proposed location is on the RHS as you head to Kampala from Tororo. The area is about 30 meters from the existing weighbridge, currently under secondary vegetation recovering from destruction. The site is chosen because it will strategically serve traffic from Malaba, which has more traffic, and Busia as well.



NALUWERERE

Naluwerere is a market center under the auspices of Bugiri Town Council in Bugiri district, Kapianga Sub-County, Bokoli County. At this market center, the Kampala – Malaba road is in excellent condition having been rehabilitated recently. Other than improving the roadside drainage, the contractor also repaired road shoulders and installed road signs. Most importantly he created two linear lorry parks on both sides of the road that can accommodate about 30 lorries. The council charges between 5,000 and 3,000 shillings depending on the location on the side parking, gives receipts for the payment and provides security to the trucks.

Naluwerere has a separate plot of public land measuring about 10 acres just behind the shops to the south that was designated to be a lorry park but has not been fully developed. Though the site is still in use as a lorry park, it does not attract many truckers. A perimeter fence and a gate were put, but have now been vandalized, see the photo below;



Fig: This was a fenced lorry park behind the shops that was abandoned after conditions therein deteriorated and existing side parking by the roadside.

IDUDI

This market centre is located in Buyanga Sub County, Iganga District in the eastern region of Uganda. Idudi has a significant population ratio of Muslims to Christians.

The town is lined with protective barriers on both sides of the road, because of road surface was raised significantly above the line of shops marking the road reserve. However, there is a 200 meter side parking on the left, just before you get to the barrier from the east. The town has piped water, but waste disposal is via pits latrines and soak pits. The main road passing through the town is in excellent condition complete with drainage and road signs. However, beyond the main road, no other streets/side roads are paved.

Currently, the truckers pay Ushs 3000 for parking which is inclusive of security, and the truckers use toilet and bathroom facilities in the neighbouring lodges and hotels. This market center will greatly benefit from a RSS, because the center is a favourite stop-over for trucks. It has the capacity and the needed facilities to cater for the truckers.

LUGAZI

Lugazi, also called Kawolo, is a town in Buikwe District, in Central Uganda. The UBOS estimated the population of Lugazi to be approximately 35,500 in 2011.

The following facilities are available in Lugazi town. The offices of Lugazi Town Council, the headquarters of the Roman Catholic Diocese of Lugazi, Lugazi Central Market, the headquarters of the Mehta Group of Companies that include the Sugar Corporation of Uganda Limited (SCOUL), Ugma Engineering Corporation Limited, Cable Corporation Limited and the Uganda Hortech Limited. The Town is also home to University of Military Science and Technology - A university owned and administered by the Uganda Ministry of Defence.

There is the Kawolo Hospital, a 200 bed public hospital, administered by the Uganda Ministry of Health, and at least 5 different banks in this town.

Current Status:



The road passing through this town has been rehabilitated and is complete with drainage and signs.

Lugazi has a side parking by the roadside, which is set aside for all other vehicles except taxis and trucks. The designated lorry park is next to a taxi park and has capacity for about 50 lorries. The park has toilet charged at Ushs 200 and shower facilities charged at Ushs 1000. It should be noted that these facilities remain closed during the night and that explains the smell of urine in the lorry park. Parking costs Ushs 5000 which is inclusive of security. However, the park get gusty when dry and muddy when wet. The Park is about 200 meters from the hotels and lodges that are located in the town center, but the truckers make use of the open food kiosks that line the lorry park.

The open food kiosks lack infrastructure that should include running water, and waste disposal (grey water, black water and solid waste) This compromises hygiene in the parking facility.

Future Proposal:

Lugazi is a fairly large city with a rapidly expanding population. Therefore the future of a lorry park in town is bleak. Relocating the park to the outskirts of the town was not feasible because west of the town is a slope that ends in a wetland, and the climb thereafter has dense population on both sides of the road. To the east of the town, are large sugarcane plantations owned by a private investor, who may not cede an inch for an RSS. Thereafter are tea plantations and a forest reserve.

Therefore no suitable location was found outside Lugazi town center, and the possibility of relocating the RSS from Lugazi to Mbiko was considered. Therefore Mbiko is highlighted here-below.

MBIKO

Mbiko is a small town, 5 Kilometers by road from the Owen falls dam in Jinja and 73 Kilometers by road from Kampala, and is a famous stop-over for trucks coming from the border. It is 68 Kms from RSS at Naluwerere, 27 from next RSS at Lugazi, 73 Kilometers by road from Kampala. It is connected mains electricity and piped water. This one-street town lines both sides of the highway and stretches for about 2 kilometers. There is plenty of trade going on here, and a wellness center was established here to cater for truckers needs.

Ideally, Mbiko is an agricultural town. It is surrounded by fertile soils, abundant water sources, and reliable rainfall. The biggest industry in the locality is the Kakira Sugar Works, other industries are fish processing, leather and paper processing, grain milling, some organic fruits, and coffee growing, and brewing for local sale.

Mbiko is gaining prominence because the next RSS at Lugazi is within the developed area in town and no suitable location can be identified in the neighbourhood. This is because the land is either on a lowland, or in dense residential area, or under sugarcane/tea plantation.

Current status:

Mbiko has always been a trucker's town. It caters for truckers who by-pass the big Jinja city to the east. Beyond Mbiko, the road winding through the hilly terrain is lined on both sides with sugarcane and tea plantations belonging to multinational companies, and forest. After Mbiko, the only other possible location for the truck stop is Lugazi, 27 kilometers away by road.

Proposed Site:

The proposed site is just after the dual carriage way, behind an upcoming petrol station on the LHS of the road as you head to Lugazi. The location is currently under private cane, and is bound at the back by high tension power transmission line.

KAMPALA – MASAKA – MBARARA –KABALE ROAD SECTION

BUWAMA

This town is 52 kilometers form Kampala town and is located in Katunga region of Mpigi district, Buwama sub-county in Maokota County. In Buwama there are two small lorry parks on both sides



of the highway that can accommodate about 10 lorries each. The road was recently rehabilitated; the town's drainage system, sidewalks and kerbs were also constructed with the road. The parking bay here is constructed using concrete, which is rarely done. This town has bumps erected to control speeding after a spate of fatal accidents since the completion of the road. The town has piped water, a police station and a magistrate's court.

This is a trucker's town (see signboard below) which has in the past accommodated trucks parking here, and welcomes the truckers presence because they boost the local economy. The truckers in return consider this town as one of the safe places to park. However, the roadside parking has no toilet or bathroom facilities, nor perimeter fencing. The truckers use the hotel facilities in the vicinity.



LUKAYA

This is a fairly vibrant town located in Lukaya Town Council in Kalungu District, and is home to one of the weighbridges in Western Uganda. Lukaya lies on the Masaka-Kampala Highway, approximately 34 kilometers by road northeast of Masaka, and approximately 115 kilometers by road, southwest of Kampala. This town is home to the offices of Lukaya Town Council, and the Lukaya Central Market. This town is very close to the shores of the Lake Victoria. In 2011, UBOS estimated the population of Lukaya at about 15,500. Transit traffic along the Kampala –Masaka road gave rise to Lukaya town. Therefore, Lukaya is a truckers town. Long distance buses, small lorries and upcountry taxis also make stops in this town to buy consumables, and this explains the presence of a many hawkers in this town.

Current status of Parking:

The road passing through this town was recently rehabilitated; the town's drainage system, sidewalks, and kerbs were also constructed with the road. There is a small parking bay near the weighbridge station on public land which offers free parking but with no amenities, and two other linear parking lots on either sides of the road. There is also a private lorry park that has a perimeter wall, ample security, bathroom and toilets with running tap water. This private park is also used by the weighbridge staff to impound overloaded trucks.

This town is a favoured parking location because it has many affordable hotels. Private parking costs the trucker 5000Ushs. The roadside parking will cost him 4000Ushs payable to the local council, but he will have to use the facilities in the nearby hotels.

From Lukaya, we gathered interesting socio-economic information; The locals don't want the weighbridge there saying that it has made trucks from Tanzania to use alternative routes because of stringent weight restrictions. For that reason some business has been lost.

MASAKA ROAD

Masaka is the second largest urban center in western Uganda, and the eighth largest urban center in the whole of Uganda. It is the headquarters of Masaka District and the regional hub of the Lyantonde District. It is approximately 140 Kilometers from Kampala Town, 28kms from RSS in



Lukaya and 69Kms from next RSS at Lyantonde; lying very close to the Equator. The UBOS estimated the population of this town to be 74,100 in mid 2011.

The residents in the district are mainly crop farmers and animal keepers, but some engage in agro-based industries for local and export markets.

This Town is home to the Masaka District Administration and the Office of the Town Council. In addition, there is an army barracks for the Uganda Army, two Universities and several middle level colleges, it also hosts the headquarters of the Masaka Diocese of the Catholic Church, over ten different Banks, a Branch of the Central Bank of Uganda, the national Social Security Fund, Private and Public Hospitals, Orphanages and Prison facilities.

Ideally, this being a large urban center, it is faced with competition for space, and this poses challenges to urban transport in general and truckers in particular. It has a bypass that diverts traffic between Kampala to the western towns, and this is what truckers use. Therefore, most of the facilities within town are unavailable to the truckers who prefer to park and use facilities in the periphery of the town.

Proposed site:

Being a fairly busy town with considerable truck and bus traffic, this town is ideal for a RSS. The investment here is projected to be viable. The proposed site is just after the roundabout where the bypass joins to route to Mbarara.

MBARARA

Mbarara town is the largest urban center in Western Uganda with an urban population of about 70,000 people, and is one of the fastest growing towns in Uganda. It is the headquarters of Mbarara District which has three municipal divisions, 14 subcounties and 2 counties. The town has the Mbarara Regional Referral Hospital, a community hospital and a children's hospital. It has offices of the Mbarara Municipal Council, the Peoples Defence Forces, and the Provincial Administration. This town is surrounded by crop growing and animal keeping activity in the surrounding farmlands, fishing in the wetlands nearby, and trade. The RSS at Mbarara is 51 Kms from RSS at Lyantonde, and 12 kms from next RSS at Biharwe.

Being a large administrative, municipal, and commercial center, this town has no convenient parking for trucks, even though they have adequate hotel and lodges. All side parking is designated by the town council as car parks. The few trailers that have to enter into town to offload goods or for any other reason park in front of the few lodges that are endowed with adequate parking space at the front.

For that reason, the truck operators would prefer to proceed on to Ruti, three kilometers out of town for parking and lodging services, or park at the weighbridge at Nyei 7 kilometers away where parking is free.

BIHARWE

Biharwe is located 7 kilometers from the weighbridge at Karanorya and 12 kilometers from Mbarara. Biharwe is a small town in Biharwe sub-county of Mbarara district of Ankole Subregion in western Uganda. The weighbridge at Karanorya is a new facility that was constructed with funding from the EU, and caters for approximately 150 to 200 trucks per day. This small town appears sleepy by day but gets active in the night because it is currently a truckers town. It would be desirable to locate a RSS at Biharwe, a convenient distance from the city of Mbarara and the weighbridge services.

The proposed site is on the LHS of the highway to Mbarara, opposite the Igongo Cultural site.

NTUNGAMO

Ntungamo Town is 66 kilometers south-west of Mbarara and 75 kilometers from Kabale. Ntungamo district borders Mbarara district to the east. This district is named after Ntungamo Town which is the administrative, commercial and municipal headquarter, and stands out as the largest sub-region in the Ankole sub-region. The Uganda Bureau of Statistics (UBOS) estimates the population as 24,750 as at mid 2011.



The town has at least 4 petrol stations, 5 different banks represented, a mixed variety of hotels and lodges that cater for all classes of visitors, tap water, sections of the town are covered by sewage system. There is a large cathedral, police station in addition to a prison in the neighbourhood. Private and public medical services are also available.

Unfortunately, this town has no lorry park, and currently, the trucks park by the roadside. They still get charged 4000Ushs as parking fee but the drivers have to pay watchmen to guard the trucks. Other trucks go to other sections of the town and park in front of hotels and lodges. From a socio-economic standpoint, this town is very suitable for a RSS.

Proposed Site:

Ntungamo is located where the road to Kigali via Mirama Hills/Kagitumba branches off the road to Kigali via Gatuna. Therefore it will strategically serve traffic using both routes to Kigali and traffic to Congo via Bunagana. The proposed site is on the LHS just before entry into the town from Kampala.

KABALE

Kabale town is in Kabale Municipality and forms the headquarters of the Kabale District in Western Uganda. It is 83 km from Bunagana, and 20 kms from Katuna. The town is at the foot of green interlocking and heavily cultivated hills with spectacular valleys. It is a busy administrative, commercial and municipal hub. This time is home to the Bakiga, but there are the Toro and Banyarwanda also represented. Over 90% of the locals are Christians, but there are a sizeable population of Muslims and animists as well. It has adequate hotel and accommodation facilities that are affordable, in addition to running water and sanitation facilities, private and public health facilities.

Truckers find this a convenient stop after winding through steep escarpment slopes on their way to Rwanda and Burundi. It has a sizeable lorry park on the left as you approach the town from Mbarara, which can accommodate about 50 lorries on the road reserve, just in front of the shops. However, this is not paved and becomes muddy when wet and dusty when dry. It is clearly noticeable that hotels and lodges are concentrated close to the lorry park, ostensibly to take advantage of the market offered by the truckers. The park does not offer any other services except security which is provided to the trucks after they pay 4000shillings to the local council. For all other facilities and services, the truckers have to pay and use them at their places of abode.

This town is suitable for a RSS considering availability of already existing space and the demand for the service.

Current situation:

- The road rehabilitation started just outside the town, and the residents felt that it should have started from the town's streets
- The existing lorry park should be paved to improve the surface and other facilities like toilets and bathrooms provided

Proposed intervention:

Kabale town is fast growing, and the on-going road rehabilitation will spur further growth. Therefore, the existing truck park that is in front of the line of shops is unsuitable for consideration for an RSS. The proposed site is along the Gatuna road, about 2.5 kilometers outside town.

LYANTONDE

This is a sizeable town that is the administrative, municipal, and commercial center of the Lyantonde District in South-Central Uganda, with a resident District Commissioner and other administrative officers in the Office of the President. Lyantonde is located approximately 75 kilometres by road west of Masaka, and 66 kilometers by road east of Mbarara. It has several banks, wholesale shops, recreational facilities, modern hotels, garages, piped water and sewage system. The town has an estimated population of about 9,000 people in 2011 (UBOS).



Lyantonde is 18 kilometers from Kyazanga along a section of road that has steep hills and sharp bends. This town has a by-pass.

Current Status:

Lyantonde is a trucker's town, and is reported to be very active after dusk. The town has a small lorry park along the main road, and alternative parking is in front of the lodges and hotels located outside the town center.

Proposed RSS:

During the field visit, Lyantonde was preferred over Kyazanga for various reasons. The proposed site for the RSS is on LHS just after the bypass as you head west, just after the junction to St Kizito high School but before the Sky blue hotel.

EXTENSION FROM NTUNGAMO TO MIRAMA HILLS

MIRAMA HILLS

Mirama Hills town lies at Uganda's border with Rwanda, and lies very close to the point where the borders of Uganda, Rwanda and Tanzania intersect. This border town is located in Ntungamo District, Ankole sub-region, in Southwestern Uganda. It is located approximately 29 kilometres by road, southeast of Ntungamo. The town is bound by the Mirama hills to the north, and River Muvumba, a tributary of the Kagera River, which also marks the boundary.

This town is linked to Ntungamo via a gravel road, and is home to the offices of Mirama Hills Town Council, and the upcoming OSBP.



Fig: The taxi park in Mirama Hills and the hoarded area where the OSBP is being constructed.

Ongoing developments:

The OSBP under construction at Mirama Hills comprises of Customs and Immigration building; Warehouses; ancilliary buildings with gate houses washrooms; water supply; waste treatment plant and Road works. These will greatly improve the operations of the OSBP. However, a RSS will be necessary here for the long distance truck drivers, and one is proposed about 100 meters before the existing taxi park.

EXTENSION FROM MBARARA TO MPONDWE

ISHAKA

Ishaka is located in Igara County in Bushenyi District, in Western Uganda. It is located approximately 12 kilometers by road, west of Bushenyi the district headquarters, and 76 kilometers by road, west of Mbarara and 100 kilometers by road from Kasese. Ishaka hosts the offices of Ishaka Town Council, the Central Market, the western Campus of Kampala International University, a large referral hospital, and at least three commercial banks.

Ishaka forms an important junction of the Mbarara-Ishaka Road with the Ntungamo-Rubirizi Road. The Kampala-Mbarara-Ishaka-Mpondwe route was very busy with trucks when the Kampala-Fort Portal-Mpondwe route was under construction. However the Mpondwe-Ishaka- Ntungamo route is used by trucks from Northern Tanzania, Rwanda and Burundi going to Kasindi in Congo.



Current Status:

Even though the distance from Ntungamo to Ishaka is 60 Kilometers, and the distance from Kasese to Ishaka is 100 kilometers, the long distance truck volumes are too low to justify a RSS. A survey revealed that most of the small trucks plying these routes carry perishable agricultural produce, fuel or industrial products destined for the major cities in Uganda. These trucks do not require RSS. Furthermore, the hilly terrain and settlement along the main roads will pose a challenge in constructing a RSS.

MPONDWE

Mpondwe is located at the foot of the Ruwenzori Mountains, in Kasese District of Western Uganda. Mpondwe is under the auspices of the Mpondwe Town Council, and is 2 kilometers from Bwera town where most of the large commercial outfits are located. The Mpondwe-Bwera metropolitan area is located approximately 37 kilometres southwest of Kasese, and approximately 390 by road, west of Kampala. In this area there are the following services; the offices of Uganda Revenue Authority, a large public Hospital, Mpondwe Central Market. The area is connected with piped water, mains electricity, and telecommunication. In 2011, UBOS estimated the mid-year population of Mpondwe at 16,700 persons.

This is an active border town is located on the Uganda/Congo frontier whose partner town is Kasindi in North Kivu Province of DRC, and the town was the busiest border crossing between Uganda and DRC based on volume of exports and imports in 2005. The Kampala-Fort Portal-Kasese-Mpondwe route is tarmac, but the Kasindi to Beni is poorly maintained murrum road, and the bridge over river Sindiki is currently broken. This explains why most truck traffic terminates at Kasindi. Most of the trucks in this town ply, though very few trucks also get here from Rwanda and Tanzania through the Ntungamo-Ishaka-Mpondwe route.

Current status on parking:

In Mpondwe there is a lorry park close to the border offices which can accommodate approximately 50 trucks. It is fenced off with un paved floor, a run down fence, gate, a drivers pavilion, public toilets and a counseling and testing center. However, it has no security lighting. On the Kasindi side, there is a similar lorry park, with similar specifications.

An alternative site is located just before the Mpondwe border post on a site 800 meters from the border crossing. This site avoids the densely populated areas of Mpondwe and Bwera, and takes into account the future growth of the towns and increased traffic volumes.

RWANDA

RUKOMO

Rukomo town lies in Rukomo sector of Gicumbi district in the Northern Province of Rwanda. It is 7 kilometers east of Byumba, the provincial capital. Rukomo is strategically located on the Byumba-Mutara/Nyagatare road and Katuna-Kigali national road. This town is served with piped water, mains electricity, and the national road section through the town was recently refurbished.

Rukomo is the busiest trading centre along Katuna-Kigali highway. It is about 20 Km by road from Gatuna border and 32 Kilometers by road to Kigali along a steep winding highway.

Its proximity to Kigali City and Gatuna border makes Rukomo a stop centre for many transit truck drivers.

