THE UNITED REPUBLIC OF TANZANIA

PRIME MINISTER'S OFFICE REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT (PMO-RALG)

MINISTRY OF WORKS (MoW)

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

Operational Guidelines for District Roads Maintenance

December 2014

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PREFACE

The Prime Minister's Office, Regional Administration and Local Government (PMO-RALG) would like to extend gratitude to Japan International Cooperation Agency (JICA) for providing a technical support to PMO-RALG, Regional Secretariats and Local Government Authorities (LGAs) on rural roads maintenance through pilot projects in the selected District Councils in Dodoma and Iringa regions (i.e. Chamwino DC, Kondoa DC, Iringa DC and Mufindi DC).

Through JICA's technical cooperation project, i.e. Rural Road Maintenance System Development (RMSD) project, PMO-RALG, with participation of Regional Secretariats and District Councils, has developed Operational Guidelines for Districts Roads Maintenance which will enable technical staff at Council and Regional Secretariat level to implement road maintenance activities efficiently and effectively.

In accordance with Road Act No. 13 of 2007, it is the responsibility of the Councils to develop and maintain urban and rural roads networks. Development of the Operation Guidelines mainly focused on ensuring that the Guidelines can practically be utilized by the Councils for maintenance of the relevant roads so as to fulfil their obligation as specified by the Act.

PMO-RALG would like to thank the Ministry of Works (MoW) for its extensive support during the development and approval of the Operational Guidelines.

Moreover, PMO-RALG would like to thank the Works Departments of Chamwino DC, Iringa DC, Kondoa DC and Mufindi DC together with the Regional Secretariat Engineers for Dodoma and Iringa for their tireless and constructive participation in developing the Guidelines in collaboration with JICA Expert Team.

Jumanne Sagini
Permanent Secretary
PMO-RALG

EXECUTIVE SUMMARY

The Prime Minister's Office Regional Administration and Local Government (PMO - RALG) prepared Operational Guidelines for Rural Roads Maintenance. The Guidelines are envisaged to enhance capacity of PMO-RALG and Regional Secretariat Engineers in coordinating and supporting Local Authorities on road maintenance and management.

The Guidelines will help the implementing agencies and Local Government Authorities (LGAs) to perform maintenance activities throughout the maintenance cycle for districts roads which have the principal purpose of securing safe and economical access.

The Guidelines has six chapters: 1) Introduction; 2) Targets and Policy Directives; 3) Planning; 4) Procurement; 5) Implementation; 6) Monitoring and Evaluation, which are summarized hereunder.

Chapter 1: Introduction

Introduction covers background, purpose and important definitions on road intervention. The Vision of 2025's emphasis on importance of systematic and sustainable maintenance of road networks is the one, and MKUKUTA II, National Strategy for Poverty Alleviation and Economic Growth is another policy that has led to signify development this Guidelines. The intervention defined are: routine maintenance; bridge maintenance; spot improvement; emergency works; periodic maintenance; rehabilitation; development; upgrading and backlog maintenance. All are the key terminology to be shared by all who are in road maintenance works.

Chapter 2: Targets and Policy Directives

This chapter explains targets and policy directives. The targets are set for the year 2015 and policy directives are set for planning, implementation, monitoring and evaluation. Performance and quality targets are set to be followed by LGAs.

Chapter 3: Planning

This chapter describes overview of planning which include budget preparation and annual, medium and long term plan. It also specifies the requirement of Annual

District Road Inventory and Condition Survey (ADRICS) which becomes the basic data for planning. Innovative approaches to road maintenance are included also.

Chapter 4: Procurement

This chapter describes three phases in the process of procurement: packaging of works; preparation of tender documents and advertisement; and evaluation and contract award.

Chapter 5: Implementation

The roles of a council engineer as project manager and requirements of handing over and final accounts are specified in this chapter.

Chapter 6: Monitoring and Evaluation

The chapter provides engineers in the Regional Secretariat (RS) and PMO-RALG with guideline criteria for M&E of road works projects in the councils. To make the M&E exercise efficient and effective, standard forms have been prepared and appended in the Annex.

List of Abbreviations

ADRICS	Annual District Road Inventory and Condition Survey
APA	Annual Performance Agreement
ATTI	Appropriate Technology Training Institute
AWP	Annual Work Plan
BOQ	Bill of Quantities
CC	Council Chairperson
CD	Council Director
CTB	Council Tender Board
DE	District Engineer
DROMAS	District Road Management System
EBT	Equipment Based Technology
ERB	Engineers Registration Board
GN	Government Notice
GPN	General Procurement Notice
LGA	Local Government Authorities
LGTP	Local Government Transport Program
M&E	Monitoring and Evaluation
MoW	Ministry of Works
PMO-RALG	Prime Minister's Office, Regional Administration and Local Government
PM	Periodic Maintenance
PMU	Procurement Management Unit
PPA	Public Procurement Act
PPRA	Public Procurement Regulatory Authority
RFB	Road Fund Board
RICS	Road Inventory and Condition Survey
RM	Routine Maintenance
RMSD	Rural roads Maintenance System Development Project
RS	Regional Secretariats
RSE	Regional Secretariat Engineer
SI	Spot Improvement
VFM	Value for Money

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CHAPTER I: INTRODUCTION

1.1 Background

The Government of Tanzania, through its Vision 2025 has emphasised importance of systematic and sustainable maintenance of road network. This has been mirrored in National Transport Policy which places rural transport as crucial in providing linkage between rural communities and urban market where agricultural inputs and products are transported to and from the farm gate respectively. The current state of ***district roads is poor*** hence contributing to poor farming and post-harvest loss in agricultural products. The National Strategy for Poverty Alleviation and Economic Growth "MKUKUTA II" has set three clear priority objectives; Growth of income and reduction of poverty, improvement of life and social well-being and good governance. It is recognised that rural roads play a key role in socio-economic performance of the country in facilitating increased farm produce, access to markets and supporting private sector growth. This makes rural transport infrastructure amongst the pillars towards achievement of MKUKUTA, Five Years Development Plan and Vision 2025.

Transport infrastructure under responsibility of local governments will take its position if it is brought to a standard that permits traffic to pass throughout the year and the roads leading to areas of high economic potentials or social importance are upgraded. In order to safeguard the investments, proper maintenance practise should be adhered to. The principal purpose of maintaining roads is to provide continuous acceptable conditions for safe and economical travel. Roads are expensive to construct, therefore well planned and timely maintenance interventions need to be undertaken to ensure least long-term costs. This has been apprehended in relevant policy papers regarding rural roads and the National Transport Policy.

In 2006 PMO-RALG carried out the exercise of Local Government Road Inventory and Condition Survey (LG-RICS). The total network was 56,0625km which is the one recognized by the Road Act 2007. However it was noted that, some of the roads in some LGAs were left during the exercise. In 2013, the LGAs total road network increased to 108,946km due to introduction of new administrative areas. The report further indicates that 23% of classified district roads are in good condition, 34% fair and 43% Poor. Furthermore 81% is earth roads, 18% gravel and only 1% is paved. This is unfavourable state hence efficiency in rural roads management using scarce resources should be enhanced.

1.2 Purpose and Rationale for developing the Guideline.

Currently there is no Guideline used by LGAs and RS Engineers to implement road works activities. This Guideline will help those technical staff at Council

and Regional levels on implementing road work maintenance activities smoothly and efficiently. As described above 81% of district roads are earth roads which need special operation guideline on maintenance technique and monitoring tool. The developed guideline is simpler and understood to all LGA's and will assist all LGA's to have common understanding on maintenance and monitoring techniques. Also in order to practically implementing the Decentralisation by Devolution (D-by-D) we need to have the guideline which is simpler and understood by all stakeholders.

1.3 Roads Maintenance Interventions

Road works planning, implementation and monitoring should be based on properly and systematic procedures as defined in this operational guidelines. The Annual District Roads Inventory and Condition Survey should be carried out and its result data used in prioritizing for maintenance of the roads.

Road works are categorized and defined as follows:

i. **Routine Maintenance:** Routine Maintenance shall be carried out to all roads in good and fair condition including roads which have received rehabilitation. Routine maintenance means all maintenance works required continuously or at intervals on every road whatever its engineering characteristics or traffic volume, and comprises of activities such as grass cutting, drain cleaning, culvert and bridge cleaning and maintenance, road furniture and bridge guardrails maintenance, paved road patching, edge repair, crack sealing, and line remarking, and also unpaved road grading, shaping, and pothole repairs.

ii. **Bridge Maintenance**: Bridge Maintenance includes all maintenance works on bridges that aim to repair or restore a bridge and its various components to the original specification. Upgrading by widening or improving a bridge beyond its original design shall be included under development activities.

iii. **Spot Improvement**: Spot Improvement is carried out to roads in fair and in transient to poor condition. The term spot improvement shall mean localised maintenance works carried out on paved and unpaved roads on short sections (typically 1 km or less) of roads in order to ensure a reasonable level of pass ability, and comprises of activities such as road surface repairs, embankment repairs, culvert and drainage repairs, localised road reshaping and re-gravelling, and the construction of diversions. Spot improvement is usually done due to the excessively poor condition of a road over a short section that threatens the flow of traffic.

iv. **Emergency Works**: Emergency Works shall mean all activities on paved and unpaved roads required to open or repair roads or bridges after a natural or other unforeseen disaster like landslides, falling of trees and stones, major accidents with damage and blockage of the road and natural events like floods. Such works are normally executed immediately following the occurrence assessment, design and cost estimates should be performed by Council engineer/consultant, report submitted to Regional Secretariat for review and forwarding to PMO-RALG.

v. **Periodic Maintenance**: Periodic Maintenance shall be planned for prioritized roads. Periodic Maintenance shall mean all maintenance works carried out on a defined project basis at intervals of several years. Some activities included here are also referred to as preventative maintenance. Typical activities on paved roads include resealing, overlays which justify the needs, fog sprays and shoulder re-forming. Pavement layer reconstruction or the addition of a pavement layer must not be included here, but under rehabilitation. Typical activities on unpaved roads include re-graveling, rip and re-compact and cross-section reforming.

vi. **Rehabilitation**: Rehabilitation includes activities that restore the original condition of the road through relatively extensive works like pavement layer reconstruction, mill and replace, reshaping of the cross-section, reconstruction of the shoulders, drainage works and thick overlays.

vii. **Development**: Development includes activities to restore or improve the level of service of roads to beyond that of the original specifications. This includes rehabilitation, upgrading and construction of new roads and bridges.

viii. **Upgrading**: Upgrading includes projects that improve the level of service of the road/bridge to beyond that of the original specification. It includes upgrading of a road/bridge to a new standard, i.e. widening, geometric changes and improvements, pavement works, and related ancillary works.

ix. **Backlog Maintenance**: Backlog maintenance includes all maintenance works needed as a result of insufficient maintenance done previously due to lack of funds. Therefore, all maintenance on roads in poor condition can be included under this definition, because they should never have deteriorated into a poor condition if sufficient maintenance funds were available. Rehabilitation projects may fall into this category.

CHAPTER II: TARGETS AND POLICY DIRECTIVES.

2.1 Targets of District Roads Maintenance Activities

PMO-RALG is currently implementing LGTP 2 with objectives of bringing all transport infrastructures to a standard that permits traffic to pass throughout the year and to upgrade transport infrastructures leading to areas of high economic potential or social importance. The assumed targets to be achieved by the year 2025 are:

i. All roads in fair and good condition to be under regular maintenance
ii. Roads upgrading and improvement of priority road links are carried out under development budget.
iii. No road shall remain in poor condition by the end of 2025/26.

2.2 Cooperation with residents/community

Since the cost and method of condition survey are limited, cooperation with resident shall be considerable. Most of the road user are living along the road, cooperation with resident/community to notify road administrator about complains and problem of the road.

Such information (contents and number) shall be stored. Some photos of damages/bottleneck also shall be stored by Road administrator. This cooperation with residents shall have a better point that it makes easier to communicate about the road user satisfaction survey.

2.3 Roles of Beneficiaries

The developed guideline is beneficial to all road users including communities, transporters, Local Government Authorities and other road users. The roles of beneficiaries are as follows:

i. Communities are the main beneficially of good roads so they are responsible to safeguard, vandalism of road furniture and avoid passing herd of animals on road carriage way.
ii. Transporters are required to make sure they do not exceed the weight of their trucks depending on type of road in use for sustaining the maintained roads.
iii. Local Government Authorities are required to provide social services, develop and maintain the roads.
iv. Other road users are required to maintain the developed roads.

2.4 Strategic Policies

2.4.1 Planning

During the planning stage, the council engineers should adhere to planning guidelines to ensure that planning and prioritization is done in adherence to guidelines, regulations and laws of the land. The outputs of planning should include:

i. Annual Council Road Work Plan (ACRWP), the Medium and Long term plans all based on ADRICS
ii. Routine Maintenance planned for all maintainable roads (good and fair conditions).
iii. Spot Improvement planned for roads in fair and transient to poor condition
iv. Periodic Maintenance planned for prioritized roads. Prioritization should be done fairly adhering to predetermined criteria as stipulated in planning section of this guideline.

2.4.2 Implementation

During implementation, an LGA should adhere to the approved budget and proceedings regarding procurement and good practise in contract management. This will enable smooth execution of works in collaboration with other stakeholders. The responsibility of the Council Engineer shall include:

i. Establishment of realistic unit rates for road works;
ii. Preparation of tender documents in collaboration with PMU;
iii. Supervision of day to day road works;
iv. Quality assurance and control to road works;
v. Timely preparation and submission of report to stakeholders.

2.4.3 Monitoring and Evaluation

Monitoring and evaluation (M&A) for maintenance of rural roads will be carried out by different stakeholders to ascertain value for money. However, the Regional Secretariat Engineer (RSE) will carry out monitoring visits at least once per quarter. Monitoring shall cover the whole project circle in order to advice on performance of road works project. The immediate technical backstopping to management of district roads is provided by RSE and where necessary consult PMO-RALG.

2.5 Performance and Quality Targets

The Council shall work to agreed quality standards, Performance Targets and as per Work Programmes for all roads maintenance in accordance with the approved Annual Operational Plan and particular attention shall be given to

the design standards, quality control, workmanship, contract periods and costs.

Designs information for PM, Development works, and any other major Emergency/Spot improvement interventions together with materials testing results, and photographs (before, during and after interventions) shall be kept in project files at the Council for reference.

The quality of all road maintenance works shall be in accordance with the Maintenance Standards, relevant specifications as agreed and safety standards as per recognized good practice. The Council shall respond to incidents and emergencies as they may be caused by natural disasters and other ordinary causes.

Over and above, the general safety requirements, the Council shall ensure that relevant road warning signs and traffic management signs related to road safety are provided, maintained and replaced in accordance with the ruling safety standards. The Council shall also pay due regard to safety of its employees.

Table 2.1: Performance Indicators and Targets for the LGAs

S/N	Performance Indicator	Performance Target(s)	Means of Verification	Objective(s)
1	Percentage completion of annual maintenance programme	85% or above completed	Progress reports Inspections	To assess the capacity to deliver
2	Percentage of funds spent at the end of the year	85% or above spent at the end of the year	Progress report Inspections	To assess the capacity to deliver
3	Percentage of contracts adhering to Procurement Act and regulation	100% of all contracts should adhere to procurement Act and regulation	Monitoring and audit reports	To asses transparency
4	Percentage of contracts adhering to standards and specifications	100% of contracts should adhere to standards and specifications	Monitoring and audit reports	To assess professionalism
5	Percentage of outsourced works	At least 90% of works should be outsourced.	Progress reports Monitoring and audit reports	Efficient programme delivery through private sector participation To address national policy

6	Number of road signs installed or replaced	Relevant road warning signs and traffic management signs relating to road safety are provided to the district roads.	Progress reports Monitoring and audit reports	To ensure safety for the road users

2.6 Specific Policy Issues

Pursuant to the implementation of road works activities, the Council shall comply with government policies and guidelines in relation to:

i. Paying adequate attention to environmental protection during design and construction of projects like checking satisfactory environmental restoration, e.g. of quarries, as part of the procedures for issuing contract completion certificates

ii. Using labour-based methods at least 20% of road maintenance activities wherever feasible. To secure the LBT technology to District Engineers/Technician and Contractors, making LBT works in periodic basis shall be considered;

iii. Gender issues i.e. employment of women in the road activities as a matter of priority;

iv. Incorporating awareness rising on HIV/AIDS and road safety into project plans and implementation;

v. Employment of local people for the purpose of availing them with employment opportunities;

vi. Monitoring compliance with labour standards by contractors;

vii. Sharing information with stakeholders and generally promoting transparency and high standard of professional and ethical conduct during project procurement and execution;

viii. Road reserves as indicated in road regulations should be enforced. The Council should ensure protection of the road reserves against encroachment;

ix. The Council should own construction material borrow pits as stipulated in mineral regulations.

The quarterly and annual reports shall indicate how all these Specific Policy Issues have been addressed, quantifying achievements where possible and identifying the constraints.

Note: HIV/AIDS and environmental protection shall be taken into account in LGAs for development projects.

2.7 Adherence to Legislations/Law

In fulfilling its responsibility for road maintenance and development of the rural and urban roads network, the Council shall have an obligation to conform to the Road Act No. 13 of 2007 and its amendments.

In procuring and executing contracts, the Council shall adhere to existing procurement proceedings.

2.8 Revision of the Operational Guidelines

Revision of the Operational Guidelines shall be as follows;

- PMO-RALG shall be initiator for the revision of the Guidelines.
- Whenever it is necessary to review the Guidelines at the council's level, the council engineer shall propose the contents to be revised and submit to PMO-RALG.

CHAPTER III: PLANNING

3.1 Planning Maintenance Overview

Planning is the initial stage in the preparation of a list of activities to be undertaken and methods to be deployed by forecasting the future situation during implementation stage. The purpose of planning is to have a network with proper links for proper traffic connections. Planning shall minimize environmental degradation but provide cost effective outputs on the transportation infrastructure.

The (LGAs) shall arrange to have short, medium and long term road maintenance plans in place.

The LGAs shall support maintenance of community access roads from own or other fund sources, on the fact that the Road Fund does not finance such roads. The Council shall organise sensitization of households for improvement and maintenance of community access roads as per National Transport Policy.

Road-works maintenance operations shall be subdivided into seven general categories:

i. Routine Maintenance
ii. Bridge Maintenance
iii. Spot Improvement
iv. Emergency Works
v. Periodic Maintenance
vi. Upgrading & Rehabilitation
vii. Cross Drainage Structures Maintenance and Construction

3.2 ADRICS and Documentation

3.2.1 Establishing Annual Road Inventory and Condition Survey

Annual District Roads Inventory and Condition Survey (ADRICS) shall be undertaken every year as per guidance provided by PMO-RALG. This shall be the first exercise in the planning cycle; preferably it shall commence on 1stof August every year. The exercise shall end by the 30thof November every year.

The standard forms for ADRICS shall be used to record all collected data. Important information to be collected in this exercise shall include:

i. Section length& identification
ii. List of all roads in the Council and their classification
    a) Collector roads;
    b) Feeder roads;
    c) Community access roads;
iii. Surface type and condition for ranking of roads e.g. good, fair or poor;

iv. Names and nodes of the roads;
v. All permanent important features along the roads shall be recorded and included in the strip maps for reference;
vi. Data and information of traffic count of all roads in the network;
vii. Road network mapping;
viii. The size, type and number of all cross drainage structures in each road
ix. The road inventory data shall be stored and updated from time to time.

3.2.2 Contents of ADRICS

The results of ADRICS shall include the following items:

i. Compilation of the ADRICS report;
ii. Prioritization;
iii. Preparation of drawings as per ADRICS findings
    a) Roadworks designs;
    b) Open channels and storm water drainages;
    c) Roads cross section;
    d) Cross drainage structures;
iv. Preparation of strip maps;
v. Prepare a draft of maintenance needs of a Council in the classified road network accompanied by the Bill of Quantities;

All drawings and the Bill of Quantities shall be approved by a Professional Engineer.

3.3 Budget Preparation

When planning the following shall be taken into consideration:

i. Maintenance cost is high during wet climate;
ii. High traffic makes the road to deteriorate faster;
iii. Earth roads are highly affected by heavy loaded traffic;
iv. Weak sub-grade needs more attention.

The roads which undergone PM, construction, SI on the previous year and other roads which are in good and fair conditions shall be considered for RM for the current year.

3.4 Formulation of Annual, Medium and Long Term Plan

Each Council shall prepare the annual, medium and long term maintenance plans according to Government policies, strategies and plans. On receiving the budget ceiling (indicative figure) from PMO-RALG, the Council Engineer shall prioritize the maintenance needs using the pre-set criteria in order of priority as shown hereunder:

i. Existing traffic volume;
ii. The average deterioration level;
iii. Economical potential of served area;
iv. Cost of interventions;
v. Constraints to traffic flow;
vi. Population served;
vii. Centres served;
viii. Poverty index;
ix. Political inputs.

The methods of implementing the maintenance activities shall be clearly shown (e.g. machine based or labour based technology). The budget shall be prepared in the given forms using the approved format; the same shall be submitted to the Council Director for Council scrutiny, approval and further forwarding.

In preparing an operational plan and budget, an implementing agency shall consider the inventory; condition of roads and traffic within its jurisdiction; and any other economic or social factors. All maintenance activities shall be as per Performance Agreement between PMO-RALG and the Council Director.
For medium and long term maintenance plan, after comprehensive evaluation of road condition survey (good, fair poor), then maintenance needs shall be developed. After calculation of the maintenance volume, there after the maintenance needs according to budget limitation shall be established.

3.5 Innovation during Planning

3.5.1 Improving Roads by Use of Different Technologies

i. Planning of maintenance activities in ***construction phases***[1] shall be promoted whereas *construction phase I* shall include gravelling and drainage structures whereas *construction phase II* may include the use of "low cost seals for low volume traffic" (e.g. otta seal) using locally available materials.
ii. The use of '*do-nou*'[2] technology may be deployed to treat some 'bad spots;
iii. Use of locally available materials e.g.pozzolana, cobblestones, arch culverts and bridges.

[1]Phase II is preferably advised to be conducted in the next financial year on the same road for provision of low cost seal surfacing to upgrade/ protect the road section maintained on the previous year

[2]Do-nou is a traditional method of districtroads maintenance used by Japanese by filling gravel/ soil in bags (viroba) for stabilizing road base (Do-Nou is a Japanese word meaning soil wrapped in the bag)

3.5.2 Identification and Owning the Borrow Pits for Road Construction Materials

LGAs shall identify the sources of road construction materials. When the sources has been approved to have quality materials, the sources shall be surveyed, demarcated and owned by LGAs; the list shall include gravel, earth fill, sand, course aggregates and stones.