NYACYONGA

Nyacyonga is located in Gasabo district of Kigali Province. Nyacyonga town is about 67 Km from Gatuna border point and 10 kms away from Kigali City. It has electricity and telecommunication services. In addition the market center is vibrant economically with Bars, shops, Hotels and Hardwares. Oilcom (Rwanda) is setting up a fuel depot just outside the town to attest to this fact. The district occupies the northern half of Kigali province, which had its boundaries extended under local government reorganisation in 2006. This district extends to the outskirts of the Kigali urban area and includes large areas of the city itself. Gasabo district is divided into 15 sectors, and Nyacyonga is in Jabana sector.



Currently Gasabo district has got 10 health centers and one serves the Nyacyonga area. The locals have a rich culture that is expressed through traditional dancing, songs and other folk demonstrations. Other than agricultural practise, the residents make baskets, jewelry, weaving in traditional ways.

The section of the road passing through this town has been done by the Strabag Construction Company, including drainages, sidewalks, roadside furniture, signs and walkways.

Current Situation:

Currently, lorries park by the roadside, next to a T-junction where passenger vehicles and motorcycles pick passengers. The parking is on the right side only as you head to Kigali, because the left side has a steep valley that is covered with Sugarcane plantation and greenhouses. The parking has capacity for a maximum of five trucks, but they have to compete for space with other smaller trucks and vans that carry goods locally.



Fig: Section of the road through the town

This town is a suitable candidate for the RSS because it is an important resting point for the trucks after a steep 60 kilometer descent through hilly terrain. It has the capacity to accommodate the truckers, and provide for their needs. Besides, being 10 Km away from Kigali, it will be strategic for the trucks that have to deliver goods to the capital, but cannot find convenient parking within the city.

RUGENDE

Rugende is an outskirt of Kigali City, estimated to be 24 kilometers East on the highway to Kayonza and Rusumo. It is in Rugende sector of Rwamagana district in the western Province of Rwanda. This area has experienced spectacular growth with the upcoming of new modern housing units in the neighbourhood.

Status of Existing RSS:

There exists a fenced-off yard measuring about 1 Ha on the right side of the road as you approach Kigali that is designated as a truck park. This site was reclaimed from the neighbouring marshlands and has loose surface soil that turns muddy when wet and dusty when dry. The truck yard at Rugende has a capacity for 20 trucks, but has serious drainage problems and the site gets muddy during peak rainy season. For that reason, truckers avoid using the designated park in wet weather.



Fig: A general view of the truck station



Fig: Status of the perimeter fence



Fig: Section of the RSS overgrown with grass



Fig: Status of the guard's office

Though the perimeter fence is poor and broken as seen in photograph 17 above, and there are no guards here, Rwanda is famed to be the safest country for the truckers. Though the parking is free, there are no toilets, no bathrooms, and no hotels, no recreational facility, no lodging, no internet, no electricity, no safe drinking water, no garage nor fuel station. There is evidence on site that the drivers cook, sleep, bathe and defecate on site. The truck stop is in a secluded place far from human interaction.



Fig: A truck driver cooking his supper before resting for the night in the park.

The RTDA is erecting kerbs along the highway bordering the park prevent the trucks from damaging the shoulders as they get off and back to the road.

RYABEGA

Ryabega is a small town located on the Kagitumba-Kayoza road, 28 kilometers by road from Kagitumba town. The branch off to the district headquarter at Nyagatare, 10 kilometers away is right in the town center, and another branch off to Ngarama is just 300 meters ahead in the same direction. Human settlement is denser along the route to Nyagatare than along the Kagitumba-Kayoza road. The topography of the area is characterized by lowly inclined hills separated by seasonal river valleys. Therefore construction of an RSS will not pose any technical challenges. In addition, the town is fairly small with people concentrated on the route to Nyagatare. Ryabega is 10 kilometers by road from Nyagatare the district headquarter of Eastern Province.

Currently, there is no truck stop in this town because north-bound truckers strive to get to the border post while south bound truckers strive to get to Kayonza.

The Proposed RSS

The Nyagatare District Development Plan 2013 -2018 highlights the construction of a roadside station for the inward and outward tractors that deal with cross border trade, to spur growth and urbanization in the district. The proposed station is slated for Kagitumba border.

However, this proposal advocates for Ryabega, which is still within the district, as a better option to Kagitumba. The proposed RSS is 300 metres south of the junction of Nyagatare-Ryabega road where private, vacant land exists on both sides of the road. It is at an acceptable distance from the Karangazi Health center.

MUHANGA

Muhanga town, formerly known as Gitarama, is 44 kilometers by road from Kigali, and it is located in the Southern Province. This town is a confluence of four major roads; going east to Kigali, south to Butare, west to Kibuye on the the shores of Lake Kivu, and north to Gisenyi and Ruhengeri in the foothills of the Virunga Mountains. In 2004, this city had a population of approximately 88,000 persons and was ranked the third largest in Rwanda.



Administratively, Muhanga town is home to the offices of Muhanga City Council, The District Council Offices, Police Station, District Prison, and the High Court. It has many institutions of learning at all levels, a referral hospital, cultural center, stadium, religious centers and over 5 banks.

Muhanga being a large city has a dense population with very busy streets, and the cost of living is fairly high. Trucks passing through the town park at a small designated truck stop on the outskirts of town.

RUHANGO

Ruhango town is the district capital of Ruhango District in the Southern Province of Rwanda. This town is 18 kilometers by road south of Muhanga, and 62 kilometers by road north of Huye.

The Rwanda Strategic Transport Master Plan (2012) reports that the majority of passenger movement takes place along the RN 1 between Kigali – Gitarama-Ruhango route and on the RN 3 between Kigali -Rwamagana. The majority of freight movement takes place along the RN 1 between Kigali-Gitarama-Ruhango and on the RN 3 between Kigali-Rwamagana. Based on 2010 accident statistics, Ruhango recorded the highest accident rates in the Southern Province, and the highest Average Daily Traffic at Ruhango varies between 1,000 and 1,500 vehicles per day.

Proposed RSS:

Being a fairly small town, and in close proximity to Muhanga, this town was the preferred choice for RSS over Muhanga. The selected site is 200 meters out of the built area as you approach the town from Muhanga.

HUYE (BUTARE)

Butare was renamed Huye in 2006 after the surrounding district. It is the capital of Rwanda's Southern Province, and has an estimated urban population of 80,000 persons in 2012. This town is famous for its universities; its scientific, religious, and cultural institutions; and for the finest national museum in Eastern Africa. It has long been famed as the intellectual capital of the country, while Kigali holds the political power.

Huye is about 80 Kilometers by road south of Kigali, and about 30 kilometers from the Akanyaru Haut. The city is also served by an aerodrome.

Current Parking Situation:

Unfortunately, this town has no lorry park, and currently, the trucks park by the roadside and in front of hotels and lodges. From a socio-economic standpoint, this town is very suitable for a RSS, because of its proximity to the border with Burundi.

Proposed RSS:

Huye is a large city with high urban population and traffic, therefore an RSS is proposed outside the built-up area on land that was initially a borrow area. This is 3.8 kilometers from the town center and about 800 meters from the previous site proposed for the RSS. This location has space on both the LHS (disused borrow area) and on the RHS where there is a vacant private land next to a *Eucalyptus* tree grove.





Fig: Proposed RSS locations LHS and RHS

KITABI

Kitabi is a small town located about 50 kilometers by road west of Huye at an altitude of 2332 meters a.s.l. This is the last urban center before a truck driver starts the long steep decent through the forested Nyungwe National Park, to Rusizi and Bukavu. It is surrounded by tea farms, and the route to this location is currently undergoing rehabilitation. The pedology of the area poses challenges of slope instability, making construction work on slopes difficult.



Fig: The main street through Kitabi town

Current Situation:

There is no truck stop in this town, though a number of trucks ply this route to western cities of Rwanda and onwards to Congo. Kitabi would be a suitable location for an RSS; to provide the truckers with opportunity to rest and check the mechanical condition of the trucks before undertaking the long decent to Congo. There is no other alternative site after Kitabi since this road spirals through a forested national park to the west.

Proposed Parking:

The challenge paused is the identification of a suitable site because the steep terrain has led to settlement close to the roads, and the town center has no room for expansion. However, there is a tea plantation on the RHS as you approach the town from the east which can be replaced by a truck station. This crop can be re-established elsewhere on the steep terrain.

DEMOCRATIC REPUBLIC OF CONGO

North Kivu Province has a total of 1,709 kilometers of road, out of which 803 Kilometers form part of the Northern Corridor Road. Out of these, only 71 Kilometers are tarmac but in a state of disrepair. Following consultations with the Technical Divisions Director of the Office of the Congolese Roads in North North Kivu Province based at Goma, it was agreed that the following towns be considered for the Pilot Phase of the RSS in the province. These are:-

GOMA

Goma is a beautiful city on the northern shores of Lake Kivu. It is the capital of North Kivu province. Goma can be accessed through Gisenyi in Rwanda. It is only 1 km from the Rwandan border and 3.5 km from Gisenyi, therefore there is a lot of interaction between the Congolese and Rwandese across the border.

Goma has an International Airport that accepts commercial charter flights and also a passenger line travels from Nairobi and the East African region. Part of the Northern Corridor linking Goma to Bukavu and Kisangani is in bad state due to wars and lack of maintenance. The city no longer exudes the vibrant nightlife and African cuisine that it was known for due to internal conflicts.

Goma faces the following challenges:



- Comparatively, Goma used to be a fairly safe town with economic activities and truckers could stay here for as long as their visa allows. However, in May/June 2013 insurgency by the M23 militia has brought unrest.
- Goma lies about 15 km due south of the crater of the active Nyiragongo Volcano. It has suffered catastrophes as a result of this volcano.
- Goma also lies at the shores of Lake Kivu identified as having huge quantities of dissolved gas held at pressure in its depths. It is anticipated that a limnic eruption could occur at any time, releasing tons of toxic gas.

There are two border posts between Goma and Gisenyi. The major one where the OSBP is being constructed has the customs warehouse and inspection yard, a truck park and immigration facilities on the Gisenyi side. The truck park located here provides security in addition to basic amenities for the road users. On the Goma side, infrastructure is still lacking, though plans are underway to establish them. The minor border post is located at the shore of Lake Kivu and has customs and immigration facilities in Gisenyi and Goma. However, the access route to this post is narrow having been designed for a residential area and poses challenges for heavy commercial goods vehicles. The route cannot be expanded because it is lined by housing on one side and the lake on the other. The existing two border posts are linked by an access route that goes through a residential area.

An American investor is providing funding for a third border post that will be located between the first two border posts. This will provide an access route and border facilities on the Gisenyi side, and not much is known about the Goma side.

Current State of Parking:

At Goma parking is provided near Customs office at the border with Rwanda, and there is also another parking in town. This modest parking has security provided at a fee, and the truck drivers use hotel and lodging facilities in the neighbourhood.

On the Gisenyi side, there is a parking where trucks are temporarily held as they await clearance from the border posts. This site is also used by taxis and motor cycles plying in town. It only has a fence on two sides bordering the residential housing, but Police provide protection. It has no toilet and bathroom, restaurant and lodging facilities.

Proposed RSS Location:

Goma is a highly populated and vibrant town, whose expansion is limited by the Lake Kivu to the south, and the Nyiragongo volcano to the north. Therefore, it will not be suitable to establish an RSS in this town.

The proposed RSS should be established on the outskirts of Goma towards Kibumba, approximately 17 kilometers by road from Goma. This is a small agricultural town that is currently used as truck stop. It is famed for safety and affordable cost of food and services. This small town links important routes to Goma, viz:

- From Uganda through Ishasha to Goma
- From Kigali/Kabale to Bunagana and onward to Goma

BENI

Beni is a city in North Kivu Province of Democratic Republic of Congo, and is also the headquarter of the Beni territory. RN 4 runs east to Paida and Mpondwe, west through the town to Kisangani, and the RN4 runs North to Komanda 125 kilometers away, RN2 runs South to Butembo lying immediately west of the Virunga National Park and the Rwenzori Mountains, on the edge of the Ituri Forest. Beni is home to a market, an airport and the Christian Bilingual University of Congo (UCBC). As of 2009 it had an estimated population of 102,624 persons.

The first 60 km of the Beni-Komamanda route was restored to tarmac before the 2011 elections, but after the vote, the remaining 200 km was ignored, leaving traffic to negotiate a deeply rutted and often impassable dirt track through the forest. The RN4 stretching westwards to Kisangani



from Beni is 800 km long. In August 2009, the Head of State inaugurated the road construction which stalled soon after.

Road users face constant threat of attacks from one of the many militia groups along the routes, especially outside the urban centers.

Proposed RSS Location:

The proposed RSS should be established at the edge of the built up area, about 1 kilometer from Beni town center. This location will serve the trucks travelling into Beni from Mahagi/Bunia in the North, and Butembo/Goma in the South. It should also serve traffic exiting Beni to Kisangani in the West.

KOMANDA

Komanda is located in Ituri District of Orientale Province, the largest Province in the Democratic Republic of Congo. Komanda has a humid climate, and the land area is not cultivated much. The landscape is mostly covered with closed to open shrubland, and the soil in the area is composed of kaolinite and quartz and enriched in Iron and Aluminium oxides.

Komanda is 70 kilometers west of Bunia along the N27. The road through town splits into the N4 running southwards to Beni 127 kilometers away, and the N4 going westwards for 92 kilometers to Mambasa.

Ituri District in general, and Komanda in particular has had challenges maintaining its roads due to climatic conditions, internal conflict, and more recently due to decreased toll revenues by more than 50% as a result of misappropriation of revenues due to the State.

Proposed RSS Location:

After consultation with the Technical Divisions Director of the Office of the Congolese Roads in North North Kivu Province it was agreed in principle that Komanda was technically suitable and should be considered for RSS. A suitable location for the proposed RSS will be just before the branch-off to Beni.

NIANIA

Nia Nia is a village in the extreme west of the Mambasa Territory. The N4 road runs eastwards through Komanda (286 kilometers) to Bunia (350 Kilometers) away, and westwards to Bafwasende and Kisangani (340 Kilometers). The N25 road runs northwards through the town to Wamba 110 kilometers away.

Nia Nia is situated on the divide between the Mambasa and Wamba administrative territories, and the area is dominated by the Ndaka and Budu tribes together with other smaller tribes. According popular estimates, the population of the Nia-Nia city alone surpasses 20,000 persons in 2010 but the figures may vary due to internal strife. Niania is the gold basin in Congo, and the area as defined in this report is home to three active international mining companies who account for, besides gold, the exploitation of tropical hardwood in the area is a matter of increasing concern, especially as Nia-Nia is located in the middle of the Okapi Wildlife Reserve.

Proposed RSS Location:

After consultation with the Technical Divisions Director of the Office of the Congolese Roads in North North Kivu Province it was agreed in principle that Nia Nia was technically suitable and should be considered for RSS. However, further consultation with the local government will be necessary to identify suitable location in the outskirts of the town.

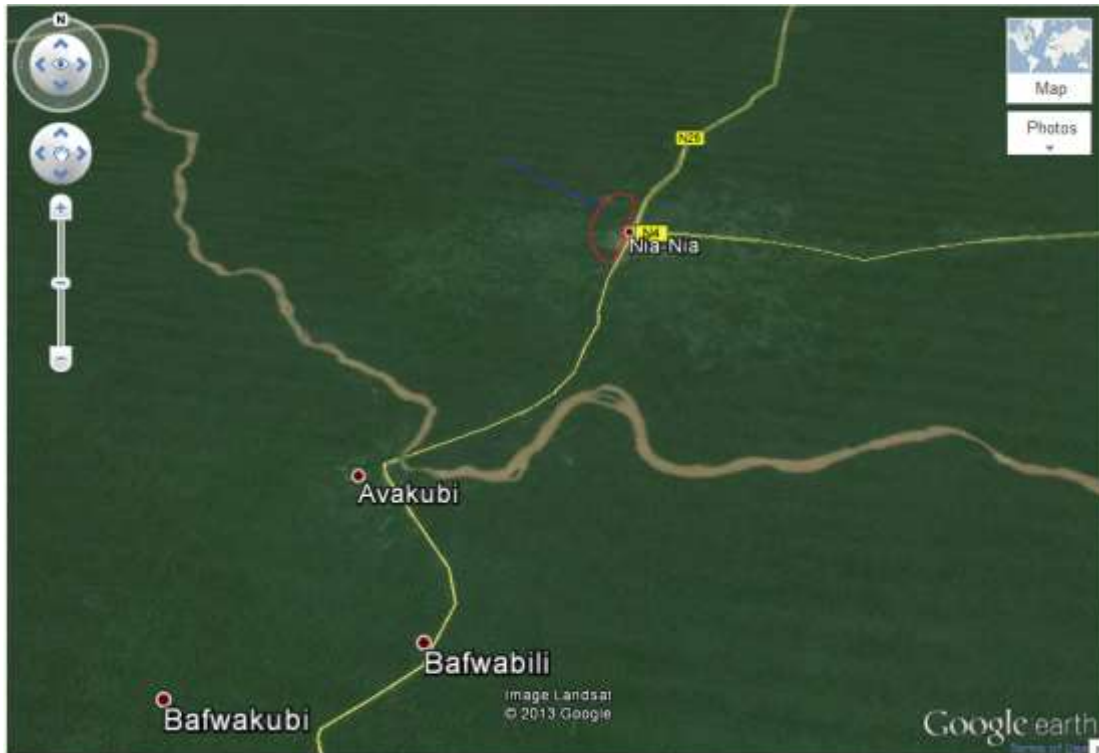


Fig: The proposed RSS site at Nia Nia indicated by a blue arrow

KISANGANI

Kisangani is the capital of Orientale Province, and the third largest city in the DRC. In 2008, the estimated population of the city was 1.2 million, with all the tribes in the country being represented here. The city is bound by the Lualaba River to the south and the Tshopo river to the north. These two rivers are tributaries of the Congo river, making Kisangani the furthest navigable port inland on the Congo river. The city is served by the busy Bangoka International Airport and another smaller one, and a railway track from the west of the country. Kisangani is an important link of the Trans-Africa Highway to Lagos in the east and The Northern Corridor to Mombasa in the west. The RN4 runs northwards for 800 Kilometers to Beni, The NR3 runs east to Bunia. The R408 runs west to Yangambi. The RN7 runs southwards across the Lualaba river, over the longest suspension bridges in the Congo, to Ubundu.

Kisangani has six urban communes, and has a city government headed by the mayor. This government has jurisdiction over such issues like environment, urban planning, public security, agreements with other governments, and to supervise, standardize and approve certain decisions made by the commune councils.

Kisangani has an extensive and complex transportation system served by buses, trucks, trains and water ways that run within and off the island city. Most of the trucks traversing the Kisangani routes ferry cargo from the port and railway terminus to the surrounding towns. Comparatively, there is less cargo coming in from the eastern frontiers along the RN4 to Kisangani even though the route was recently rehabilitated. This is because of bandits robbing motorists, muddy conditions during wet weather, and the long distance to the border.

Proposed Parking:

After consultation with the Technical Divisions Director of the Office of the Congolese Roads in North North Kivu Province it was agreed in principle that Kisangani was technically suitable and should be considered for RSS. However, further consultation with the local government will be necessary to identify suitable location in the outskirts of the town.

BUNAGANA



Bunagana is a small border-town in Rutshuru Territory of North Kivu Province in eastern Democratic Republic of the Congo. On the Uganda side, Bunagana town is located in extreme southwestern tip, in Kisoro District, approximately 14 kilometers by road west of Kisoro the district headquarter, and 54 kilometers by road, west of Kabale. On the Congo side, Bunagana is located approximately 73 kilometers by road northeast of Goma, the provincial capital.

Bunagana is a high altitude town, at an altitude of 1,920 meters above sea level, and is a major crossing point, for both human and commercial traffic between DRC and Uganda. It lies between Bwindi National Park in Uganda and Virunga National Park in DRC. However, because of these natural ecosystems in the neighbourhood, rebels have used these hideouts to stifle its growth and development in the past.

Proposed RSS:

The Congolese side of Bunagana has less development and population than its Ugandan counterpart; therefore land will be readily available for a RSS. A suitable location on the hilly terrain will be selected with the assistance of the OdR in North Kivu Province. The proposed site will be in the outskirts of the built-up area, on the RHS of the road to Goma to avoid the park boundary on the LHS.

This RSS will serve the truck users who will have covered 40 Kilometers from the closest RSS at Kabale (Uganda), who will still be having 73 kilometers to reach Goma.

BUKAVU

Bukavu town in South Kivu Province of DRC lies at the southern end of Lake Kivu, and is contiguous with Cyangungu in the western Province of Rwanda, but are separated from it by the Ruzizi River. It is linked by the RN5 southwards to Uvira and Bujumbura, the N2 to Goma in the north, and the N3 to Kisangani in the North West. Though the road network is in need of rehabilitation, Bukavu is an important node on the Northern Corridor. Bukavu is also linked to lake Tanganyika by road, after which cargo is trans-shipped to the railway termini at Kigoma, which is linked to Dar es Salaam, and Kalemie which is linked to Katanga. Kavumu Airport located about 30 kilometres north of Bukavu, is the domestic airport.

Present Situation:

This town is heavily infested with ragtag militia who interfere with social, economic and administrative functions of this town. For that reason, trucks cannot operate at daytime unhindered, and must get armed escort to cross through town. The only "safe" parking is near the main post office where the local police provide guard. However, cases of pilferages are still rampant because of the militia.

Proposed RSS:

The proposed site for the RSS is near Panzi, at the junction of the Route 3b from Cyangungu and the N5. This location will take care of traffic diverging to Kasongo in the South west, Kalemie in the south, and all destinations in the north through the N3.

BURUNDI

KAYANZA

Kayanza city is the capital city of Kayanza Province in northern Burundi. It is 59 Kilometers from the Capital City, and 24 Kilometers from the Akanyaru border post. It is surrounded by rich agricultural lands used for tea and coffee production. Kayanza city is located at the junction of the Northern Corridor (RN1) from Akanyaru Haut to Bujumbura and the RN10 from Kibira National Park in the west to Muyinga- Kobero at the Tanzania border in the east. It also branches northwards to Kirundo and onwards to Kigali. Therefore the RN 10 east of Kayanza serves traffic from the Northern and Central Corridor. This outlines the strategic importance of this town to both corridors. Kayanza is 38 Kilometers from the last RSS at Huye.

Current situation:



Kayanza is a high population density area, with the town taking a linear presentation along the major routes. Because of the steep terrains, human settlement is very close to the roads. Currently, trucks park along the main streets where space allows towards the southern exit of the town. There is a wellness center near the provincial offices that caters for both locals and travelers. There is more truck traffic eastwards to the Tanzania border than northwards to Rwanda.

Proposed RSS:

The new RSS proposed for this town is designed to serve traffic from both the Northern and Central Corridors. Despite the demonstrated need for a RSS here, it is not easy to identify suitable land. However, a portion of vacant land near the Kayanza town Signboard that wishes travelers a safe journey could be identified. On this portion of private land there is a *Eucalyptus* tree grove and a house nearby which will unfortunately have to be displaced.



BUGARAMA

Bugarama is a town located in Muramvya Province of central-western Burundi. The Provincial capital is at Muramvya. Bugarama lies at an altitude of 6879 feet and it is close to the divide of the Nile and Congo river basins. The town had an estimated population of 38,714 persons in 2010.

This town is 24 kilometers from Bujumbura town, and lies at the point where the Bujumbura-Gitega RN2 road joins up with the Bujumbura-Akanyaru RN1 road. Proceeding from Bugarama towards Bujumbura, the RN1 road winds down a long steep hillside. At an elevated position 1250m a.s.l, approximately 10 kilometers from Bujumbura you will have a very nice view of the Bujumbura Capital with Lake Tanganika at the background the plain of Imbo that extends into the Democratic Republic of Congo.

Current situation:

Bugarama is a high population density area, with the town taking a linear presentation along the RN1 and RN2 routes. Because of the steep nature of the collines, human settlement is very close to the roads. Currently, trucks park along the main streets where space allows despite the town having narrow crowded streets, creating an impediment to the traffic flow. Furthermore, street vendors in this town create more congestion as they jostle for travelers.

Proposed RSS:

Despite the demonstrated need for a RSS here, it is not easy to identify suitable land. However, two locations were identified:

- A small portion of vacant land near the Local Health Center that is currently used as children's play field. However, this portion has an overhead power transmission line, and a health facility in close proximity.
- An alternative site is directly opposite on private property that was under development but has since stalled. The investor could be brought on board to convert the investment into a RSS in a PPP.



- On consultation with the OdR in Bujumbura, he stated that a suitable location could be found just before the town as you enter from Kayanza.



Fig: One of the available sites for consideration



4. BASIC INFORMATION FOR THE DIMENSIONING OF PRE-SELECTED ROADSIDE STATIONS

In the first volume of this document an example of the calculation carried out for dimensioning the pre-selected roadside stations has been shown. Other fiches of pre-selected RSSs (those with full traffic data available) are shown as follows.



1	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	R. exit Mombasa								Sales area, Banks, Petrol Stations and Truck area, Cleaning of trucks, Services to trucks, Parking	YES (no dimensions available)
KILOMETRES FROM PREVIOUS STATION	0									
PASSENGER CARS	2600	0%	0	2	0	15%	0,5	0		
MINIBUSES	47	0%	0	10	0	15%	1	0		
LARGE BUSES	80	0%	0	30	0	15%	1	0		
TRUCKS	2500	20%	500	1	500	15%	1	75		

2	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Station Kenol								Sales area, Petrol Stations and Truck area, Cleaning of trucks, Services to trucks, Parking	YES: 100 x 70 = 7000 m ²
KILOMETRES FROM PREVIOUS STATION	4,7									
PASSENGER CARS	3110	0%	0	2	0	15%	0,5	0		
MINIBUSES	47	0%	0	10	0	15%	1	0		
LARGE BUSES	80	0%	0	30	0	15%	1	0		
TRUCKS	2150	20%	430	1	430	15%	1	65		



3	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Mariakani								Sales area, Petrol Stations and Truck area, Cleaning of trucks, Services to trucks, Parking	YES: 150 x 80 = 12000 m ²
KILOMETRES FROM PREVIOUS STATION	29									
PASSENGER CARS	2750	0%	0	2	0	15%	0,5	0		
MINIBUSES	47	0%	0	10	0	15%	1	0		
LARGE BUSES	80	0%	0	30	0	15%	1	0		
TRUCKS	1160	20%	232	1	232	15%	1	35		

4	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Taru								Sales area (clothes and vegetables), Petrol Stations and Truck area, Cleaning of trucks, Services to trucks, Health clinic, Restaurant, Parking, Hotel	YES: 100 x 90 = 9000 m ²
KILOMETRES FROM PREVIOUS STATION	35									
PASSENGER CARS	2500	0%	0	2	0	15%	0,5	0		
MINIBUSES	47	0%	0	10	0	15%	1	0		
LARGE BUSES	80	0%	0	30	0	15%	1	0		
TRUCKS	1160	20%	232	1	232	15%	1	35		



5	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Mackinnon Road II								Sales area (textil and vegetables), Petrol Stations and Truck area, Cleaning of trucks, Services to trucks, Restaurant, Mosque, Railway station, Bus station, Police station, Recreational area, Parking	YES: 100 x 100 = 10000 m ² in general. Available space 50 x 20
KILOMETRES FROM PREVIOUS STATION	13,6									
PASSENGER CARS	1975	20%	395	2	790	15%	0,5	30		
MINIBUSES	47	25%	12	10	118	15%	1	2		
LARGE BUSES	80	25%	20	30	600	15%	1	3		
TRUCKS	900	15%	135	1	135	15%	1	20		

6	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Maungu								Sales area (textil and vegetables), Petrol Stations and Truck area, Restaurant, Health area (HIV), Mosque, Bank, Parking	YES: 200 x 30 = 6000 m ²
KILOMETRES FROM PREVIOUS STATION	34,4									
PASSENGER CARS	1925	0%	0	2	0	15%	0,5	0		
MINIBUSES	60	0%	0	10	0	15%	1	0		
LARGE BUSES	80	0%	0	30	0	15%	1	0		
TRUCKS	850	15%	128	1	128	15%	1	19		



7	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Voi								Petrol station, restaurant, Parking, Toilets, Bar	YES: 60 x 40 = 2400 m ²
KILOMETRES FROM PREVIOUS STATION	29									
PASSENGER CARS	1400	0%	0	2	0	15%	0,5	0		
MINIBUSES	60	0%	0	10	0	15%	1	0		
LARGE BUSES	80	0%	0	30	0	15%	1	0		
TRUCKS	1100	2%	22	1	22	15%	0,5	2		

8	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Manyani								Sales area (textil and vegetables), Parking, Bar, Bank, Bazar	YES: 200 x 50 = 10000 m ²
KILOMETRES FROM PREVIOUS STATION	34,6									
PASSENGER CARS	1420	0%	0	2	0	15%	0,5	0		
MINIBUSES	60	0%	0	10	0	15%	0,5	0		
LARGE BUSES	80	0%	0	30	0	15%	0,5	0		
TRUCKS	900	11%	99	1	99	15%	1	15		



9	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Mtito Andei								Petrol station, Hospital, Restaurant, Sales area (vegetables, handicraft), Parking, Bus station, Hotel, Bar, Bazar, Toilets	YES: 80 x 100 = 8000 m ²
KILOMETRES FROM PREVIOUS STATION	57,4									
PASSENGER CARS	1650	20%	330	2	660	15%	0,5	25		
MINIBUSES	60	25%	15	29	435	15%	1	2		
LARGE BUSES	80	25%	20	30	600	15%	1	3		
TRUCKS	950	9%	86	1	86	15%	1	13		

10	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Daru Salam								Petrol station, Police check point, Sales (handicraft)	YES: 70 x 100 = 7000 m ²
KILOMETRES FROM PREVIOUS STATION	6									
PASSENGER CARS	1610	0%	0	2	0	15%	0,5	0		
MINIBUSES	55	0%	0	10	0	15%	1	0		
LARGE BUSES	75	0%	0	30	0	15%	1	0		
TRUCKS	980	3%	25	1	25	15%	0,5	2		



11	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Makindu								Sales area (vegetables, handicraft), Mosque, Petrol stations (2), Restaurant, Parking, Bar, Toilet, Health clinic, Mosque, Hotel	YES: 80 x 70 = 5600 m ²
KILOMETRES FROM PREVIOUS STATION	51									
PASSENGER CARS	1615	0%	0	2	0	15%	0,5	0		
MINIBUSES	55	0%	0	10	0	15%	1	0		
LARGE BUSES	75	0%	0	30	0	15%	1	0		
TRUCKS	875	7%	61	1	61	15%	1	9		

12	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Emali								Sales area (vetables), Truck services, Petrol stations, Health centre (HIV, etc.), Restaurant, Hotel, Parking, Market, Toilets	YES: 100 x 100 = 10000 m ²
KILOMETRES FROM PREVIOUS STATION	49									
PASSENGER CARS	1625	20%	325	2	650	15%	0,5	24		
MINIBUSES	55	25%	14	29	399	15%	1	2		
LARGE BUSES	75	25%	19	30	563	15%	1	3		
TRUCKS	835	10%	79	1	79	15%	1	12		



13	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Sultan Hamud								Sales area, Truck services, Petrol stations, Cleaning of Trucks, Truck repair, Restaurant, Hotel, Police check point, Big parking area	YES: 80 x 40 = 3200 m ²
KILOMETRES FROM PREVIOUS STATION	13,2									
PASSENGER CARS	1815	0%	0	2	0	15%	0,5	0		
MINIBUSES	55	0%	0	10	0	15%	1	0		
LARGE BUSES	75	0%	0	30	0	15%	1	0		
TRUCKS	995	16%	159	1	159	15%	2,5	60		

14	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Junction Machakos								Sales area, Hotel, Restaurant, Parking of trucks for spending the night, Security services, Mosque	YES: Dimmensions not available (very big space)
KILOMETRES FROM PREVIOUS STATION	61,4									
PASSENGER CARS	1930	0%	0	2	0	15%	0,5	0		
MINIBUSES	55	0%	0	10	0	15%	1	0		
LARGE BUSES	75	0%	0	30	0	15%	1	0		
TRUCKS	1265	22%	278	1	278	15%	6	250		



15	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Naivasha								Sales area, Hotel, Restaurant, Parking of trucks for spending the night, Security services, Police check point, Banks	YES: 3 Has.
KILOMETRES FROM PREVIOUS STATION	114,6									
PASSENGER CARS	2120	0%	0	2	0	15%	0,5	0		
MINIBUSES	75	0%	0	10	0	15%	1	0		
LARGE BUSES	95	0%	0	30	0	15%	1	0		
TRUCKS	1070	25%	268	1	268	15%	2,5	100		

16	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Gilgil Weighbridge								Restaurant, Hotel, Truck services, Weighbridge, Parking, Sales (vegetables)	YES: 150 x 100 = 15.000 m ²
KILOMETRES FROM PREVIOUS STATION	19									
PASSENGER CARS	1897	0%	0	2	0	15%	0,5	0		
MINIBUSES	75	0%	0	10	0	15%	1	0		
LARGE BUSES	95	0%	0	30	0	15%	1	0		
TRUCKS	1060	20%	212	1	212	15%	1,5	48		



18	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Salgaa								Truck services, Petrol stations, Parking, Hotel, Sales, Restaurant	YES: 50 x 200 = 10000 m ²
KILOMETRES FROM PREVIOUS STATION	36,9									
PASSENGER CARS	1980	0%	0	2	0	15%	0,5	0		
MINIBUSES	75	0%	0	10	0	15%	1	0		
LARGE BUSES	95	0%	0	30	0	15%	1	0		
TRUCKS	950	35%	333	1	333	15%	1	50		

19	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Mau Summit								Sales area (vegetables, clothes), Truck services, Petrol stations, Restaurant, Parking, Bazar	YES: 150 x 300 = 45000 m ²
KILOMETRES FROM PREVIOUS STATION	22,5									
PASSENGER CARS	1715	0%	0	2	0	15%	0,5	0		
MINIBUSES	75	0%	0	10	0	15%	1	0		
LARGE BUSES	95	0%	0	30	0	15%	1	0		
TRUCKS	720	25%	180	1	180	15%	1	27		



20	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Burnt Forest								Truck services, Petrol stations, Restaurant, Parking space for spending the night	YES: 100 x 120 = 12000 m ²
KILOMETRES FROM PREVIOUS STATION	62									
PASSENGER CARS	1430	0%	0	2	0	15%	0,5	0		
MINIBUSES	75	0%	0	10	0	15%	1	0		
LARGE BUSES	95	0%	0	30	0	15%	1	0		
TRUCKS	660	20%	132	1	132	15%	6	119		

21	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Jua Kali								Sales (vegetables, construction materials, furniture), Cars workshop, Shops, Sewage Infrastructure, Medical center, Restaurants, Hotels, Physical barrier in the road for trucks parking	YES: 200 x 200 = 40000 m ²
KILOMETRES FROM PREVIOUS STATION	33,1									
PASSENGER CARS	2560	0%	0	2	0	15%	0,5	0		
MINIBUSES	70	0%	0	10	0	15%	1	0		
LARGE BUSES	88	0%	0	30	0	15%	1	0		
TRUCKS	770	30%	231	1	231	15%	1	35		



22	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Webuye weighbridge								Truck services, Truck parking, Weighbridge	YES: 200 x 200 = 40000 m ²
KILOMETRES FROM PREVIOUS STATION	34,2									
PASSENGER CARS	1640	0%	0	2	0	15%	0,5	0		
MINIBUSES	70	0%	0	10	0	15%	1	0		
LARGE BUSES	88	0%	0	30	0	15%	1	0		
TRUCKS	800	20%	160	1	160	15%	1	24		

23	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Malaba								Truck services, Truck parking, Border post, Sales (drinks, vegetables)	YES: 50 x 40 = 2000 m ²
KILOMETRES FROM PREVIOUS STATION	48,5									
PASSENGER CARS	1638	0%	0	2	0	15%	0,5	0		
MINIBUSES	70	0%	0	10	0	15%	1	0		
LARGE BUSES	88	0%	0	30	0	15%	1	0		
TRUCKS	1400	20%	280	1	280	15%	1	42		



24	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Busia junction								Sales area (vegetables), Truck services, Petrol stations, Restaurant, Parking for trucks, buses, minibuses and cars, Hotel	YES: 100 x 60 = 6000 m ²
KILOMETRES FROM PREVIOUS STATION	46,1									
PASSENGER CARS	1250	20%	250	2	500	15%	0,5	19		
MINIBUSES	70	25%	18	10	175	15%	1	3		
LARGE BUSES	88	30%	26	30	792	15%	1	4		
TRUCKS	480	20%	96	1	96	15%	1	14		

25	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Naluwerere								Sales area, Truck services, Petrol stations, Restaurant, Hotel, Parking	YES: 80 x 40 = 3200 m ²
KILOMETRES FROM PREVIOUS STATION	25,5									
PASSENGER CARS	945	0%	0	2	0	15%	0,5	0		
MINIBUSES	70	0%	0	10	0	15%	1	0		
LARGE BUSES	98	0%	0	30	0	15%	1	0		
TRUCKS	520	14%	73	1	73	15%	1	11		



26	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Idudi								Sales area (furniture), Truck services, Petrol stations, Restaurant, Hotel, Parking	YES: 80 x 40 = 3200 m ²
KILOMETRES FROM PREVIOUS STATION	17									
PASSENGER CARS	1520	0%	0	2	0	15%	0,5	0		
MINIBUSES	70	0%	0	10	0	15%	1	0		
LARGE BUSES	98	0%	0	30	0	15%	1	0		
TRUCKS	640	12%	77	1	77	15%	1	12		

27	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Lugazi								Sales area, Shops, Truck services, Petrol stations, Restaurant, Parking trucks, buses, minibuses and cars, Security, Toilets	YES: 100 x 80 = 8000 m ²
KILOMETRES FROM PREVIOUS STATION	96,1									
PASSENGER CARS	1920	20%	384	2	768	15%	0,5	29		
MINIBUSES	70	25%	18	10	175	15%	1	3		
LARGE BUSES	95	30%	29	30	855	15%	1	4		
TRUCKS	860	30%	258	1	258	15%	1	39		



28	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Buwama								Sales area (vegetables), Petrol stations, Restaurant, Parking trucks, Bar, Bazar, Hotel, Car and Trucks repair and workshop, Health clinic	YES: 80 x 80 = 6400 m ²
KILOMETRES FROM PREVIOUS STATION	87,9									
PASSENGER CARS	2250	0%	0	2	0	15%	0,5	0		
MINIBUSES	150	0%	0	10	0	15%	1	0		
LARGE BUSES	60	0%	0	30	0	15%	1	0		
TRUCKS	720	6%	43	1	43	15%	1	6		

29	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Lukaya Weighbridge								Petrol stations, Restaurant, Parking trucks, Weighbridge, Hotel, Sales (Drinks)	YES: 100 x 200 = 20000 m ²
KILOMETRES FROM PREVIOUS STATION	8									
PASSENGER CARS	1883	0%	0	2	0	15%	0,5	0		
MINIBUSES	150	0%	0	10	0	15%	1	0		
LARGE BUSES	60	0%	0	30	0	15%	1	0		
TRUCKS	580	5%	29	1	29	15%	1	4		