3.5.3 Route Planning for Urban Roads

LGAs with urban roads in their jurisdiction shall prepare plans which will avoid current and future traffic congestion; land use plan department shall be involved fully. The strategies shall include:

i. Provision of enough road reserves i.e. 15m from centre line of the road,
ii. Design urban roads with 'more' lanes and space for future improvement at major junctions;
iii. Provision of alternative routes for example (ring roads)

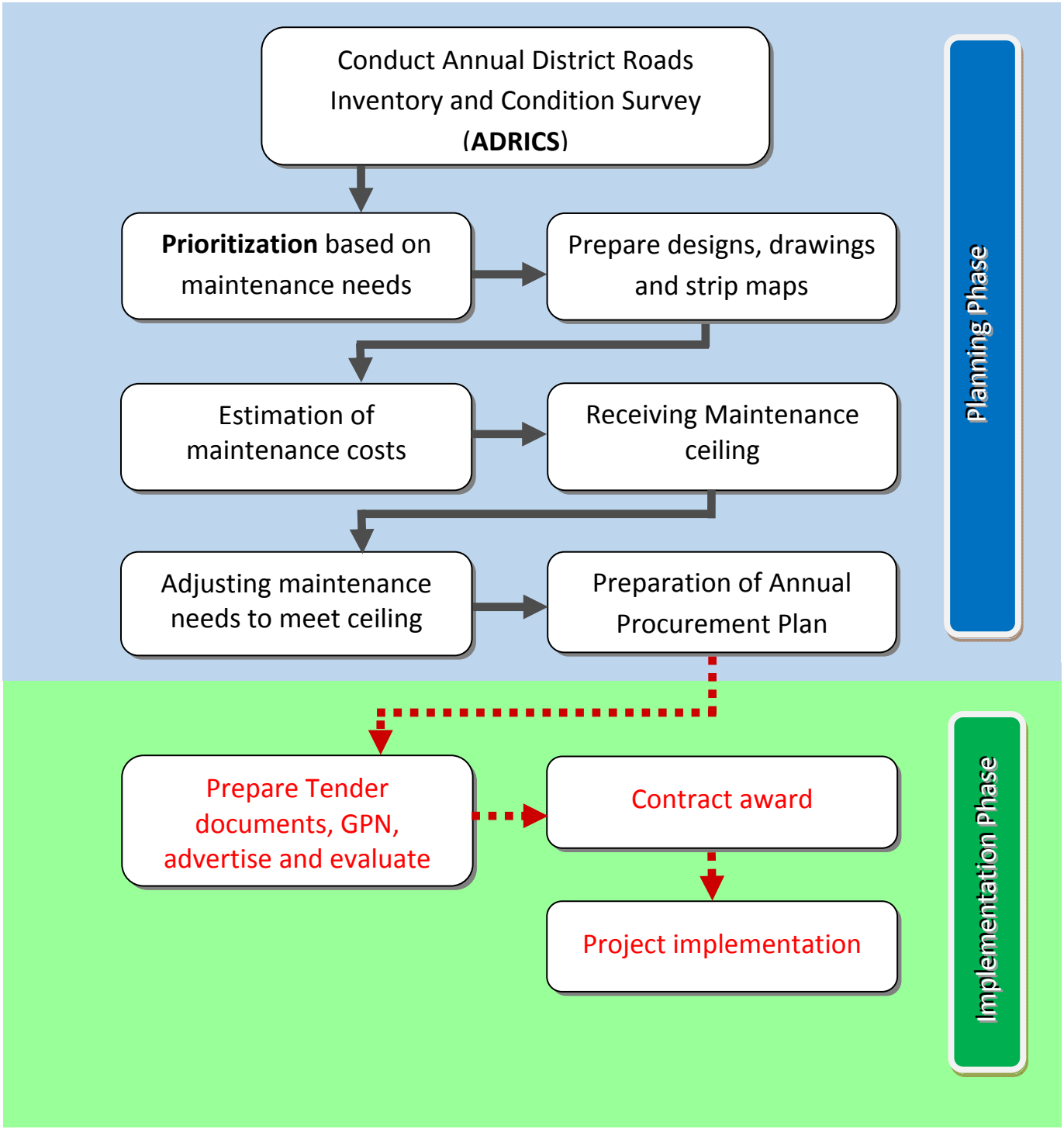
3.6 Maintenance Linked with Planning, Reporting and Accounts Software

i. The approved budget shall be linked with Planning and Reporting software so that the roads annual maintenance plan is included in the Medium Term Expenditure Framework (Council budget).
ii. Road maintenance budget shall as well be linked with account software in order to control road works payments during implementation phase.

3.7 Establishing Annual Procurement Plan

In cooperation with Council Procurement Management Unit (PMU) Road Works, an Annual Procurement Plan shall be prepared. The procurement procedures to be followed and documents to be used shall be those released by the Public Procurement Regulatory Authority (PPRA).

3.8 Planning Procedure Flowchart



3.9 Time Frame on Procurement of Road Works

Table 3.1 Time Frame on Procurement of Road works

S/N	WHAT TO BE DONE?	RESPONSIBLE PERSON	TIME FRAME	
			PHASE I (60%)	PHASE II (40%)
1.	Carried out Annual District Road Inventory and condition survey(ADRICS)	Council Engineer	30 JULY TO 15 NOVEMBER	30 JULY TO 15 NOVEMBER
2.	Analysed Road Condition to determine maintenance needs based on the result of the findings on ADRICS	Council Engineer	15 TO 30 NOVEMBER	15 TO 30 DECEMBER
3.	Preparation of activities to carried out in form BOQ and its specification (Understand the specifications of the Item(s) to be done Lay down term and conditions and specifications. State rate estimated that shall be treated guide price based on a good quality design and costing process)	Council Engineer	1 TO 15 JANUARY	1 TO 15 JANUARY
4.	Receipt the ceiling budget	Council Engineer	JANUARY	JANUARY
5.	Scrutinize the estimated Activities to fit to the Ceiling budget.	Council Engineer	FEBRUARY	FEBRUARY
6.	Establish the annual procurement plan for Department and determined proper procurement method	Council Engineer	MARCH	MARCH
7.	Submitted the requirements to PMU	Council Engineer	MARCH	MARCH
8.	Annual Tender General Notice (Specific for road works) Due to assurance of Fund	PMU	10-15 APRIL	10-15 APRIL
9.	Budget Approval by Parliament	PMO-RALG	10-20 APRIL	10-20 APRIL
10.	Finalize Tender Documents	PMU	24-30 APRIL	25 APR-1MAY
11.	Notification of Budget Approval	PMO-RALG	20-25 APRIL	20-25 APRIL
12.	Tender Advertisements	PMU	3-10 MAY	1-8 AUGUST
13.	Tender Opening	PMU	25-31 MAY	23-30 AUGUST
14.	Tender Evaluation(For work which has Not received Fund will be retained until Fund Available)	Council Engineer & PMU	1-10 JUNE	1 – 9 SEPTEMBER
15.	Tender Award	CTB	14-17 JUNE	13-16 SEPTEMBER
16	Preparation of Contract Document	Council Engineer, Legal Officer & PMU	18 – 23 JUNE	17 – 23 SEPTEMBER
17	Forwarding Contracts to Attorney General for vetting	Legal Officer & PMU	24 JUNE-7 JULY	24 SEPT-7 OCT
18	Notification of Award	PMU/ CD	8-12 JULY	8-12 OCTOBER
19.	Signed of Contract	CC& PMU, CD	14-18 JULY	15 -18 OCTOBER
20	Project Commencement	Council Engineer	25-30 JULY	25-30 OCTOBER

NB: 85% of fund releases from Road Fund shall be consumed by 30th June of relevant financial year.

Road works projects commencement for phase I shall be as near to the 25th of July as possible.

CHAPTER IV: PROCUREMENT

4.1 The Procurement Phase

Procurement phase involves three stages:

i. Packaging of works
ii. Preparation of tender documents and advertising;
iii. Evaluation and Contract award

4.2 Packaging of Works

All roads that have being proved to have fund shall be grouped and made packages to attract contractors and reduce number of contracts. Works packaging shall consider maintenance type (Routine, Spot or Periodic) and method whether is Machine based or Labour based. Routine maintenance works are preferred to be labour based so as to enhance the use of labour along the road where maintenance operations are being carried out.

4.3 Preparation of Bid Documents and Advertising

A set of bid documents to be used shall be that released by Public Procurement Regulatory Authority (PPRA). These documents can be downloaded from www.ppra.go.tz and customized by the procuring entity. The contract document exclusively for LBT works shall be developed.

4.3.1 Standard Specifications for Road Works/ Bridge Construction

These specifications are those developed and provided by the Ministry of Works.

4.3.2 Maintenance of Roads and Bridges

i. The minimum carriage way width for the district roads shall be 4.5m.
ii. Gravel wearing course thickness shall be uniform, minimum thickness allowed shall be 100mm.
iii. Standard drawings for bridges and culverts shall be adopted, if a different design is required, a Professional Engineer shall design as necessary, if the scope of design is beyond the capacity of Council Engineer the Council shall arrange to procure consultancy services.
iv. The strip maps shall be included in the set of drawings attached in the contract dossier.
v. The approved software may be used to prepare drawings
vi. The contractor shall prepare and submit ‘as built drawings’ on substantial completion of the project.

4.4 Evaluation and Contract award

4.4.1 Formation of Evaluation Committee

i. The evaluation committee shall compose of minimum of three (3) members or five (5) members
ii. Where the evaluation committee is composed of three members, two members must be technical personnel i.e. Civil Engineers or Technicians with relevant experience of not less than 3 years.
iii. Where the composition is of five members, three of them must be technical personnel as stated. Where there is shortage of qualified staff in the Council, staff from nearby Governmental institutions can be invited/hired.

4.4.2 Contracting

A contract document shall be as per PPRA standard contract documents with additional of the following:

i. Method statement for execution and completion of works （Work schedule）
ii. Minutes of negotiations if any
iii. CV of key personnel including 'site agent'[3]
iv. Equipment schedule for execution and completion of works

NB: Personnel with CVs presented during bidding shall be available for administration of the project.

4.4.3 Contract Signing Ceremony (CSC)

LGA shall prepare internal arrangements to conduct an event of one day contract signing ceremony. This event shall be done not more than 10 Days after tender board approval. Members to attend the event shall be:

i. Council chairperson/ Mayor;
ii. Council Director,
iii. Council Treasurer,
iv. Council Engineer,
v. Head of PMU;
vi. Council Legal Officer;
vii. Contractors to be awarded.

All contracts once signed, shall be recorded in Contract Register maintained and regularly updated by the Head of PMU and Council Engineer for records and future audits.

[3]Minimum qualification of site agent: FTC/ Diploma with experience of not less than 3years. For LBT, the minimum qualification shall be specified by the Engineer.

CHAPTER V: IMPLEMENTATION

5.0 The Implementation Phase

Implementation phase involves two stages:

i. Contract management and administration;
ii. Handing over and final accounts.

5.1 Contract Management and Administration

5.1.1 Council Internal Arrangements

i. The Council Engineer shall be the Project Manager.
ii. The Project Manager shall issue site possession letter to Contractor
iii. The Project Manager shall supervise the works and appoint a competent project supervisor on behalf of the Council Director for day to day supervision and reporting.
iv. Stakeholders shall be notified in writing on important data of project including:
   i) Important data of the project to be notified to stakeholders shall be;
      a. Major activities to be executed;
      b. Start and end dates of project;
      c. Name of Contractor and contract sum;
   ii) Stakeholders to be notified shall be:
      a. District Commissioner;
      b. Division Officer;
      c. All Councillors and Ward Executive Officers where the road stretch has maintenance activities;
      d. All Village Executive Officers and chairpersons where the road stretch has maintenance activities;
      e. Members of Parliament.

5.1.2 Supervision & Monitoring

The Project Manager shall supervise the project to successful completion by:

i. Ensuring that the Contractor executes all activities and performs as per contract documents; contract documents include agreed revised work schedule (after contract and also after variation) submitted by contractor
ii. Providing variations and addenda as per public procurement guidelines;
iii. Inspecting and certifying all payment certificates;
iv. Prepare Contractor's performance report at the end of project;

v. Write instructions and warnings to Contractor as necessary;
vi. Prepare substantial completion certificate.

The Project Supervisor shall be responsible for daily supervision of the project representing the Project Manager. Duties of the Project Supervisor shall be but not limited to:

i. Witness and supervise all concrete works and sophisticated activities and shall fill in quality control forms;
ii. Ensure that materials to be used are from approved sources only and are inspected for suitability before the commencement of works;
iii. Arrange for monthly site meetings and take minutes for the same including work situation, progress of work, and if necessary correction method for delay of work and/or quality, variation and alternation of condition proposed by contractor.
iv. Ensure samples to be tested in the laboratory shall be jointly collected between Contractor and the supervising team member;
v. Maintain and keep all contract records in the contract file;
vi. Ensure payments are effected only when the works has been jointly inspected and found to comply with specifications and specified quality. Measurement sheets and quality assurance forms （Including laboratory test results） shall be dully filled;
vii. Cooperate with inspection committee when necessary.

At the end of project the Contractor shall refer to the environmental guidelines. The Contractor shall:

i. Trim all borrow pits to good slopes after use to avoid danger of person or animal to fall in accidentally.
ii. Prepare as built drawings and handover the same before the release of retention money.

5.2 Handing over and Final accounts

The Council Engineer shall advise the Council Director irrespective of inspection committee report within 10 days to effect the following payments:

i. Advance payment to the Contractor (if all conditions prescribed in the Contract documents are fulfilled.)
ii. Interim payments if the works are properly done and certified
iii. Final payments on completion of the project including release of retention money.
iv. Final accounts at the end of defects liability period which shall be prepared by Council Engineer.

The Council Engineer shall prepare progress reports as follows:

i. Monthly reports (to monitor contractor’s progress)

ii. Quarterly reports which shall be submitted to PMO-RALG through RS Engineer according to APA.
iii. A Swahili version quarterly report shall be submitted to Council Economist for Council records and submission to Council committees.