30	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Masaka road								Petrol stations, Restaurant, Parking trucks, Truck services, Truck cleaning, Supermarket, Bus terminal, Bus and Minibus parking, Sales, Shops, Hotel, Health clinic	YES: 50 x 60 = 3000 m ²
KILOMETRES FROM PREVIOUS STATION	111,8									
PASSENGER CARS	2160	20%	432	2	864	15%	0,5	32		
MINIBUSES	150	80%	120	10	1200	15%	1	18		
LARGE BUSES	60	80%	48	30	1440	15%	1	7		
TRUCKS	640	20%	128	1	128	15%	1	19		

31	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Kyazanga								Petrol stations, Restaurant, Parking trucks, Truck services, Sales, Bazar	YES: 50 x 80 = 4000 m ²
KILOMETRES FROM PREVIOUS STATION	56,2									
PASSENGER CARS	1600	0%	0	2	0	15%	0,5	0		
MINIBUSES	150	0%	0	10	0	15%	1	0		
LARGE BUSES	60	0%	0	30	0	15%	1	0		
TRUCKS	400	20%	80	1	80	15%	1	12		



32	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Biharwe								Petrol stations, Restaurant, Parking trucks, Truck services, Security, Hotel, Truck cleaning, Sales (Handicraft and vegetables), Pharmacy	YES: 60 x 80 = 4800 m ²
KILOMETRES FROM PREVIOUS STATION	74,7									
PASSENGER CARS	1520	0%	0	2	0	15%	0,5	0		
MINIBUSES	150	0%	0	10	0	15%	1	0		
LARGE BUSES	60	0%	0	30	0	15%	1	0		
TRUCKS	640	20%	128	1	128	15%	1	19		

33	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Nyeihanga								Petrol stations, Restaurant, Parking trucks, Truck services, Cafeteria, Mosque, Sales area (vegetables, locksmith shops)	YES: 150 X 80 = 12000 m ²
KILOMETRES FROM PREVIOUS STATION	41,7									
PASSENGER CARS	1280	0%	0	2	0	15%	0,5	0		
MINIBUSES	147	0%	0	10	0	15%	1	0		
LARGE BUSES	53	0%	0	30	0	15%	1	0		
TRUCKS	420	20%	84	1	84	15%	1	13		



34	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Ntungamo								Petrol stations, Restaurant, Parking trucks, Truck services, Hotel, Sales (vegetables), Supermarket, Church, Bank	YES: 200 x 200 = 40000 m2
KILOMETRES FROM PREVIOUS STATION	23,8									
PASSENGER CARS	1760	0%	0	2	0	15%	0,5	0		
MINIBUSES	147	0%	0	10	0	15%	1	0		
LARGE BUSES	53	0%	0	30	0	15%	1	0		
TRUCKS	400	15%	60	1	60	15%	1	9		

35	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Rubaare								Petrol stations, Restaurant, Parking trucks, Truck services	YES: 100 x 70 = 7000 m2
KILOMETRES FROM PREVIOUS STATION	47									
PASSENGER CARS	1820	0%	0	2	0	15%	0,5	0		
MINIBUSES	147	0%	0	10	0	15%	1	0		
LARGE BUSES	53	0%	0	30	0	15%	1	0		
TRUCKS	440	15%	66	1	66	15%	1	10		



36	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Kabale								Petrol stations, Restaurant, Parking trucks, Truck services; Health clinic, sales, Hotel, Shops, Parking for buses, minibuses and cars, Bazar	YES: 150 x 80 = 12000 m2
KILOMETRES FROM PREVIOUS STATION	52,8									
PASSENGER CARS	2686	20%	537	2	1074	15%	0,5	40		
MINIBUSES	147	25%	37	10	368	15%	1	6		
LARGE BUSES	53	40%	21	30	636	15%	1	3		
TRUCKS	380	25%	95	1	95	15%	2,5	36		

37	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Gatuna								Truck services, Truck parking, Border post, Restaurant, Hotel, Bank, Health clinic, toilet, Bureau office	YES: 50 x 80 = 4000 m2
KILOMETRES FROM PREVIOUS STATION	21,7									
PASSENGER CARS	1516	0%	0	2	0	15%	0,5	0		
MINIBUSES	150	0%	0	10	0	15%	1	0		
LARGE BUSES	55	0%	0	30	0	15%	1	0		
TRUCKS	200	50%	100	1	100	15%	1	15		



38	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Rukomo								Truck services, Truck parking, Sales, restaurant, Hotel, Bank, Petrol Station, Bar, Bureau office	YES: 200 x 100 = 20000 m2
KILOMETRES FROM PREVIOUS STATION	28,3									
PASSENGER CARS	400	0%	0	2	0	15%	0,5	0		
MINIBUSES	150	0%	0	10	0	15%	1	0		
LARGE BUSES	55	0%	0	30	0	15%	1	0		
TRUCKS	180	15%	27	1	27	15%	1	4		

39	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Nyacyonga								Truck services, Truck parking, Sales, restaurant, Bar, Hotel, Petrol Station	NO
KILOMETRES FROM PREVIOUS STATION	38,1									
PASSENGER CARS	1040	0%	0	2	0	15%	0,5	0		
MINIBUSES	150	0%	0	10	0	15%	1	0		
LARGE BUSES	55	0%	0	30	0	15%	1	0		
TRUCKS	800	5%	40	1	40	15%	1	6		



40	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Kigali								Truck services, Truck parking, Sales, restaurant, Hotel, Bus and Minibus terminal, parking for buses and minibuses, Health clinic, Bank, Toilet	YES: 100 x 70 = 7000 m2 + 10000 m2
KILOMETRES FROM PREVIOUS STATION	9,4									
PASSENGER CARS	1480	0%	0	2	0	15%	0,5	0		
MINIBUSES	150	70%	105	10	1050	15%	6	95		
LARGE BUSES	55	100%	55	30	1650	15%	6	50		
TRUCKS	500	20%	100	1	100	15%	3	45		

41	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Ruhango								Truck services, Truck parking, Sales, restaurant, Minibus terminal, parking for minibuses, Hotel, Bank	YES: 100 x 70 = 7000 m2
KILOMETRES FROM PREVIOUS STATION	67,6									
PASSENGER CARS	428	0%	0	2	0	15%	0,5	0		
MINIBUSES	150	25%	38	10	375	15%	1	6		
LARGE BUSES	10	0%	0	30	0	15%	1	0		
TRUCKS	220	25%	55	1	55	15%	1	8		



42	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Butare								Truck services, Truck parking, Sales, restaurant, Minibus terminal, parking for minibuses, Hotel, Health clinic, Café factory, Petrol Station	YES: 100 x 70 = 7000 m2
KILOMETRES FROM PREVIOUS STATION	53,2									
PASSENGER CARS	360	20%	72	2	144	15%	0,5	5		
MINIBUSES	213	25%	53	10	533	15%	1	8		
LARGE BUSES	10	0%	0	30	0	15%	1	0		
TRUCKS	160	25%	40	1	40	15%	1	6		

43	Data	Percentage of vehicles stopping	Number of vehicles stopping daily	Average number of passengers	Number of users per day	Rate of concentration at peak times	Average length of time parked (hours)	Number of parking spaces	Services	Available space
NAME OF THE STATION	Bujumbura								Truck services, Truck parking, Sales (drinks, vegetables, fruits), Bank, restaurant, Hotel, Bus and Minibus terminal, parking for buses and minibuses, Truck and cars cleaning	YES: 30 x 45= 1350 m2
KILOMETRES FROM PREVIOUS STATION	140,7									
PASSENGER CARS	400	0%	0	2	0	15%	0,5	0		
MINIBUSES	150	70%	105	10	1050	15%	6	95		
LARGE BUSES	10	70%	7	30	210	15%	6	6		
TRUCKS	200	25%	50	1	50	15%	6	45		

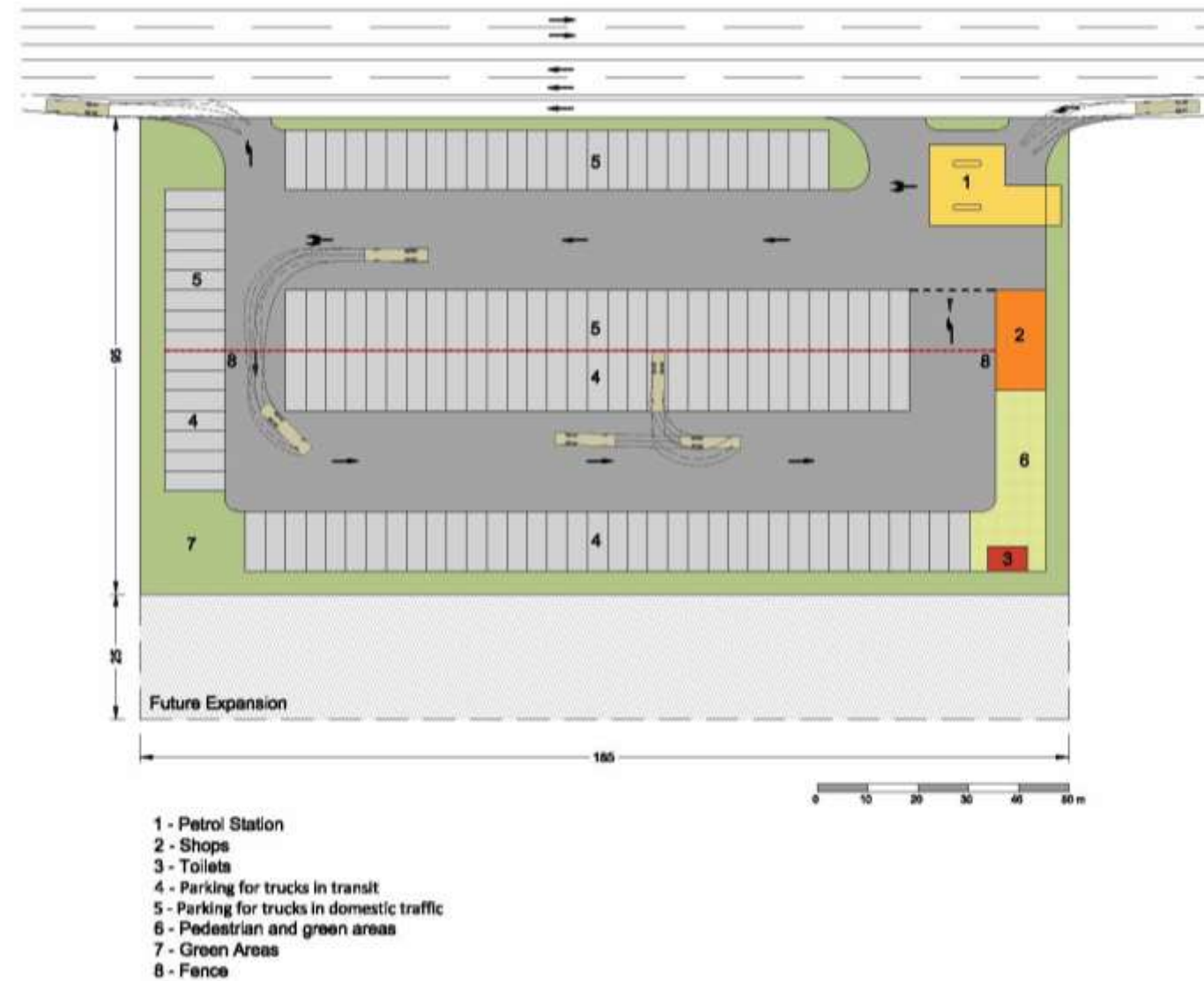


5. RESULTS OF THE RSS MODEL DESIGN

The results of the model design for others RSSs, together with an example of architectural design for one of them (Mau Summit), are included as follows, including calculations of construction costs and operation and maintenance costs. Some of these RSSs have finally not been proposed as suitable RSS, as explained in the volume 1. For the rest of selected RSSs standard designs have been used, due to the lack of complete and detailed traffic data (see explanation in volume 1).

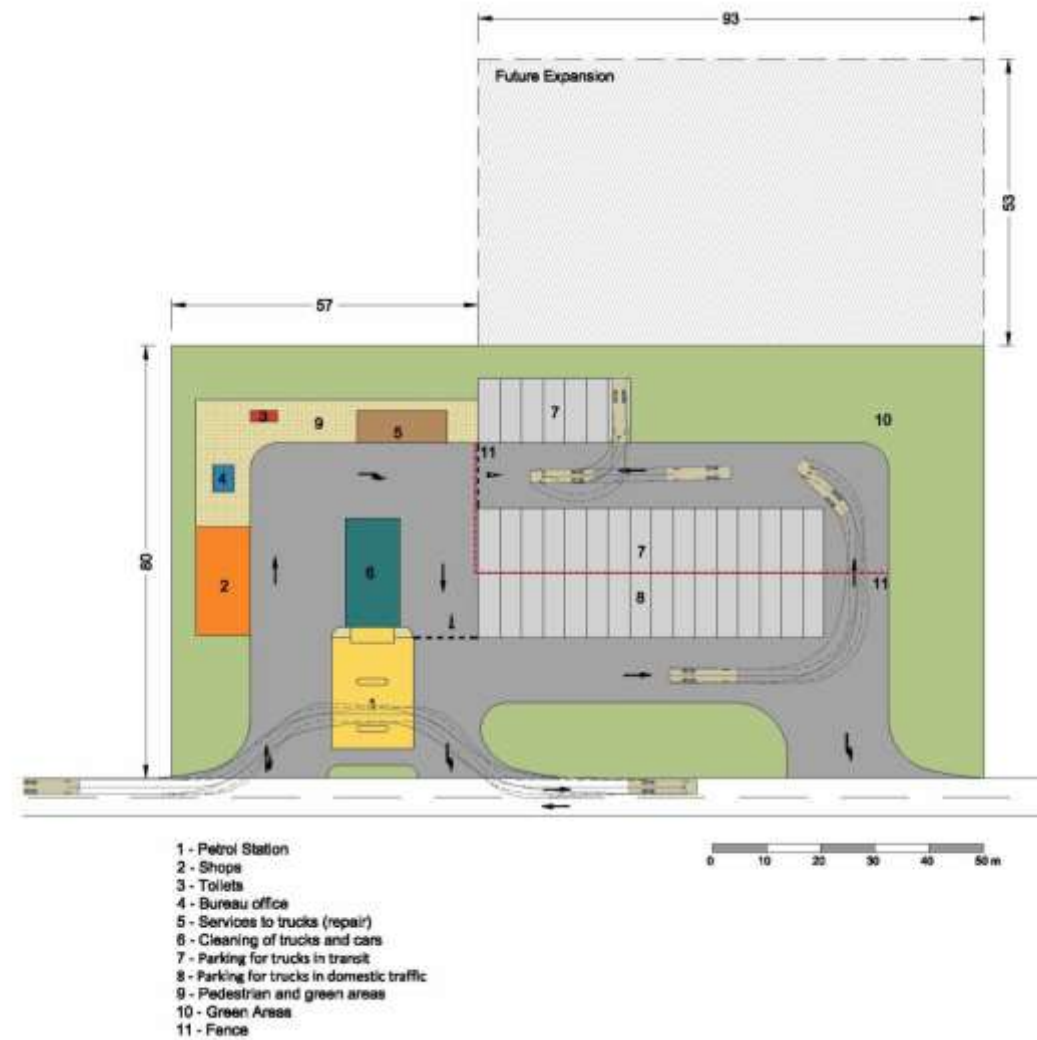


2	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Station Miritini																											
KILOMETRES FROM PREVIOUS STATION	4,7																											
PASSENGER CARS	3110	5330	0	0	25	51	0	0	200								300						9387	18551	3556	22107	15107	
MINIBUSES	47	81	0	0																								
LARGE BUSES	80	137	0	0																								
TRUCKS	2150	3460	6720	8613																								



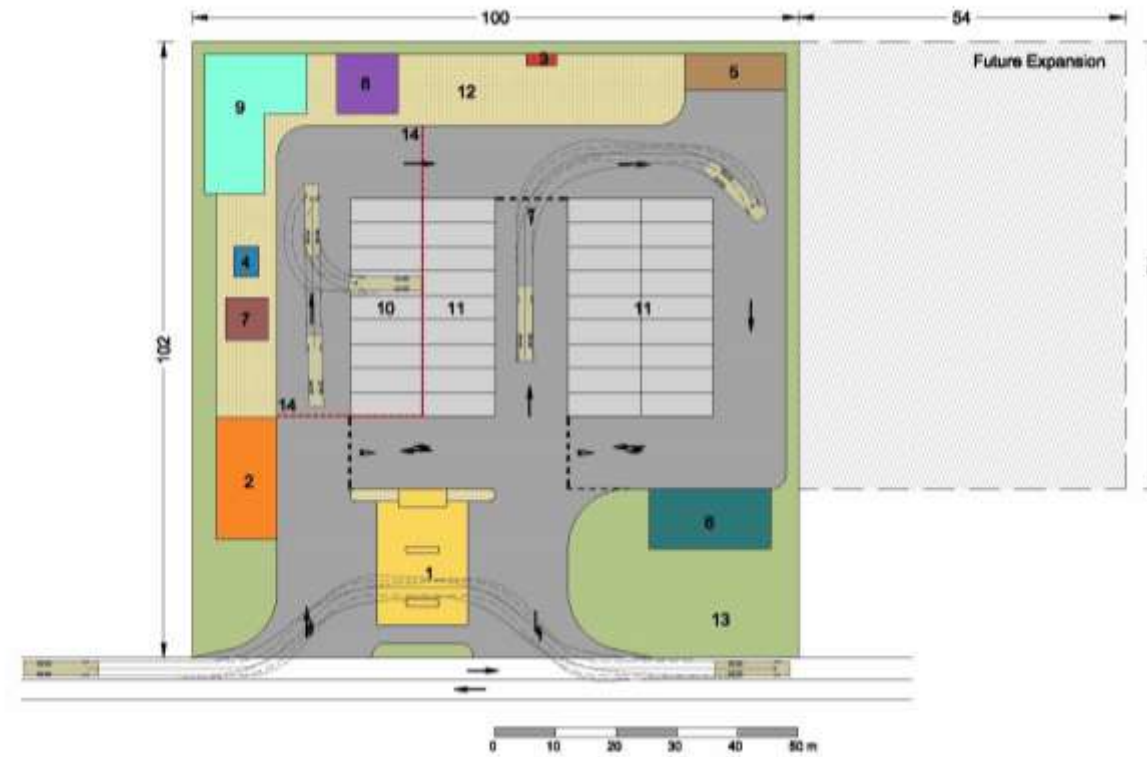


3	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Mariakani																											
KILOMETRES FROM PREVIOUS STATION	29																											
PASSENGER CARS	2750	4713	0	0	8	16	0	0	200				20		200		300						6432	10195	6708	16903	0	
MINIBUSES	47	81	0	0																								
LARGE BUSES	80	137	0	0																								
TRUCKS	1160	1867	1867	2927																								





4	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Taru																											
KILOMETRES FROM PREVIOUS STATION	35																											
PASSENGER CARS	2500	4284	0	0	8	16	45	157,5	200	100			20		200	300	300				100		6182	10356	3795	14152	0	
MINIBUSES	47	81	0	0																								
LARGE BUSES	80	137	0	0																								
TRUCKS	1160	1867	1728	2781																								



- 1 - Petrol Station
- 2 - Shops
- 3 - Toilets
- 4 - Bureau office
- 5 - Services to trucks (repair)
- 6 - Cleaning of trucks and cars
- 7 - Restaurant
- 8 - Health clinic
- 9 - Hotel
- 10 - Parking for trucks in transit
- 11 - Parking for trucks in domestic traffic
- 12 - Pedestrian and green areas
- 13 - Green Areas
- 14 - Fence