5.3 Force Account Projects

In carrying out the force account works, the accounting officer shall enter into an agreement with the Council Engineer, who is the Project Manager. RSE shall supervise and monitor the Council Engineer.
The proper documentation of the use of:

- Materials;
- Labour and equipment;
- Supervision costs for roads works by force account shall be maintained to as proof of payments.

The Council Engineer shall provide all necessary cooperation and assistance to the internal and external auditors:

i. Provide all required project documents;
ii. Provide a technical person during site visit by auditors;
iii. Provide all necessary information and explanations regarding the project;
iv. The maximum allowance for force account shall be 10%

CHAPTER VI: MONITORING AND EVALUATION

6.1 Introduction

The aim of this chapter is to provide Engineers in the Regional Secretariats (RS) and PMO-RALG with guideline criteria for M&E of road works projects in the Councils. This chapter will assist the RSEs and PMO-RALG including the Technical and non-Technical Inspection Committees formed by Councils to systematically collect and analyse information continuously as the road projects progress or after termination of the project. These guidelines are expected to be a valuable tool for managing Councils road works projects.
The M&E work by Consultants should conform to this guideline and directives of the PMO-RALG and are to be based on professional experience and sound management practice.

All road works receiving funds from Roads Fund Board (RFB), donors and the Central Government shall be monitored and evaluated by the RSE, PMO-RALG and where necessary by a suitably qualified person or appointed Consultants who are experienced in the project management, construction of works and services related to road infrastructure development using these guidelines.

Where in this chapter reference is made to the Engineer; that Engineer shall be registered by Engineers Registration Board (ERB) as a Professional Engineer or Consulting Engineer.
Where reference is made to other guidelines or manuals, this M&E guideline takes precedence over those documents. Any exceptions to this are to be approved by the PMO-RALG.

The key areas of focus when performing M&E are planning, design works, and procurement process, implementation, enforcement of The Annual Performance Agreement and Roads and Fuel Tolls Act, Medium and Long Term Plans and Value for Money.
To make the M&E exercise efficient and effective, some important standard formats have been appended to these guidelines.

6.2 Planning

The primary objective of a road network plan is to remove deficiencies within the network by upgrading the roads. The M&E on Planning shall collect and analyse the following information:

i. Road Inventory and Condition Survey;
ii. Determination of maintenance programmes, intervention methods and prioritization;

iii. Formulation of Annual, Medium and Long Term Operational Plans;
iv. Criteria for Setting Maintenance levels, Budgeting Process and Formulation of Annual Work Plans.

6.2.1 Road Inventory and Condition Survey

The Road Inventory and Condition Survey is an essential undertaking for planning and implementation of road maintenance and development programmes by the LGAs.

This chapter provide means for monitoring and evaluating the Road Inventory and Condition Survey (RICS) and therefore assist the Council Engineers (CEs) to identify the necessary level of repairs.

This chapter had aim at obtaining and assessing information on Road Inventory and Condition Survey particularly the guidelines for conducting Road Inventory and Condition Surveys, method for surface condition rating and identification of deficiencies within the road network including results and their application.

6.2.1.1 Guidelines for Conducting Road Inventory and Condition Surveys

The M&E activities shall include collection and analysis of information on the whole process of carrying out the Road Inventory and Condition to see if the following data on a road network were adequately collected and recorded:

i. Section identification;
ii. Section Length;
iii. Road classification;
iv. Surface type;
v. Drainage structures;
vi. Traffic data;
vii. Roads cross section;
viii. Climatical condition of the area;
ix. Determination of the road distress through rating that represents the collective judgement of the survey team (good/ fair/ poor).

6.2.1.2 Method for Surface Condition Rating and identification of Deficiencies within the Road Network

The LGAs shall prepare the following information:

i. Composition of the Field or Rating Team;
ii. Equipment and facilities used;
iii. General rules used on the whole process;
iv. Methods and Data Collection Forms in use which provide a medium for organizing, collecting, and storing information for each section;

v. Basis for judgement and correlations between the numerical values and the descriptive ratings.

6.2.1.3 Results and Their Applications

The inventoried road network data and condition ratings obtained through the use of the Road Condition Survey shall be used as important inputs in the prioritization to establish acceptable repair techniques.

The M&E activities shall include obtaining and assessing information relating to the applications of RICS results on the following:

i. Planning;
ii. Design;
iii. Prioritization;
iv. Maintenance and rehabilitation;
v. Computerized system of data storage, use and retrieval.

6.2.2 Determination of Maintenance Programmes, Interventions Strategies and Prioritization and Ranking

Determination of maintenance programmes, intervention methods and prioritization shall be monitored and analysed particularly on the roadwork planning scenario adopted by the Council, methods used in determining maintenance interventions and factors considered for prioritization and ranking.

6.2.2.1 Roadwork Planning Scenario

The adopted roadwork planning scenario shall reflect the characteristics and specific issues. The M&E shall collect and analyse the adopted roadwork planning scenario in relation to the realization of the following:

i. Improvement of existing roads;
ii. Improvement of existing circulation element of road network;
iii. Main street area improvements;
iv. Enhancement of local connections;
v. Enhancement of regional connections;
vi. Acceptance of a lower level of service.

6.2.2.2 Maintenance Interventions Strategies

Maintenance programmes and interventions shall be developed through scientific planning to ensure timely and effective maintenance for effective and efficient utilization of funds.

For this reason the M&E shall intend to search out and assess data on the following aspects:

i. Timing;
ii. Frequency;
iii. Extent;
iv. Tools for the best selected maintenance strategies;
v. Initiative by the LGAs to modernize unscientific planning of maintenance activities;
vi. Treatment options resulting to delivery of various maintenance strategies.

6.2.2.3 Prioritization and Ranking

The M&E on Prioritization and Ranking shall include activities of collecting and analysing information on technical, economical (for efficiency) and social (for equity) considerations used by the Council to establish scores which in turn were taken into consideration in prioritizing and ranking the roads. These factors are as described in Chapter II Planning.

6.2.3 Formulation of Short, Medium and Long Term Operational Plans

The M&E on the Short, Medium and Long Term Operational Plans shall collect and assess information on criteria used by the Council to develop such operational plans. These criteria will include but not limited to the following:

i. Considerations based on traffic forecast models and traffic network alternatives;
ii. Formulations of plans within the context of connections to local and regional road system;
iii. Formulation of plans to support traffic conveyance and access;
iv. Formulation of plans within the context of local Master Plans.

6.2.4 Setting Maintenance Levels, Budgeting Process and Formulation of Annual Work Plans

6.2.4.1 Criteria for Setting Maintenance Levels

A maintenance level is a level of service and maintenance requirement provided to a specific road.

The M&E activities gather and analyse information on factors used in setting maintenance levels to ensure the maintenance levels set were consistent with road management objectives and maintenance criteria.These factors may include but not limited to:

i. Resource program needs,
ii. Requirements for Environmental protection;
iii. Road investment requirements;
iv. Service life and current operational status;
v. User safety;

vi. Volume, type, class, and composition of traffic;
vii. Surface type;
viii. Travel speed;
ix. User comfort and convenience;
x. Functional classification.

6.2.4.2 Budgeting Preparation and Approval Process

(a) Budget Preparation

A maintenance program and budget must be based on reliable information on road conditions, traffic and cost of maintenance operations.

The main objective of the budget is to provide a framework for accountability. However, the budget shall also be viewed as a contract between the LGAs and the Government in which the LGAs is committed to produce a quantity of work outputs for the financial resources it receives from Government, Road Fund Board, and Financiers.

The M&E aim at finding and analysing information on budget preparation and approval procedures including formulation of the Council's Annual Work Plans.

(b) Approval Process

It is imperative that every budget has to be approved to receive funds for implementation. The approval process starts at the level of an LGA by presenting and discussing in appropriate organs such as Council Management Team and Full Council Meeting before submitting to the Regional Inter-Council Forum for final check. The final budget document incorporating comments and views of the Regional inter- Council meeting should then be submitted to PMO-RALG for further action.

The M&E is sought to collect and analyse information on budget approval process.

6.2.4.3 Formulation of Annual Work Plans

The M&E on Formulation of Annual Work Plan (AWP) activities shall include collection and assessment of the following information:

i. How the AWP enhances roles establishment and responsibilities;
ii. How the AWP takes on hand cost minimization;
iii. How the AWP focuses on objectives and goals of an LGA.

6.3 Major works

Sufficient design and drawings shall be carried out for major works, like box culvert, bridge repair etc. Moreover "proper feasibility studies" shall be carried out. M&E on design works seek to obtain and examine such information as

Construction Design Documents, General Road Works Design Requirements, General Pavement Design, Storm Water Drainage Design, Consideration on Public Utility Services in case of Urban areas, Essential Design Information for Records, accountability, Approval Process and Certification.

6.3.1 Construction Design Documents

The M&E on Construction Design documents shall collect and analyse information mostly on Engineering Plans**.**

6.3.1.1 Engineering Plans

The engineering plans generally shall contain sufficient information to allow adequate checking of the plans and for the construction of works. The complete set of engineering design plans generally shall include but not limited to the following information:

i. Locality plan;
ii. Layout plan;
iii. Plan of each new road (at appropriate scale);
iv. Longitudinal section of each road;
v. Cross section of each road(including typical sections);
vi. Detail plan of each intersection;
vii. Detail plan of each traffic management device;
viii. Drainage catchments and storm water layout plan and relevant calculations;
ix. Drainage plan;
x. Longitudinal section of each drain line to show service crossing

6.3.2 General Road Works Design Requirements

The M&E on General Requirements of Road Works Design shall obtain and assess the following information:

i. Compliance of Design works with the requirements of the existing approved Road Hierarchy/ Road Classification as stated in the existing Road Act and Regulation;
ii. Compliance with the requirements of traffic impact assessment;
iii. Compliance with the requirements of the road reserves in accordance with existing Road Act and Regulation;
iv. Compliance with the requirements of road geometry in accordance existing guidelines e.g. LBT guide, Design Manual, etc.;
v. Compliance with the requirements of design speed;
vi. Compliance with the requirements of grades;
vii. Compliance with the requirements of vertical and horizontal alignments;

viii. Compliance with the requirements of minimum curves radius and intersections

6.3.3 General Pavement Design

The M&E activities shall include collection and analysis of information essentially on the Compliance of General Pavement design with the guidelines and manuals issued by the Ministry responsible for roads mostly on the following aspects:

i. Kerbs;
ii. Guide posts and Parking Designs;
iii. Traffic Islands;
iv. Drains;
v. Line Marking/Signage;
vi. Pathways (Cycles and Pedestrians);
vii. Earth Works and Erosion Control;

6.3.4 Storm Water Drainage Design

The M&E activities on Storm Water Drainage Design shall include collection and analysis of information which includes but not limited to the following aspects:

i. Approved Design data;
ii. Rational methods and other hydrological models;
iii. Design Criteria for Major Drainage;
iv. Hydraulic calculations;
v. Open channels;
vi. Embankment Protection / Freeboard;
vii. Flow Calculations and Volume Determination;
viii. Design Storms – Average Recurrence Interval;
ix. Legal and Town Planning;
x. Lawful Point of Discharge.

6.3.5 Consideration on Public Utility Services

In urban centres road works maintenance and development programmes should give due weight to existing public utility services to enhance continuity of services when such programmes are being carried out. The M&E shall therefore target to collect and analyse information contained in the urban Design Guidelines issued by the Ministry responsible for roads particularly on the following aspects:

i. Power line system;
ii. Portable water system;
iii. Street Lighting;

iv. Foul water system;
v. Telecommunications system.

6.3.6 Essential Design Information for Records

The M&E on this aspect shall aim at collecting and assessing the following information:

i. Adopted codes of practices;
ii. Design assumptions;
iii. Design calculations;
iv. Working drawings and all details.

6.3.7 Accountability, Approval Process and Certification

The M&E on Accountability, Approval Process and Certification of design works shall be focused to gather up and analyse the following information:

i. Person(s) responsible for carrying out design of road works if are registered professional Engineer/ Consulting Engineer or Firm in Civil/Road/Structural depending on the nature of the works;
ii. Final design documents if are certified by the Professional Council/ RS Engineer/ Consulting Engineer or Firm;
iii. The design documents for major/complex projects prepared by LGAs shall be approved and endorsed by RSE and reviewed by PMO-RALG before implementation.

6.4 Procurement

Procurement shall be governed by the Public Procurement Act, No.7 of 2011 and its Regulations (GN. 446 of 2013) and its amendments.

M&E on Procurement shall aim to obtain and assess the following information:

i. Procurement Planning
ii. Solicitation process;
iii. Selection;

6.4.1 Procurement Planning

Every LGA shall plan its procurement in a rational manner and aggregate its requirements both within and between procuring entities in order to obtain value for money and hence reduce procurement costs.

The M&E activities on Procurement Planning shall include collection and analysis of information on the whole of the procurement planning process to make certain if it was aimed at obtaining value for money and reducing procuring costs.

6.4.2 Solicitation Process

The M&E on Solicitation Process should seek to collect and assess information on the process of solicitation if pursued in favour of the requirements of the PPA and its Regulation.

6.4.3 Selection

Selection is the process of receiving bids or proposals and applying the evaluation criteria to select a Supplier, Contractor or Consultant.
The M&E shall aim at gathering up and analysing information on the entire selection procedure including composition of evaluation team, to ascertain if it was intending to obtain the lowest evaluated bidder.

6.5 Implementation:

The M&E activities during Implementation shall collect and assess information on service delivery management, Contract Administration, Management of the relationship of the Key Parties to the Contract, Contractors and Consultants Performances, Management of Road Funds Allocations, supervision by the Council, managing procurement time frame and managing maintenance operations.

6.5.1 Service Delivery Management

Service delivery management involves activities performed by LGAs after awarding the contract to determine how well LGAs and the Contractor meet the requirements of the contract.
The M&E on service delivery management should therefore aim at collecting and analysing information on the following aspects:

i. Inspection reports;
ii. Measurement sheets;
iii. Quality assurance forms;
iv. Contractors claims and payment certificates;
v. Cost, time and scope control;
vi. Service performance certificates;
vii. Issuance of instructions;
viii. Process of closing out the Contract, final acceptance of works or services, project records reflecting final specifications including final payments;
ix. Contractor's or Service Provider's performance;
x. Post project audit and lessons learnt in the contract;
xi. Project success and effectiveness;
xii. Contract records/ Project file for future use.

6.5.2 Contract Administration

The M&E on Contract Administration shall obtaining and assessing information on the following aspects:

i. Pre-performance conferences;
ii. Risk monitoring and control;
iii. Contract change control process;
iv. Contractor's and Service Providers performance;
v. Control of provisional sums and day works;
vi. Formal contract commencement and also winding up.

6.5.3 Relationship Management of Key Parties to the Contract

Relationship management of Key Parties to the Contract is essentially about keeping the relationship of these Key Parties open and constructive. The M&E on management of relationship of the Key Parties to the Contract shall intend to gather up and analyse information on the following:

i. Disputes management and their resolution with an aim of encouraging early and effective settlement;
ii. Early warnings procedures paying attention on analysis of circumstances leading to compensation events;
iii. Provision of Time and cost compensations in line with Terms of contract particularly the General Conditions of contract and existing procurement laws and regulations;
iv. Resolutions from management Meetings and actions taken by LGAs and Contractors

6.5.4 Contractors and Consultants Performance

The M&E activities on performance of contractors and consultants are data and information collection and their assessment on general performance of contractors and providers of intellectual services.

6.5.5 Management of Road Funds Allocations

Management of Road Funds Allocations basically involves activities such as planning, organizing, directing and controlling the financial resources for effective and efficient utilization. Principally it is an application of the general financial management principles to road finances. The M&E on Management of Road Funds Allocations should therefore seek to collect and analyse the following information:

i. Reliability of the scheduled flow of funds to the Contractors and Service Providers;
ii. Returns obtained by the Council and road sector stakeholders;
iii. Best possible utilization of funds;
iv. Misappropriation;
v. Management of receipts and expenditures if in accordance with Road and Fuel Tolls Act and its regulations including existing financial guidelines and regulations of the Government.

6.5.6 Supervision by the Council

The Council shall follow closely the implementation of projects works to ensure it gets what it bargained for and derives maximum benefits from the projects. The M&E on supervision by the Council as a Procuring Entity shall intend to collect and analyse information on involvement of the council in supervising projects against the requirements of the PPA and its Regulation and Terms of the Contract from commencement to contract closure.

6.5.7 Managing Procurement Time Frame

The Council should strive to implement its AWP by considering procurement time frame as its major strategic option. The M&E on management of procurement time frame should therefore seek to collect and assess information on general strategies pursued by the Council for effective execution of the proposed time schedule for procurement of works.

6.5.8 Managing Maintenance Operations

The M&E on Management of Maintenance Operations shall include information collection and analysis on the following:

i. Understanding of the intended purpose of the maintenance operation;
ii. Estimation of resource requirements;
iii. Scheduling of human, equipment and materials and performances;
iv. Cost estimation procedures;
v. Method of measurements;
vi. Work methods;
vii. Adherence Technical Specifications;
viii. Execution

6.5.9 Enforcement of Annual Performance Agreement and Roads and Fuel Tolls ACT

The M&E on enforcement of Annual Performance Agreement shall gather and assessing the following information:

i. Use of the money deposited into Council's Road Fund account against requirements of APA;
ii. Executing road works in accordance with approved plans and budgets in APA and requirements of Road Fund Board;
iii. A Council agreement with PMO-RALG for accountability;
iv. Provision of cost effective and sustainable maintenance of the Council's road network applying such approach as frame works or area based contracts, corridor approach, performance based maintenance, force account and any other appropriate approaches;
v. A Council strategy for utilization of full budget within the financial year
vi. Implementation of specific policy issues according to the requirement of APA and Road Fund Board;
vii. Compliance with safety requirements and submission of progress reports and financial statements as per requirement of APA;
viii. Compliance with Roads and Fuel Tolls Act and its Regulations.

6.6 Value for Money

Value for Money (VFM) can simply be defined as a utility derived from every purchase or every sum of money spent. VFM is based not only on the minimum purchase price (economy) but also on the maximum efficiency and effectiveness of the purchase. VFM shall be used to assess whether or not the Council has obtained the maximum benefit from the services it acquires within the resources provided to it.

The M&E on value for money shall therefore aim to collect and analyse information on planning, design work, procurement, implementation and enforcement of Annual Performance Agreement to ensure the Council derives the maximum utility from every purchase or sum of money it spent.

6.7 Implementation of Annual, Medium and Long-Term Plans

Every Council shall prepare Road Development Operational Plans taking into account the annual, medium and long-term government, policies, strategies and plans. The M&E on implementation of the Annual, Medium and Long Term Operational Plans shall be conducted by obtaining and assessing following information:

i. Formulation and implementation of plans against factors such as traffic forecast models, traffic network alternatives and consideration for enhancement of connections to local and regional road system;

ii. Formulation and implementation of plans against other factors such as enhancement of traffic conveyance and access and considerations for achieving the local Master Plan objectives and the Annual Work Plan;

iii. Formulation and implementation of such plans vis-à-vis Government strategies and policies.

6.8 Report of M&E

The RSEs shall prepare from time to time monitoring and evaluation reports capturing implementation information of all components of the project management cycle and submit to PMO-RALG on quarterly basis together with consolidated quarterly progress reports of the maintenance projects in Local Government Authorities. The PMO-RALG shall also prepare regularly reports featuring the same phases of the project cycle within the Financial Year.

The observed issues shall be brought to the attention of the Local Government Authorities and to the Members of the Regional Road Boards to enhance their functioning of their roles as per requirements of Road Act No. 13 of 2007. The reports shall be acted upon by LGAs for actions and corrections and contribute to decision making mechanisms and in improving various guidelines, manuals and policies related to road maintenance and management in the local Government Authorities.

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THE UNITED REPUBLIC OF TANZANIA

PRIME MINISTER'S OFFICE REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT (PMO-RALG)

MINISTRY OF WORKS

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

Operational Guidelines for District Roads Maintenance

ANNEX

December 2014

ANNEX TABLE of CONTENTS

Tables

Forms

Organization of Annex

The Annex has two sections: Table and Form. The tables are the standards to be referred, and the forms are the standard forms to be used. All the forms listed in this Annex are downloadable at: http://www.pmoralg.go.tz/.

Table 1 Road Condition Classification

S/N	CONDITION	SURFACE CONDITION
1	Good	Roughness < 8 m/km; good shape, smooth running surface
2	Fair	Roughness 8 – 14 m/km; reasonable shape, corrugations and potholes up to 10cm deep
3	Poor	Roughness > 14 m/km; Poor shape, frequent depressions, rutting and potholes > 10cm deep.

Table 2 Contractor's Performance Capacity Check List

S/N	ITEM	CHECK POINT
1	Execution system	Submission of working schedules as per Terms of contract
		If works schedule reflect specifications and actual site conditions
		If execution procedures are following the working program
2	Equipment mobilization and management	If equipment are effectively mobilized and maintained throughout the contract period
3	Contractors staff	If qualified staff are assigned as per contract Terms and have high understanding of work process and schedules and are able to direct and guide workers timely and properly
4	Personnel employment	If recruitment is done according to working schedules /labour histogram and equitable remuneration is observed
5	Site base facilities	If office and stock yard prepared according to works schedules and maintained throughout the contract period
6	Quality and quantity management	If material testing, structural examination and measurements are routinely done and are based on specifications and works schedules
7	Works scheduling	If contractor understands critical path and its effects and is able to compare periodically planned and actual schedules and ensure all works are completed within time
8	Works safety management	Contractor ensures no accident occurs, observes workers safety, shifts risks to third parties and checks temporary facilities regularly
9	Environmental and social management	Environmental and social effects are properly mitigated

Table 3 Supervising Engineers' Performance Capacity Check List

S/N	ITEM	CHECK POINT
1	Communication, requests, consent and notices between Parties	If done in writing and timely
2	Fulfilment of supervisory tasks	If done according to contract conditions and Terms of Contract
3	Taxes and duties in case of employed Consultants	If paid as per Government laws
4	Holding Employer's interest	If decisions and strategies made are within the interest of the Employer
5	Professional Ethics	If professional ethics are properly observed and for case of employed consultant without having future considerations
6	Experience and knowledge	If Supervising Engineer have knowledge and experience in contract administration and management
7	Reporting requirements	If reports and documents required are submitted as per Terms of contract

Table 4 Minimum Requirement: Establishment Level of Road Management Technical Staff at Council Level

S/N	Technical Staff	Minimum Requirement Size		
		District Council	Municipal Council	City Council
1	Professional Engineers	2	2	3
2	Technician (FTC)	6	4	6
	TOTAL	8	6	9
Note: The number will also depend on the work load of the respective Council				

General Quality Control Checklist for Road Construction/Rehabilitation Works

Table 5 Quality Control Checklist for Road Construction

Item	Description	Test/Q. Control	Responsible
Gravel at source	Grading PI, MDD and CBR tests for each identified	Laboratory tests	DE, Project Supervisor and TANROADs Laboratories
Sand at Source	Grading and cleanliness	Visual and sieving	DE and Project Supervisor
Aggregate (Ballast) at Source	Cleanliness	Visual and Laboratory tests for hardness	DE, Project Supervisor and TANROADs/RE Laboratories.
Cement	Supply from approved manufactures	Approved manufactures	DE and Project Supervisor
Emulsion Bitumen	Supply from approved manufactures	Approved manufactures	DE and Project Supervisor
Stone (for cobblestone pavements)	Compression strength, water absorption rate and specific gravity	Laboratory test. Plus simple field tests for site assurance Hardness	DE, Project Supervisor and TANROADs/ RE Laboratories.
Soil Alignment Tests	CBR in-situ, centreline, every 500m	Soil alignment tests	DE, Project Supervisor and TANROADs/ RE Laboratories.