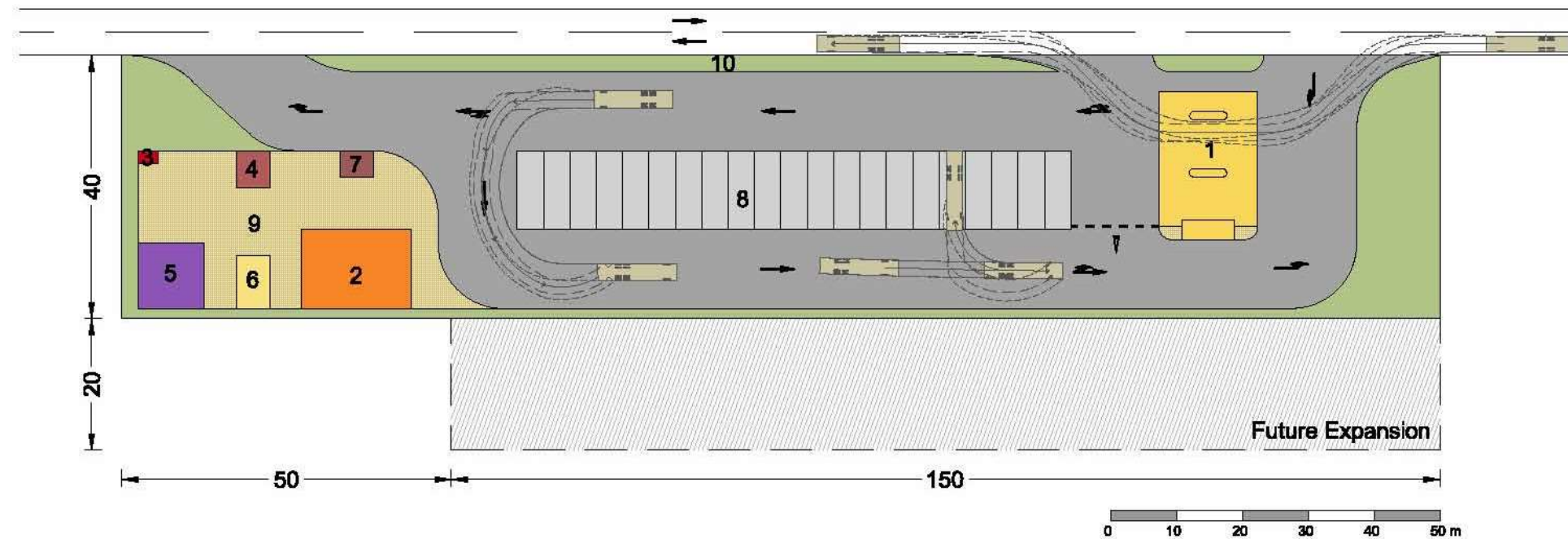
5	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Mackinnon Road II																											
KILOMETRES FROM PREVIOUS STATION	13,6																											
PASSENGER CARS	1975	3385	350	600	13	26	182	637	200		40			70	200		300	25	100		100	200	5168	9622	4728	14350	0	
MINIBUSES	47	81	48	82																								
LARGE BUSES	80	137	192	329																								
TRUCKS	900	1448	960	1545																								



- 1 - Petrol Station
- 2 - Shops
- 3 - Toilets
- 4 - Restaurant
- 5 - Bank
- 6 - Car workshop
- 7 - Services to trucks (repair)
- 8 - Cleaning of trucks and cars
- 9 - Police check point
- 10 - Public information/ Administrative offices
- 11 - Supermarket
- 12 - Truck parking
- 13 - Minibuses parking
- 14 - Large buses parking
- 15 - Passenger cars parking
- 16 - Pedestrian and green areas
- 17 - Green Areas



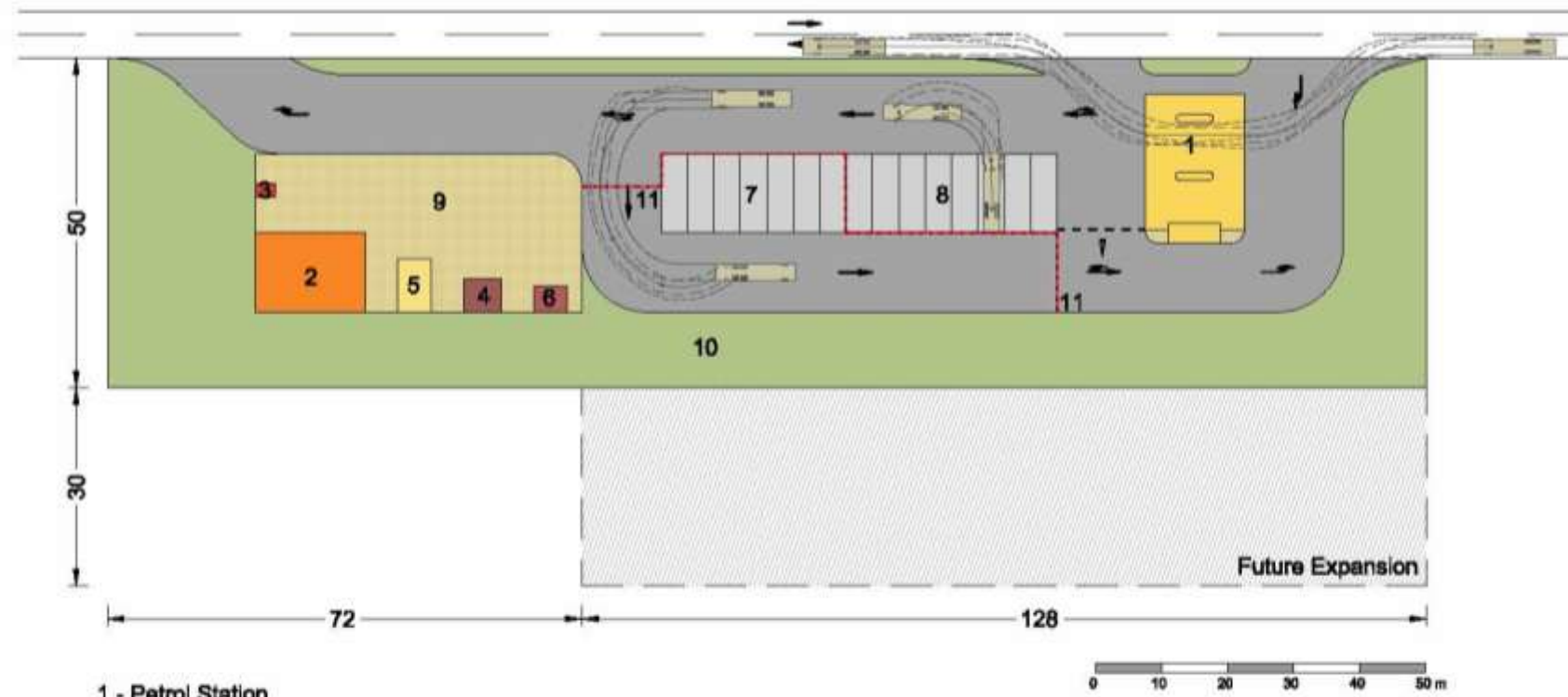
6	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Maungu																											
KILOMETRES FROM PREVIOUS STATION	34,4																											
PASSENGER CARS	1925	3299	0	0	5	10	25	87,5	200	100	40	20					300						5752	8074	2834	10908	0	
MINIBUSES	60	103	0	0																								
LARGE BUSES	80	137	0	0																								
TRUCKS	850	1368	1008	1564																								



- 1 - Petrol Station
- 2 - Shops
- 3 - Toilets
- 4 - Restaurant
- 5 - Health clinic
- 6 - Bank
- 7 - Bar
- 8 - Truck Parking
- 9 - Pedestrian and green areas
- 10 - Green Areas



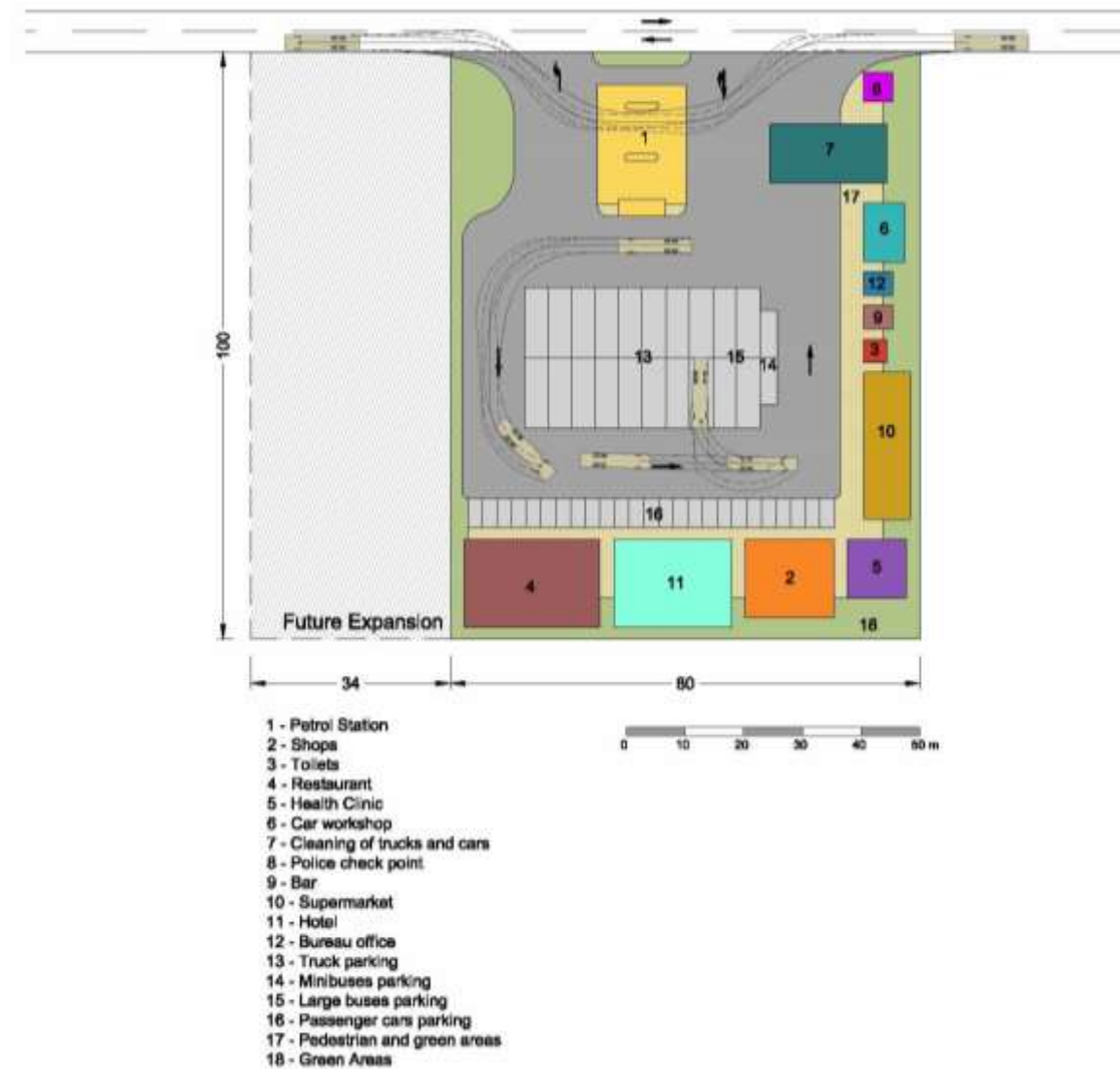
8	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Manyani																											
KILOMETRES FROM PREVIOUS STATION	63,6																											
PASSENGER CARS	1420	2433	0	0	3	7	20	70	200		40	20					300						5380	7176	6556	13732	0	
MINIBUSES	60	103	0	0																								
LARGE BUSES	80	137	0	0																								
TRUCKS	900	1448	720	1159																								



- 1 - Petrol Station
- 2 - Shops
- 3 - Toilets
- 4 - Restaurant
- 5 - Bank
- 6 - Bar
- 7 - Parking for trucks in transit
- 8 - Parking for trucks in domestic traffic
- 9 - Pedestrian and green areas
- 10 - Green Areas
- 11 - Fence

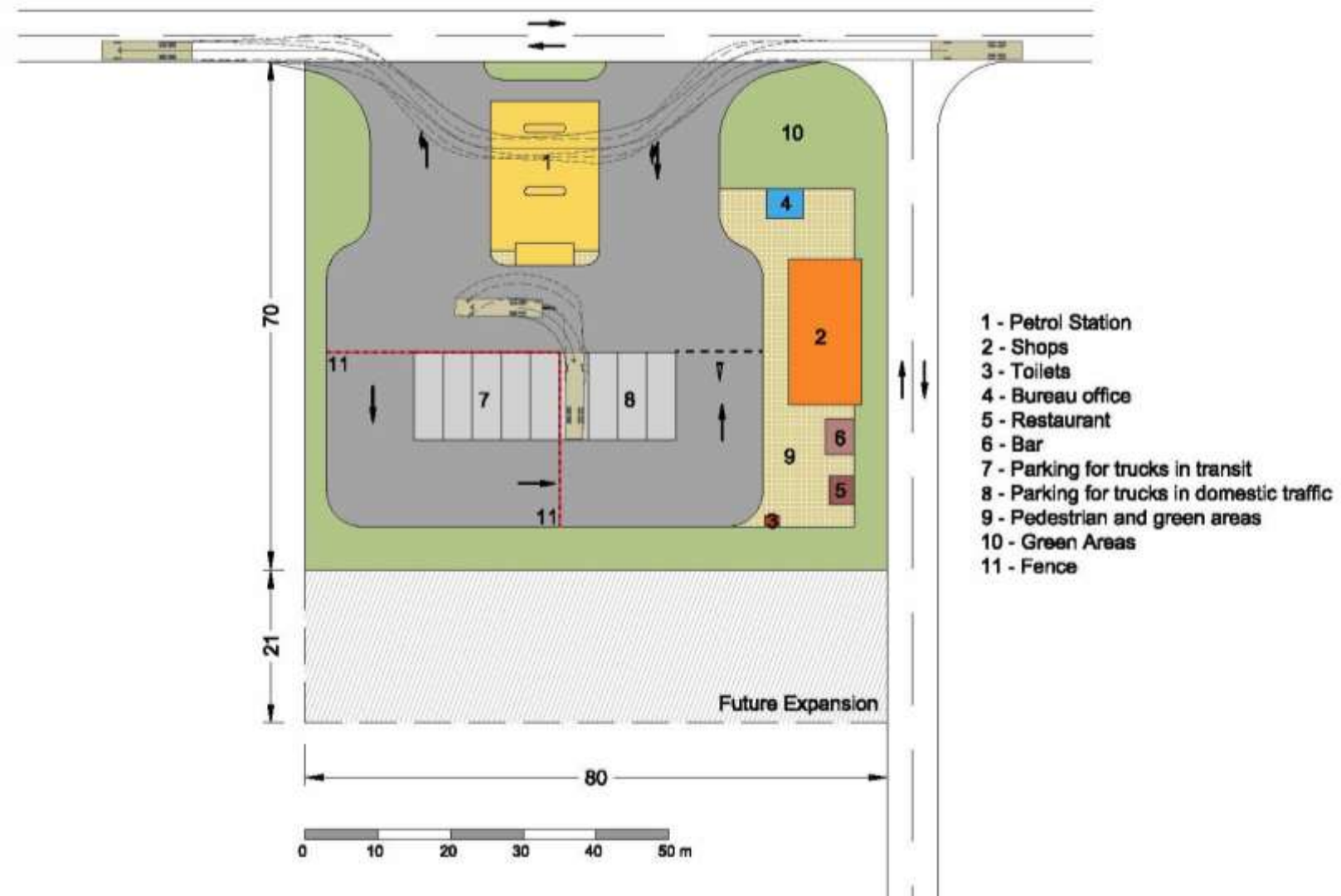


9	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Mtito Andei																											
KILOMETRES FROM PREVIOUS STATION	57,4																											
PASSENGER CARS	1650	2828	313	536	10	21	191	668,5	200	100		20	20	70	200	300	300	25				200	4342	8587	2333	10920	0	
MINIBUSES	60	103	48	82																								
LARGE BUSES	80	137	192	329																								
TRUCKS	950	1529	768	1173																								



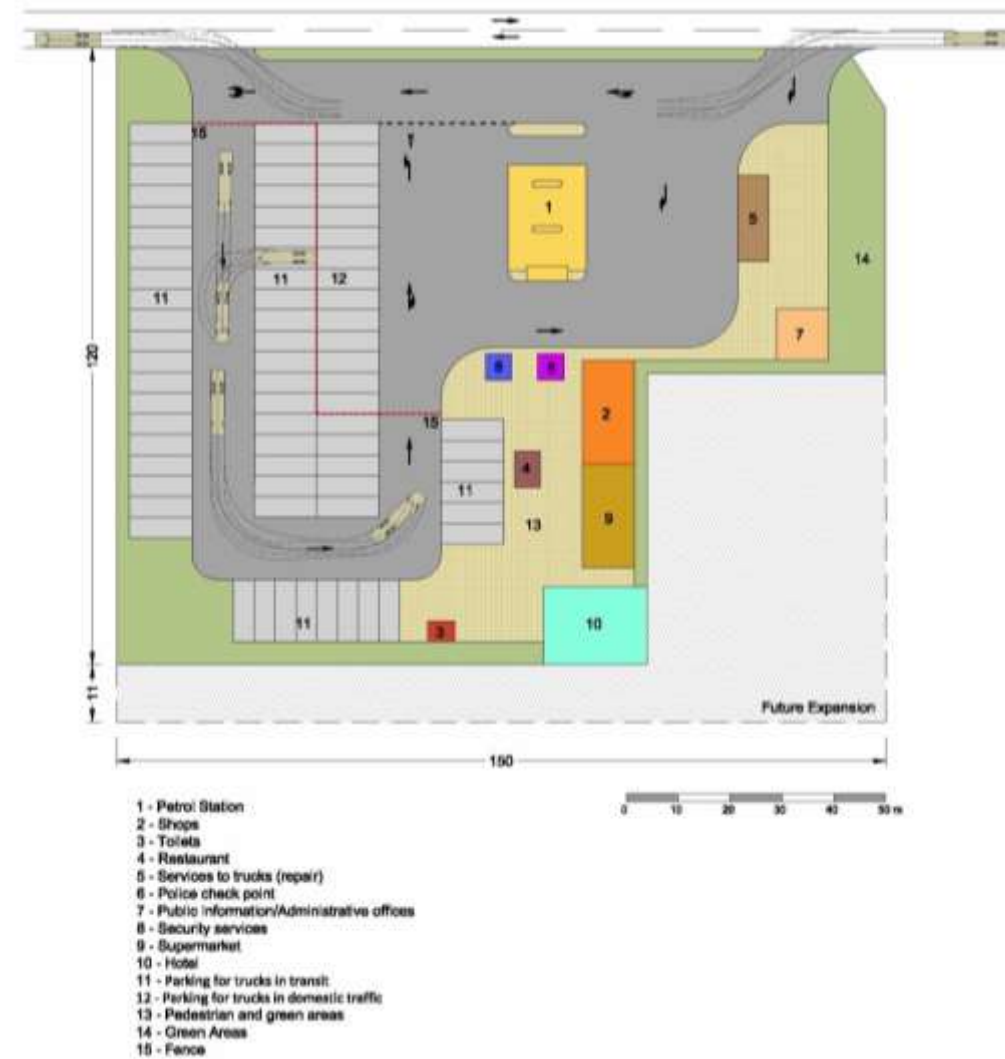


11	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
	NAME OF THE STATION	Makindu																										
KILOMETRES FROM PREVIOUS STATION	57																											
PASSENGER CARS	1615	2768	0	0	2	5	12	42	200			20	20				300						3612	4894	2315	7209	0	
MINIBUSES	55	94	0	0																								
LARGE BUSES	75	129	0	0																								
TRUCKS	875	1408	432	695																								