Table 6 Section (Bill) Earthworks

Item	Description and Required Quality	Test / Q. Control	Responsible
Re -Establishment of the vertical Alignment	Levels of slots and longitudinal alignment: - Levels of slots, tolerance + / - 50mm - Longitudinal profile every 3rd slot, tolerance + / - 50mm	Check by measuring using straight edge and boning rods or travellers and approval	DE and Project Supervisor
Side-drain Excavation (Soft Material)	Dimensions and gradients: - Dimensions at 50m intervals, tolerance + / - 50mm - Longitudinal profile at 30m intervals, tolerance + / - 50mm	Check by measuring using ditch template and boning rods or travellers and approval	DE and Project Supervisor
Side-drain Excavation (Hard material)	Dimensions and gradients: - Dimensions at 50m intervals, tolerance + / - 50mm - Longitudinal profile at 30m intervals, tolerance + / - 50mm	Check by measuring using ditch template and boning rods or travellers and approval	DE and Project Supervisor

Table 6 Section (Bill) Earthworks (Cont. 2/3)

Item	Description and Required Quality	Test / Q. Control	Responsible
Excavation to Level and Compaction	Excavation and Compaction: - Width of platform at 50m - Intervals, tolerance + / - 50mm - Level of the platform, + / - 15mm under 2 meter straight edge - Longitudinal profile at 30m intervals, tolerance + / - 50mm -Compaction density test at 100m intervals! 95% MDD (AASHTO T99)	a. Check by measuring using tape measure, straight edge and boning rods or travellers and approval b. DCP test, confirmed by initial and occasional lab tests (sand replacement) with written approval to continue formation works	DE and Project Supervisor a. Engineer instructs Contractor to carry out initial laboratory and possible occasional lab tests at TANROADs/RE Laboratories and calibrate DCP. b. Engineer requests the TANROADs/RE Laboratories to carry out DCP tests. Checked and confirmed by DE and Project Supervisor. Written approval by Engineer to continue with formation works

Table 6 Section (Bill) Earthworks (Cont. 3/3)

Item	Description and Required Quality	Test / Q. Control	Responsible
Spreading and Compaction for Camber Formation	Spreading and Compaction:		DE and Project Supervisor
	-Width of platform at 50m intervals, tolerance + / - 50mm - Camber of 5% at 50m intervals, tolerance +/- 1% - Compaction density test at 100m intervals! 95% MDD (AASHTO T180)	a. Check by measuring using tape measure and camber-board and approval	a. Engineer instructs Contractor to carry out initial laboratory and possible occasional lab tests at TANROADs/RE Laboratories and calibrate DCP.
		b. DCP test, confirmed by initial and occasional lab tests (sand replacement) with written approval to continue formation works	b. Engineer requests the TANROADs/RE Laboratories to carry out DCP tests. Checked and confirmed by DE and Project Supervisor.
			Written approval by Engineer to continue with formation Grading and Gravelling works

Table 7 Section (Bill) Excavation and Filling for Structures

Item	Description and Required Quality	Test / Q. Control	Responsible
Excavation for Drainage Structures	Excavation for Structures: - Dimensions of excavations, tolerance + / - 50mm - Invert level, tolerance + / - 50mm - Gradient, tolerance + / - 20mm over length of trench	Check by measuring using tape measure, straight edge and boning rods and approval	DE and Project Supervisor Written approval by Engineer to continue with Culvert and Drainage works.

Table 8 Section (Bill): Culvert and Drainage Works (1/3)

Item	Description and Required Quality	Test / Q. Control	Responsible
Ditch Cleaning (Manual)	Dimensions and gradients: - Dimensions at 50m intervals, tolerance + / - 50mm - Longitudinal profile at: 30m intervals, tolerance + / - 50mm	Check by measuring using ditch template and boning rods or travellers and approval	DE and Project Supervisor
Mitre Drains/Catch water Drains Excavation	Dimensions, and gradients (and location of mitre-drains): - Dimensions of the mitre drains, tolerances of + / - 20mm - Longitudinal profile with gradient of maximum 4% - Location of mitre drains to be approved by Engineer	Check by measuring using ditch template and boning rods or travellers and approval	DE and Project Supervisor

Table8 Section (Bill): Culvert and Drainage Works (2/3)

Item	Description and Required Quality	Test / Q. Control	Responsible
Culvert Cleaning (partially blocked)	Clean and free draining culvert	Visual check and approval	DE and Project Supervisor
Culvert Cleaning (Fully blocked)	Clean and free draining culvert	Visual check and approval	DE and Project Supervisor
Concrete Pipe Culverts	Material, mixture, gradient and strength:		
	a. Aggregate, sand, cement and water	a. Material approval visual check	DE and Project Supervisor
	b. Concrete mixture test	b. Slump test	DE and Project Supervisor
	c. Final quality; no cracks and honey combing, joints etc	c. Visual quality check and Approval	DE and Project Supervisor
	d. Gradient of bedding not less than 2%	d. Gradient check using straightedge or boning rods with line level	DE and Project Supervisor
	e. Compressive concrete crush test to specified strength as per specifications	e. Concrete strength test (cube)	Engineer instructs Contractor to carry out crush tests at TANROADs/RE Laboratories and later checks with Schmidt hammer, confirmed by DE and RE.
Head Wall Repair Masonry	Stability and pointing as per specifications	Visual check and approval	DE and Project Supervisor
Minor Drainage Structures – Masonry	Stability as per specifications	Visual check and approval	DE and Project Supervisor

Table8 Section (Bill): Culvert and Drainage Works (3/3)

Item	Description and Required Quality	Test / Q. Control	Responsible
Minor Drainage Structures – Concrete	Dimensions, gradient, levels and mortar joints with tolerances as per specifications - Dimensions, tolerance + / - 10mm - Levels, tolerance + / - 10mm - Joints flash to wall	Check by measuring using tape measure, boning rods with line level and/or straight edge with spirit level	DE and Project Supervisor
Stone Pitching		a. Material approval: visual check b. Slump test c. Visual quality check and Approval d. Gradient check using straight edge or boning rods with line level e. Concrete strength test cube crushing method or Schmidt hammer	DE and Project Supervisor
Stone Pitching Repair	To satisfaction of the Engineer	Check by measuring using tape measure and visual check	DE and Project Supervisor
Gabion Installation	Placing and tying	Visual check	DE and Project Supervisor
Rock fill to Gabion	Filling and compaction to satisfaction of the Engineer	Visual check	DE and Project Supervisor

Table 9 Section (Bill) Grading and Gravelling (1/2)

Item	Description and Required Quality	Test / Q. Control	Responsible
Carriageway Grading – Heavy Grading	Heavy Grading: - Width of carriageway at 50m intervals, tolerance 20 to 50mm - Camber at 25m intervals, tolerance + / - 1% - Loose rocks, debris, roots and grass removed well clear of drains	Check by measuring using tape measure, camber board with spirit level and visual check	DE and Project Supervisor
Carriageway Grading – Light Grading	Light Grading: - Width of carriageway at 50m intervals, tolerance 20 to 50mm - Camber at 25m intervals, tolerance + / - 1% - Loose rocks, debris, roots and grass removed well clear of drains	Check by measuring using tape measure, camber board with spirit level and visual check	DE and Project Supervisor
Excavation, Free Haul, Spreading and Compaction of Gravel – Labour/ Equipment	Gravelling Works: Excavation and haulage of material a. Material as per specifications b. Haulage using approved equipment c. Dumping distances	1. Material tests of actual delivered gravel to site: a. Grading, PI and CBR check specifications for appropriate requirements b. Visual checks c. Visual checks	1. Material Tests DE and Project Supervisor If necessary PI and CBR by Material Department's Lab (CML) After approval of the material by the Engineer, the contractor is allowed to continue with actual gravelling works

Table 9 Section (Bill) Grading and Gravelling (2/2)

Item	Description and Required Quality	Test / Q. Control	Responsible
Excavation, Free Haul, Spreading and Compaction of Gravel – Labour/ Equipment	Spreading and Compaction for final layer: a. Placing of shutters b. Width of gravel surface at 100m intervals, tolerance + / -50mm c. Camber of 5% at 50m intervals, tolerance +/- 1% d. Thickness of compacted layer at 100m intervals, tolerance +/- 10mm e. Longitudinal profile f. Compaction density test at 100m .95% MDD (AASHTO T180)	Final gravel layer a. Visual check b. Tape measure) c. Camber board with level d. Trial holes and measuring e. Boning rods f. DCP test, confirmed by initial and occasional lab tests (sand replacement) with written approval to continue formation	2. Final Gravel Layer Tests DE and Project Supervisor Engineer instructs Contractor to carry out initial lab and possible occasional lab tests and calibrate DCP. Written approval by Engineer to commence finishing works
Overhaul (beyond 10 km	Haulage: a. Material as per specifications b. Haulage using approved equipment c. Dumping distances	Material tests of actual delivered gravel to site and haulage: a. Grading, PI and CBR "check specifications for appropriate requirements b. Visual checks	DE and Project Supervisor
Removal of Overburden	Removal of Overburden by labour/ equipment a. Thickness of overburden b. Location of overburden material		DE and Project Supervisor
Restoration of Quarries and Borrow Pits	Restoration of Quarries: levelling of ground and return of topsoil uniformly spread over entire quarry areas	Determined from trial pits of 30m grid as instructed and approved by Engineer	DE and Project Supervisor
Restoration of Quarries and Borrow Pits	Restoration of Quarries: Levelling of ground and return of topsoil uniformly spread over entire quarry areas	Visual checks	DE and Project Supervisor

Table 10 Characteristic of EBT and LBT

Items		Mechanical Method	Labour based Method
Condition of the Construction	Soil	Does not depend on soil type	Where soil not hard is desirable.
	Terrain	Does not depend on terrain	Moderate terrain is more desirable
	Speed	Much faster than LBT. So, good at where rapid construction requires such as heavy traffic section, urban area, etc..	To do same length, needs more construction period than Mechanical Method
	Quantity	Able to cope with large quantity contract	In periodic maintenance maximum up to 10 km per contract
	Labour	Does not depend of the use of roadside and season. However, dry season is more preferable to do earth works.	Needs labour at site, so near village is more disable. Difficulty found in urban area due to high daily payment to the labours. Have to choose seasons.
	Machinery	Have to procure and haul large scale machinery to site as well as fuel	Minimum scales of machineries such as compactor, watering and tow grader are required.
Manual & Guideline	Key Factors	Depends on the calibration/maintenance of the machinery and operator's skill as well as engineering knowledge of manager/foreman.	Depends on the engineering knowledge of the manager/foreman
	Manual/ Guideline	Highly structures & authorized M/G established	Authorized M/G exists, however currently relying more on personal engineering skills & experience at site
Economic /Indirect effect	Unit Price	Construction price per km is higher than LBT. The result of the Pilot Project shows that machinery based was 20mil. Tsh/km where LBT was 13mil Tsh/km	Construction price per km is lower than Machinery based. The result of the Pilot Project shows that machinery based was 20mil. Tsh/km where LBT was 13mil Tsh/km
	Benefit	At where traffic heavy, it generates economic benefit on time, travel & environment due to fast construction speed	Difficult to generate type of benefit as mentioned in left
		60 to 70% of the construction price , as machine, spare parts, materials (tar) & fuel, goes out from Tanzania.	60 to 70% of the construction price dropped at the community and will directly contribute to local economy
	Job Creation	Creates job but not as LBT	Creates job than machinery base and contribute increasing the direct income to local economy
	Others	Can expect the effect in wide area since the scale of the construction is huge than LBT generally	Can expect high ownership awareness to the constructed road

General Forms

Form 1 Road Condition Assessment Form

Section breaks required at:
Any change in road condition
Ward boundary
Intersection with other roads

District Name & No.: ____________ **Road Number:** ____________ **Road Name:** ____________

Assessed by: ____________ **Road Link Number** ____________ **Road Length:** ______ **km**

Road Sect. No	Road Link Section Chainages (km)		Rd Sect. Length (km)	Road Surface Type	Year Last Surfaced	Surface Material Factor	Material Proximity Factor	Traffic Group Factor	Drainage Cond. Factor		Shoulder Cond. Factor		Surface Cond. Factor	Bottle Neck Yes/No	Comments (particularly concerning Bottle Necks)
	Start	End							left	right	left	right			
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)	(xv)	(xvi)

Notes: Refer to "Look-Up" Tables in **Form** for Factor Coding and Definitions.
Bottle Necks must be fully described in column **xvi** including their chainage and details thereof.