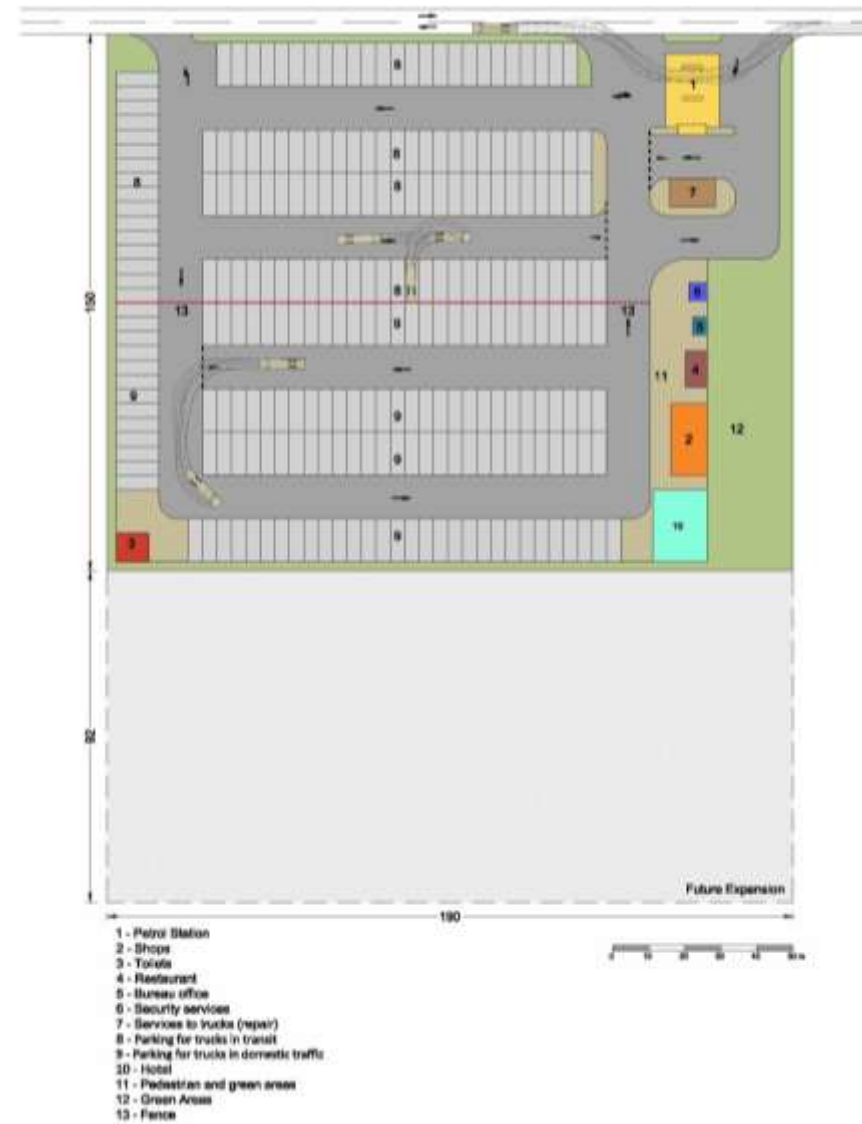


13	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Sultan Hamud																											
KILOMETRES FROM PREVIOUS STATION	62,2																											
PASSENGER CARS	1815	3110	0	0	15	31	31	108,5	200							300	300	25	100	25	100	200	6858	13457	4848	18305	15105	
MINIBUSES	55	94	0	0																								
LARGE BUSES	75	129	0	0																								
TRUCKS	995	1601	3456	5210																								





14	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Junction Machakos																											
KILOMETRES FROM PREVIOUS STATION	61,4																											
PASSENGER CARS	1930	3307	0	0	56	113	54	189	200				20			300	300			25	100		16188	36747	8194	44941	34941	
MINIBUSES	55	94	0	0																								
LARGE BUSES	75	129	0	0																								
TRUCKS	1265	2036	12000	19312																								





15	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Naivasha																											
KILOMETRES FROM PREVIOUS STATION	114,6																											
PASSENGER CARS	2120	3633	0	0	23	46	52	182	200	100	40				200	300	300	25		25	100		8637	17957	27572	45529	0	
MINIBUSES	75	129	0	0																								
LARGE BUSES	95	163	0	0																								
TRUCKS	1070	1722	4848	7802																								





16	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Gilgil Weighbridge																											
KILOMETRES FROM PREVIOUS STATION	19																											
PASSENGER CARS	1897	3251	0	0	11	22	41	143,5	200				20			300	300				100		6580	11297	6672	17969	0	
MINIBUSES	75	129	0	0																								
LARGE BUSES	95	163	0	0																								
TRUCKS	1060	1706	2256	3631																								



- 1 - Petrol Station
- 2 - Shops
- 3 - Toilets
- 4 - Restaurant
- 5 - Services to trucks (repair)
- 6 - Bureau office
- 7 - Hotel
- 8 - Truck parking
- 9 - Pedestrian and green areas
- 10 - Green Areas

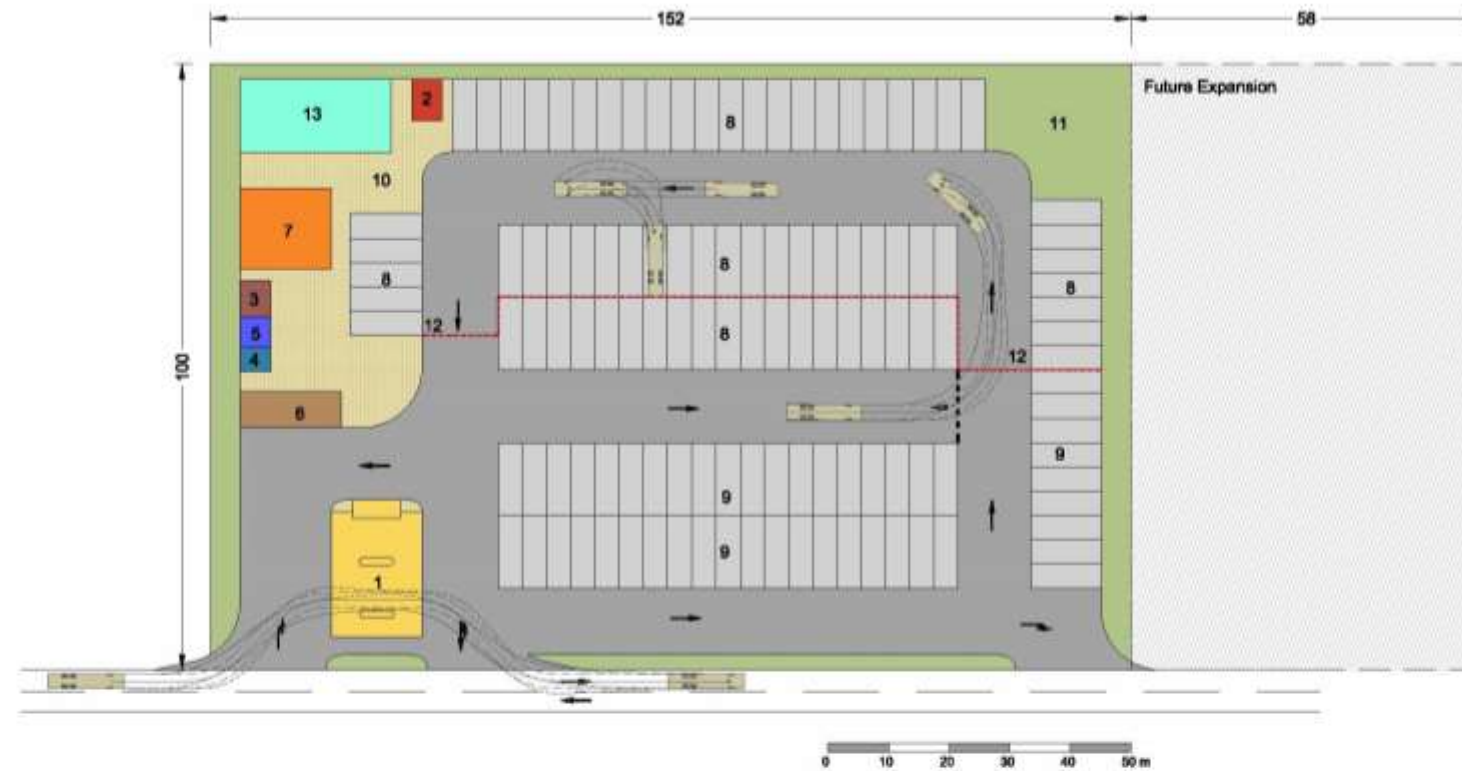


19	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Mau Summit																											
KILOMETRES FROM PREVIOUS STATION	59,4																											
PASSENGER CARS	1715	2939	0	0	13	27	35	122,5	200				20		200		300				100	200	6906	12565	3528	16093	0	
MINIBUSES	75	129	0	0																								
LARGE BUSES	95	163	0	0																								
TRUCKS	720	1159	3699	4489																								





20	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Burnt Forest																											
KILOMETRES FROM PREVIOUS STATION	62																											
PASSENGER CARS	1430	2451	0	0	27	54	26	91					20			300	300			25	100	200	8624	16167	3954	20121	0	
MINIBUSES	75	129	0	0																								
LARGE BUSES	95	163	0	0																								
TRUCKS	660	1062	4010	6454																								



- 1 - Petrol Station
- 2 - Toilets
- 3 - Restaurant
- 4 - Bureau office
- 5 - Security services
- 6 - Services to trucks (repair)
- 7 - Supermarket
- 8 - Parking for trucks in transit
- 9 - Parking for trucks in domestic traffic
- 10 - Pedestrian and green areas
- 11 - Green Areas
- 12 - Fence
- 13 - Hotel



21	Traffic		Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
	Traffic 2013	Traffic 2020																										
NAME OF THE STATION			Jua kali																									
KILOMETRES FROM PREVIOUS STATION			33,1																									
PASSENGER CARS			2560	4387	0	0	8	16	45	157,5	200	100			20		200	300	300					6558	10633	8289	18922	0
MINIBUSES			70	120	0	0																						
LARGE BUSES			88	151	0	0																						
TRUCKS			770	1239	1728	2781																						



- 1 - Petrol Station
- 2 - Shops
- 3 - Toilets
- 4 - Bureau office
- 5 - Cleaning of trucks and cars
- 6 - Hotel
- 7 - Restaurant
- 8 - Health clinic
- 9 - Parking for trucks in transit
- 10 - Parking for trucks in domestic traffic
- 11 - Pedestrian and green areas
- 12 - Green Areas
- 13 - Fence



23	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Malaba																											
KILOMETRES FROM PREVIOUS STATION	82,7																											
PASSENGER CARS	1638	2807	0	0	13	26	55	192,5	200								300						4842	10224	4829	15053	13053	
MINIBUSES	70	120	0	0																								
LARGE BUSES	88	151	0	0																								
TRUCKS	1400	2253	3216	4463																								





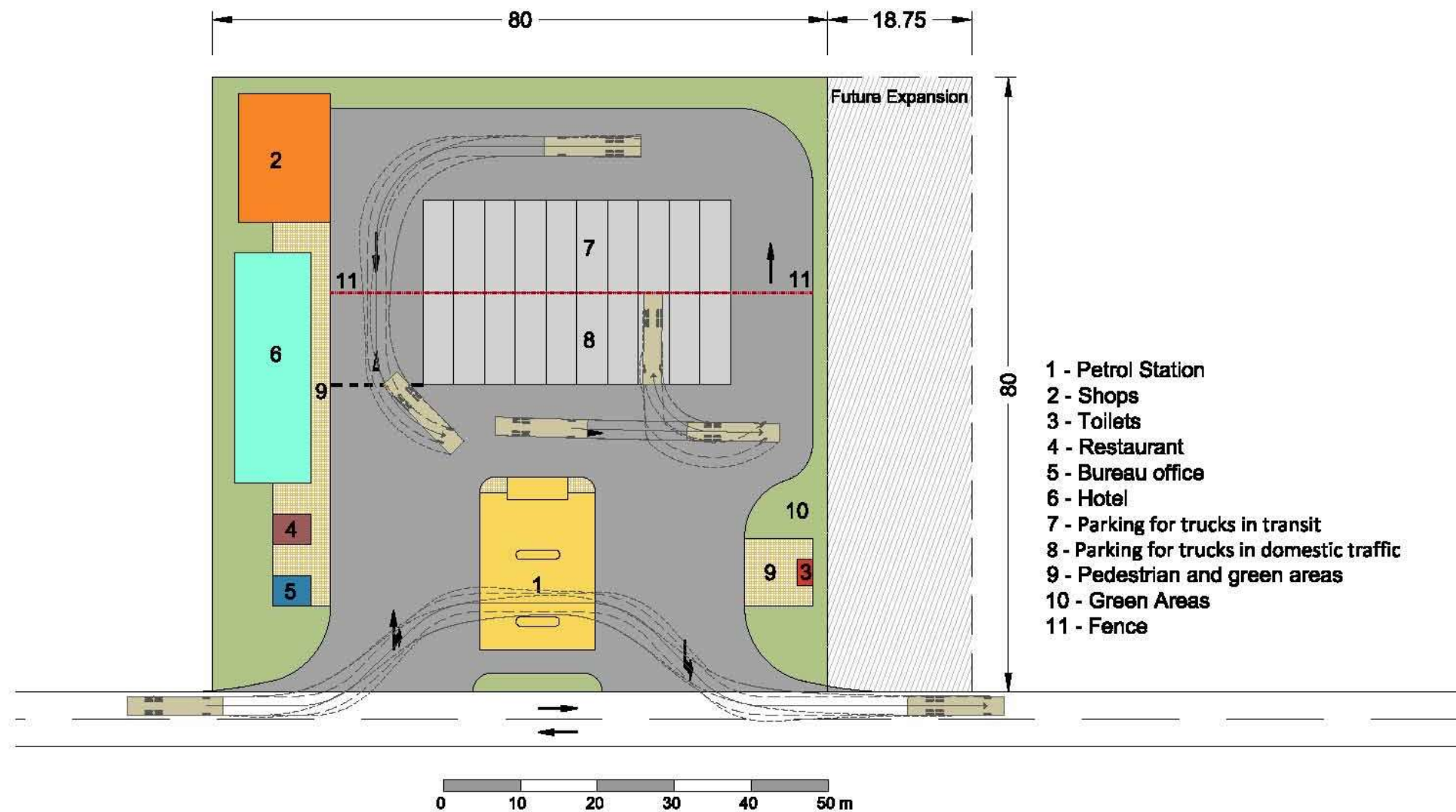
24	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Busia junction																											
KILOMETRES FROM PREVIOUS STATION	46,1																											
PASSENGER CARS	1250	2142	238	408	9	19	170	595	200		40	20		70		300	300	25				200	5751	9483	4619	14102	0	
MINIBUSES	70	120	84	144																								
LARGE BUSES	88	151	192	329																								
TRUCKS	480	772	672	1081																								



- 1 - Petrol Station
- 2 - Shops
- 3 - Toilets
- 4 - Restaurant
- 5 - Bank
- 6 - Bar
- 7 - Car workshop
- 8 - Hotel
- 9 - Police check point
- 10 - Supermarket
- 11 - Truck parking
- 12 - Minibuses parking
- 13 - Large buses parking
- 14 - Passenger cars parking
- 15 - Pedestrian and green areas
- 16 - Green Areas



25	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Naluwerere																											
KILOMETRES FROM PREVIOUS STATION	25,5																											
PASSENGER CARS	945	1619	0	0	4	9	15	52,5	200				20			300	300							3846	6214	1642	7856	0
MINIBUSES	70	120	0	0																								
LARGE BUSES	98	168	0	0																								
TRUCKS	520	837	1152	1486																								



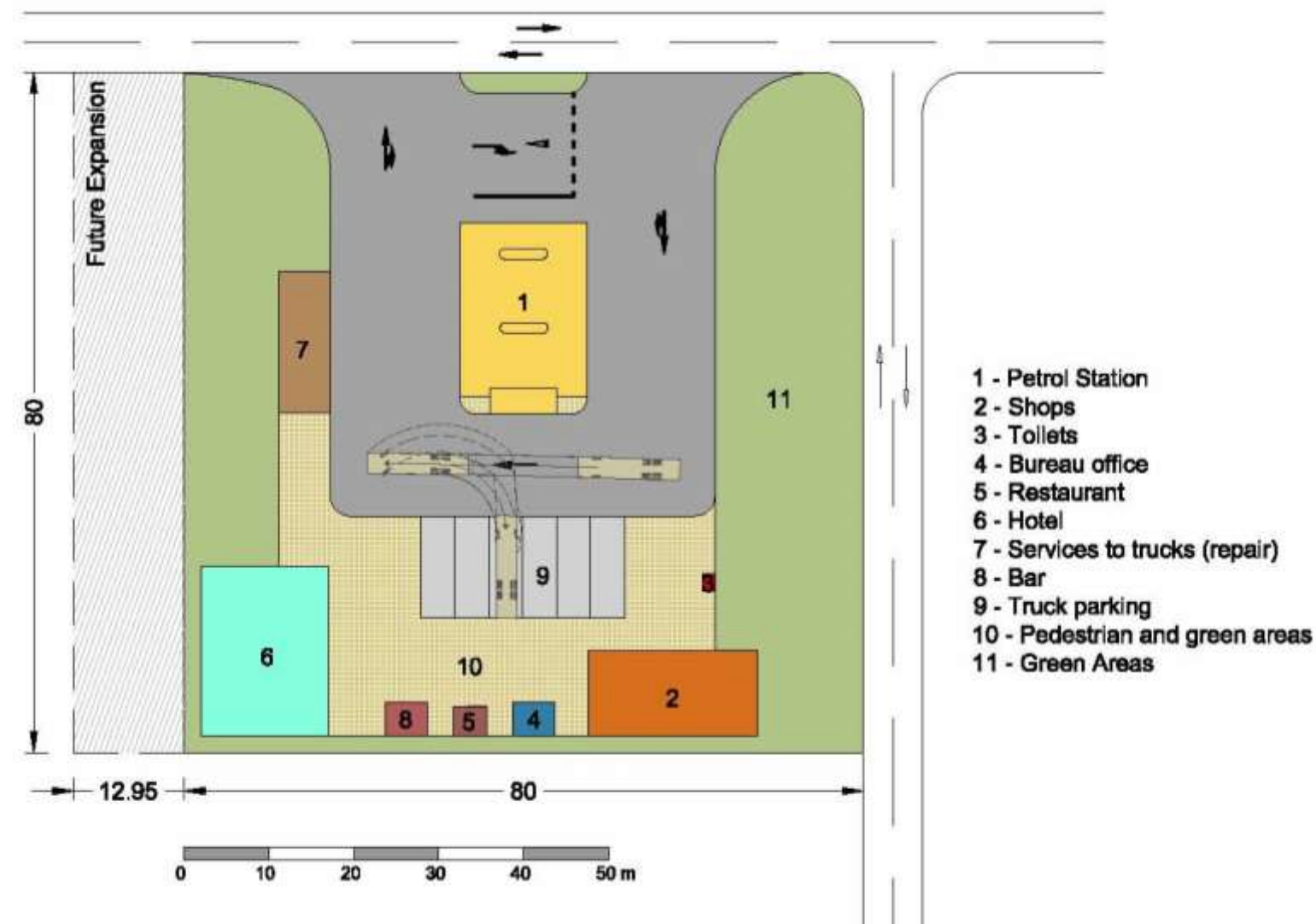


27	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Lugazi																											
KILOMETRES FROM PREVIOUS STATION	113,1																											
PASSENGER CARS	1920	3290	363	622	17	35	235	822,5	200	100	40			70	200		300			25	100	200	5243	10895	4204	15099	0	
MINIBUSES	70	120	80	137																								
LARGE BUSES	95	163	192	329																								
TRUCKS	860	1384	1536	2472																								