Form 2 Structure Inventory Form

District Name & No.: _____ **Road Number:** _____ **Road Name:** _____

Assessed by: _____ **Assessment Date:** _____ **Road Length:** _____ **km**

Struct. No	Structure Type (see below)	Location (chainage)	No of Spans (Bridges only)	Width (m) (Bridges only)	Length (m)	No of openings (Culvert only)	Size of openings (Culvert only)	Head walls (Y/N)	Structure Condition (see below)	Type of Bottleneck If any	Details of Work to be Done / Comments
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)		(xi)

STRUCTURE TYPES							
A	R/C bridge	**D**	Steel Truss bridge	**G**	Concrete pipe culvert Ø	**J**	Vented ford
B	Composite bridge	**E**	Timber bridge	**H**	Steel pipe culvert Ø	**K**	Drift
C	Bailey bridge	**F**	Other Bridge type	**I**	Concrete box culvert WxH	**L**	Other structure type

CONDITION							
1	Good - no work req'd	**2**	Fair - minor work req'd	**3**	Poor - major work req'd	**4**	Bad - in danger of failure / already failed

* Colum (v) width of the deck across the roadway

*Colum (vi) for bridges, total lengt incl.all spans.For culverts, the length of structure across the roadway

ROAD IMPROVEMENT LINE DIAGRAM

REGION:	IRINGA		ROAD NAME:	PREPARED BY:	DE'S OFFICE
ROAD AREA:	PAWAGA		DISTRICT	DATE:	PAGE: 1

STRIP MAP:

	VILLAGE	MKT	MARKET
	HOUSE/HUT	SCH	SCHOOL
	BRIDGE	CLI	CLINIC
	CULVERT	CH	CHURCH
	ROAD/TRACK	PET	PETROL STATION
	FOOTPATH	WP	WATER POST
o|	ROAD SIGN	GP	GRAVEL PIT
x	ROCK OUTCROP	Q	QUARRY
	CHAINAGE	(KM)	

ACTIVITY	METRES	0km	200	400	600	800	1m	200	400	600	800	2km	200	400	600	800	3km
	Site Clearance																
	Heavy grading																
	Form up Road Formation (light)																
	Form up Road Formation (heavy)																
	Fill Sections																
	Cut Sections - Common Excavation																
	Cut Sections - Rock Excavation																
	Gravel Compacted Thickness																
	Mitre Drains (left hand side)																
	Mitre Drains (right hand side)																
	Catch Water Drains (left hand side)																
	Catch Water Drains (right hand side)																
	Erosion Checks (left hand side)																
	Erosion Checks (right hand side)																
	Drainage Structures - Repair Existing																
	Drainage Structures - New Construct																
	Ditch re- excavation																
	Re excavate catch w ater																
	Pothole filling using gravel materials																
	Culvert repar																

LEGEND

CLR:	CLEARING	REP:	REPAIR	RM:	REMOVE	SD:	SIDE DRAIN	BIT:	BITUMEN	CP:	CONTRETE PIPE	BX:	BOX CULVERT	HW:	HEAD WALL	H:	HIGHT		
CLN:	CLEANING	RPL:	REPLACE	BF:	BACKFILL	TO:	TURN OUT	GR:	GRAVEL	AP:	ASBESTOS PIPE	TC:	TIMBER CULVERT	WW:	WING WALL	W:	WIDHT		
EXC:	EXCAVATION	EXT:	EXTEND	SP:	STONE PITCHING	CO:	CUT OFF DITCH	G:	GRASS	MP:	METAL PIPE	DR:	DRIFT	APR:	APRON	T:	THICKNESS		
REX:	REEXCAVATION	CON:	CONSTRUCT	GAB:	GABION	DL:	DITCH LINING	B&T:	BUSH & TREES	MA:	METAL ARCH	BR:	BRIDGE	DI:	DROP INLET	L/R:	LEFT/RIGHT		

S/N	Road No./ Name	Length (km)	Value Index					Value	priority	Evaluation/ Comments	Condition/ Deterioration/ Inventory	Prioritization											
			%	%	%	%	%					2015/16				2016/17				2017/18			
			Road Class	Network	Population	Economy Activity	Others					R	S	P	B/C	R	S	P	B/C	R	S	P	B/C
1																							
2																							
4																							
5																							
6																							
7																							
										TOTAL (MIL TSH)													

Input by Engineer's decision

Input by Engineer's dicision in 5 level

UNIT PRICE (MIL TSH/KM)		
	Routine	
	Spot	
	Periodic	
	B/C	
	supervision 5%	

	TOTAL FY 2015/16	TOTAL FY 2016/17	TOTAL FY 2017/18
Annual budget for financial year 2015/16			
Annual budget for financial year 2016/17			
Annual budget for financial year 2017/18			

Form 5 Road Maintenance Budget Summary /Annual Estimate (Form BULG-2A)

PRIME`S MINISTERS OFFICE REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

ROAD MAINTENANCE BUDGET SUMMARY FOR ROAD FUND (F.Y 2012/13)

COUNCIL ---------- *FORM BULG-2A*

REGION ----------

S/NO	ACTIVITY	ANNUAL ESTIMATES				SOURCE OFOTHER FUNDS
		TARGET (KM)	ROAD FUND (TSHS)	OTHER SOURCE (TSHS)	TOTAL TSHS	
1	ROUNTINE MAINTENANCE					
2	SPOT IMPROVEMENT/ EMERGENCY REPAIR					
3	PERIODIC MAINTENANCE					
4	MAINTENANCE OF BRIDGES/CULVERTS					
5	SUPERVISION COSTS					
	ALLOWANCE					
	VEHICLE MAINTENANCE					
6	DEVELOPMENT PROJECTS					

NOTE: Supervision costsis 5% of the work costs.

Form 6 Budget Summaries (Form BULG-2B)

PRIME MINISTER'S OFFICE REGIONAL ADMINISTRATON AND LOCAL GOVERNMENT ROAD MAINTENANCE

BUDGET SUMMARY FOR ROAD FUND FOR THE YEAR 2014/2015

NAME OF COUNCIL :

REGION: **FORM BULG. 2B**

No.	Activity/Road Name	Road Number	ROAD CLASS	SURFACE TYPE	Annual Estimate		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter		Mode of Execution
A	ROUTINE MAINTENANCE		D/U/F	P/G/E	Target (km)	Cost Tshs. (Mio)	Phy (km	Cost Tshs. (Mio)	Phy (km)	Cost Tshs. (Mio)	Phy (km	Cost Tshs. (Mio)	Phy (km)	Cost Tshs. (Mio)	
	SUB TOTAL 1											-	-	-	
B	SPOT IMPROVEMENT														
	SUB TOTAL 1														
C	PERIODIC MAINTENANCE														
	SUB TOTAL 1														
D	BRIDGE AND CULVERTS														
	SUB TOTAL 1														
	SUB TOTAL 2														
	SUPERVISION 5%														
	TOTAL														

D- District U-Uban F- Feeder P - Paved G - Gravel E- Earth

Form 7 Road Maintenance Budget Summary/ Road Maintenance Activities (Form BULG-2C)

PRIME MINISTER`S OFFICE REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

ROAD MAINTENANCE BUDGET SUMMARY FOR FUNDS F.Y 2013/14

Form - BULG - 2C

Name of council

Name of Region

S/O	ROAD NAME	ROAD LENGTH (KM)	ROAD MAINTENANCE ACTIVITIES								REHABILITATION/ UPGRADING	
			ROUTINE MTCE		SPOT IMPROVEMENT		PERIODIC MTCE		REPAIR OF BRIDGE/CULV.			
			Physical KM	Financial Tshs(mio)	Physical KM	Financial Tshs(mio)	Physical KM	Financial Tshs(mio)	Physical no/line(s)	Financial Tshs(mio)		
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
	TOTAL											

Form 8 Road surface types with its condition (Form BULG-2D)

PRIMES MINISTER`S OFFICE REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

NAME OF COUNCIL

BULG 2D

REGION.

No.	Road Name	Road No.	Road Class	Surface Type	Road Length (Km)	ROAD SURFACE TYPE WITH ITS CONDITION IN KM								
						PAVED			GRAVEL			EARTH		
			D/U/F	P/G/E		Good (	Fair (Km)	Poor (Km)	Good (Km)	Fair (Km)	Poor (Km)	Good (Km)	Fair (Km)	Poor (Km)
	DISTRICT ROADS				(a)	(b)	(.c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)

Form 9 Summary of committed and uncommitted action plan (Form RALG-1A)

PRIME MINISTER'S OFFICE REGIONAL ADMINISTRATION AND LOCAL GOVERNMENTS

SUMMARY OF COMMITTED AND UNCOMMITTED ACTION PLANS **FORM RALG - 1**

COUNCIL: ..... **REGION .....** FY:.....

(I) Total Approved Budge T.Shs----------
(2) Fund received todate T.Shs----------
(3) Fund not received todate T.Shs----------
(4) Bank balance as at. T.Shs----------
(5) Uncommitted Funds as at---------- T.Shs----------

SN.	MAINTENANCE	ROAD NAME		IMPLEMENTATION STATUS		COMMITTED FUND DETAILS				UNCOMMITED FUND (Tshs.)	REMARKS
	Activity		Approved Budget	Start Date	Completion Date	Contract No.	Contract Amount (Commitment) Sum (Tshs)	Amount Paid	Balance Committed		
						TOTAL					

NB. Committed fund balance + Uncommitted fund = Bank balance as of today.

PRIME MINISTER'S OFFICE REGIONAL ADMINISTRATION AND LOCAL GOVERNMENTS Form- RALG 2A

SUMMARY OF QUARTERLY ROAD MAINTENANCE WORKS IMPLEMENTATION REPORT

COUNCIL: _____ REGION: _____

FY:

S/N	ACTIVITY	ROAD NAME	Total	Annual Plan		Actual Road Maintenance Performance										Implementation	
			Length			Actual 1stQuarter		Actual 2nd Quarter		Actual 3rd Quarter		Actual 4th Quarter		Actual cumulative		Status	Remarks
			(km)	Phy.	Financial	Ph'cal.	Financial	Ph'cal.	Financial	Ph'cal.	Financial	Ph'cal.	Financial	Ph'cal.	Financial	(FA/C)	or %
				Km.	Tshs(mio).	Km.	Tshs(mio).	Km.	Tshs(mio).	Km.	Tshs(mio).	Km.	Tshs(mio).	Km.	Tshs(mio).		
	Routine Mtce																
		Sub Total:															
	Spot Improvement																
		Sub Total:															
	Periodic Mtce																
		Sub Total:															
		TOTAL															
	Cross drainage	B/C/D and road name		No.	Tshs(mio).	No.	Tshs(mio).	No.	Tshs(mio).	No.	Tshs(mio).	No.	Tshs(mio).				
	Structure																
		Sub Total:															
	SUPERVISION																
	GRAND TOTAL:																

Note: B = Bridge, C = Culvert, D = Drift, FA = Force Account and C = Contract.

Form 11 Contract Execution Report (Forms RALG-1B)

PRIME MINISTER'S OFFICE REGIONAL ADMINISTRATION AND LOCAL GOVERNMENTS

QUARTERLY SUMMARY OF ROAD MAINTENANCE CONTRACTS EXECUTION REPORTS

Form RALG - 1B

COUNCIL: REGION:

FY:

SN	Date of award	Road name/Project description	Project Length(Km)	Contract Number	Contract Sum(Tshs)	Commen. Date	Compl. Date	Contractors Name	Payment made todate	Balance	Progress todate (in%ge).
		TOTAL									

Contract Related Forms

Form 12 Contract Agreement Form

Form of Contract Agreement

This Agreement, made on this ..... day of ……. 20……., between ……. **COUNCIL** of P.O. BOX ……. (Hereinafter called "the Employer") on the one part and **M/S …….. of P.O. BOX ……..** Hereinafter called "the Contractor") on the other part.

Whereas the Employer is desirous that certain works should be carried out, viz:

…… IN ……. DISTRICT and has by the letter of Acceptance with ref. No. …… accepted a tender by the Contractor for execution, and completion of such Works.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Bid Submission Form hereinafter referred to and;

2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz: -

Contract Agreement;
Letter of Acceptance;
Bid submission form
Contract data
General condition of contract
Special Condition of Contract
Specifications
Drawings
Priced Bill of Quantities

Any other document forming part of the contract (CVs of key Personnel, Power of attorney, Method statement, Work program)

All the aforesaid documents are hereinafter referred to as 'the Contract' and shall be taken as complementary and mutually explanatory of one another but in case of ambiguities or discrepancies shall take precedence in the order set out above.

In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the works in conformity, in all respects, with the provisions of the Contract.

The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the works at the duration of **……..** at the sum of Tanzanian Shillings **(…….***Insert figure***) ……***In words***)**, hereinafter referred to as the "Contract Price", at the times and in the manner prescribed by the Contract.

IN WITNESS where of, the parties hereto have set their hands and seals on the day and year first above written.

SIGNED FOR AND ON BEHALF OF THE EMPLOYER

.....

Signature

ON BEHALF OF THE CONTRACTOR:

.....