28	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Buwama																											
KILOMETRES FROM PREVIOUS STATION	87,9																											
PASSENGER CARS	2250	3856	0	0	1	3	9	31,5	200			20	20			300	300				100		2388	3826	3565	7391	0	
MINIBUSES	150	257	0	0																								
LARGE BUSES	60	103	0	0																								
TRUCKS	720	1159	288	463																								





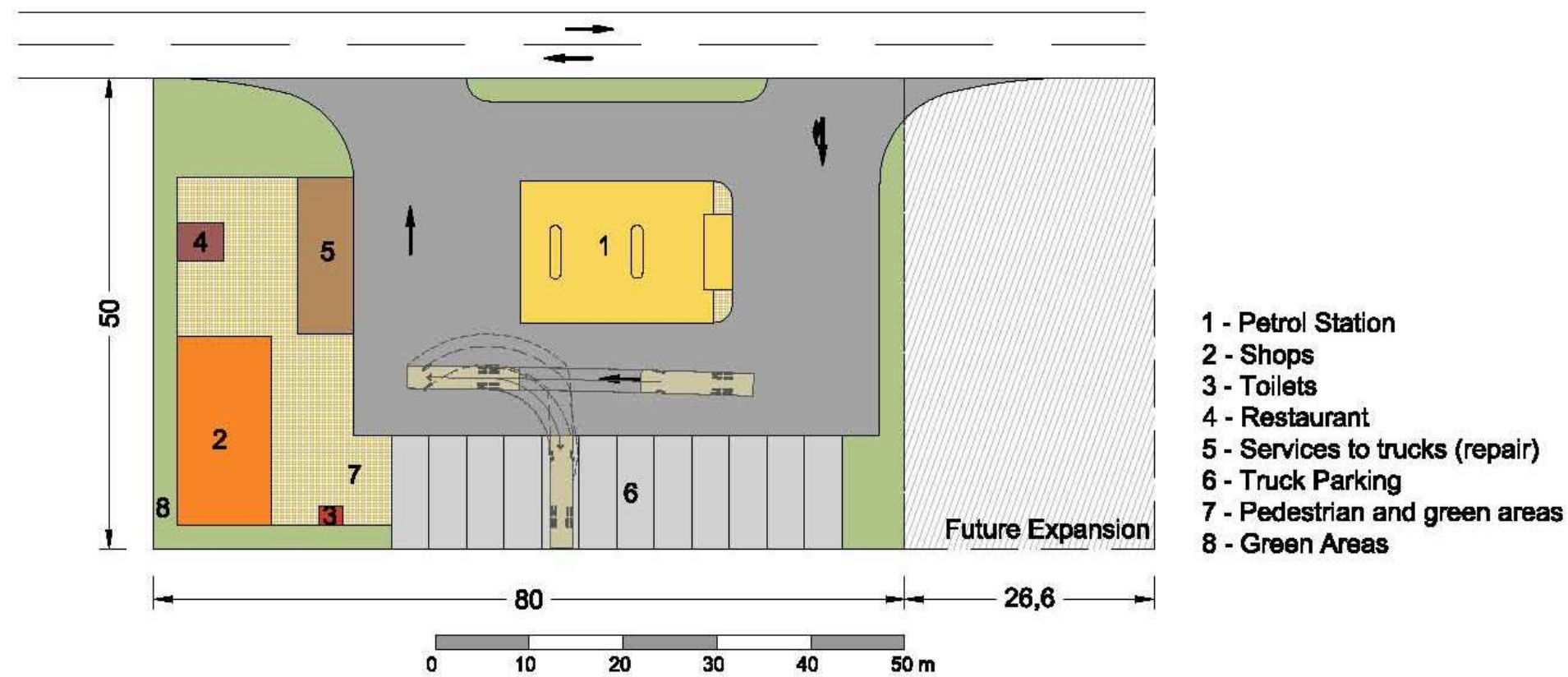
30	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Masaka road																											
KILOMETRES FROM PREVIOUS STATION	119,8																											
PASSENGER CARS	2160	3702	400	685	19	38	386	1351	200	100			20	70	200	300	300				100	200	5207	11604	3848	15452	12452	
MINIBUSES	150	257	432	740																								
LARGE BUSES	60	103	336	576																								
TRUCKS	640	1030	1008	1516																								



- 1 - Petrol Station
- 2 - Shops
- 3 - Toilets
- 4 - Restaurant
- 5 - Health Clinic
- 6 - Car workshop
- 7 - Services to trucks (repair)
- 8 - Cleaning of trucks and cars
- 9 - Supermarket
- 10 - Hotel
- 11 - Bureau office
- 12 - Truck parking
- 13 - Minibuses parking
- 14 - Large buses parking
- 15 - Passenger cars parking
- 16 - Pedestrian and green areas
- 17 - Green Areas

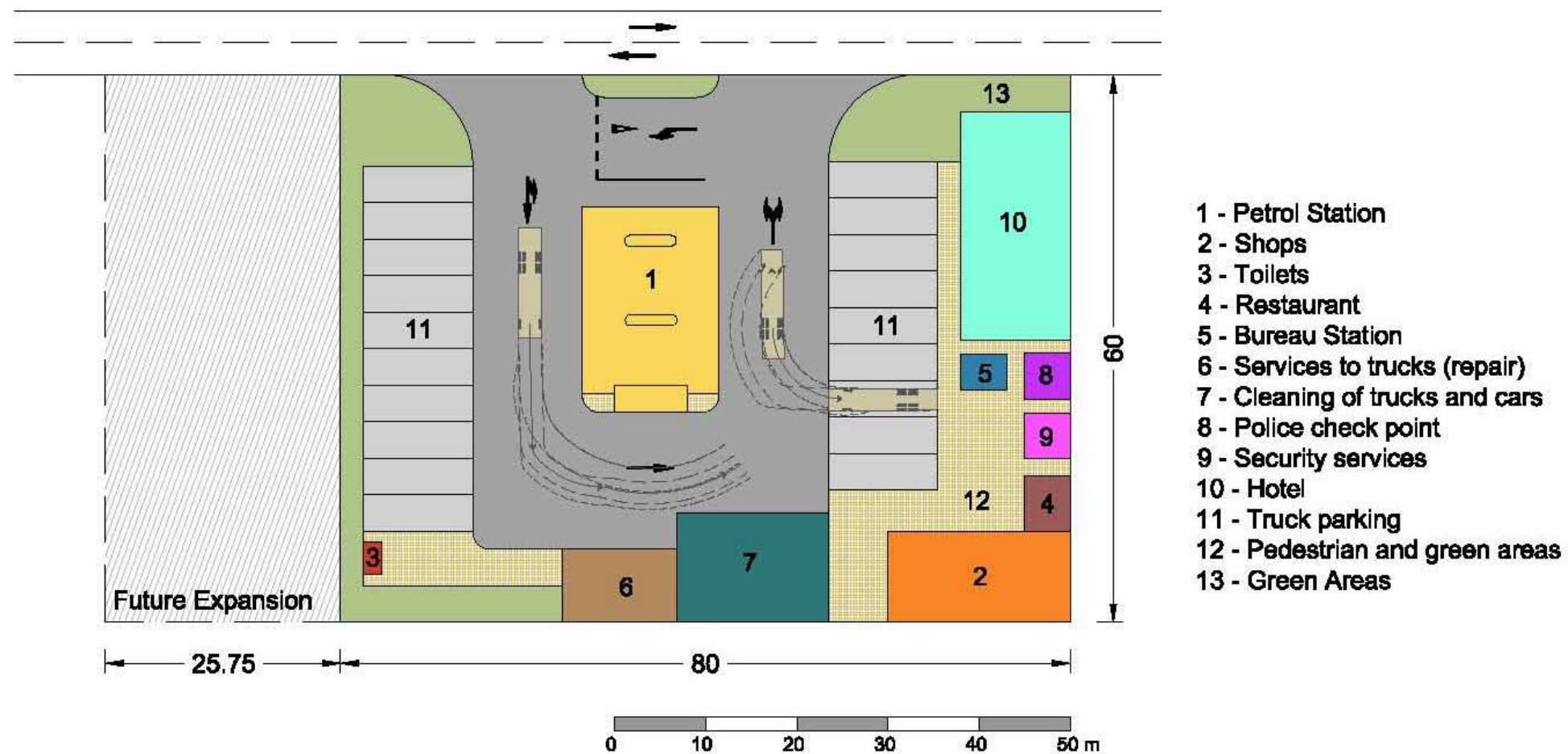


31	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Kyazanga																											
KILOMETRES FROM PREVIOUS STATION	56,2																											
PASSENGER CARS	1600	2742	0	0	3	6	16	56	200								300				100			2373	3962	1343	5304	0
MINIBUSES	150	257	0	0																								
LARGE BUSES	60	103	0	0																								
TRUCKS	400	644	576	927																								



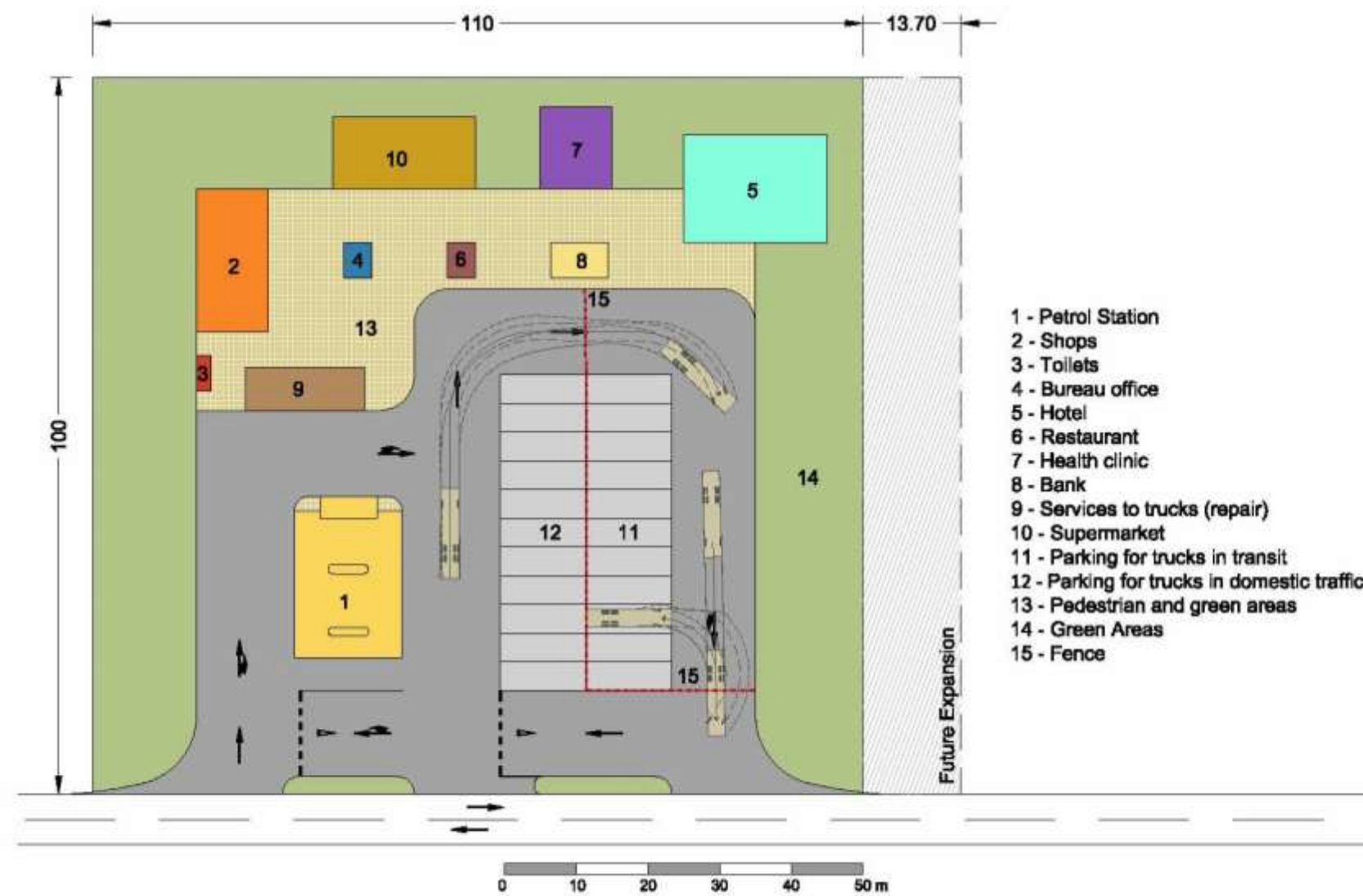


32	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Biharwe																											
KILOMETRES FROM PREVIOUS STATION	74,7																											
PASSENGER CARS	1520	2605	0	0	4	9	25	87,5	200				20		200	300	300	25		25	100		2120	4932	1359	6291	0	
MINIBUSES	150	257	0	0																								
LARGE BUSES	60	103	0	0																								
TRUCKS	640	1030	960	1545																								



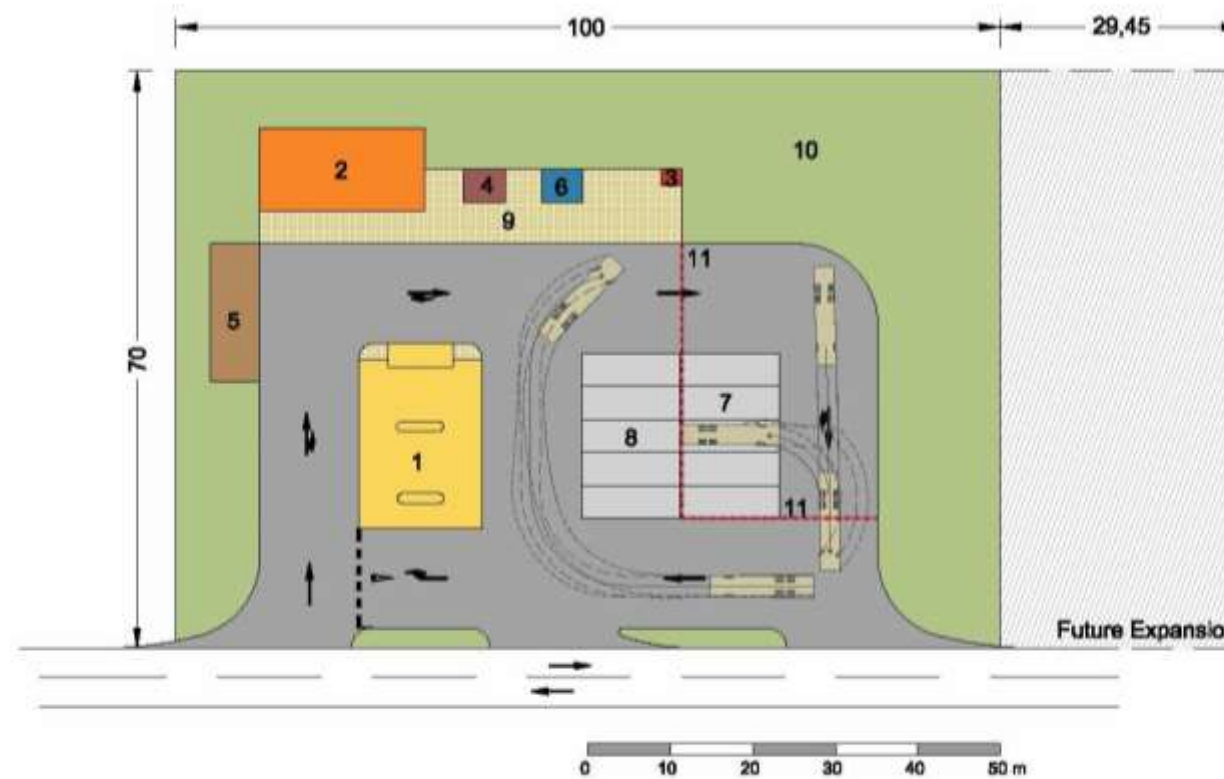


34	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Ntungamo																											
KILOMETRES FROM PREVIOUS STATION	65,5																											
PASSENGER CARS	1760	3016	0	0	4	8	12	42	200	100	40		20			300	300				100	200	4020	6649	5418	12067	0	
MINIBUSES	147	252	0	0																								
LARGE BUSES	53	91	0	0																								
TRUCKS	400	644	1056	1319																								





35	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Rubaare																											
KILOMETRES FROM PREVIOUS STATION	47																											
PASSENGER CARS	1820	3119	0	0	2	5	13	45,5	200				20				300											
MINIBUSES	147	252	0	0																								
LARGE BUSES	53	91	0	0																								
TRUCKS	440	708	480	772																	100			3653	5096	3923	9019	0



- 1 - Petrol Station
- 2 - Shops
- 3 - Toilets
- 4 - Restaurant
- 5 - Services to trucks (repair)
- 6 - Bureau office
- 7 - Parking for trucks in transit
- 8 - Parking for trucks in domestic traffic
- 9 - Pedestrian and green areas
- 10 - Green Areas
- 11 - Fence



36	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Kabale																											
KILOMETRES FROM PREVIOUS STATION	52,8																											
PASSENGER CARS	2686	4603	500	857	22	44	232	812	200	100	40			70	200	300	300	25		25	100	200	6709	13973	2421	16394	0	
MINIBUSES	147	252	144	247																								
LARGE BUSES	53	91	144	247																								
TRUCKS	380	612	2448	3498																								





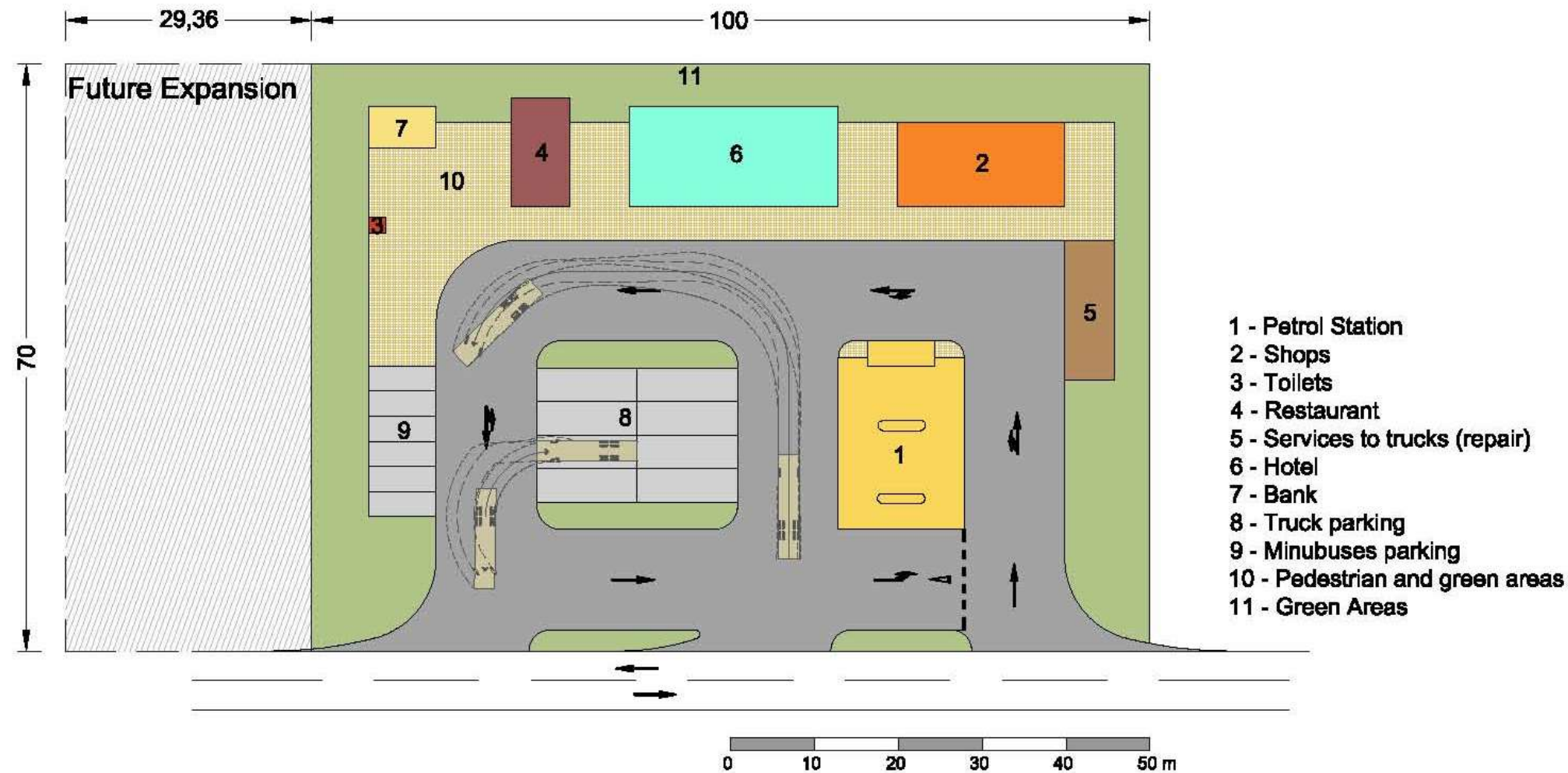
38	Traffic		Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
	Traffic 2013	Traffic 2020																										
NAME OF THE STATION	Rukomo																											
KILOMETRES FROM PREVIOUS STATION	50																											
PASSENGER CARS	400	685	0	0	8	17	6	21	200	100	40	20				300	300		100					5946	9903	7234	17137	0
MINIBUSES	150	257	0	0																								
LARGE BUSES	55	94	0	0																								
TRUCKS	180	290	2640	2758																								



- 1 - Petrol Station
- 2 - Shops
- 3 - Toilets
- 4 - Restaurant
- 5 - Health clinic
- 6 - Bank
- 7 - Bar
- 8 - Hotel
- 9 - Public information area/Administrative offices
- 10 - Services to trucks (repair)
- 11 - Truck parking
- 12 - Pedestrian and green areas
- 13 - Green Areas

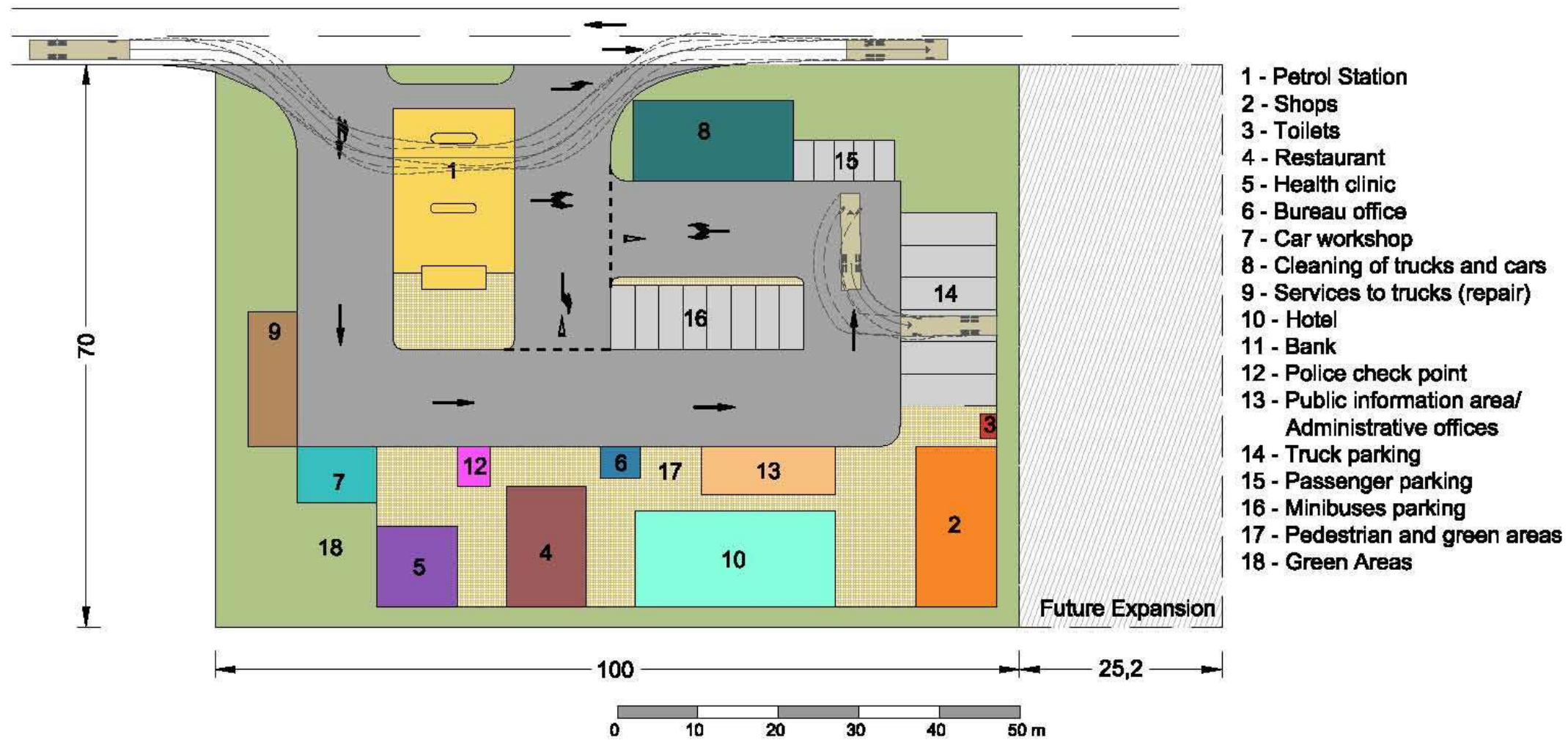


41	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Ruhango																											
KILOMETRES FROM PREVIOUS STATION	115,1																											
PASSENGER CARS	428	733	0	0	3	7	50	175	200		40					300	300				100			3527	5514	3429	8943	0
MINIBUSES	150	257	144	247																								
LARGE BUSES	10	17	0	0																								
TRUCKS	220	354	384	618																								





42	Traffic		Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)
	Traffic 2013	Traffic 2020																									
NAME OF THE STATION	Butare																										
KILOMETRES FROM PREVIOUS STATION	53,2																										
PASSENGER CARS	360	617	63	108	5	10	78	273	200	100			20	70	200	300	300	25	100				2939	5456	3094	8550	0
MINIBUSES	213	365	144	247																							
LARGE BUSES	10	17	0	0																							
TRUCKS	160	257	288	463																							





43	Traffic 2013	Traffic 2020	Parking (m ²) 2013	Parking (m ²) 2020	Toilets (units)	m ² of toilet	Rest. (seats)	m ² of rest.	Shops (m ²)	Health clinic (m ²)	Bank (m ²)	Bar (m ²)	Bureau office (m ²)	Car workshop (m ²)	Cleaning of trucks and cars (m ²)	Hotel (m ²)	Petrol station (m ²)	Police check point (m ²)	Recreational area / Adm. offices (m ²)	Security services (m ²)	Services to trucks (repair) (m ²)	Supermarket (m ²)	Internal Roads (m ²)	TOTAL Without pedestrian and green areas	Pedestrian and green areas	TOTAL 2020	Land needed (m ²)	
NAME OF THE STATION	Bujumbura																											
KILOMETRES FROM PREVIOUS STATION	140,7																											
PASSENGER CARS	400	685	0	0	34	69	140	490	200							300	300			25	100			7028	16880	5481	22360	11010
MINIBUSES	150	257	2256	3866																								
LARGE BUSES	10	17	441	539																								
TRUCKS	200	322	2400	3862																								





MAU SUMMIT STATION







2	Data
NAME OF THE STATION	Station Kenol
KILOMETRES FROM PREVIOUS STATION	4,7
PASSENGER CARS	3110
MINIBUSES	47
LARGE BUSES	80
TRUCKS	2150

Parking	Pedestrian and gardening	Building	Others	TOTAL
774.571	34.777	332.911	183.734	1.325.993

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	642	5.453	1.966	21.622

3	Data
NAME OF THE STATION	Marianaki
KILOMETRES FROM PREVIOUS STATION	29
PASSENGER CARS	2750
MINIBUSES	47
LARGE BUSES	80
TRUCKS	1160

Parking	Pedestrian and gardening	Building	Others	TOTAL
402.734	65.602	444.403	183.734	1.096.473

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	974	8.273	2.281	25.089



4	Data	Parking	Pedestrian and gardening	Building	Others	TOTAL	Personnel	Security guard	Repairs	Public utilities	Others	Total
NAME OF THE STATION	Taru											
KILOMETRES FROM PREVIOUS STATION	35											
PASSENGER CARS	2500											
MINIBUSES	47											
LARGE BUSES	80											
TRUCKS	1160											
		385.691	37.119	662.497	183.734	1.269.041	6.520	7.042	1.623	13.790	2.897	31.872

5	Data	Parking	Pedestrian and gardening	Building	Others	TOTAL	Personnel	Security guard	Repairs	Public utilities	Others	Total
NAME OF THE STATION	Mackinnon Road II											
KILOMETRES FROM PREVIOUS STATION	13,6											
PASSENGER CARS	1975											
MINIBUSES	47											
LARGE BUSES	80											
TRUCKS	900											
		332.381	46.242	859.858	183.734	1.422.215	6.520	7.042	2.211	18.783	3.455	38.010



6	Data
NAME OF THE STATION	Maungu
KILOMETRES FROM PREVIOUS STATION	34,4
PASSENGER CARS	1925
MINIBUSES	60
LARGE BUSES	80
TRUCKS	850

Parking	Pedestrian and gardening	Building	Others	TOTAL
314.832	27.719	413.694	183.734	939.978

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	882	7.496	2.194	24.134

8	Data
NAME OF THE STATION	Manyani
KILOMETRES FROM PREVIOUS STATION	63,6
PASSENGER CARS	1420
MINIBUSES	60
LARGE BUSES	80
TRUCKS	900

Parking	Pedestrian and gardening	Building	Others	TOTAL
281.390	64.120	366.554	183.734	895.798

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	742	6.304	2.061	22.668



9	Data
NAME OF THE STATION	Mtito Andei
KILOMETRES FROM PREVIOUS STATION	57,4
PASSENGER CARS	1650
MINIBUSES	60
LARGE BUSES	80
TRUCKS	950

Parking	Pedestrian and gardening	Building	Others	TOTAL
278.077	22.819	948.464	183.734	1.433.093

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	2.474	21.024	3.706	40.766

11	Data
NAME OF THE STATION	Makindu
KILOMETRES FROM PREVIOUS STATION	57
PASSENGER CARS	1615
MINIBUSES	55
LARGE BUSES	75
TRUCKS	875

Parking	Pedestrian and gardening	Building	Others	TOTAL
185.352	22.641	346.994	183.734	738.722

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	684	5.809	2.005	22.060



13	Data
NAME OF THE STATION	Sultan Hamud
KILOMETRES FROM PREVIOUS STATION	62,2
PASSENGER CARS	1815
MINIBUSES	55
LARGE BUSES	75
TRUCKS	995

Parking	Pedestrian and gardening	Building	Others	TOTAL
532.201	47.410	543.572	183.734	1.306.917

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.269	10.782	2.561	28.173

14	Data
NAME OF THE STATION	Junction Machakos
KILOMETRES FROM PREVIOUS STATION	61,4
PASSENGER CARS	1930
MINIBUSES	55
LARGE BUSES	75
TRUCKS	1265

Parking	Pedestrian and gardening	Building	Others	TOTAL
1.540.543	80.140	487.826	183.734	2.292.243

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.103	9.372	2.404	26.440



15	Data
NAME OF THE STATION	Naivasha
KILOMETRES FROM PREVIOUS STATION	114,6
PASSENGER CARS	2120
MINIBUSES	75
LARGE BUSES	95
TRUCKS	1070

Parking	Pedestrian and gardening	Building	Others	TOTAL
707.407	269.657	711.202	183.734	1.871.999

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.768	15.022	3.035	33.387

16	Data
NAME OF THE STATION	Gilgil Weighbridge
KILOMETRES FROM PREVIOUS STATION	19
PASSENGER CARS	1897
MINIBUSES	75
LARGE BUSES	95
TRUCKS	1060

Parking	Pedestrian and gardening	Building	Others	TOTAL
439.401	65.256	542.008	183.734	1.230.399

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.264	10.742	2.557	28.125



19	Data
NAME OF THE STATION	Mau Summit
KILOMETRES FROM PREVIOUS STATION	59,4
PASSENGER CARS	1715
MINIBUSES	75
LARGE BUSES	95
TRUCKS	720

Parking	Pedestrian and gardening	Building	Others	TOTAL
490.375	34.504	574.868	183.734	1.283.482

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.362	11.573	2.650	29.147

20	Data
NAME OF THE STATION	Burnt Forest
KILOMETRES FROM PREVIOUS STATION	62
PASSENGER CARS	1430
MINIBUSES	75
LARGE BUSES	95
TRUCKS	660

Parking	Pedestrian and gardening	Building	Others	TOTAL
661.707	38.672	426.408	183.734	1.310.520

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	920	7.818	2.230	24.530



21	Data
NAME OF THE STATION	Jua kali
KILOMETRES FROM PREVIOUS STATION	33,1
PASSENGER CARS	2560
MINIBUSES	70
LARGE BUSES	88
TRUCKS	770

Parking	Pedestrian and gardening	Building	Others	TOTAL
401.881	81.070	623.377	183.734	1.290.062

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.507	12.800	2.787	30.656

23	Data
NAME OF THE STATION	Malaba
KILOMETRES FROM PREVIOUS STATION	82,7
PASSENGER CARS	1638
MINIBUSES	70
LARGE BUSES	88
TRUCKS	1400

Parking	Pedestrian and gardening	Building	Others	TOTAL
400.418	47.229	476.677	183.734	1.108.058

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.070	9.089	2.372	26.093



24	Data	Parking	Pedestrian and gardening	Building	Others	TOTAL	Personnel	Security guard	Repairs	Public utilities	Others	Total
NAME OF THE STATION	Busia junction	331.937	45.177	809.393	183.734	1.370.241	6.520	7.042	2.060	17.506	3.313	36.441
KILOMETRES FROM PREVIOUS STATION	46,1											
PASSENGER CARS	1250											
MINIBUSES	70											
LARGE BUSES	88											
TRUCKS	480											

25	Data	Parking	Pedestrian and gardening	Building	Others	TOTAL	Personnel	Security guard	Repairs	Public utilities	Others	Total
NAME OF THE STATION	Naluwerere	229.482	16.058	462.203	183.734	891.477	6.520	7.042	1.027	8.723	2.331	25.643
KILOMETRES FROM PREVIOUS STATION	25,5											
PASSENGER CARS	945											
MINIBUSES	70											
LARGE BUSES	98											
TRUCKS	520											



27	Data
NAME OF THE STATION	Lugazi
KILOMETRES FROM PREVIOUS STATION	113,1
PASSENGER CARS	1920
MINIBUSES	70
LARGE BUSES	95
TRUCKS	860

Parking	Pedestrian and gardening	Building	Others	TOTAL
378.807	41.114	935.946	183.734	1.539.601

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	2.437	20.707	3.671	40.377

28	Data
NAME OF THE STATION	Buwama
KILOMETRES FROM PREVIOUS STATION	87,9
PASSENGER CARS	2250
MINIBUSES	150
LARGE BUSES	60
TRUCKS	720

Parking	Pedestrian and gardening	Building	Others	TOTAL
122.704	34.870	498.584	183.734	839.893

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.135	9.644	2.434	26.774



30	Data
NAME OF THE STATION	Masaka road
KILOMETRES FROM PREVIOUS STATION	119,8
PASSENGER CARS	2160
MINIBUSES	150
LARGE BUSES	60
TRUCKS	640

Parking	Pedestrian and gardening	Building	Others	TOTAL
375.468	37.632	1.243.625	183.734	1.840.459

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	3.353	28.491	4.541	49.946

31	Data
NAME OF THE STATION	Kyazanga
KILOMETRES FROM PREVIOUS STATION	56,2
PASSENGER CARS	1600
MINIBUSES	150
LARGE BUSES	60
TRUCKS	400

Parking	Pedestrian and gardening	Building	Others	TOTAL
141.986	13.132	376.334	183.734	715.186

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	771	6.551	2.088	22.972



32	Data
NAME OF THE STATION	Biharwe
KILOMETRES FROM PREVIOUS STATION	74,7
PASSENGER CARS	1520
MINIBUSES	150
LARGE BUSES	60
TRUCKS	640

Parking	Pedestrian and gardening	Building	Others	TOTAL
157.725	13.290	612.815	183.734	967.564

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.475	12.533	2.757	30.327

34	Data
NAME OF THE STATION	Ntungamo
KILOMETRES FROM PREVIOUS STATION	65,5
PASSENGER CARS	1760
MINIBUSES	147
LARGE BUSES	53
TRUCKS	400

Parking	Pedestrian and gardening	Building	Others	TOTAL
229.750	52.984	629.832	183.734	1.096.300

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.526	12.964	2.805	30.856



35	Data
NAME OF THE STATION	Rubaare
KILOMETRES FROM PREVIOUS STATION	47
PASSENGER CARS	1820
MINIBUSES	147
LARGE BUSES	53
TRUCKS	440

Parking	Pedestrian and gardening	Building	Others	TOTAL
190.453	38.368	379.660	183.734	792.214

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	781	6.635	2.098	23.076

36	Data
NAME OF THE STATION	Kabale
KILOMETRES FROM PREVIOUS STATION	52,8
PASSENGER CARS	2686
MINIBUSES	147
LARGE BUSES	53
TRUCKS	380

Parking	Pedestrian and gardening	Building	Others	TOTAL
497.336	23.676	1.062.499	183.734	1.767.244

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	2.814	23.909	4.028	44.313



38	Data
NAME OF THE STATION	Rukomo
KILOMETRES FROM PREVIOUS STATION	50
PASSENGER CARS	400
MINIBUSES	150
LARGE BUSES	55
TRUCKS	180

Parking	Pedestrian and gardening	Building	Others	TOTAL
374.584	70.748	586.018	183.734	1.215.083

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.395	11.855	2.681	29.494

41	Data
NAME OF THE STATION	Ruhango
KILOMETRES FROM PREVIOUS STATION	115,1
PASSENGER CARS	428
MINIBUSES	150
LARGE BUSES	10
TRUCKS	220

Parking	Pedestrian and gardening	Building	Others	TOTAL
6.520	7.042	9.405	79.912	10.288

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.307	11.103	2.597	28.569



42	Data
NAME OF THE STATION	Butare
KILOMETRES FROM PREVIOUS STATION	53,2
PASSENGER CARS	360
MINIBUSES	213
LARGE BUSES	10
TRUCKS	160

Parking	Pedestrian and gardening	Building	Others	TOTAL
161.696	30.264	781.618	183.734	1.157.311

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.978	16.803	3.234	35.577

43	Data
NAME OF THE STATION	Bujumbura
KILOMETRES FROM PREVIOUS STATION	140,7
PASSENGER CARS	400
MINIBUSES	150
LARGE BUSES	10
TRUCKS	200

Parking	Pedestrian and gardening	Building	Others	TOTAL
671.115	53.602	619.661	183.734	1.528.111

Personnel	Security guard	Repairs	Public utilities	Others	Total
6.520	7.042	1.496	12.706	2.776	30.540