Signature

NAME ……..
(Name)..... **COUNCIL CHAIRMAN**
(Occupation)..... **……DISTRICT COUNCIL.**
(Address).....

.....

Signature

.....

Signature

NAME…… (Name).....

DISTRICT EXECUTIVE DIRECTOR
(Occupation)..... **……. DISTRICT COUNCIL**
(Address).....…

P.O. BOX ……

Form 13 Letters for the Appointment of the Project Supervisor and other Stakeholders & Measurement Sheets

Example of Letter of appointment of Project supervisor (Technician/Engineer) on behalf of Project manager (DE/ME)

NAME OF THE DISTRICT COUNCIL

All Letters should be addressed to:
District Executive Director,
P.O. Box.....
Email: .....
TANZANIA

COUNCIL'S LOGO

Telephone,
General Line: +255.....
Direct Line: +255.....
Fax: +255.....

Our Reference No. .....
Your Ref. No: Date …….. 201…

NDUGU,

……name,
CHEO……..,
S.L.P ……..,
……..

YAH: KUTEULIWA KUSIMAMIA MRADI WA MATENGENEZO YA / UKARABATI WA
……
…

Tafadhali husika na kichwa cha habari hapo juu.

Nimekuteua kusimamia mradi wa Matengenezo ya (Mara kwa mara.Sehemu korofi,Muda maalum) Barabara ya …… ambao utafanywa na Mkandarasi **M/S ……..,** kwa Tshs. **0.00** wenye mkataba No**. ……..** ambao utaanza tarehe **……** hadi tarehe **……..**

Majukumu yako yatakuwa kama ifuatavyo.

(i) Kusimamia kwa karibu mradi huu kwa kufuata taratibu za mkataba.

(ii) Kusimamia ubora na viwango kazi vinavyokubalika kwa mujibu wa mkataba.

(iii) Kusimamia utekelezaji wa mradi kwa kufuata mpango kazi "work programme" ya mkandarasi kama zipo dalili za kutotekelezeka mpango kazi.

(iv) Kuandaa malipo kulingana na kazi zilizokamilika na zinazostahili kulipwa kwa uhalisia na sio kufuata 'BOQ' lipa "actual works"

(v) Kuandaa vikao vya maeneo ya kazi "Site meetings" zitakazo wahusisha , Mwajiri, PMU, viongozi wa Serikali za Vijiji/Kata waliopo karibu na eneo la mradi pamoja na Mkandarasi kila mwezi.

(vi) Kusimamia upimaji na ubora wa kazi inayofanywa na Mkandarasi ukishirikiana na TANROADS.

(vii) Kushirikisha Wananchi walio karibu na eneo la mradi katika utekelezaji wa mradi ikiwa ni pamoja na kuwapa taarifa juu ya maendeleo ya mradi.

(viii) Kumsimamia Mkandarasi kuhusu masuala mtambuka katika eneo la mradi huu ikiwa ni pamoja na ushiriki wa sawa wa kijinsia (wanawake na wanaume) katika kuajiri vibarua , ugawaji wa vipeperushi na "condom" katika maeneo ya mradi ili kupunguza maambukizi ya VVU.

(ix) Kusimamia kwa karibu rasilimali zilizopo barabarani (existing road structures and Furnitures) ili zisiharibiwe wakati wa utekelezaji wa mradi huu ili kupunguza gharama za kurudia kazi.

(x) Kumshauri Mhandisi wa ujenzi ***pale inapobidi*** juu ya kuongeza na kupunguza kazi kulingana na mkataba.

(xi) Kutoa mapendekezo kwa maandishi na vitendo juu ya Wananchi wanaofanya shuguhuli zozote katika eneo la barabara (yaani, umbali usiozidi mita 15 kila upande wa barabara.

Hakikisha unatekeleza majukumu yote hayo kwa umakini na kuhakikisha utekelezaji wa mradi huu unakamilika kama ulivyo katika mkataba. Iwapo mradi huu utatekelezwa chini ya kiwango utawajibishwa kwa mujibu wa sheria na taratibu za kiutumishi.

Nakutakia kazi njema.

……
JINA……
MKURUGENZI MTENDAJI (W)
……..

Nakala 1. Mhandisi wa Ujenzi (W)

2. Afisa ugavi (W)

Example of MEASUREMENT SHEET

…….. DISTRICT COUNCIL

ROAD FUND Financial Year ……

Project Name: ……. ……..

Name of Contractor ……..

MEASUREMENT SHEET

S/NO	Chainage	Description of work and measurement	Quantity

For ….. District Council Contractor

Sign…….
Sign……..

Name…….
Name……
CLERK OF WORKS SITE AGENT

Form 14 Letter to Stakeholders

NAME OF THE DISTRICT COUNCIL

All Letters should be addressed to:
District Executive Director,
P.O.Box …...
REGION

COUNCIL`S LOGO

Telephone,
General Line. ……..
Direct Line. ……..……
Tanzania

Our Reference No ……. Date:……..
Your Reference No: ……

KWA
MH. MBUNGE – JIMBO LA ……..
WAH. MADIWANI,
WATENDAJI WA KATA,
WATENDAJI NA WENYEVITI WA VIJIJI HUSIKA.

YAH. **MATENGENEZO YA BARABARA YA …… NA KUMTAMBULISHA MKANDARASI……**

Ndugu!

Somo hapo juu lahusika,

Tunamtambulisha kwenu mkandarasi tajwa hapo juu kuwa ameteuliwa na bodi ya zabuni ya Wilaya kupitia kikao kilichofanyika …….. baada ya taratibu za utoaji zabuni kukamilika, Mkandarasi huyo ndiye atakayefanya Matengenezo ya barabara ambayo imetajwa hapo juu kwa jumla ya shilingi ……*(Insert figure)* kwa muda wa siku ……*(Insert figure)*

Kazi atakazo zifanya ni kufungua barabara, kutengeneza tuta la barabara km……..., kumwaga changarawe sehemu korofi……, kuweka makalvati mistari……, kujenga daraja la zege lenye urefu wa meta ……. na kuchimba mifereji ya kutoa maji barabarani.

Wakati wa utekelezaji wa kazi hiyo tunaomba kutoa ushirikiano katika pande zote kwa maana ya Wilaya na Mkandarasi. Kwa maoni au ushauri mnatakiwa kuwasiliana na ofisi ya mhandisi [W] au Simu Na. ……..ili aweze kuthaminisha mapendekezo yatakayo tolewa.

Tunaamini tutapata ushirikiano wa dhati mapema iwezekanavyo ilikufanikisha utekelezaji wa mradi huu.

Nawatakieni kazi njema

……
Tamisemi Dodoma
Mhandisi Ujenzi [W]

Nakala – Mkurugenzi Mtendaji

Form 15 Prequalification of the Contractor

1.0 POST-QUALIFICATION INFORMATION – PENDING LITIGATION

M/S …… *(Insert name of contractor)*

Sub-Factor	Requirement	Qualification of the Bidder	Remarks
History of non-performing contracts	Non-performance of a contract did not occur within the last five (2) years prior to the deadline for application submission.	If Submitted a declaration of having no unperformed contract (Comply otherwise not comply)	Comply/ Not Comply
Pending Litigation	All pending litigation not exceed than fifty percent (50%) of the Bidder's net worth.	If Submitted a declaration of having no pending litigation (Comply otherwise not comply)	Comply/ Not Comply
Overall Remarks			Comply/ Not Comply

Note: For Contractors Class VI and below the Prequalification is not applicable

2.0 POST-QUALIFICATION INFORMATION -FINANCIAL SITUATION

M/S …… *(Insert name of contractor)*

Sub-Factor	Requirements	Qualification of the Bidder	Remarks
Historical Financial Performance	Audited Financial statements of the last two (2) years up to December ……..	If submitted reports for two (2) consecutive years ending December …… (Comply otherwise not comply)	Comply
	Current Ratio (≥1.2)	=(3,636,219,758/762,028,761.3)=4.77 (≥1.2)	Comply
	Return of Equity (≥5%)	=(1,304,721,914/32,278,600) =40% (≥5%)	Comply
Average Annual Turnover	Minimum average annual turnover within last Three (3) years TShs. 2,000, 000,000.00	TShs 3,636,219,758	Comply
Financial Resources	Overall cash flow requirements for this contract and its current works commitments TShs 1,000,000,000.00	Financial analysis indicated that the bidder has a fuel credit of TShs 400,000,000.00, cash in bank TShs 600,258,638.04 and extra new equipment credit of TShs 1,003,568,610.59, The company is financially capable	Comply
Overall Remarks			**Comply**

Note: Red part is just example; it should have to be customized according to size of the Project

3.0 POST-QUALIFICATION INFORMATION – EXPERIENCE

M/S …….

Sub-Factor	Requirements	Qualification of the Bidder	Remarks
General Experience	Minimum FIVE [Number] Years	More than five (5) years	Comply
Specific Experience	Minimum THREE [3] similar projects within the last THREE [3] Years each with a value of at least TShs. 800,000,000.00.	Has 13 projects each has more 800,000,000.00 and have been completed of the same nature	Comply
	Construction of reinforced concrete bridges of spans 10m and above.	Has not submitted any bridge project	Comply*
	Construction of fully Engineering designed gravel road of minimum length 30km.	Has more than 5 projects with the more than the 30 km	Comply
Overall Remarks			Comply

*The Evaluation Team considers this as an irrelevant requirement for lot I & II which are road bids. The inserted figure is just for example and shall be customized according to size of the project.

4.0 POST-QUALIFICATION INFORMATION – PERSONNEL

M/S ……..

Key Position	Requirements		Provided		Remark
	T.W.E. (in years)	S. E. (in years)	T.W.E. (in years)	S. E. (in years)	
A Project Manager with academic qualifications of at least Diploma in Civil Engineering or Equivalent Qualifications					
Site Engineer with academic qualifications of at least Degree in Civil Engineering/ or Equivalent Qualifications and registered with Engineers Registration Board (T).					
Chief Foreman with at least ordinary Diploma in Civil Engineering or Equivalent Qualifications					
Overall Remarks					

T.W.E.: Total Work Experience

S.E.: Specific Work Experience

POST-QUALIFICATION INFORMATION - EQUIPMENT

M/S ……

No.	Equipment Type and Characteristics	Minimum Number required	Submitted by the Bidder	Remarks
1	Self-propelled vibrating rollers, 10 T	2	2	
2	Motor graders, 120hp	2	2	
3	Excavators,75hp	1	2	
4	Bulldozers,140hp	1	1	
5	Dumpers / tipper trucks, 4.6m^3	10	12	
6	Water bowser, 10,000 liter	4	5	
7	Concrete mixer, vibrator set, 1m^3	2	4	
8	Poker Vibrator	2	4	
9	Supervision vehicles, 4WD	1	1	
	Overall Remarks			

The bidder has submitted additional equipment which will be hired from a hiring pool to serve as standby. The evaluation team considers this as extra strength and an added advantage

Supervision Check List (1/2)

Project Title:	
Contractor:	

	Date	Name	Signature
The Engineer's Representative (Project Engineer/Supervision)			
Resident Engineer/ Site Clerk			

1. This check list is for Resident Engineer to check contractor's work execution process.
2. Fill in date of checking as (day/month), mark as indicated in Filling Example, and state remarks.
3. Put this check list in the Monthly Progress Report.

Item		Check Point		before	During execution								after	Remarks
				Date /	Date /	Date /	Date /	Date /	Date /	Date /	Date /	Date /	Date /	Reason for unsatisfactory performance (Site diary No.) Corrective order by authority (Date) Excellent point to be specified
1	Execution system in general	1-1	Works Execution Programme (including its revised version if any) is submitted before the date specified in contract document	☐	☐	☐	☐	☐	☐	☐	☐	☐		
		1-2	Works Execution Programme properly reflects the given specifications and site conditions	☐	☐	☐	☐	☐	☐	☐	☐	☐		
		1-3	Execution procedures are in accordance with Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐		
2	Equipment holding	2-1	All equipment used are properly mobilized in accordance with Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐		
		2-2	All equipment used is well maintained during the execution of works		☐	☐	☐	☐	☐	☐	☐	☐		
3	Contractor's in-house staff	3-1	Qualified technical staff of contractor are properly assigned as specified in Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐		
		3-2	Contractor's in-house key staff understand work process and schedule properly		☐	☐	☐	☐	☐	☐	☐	☐		
		3-3	Contractor's in-house staff give technical guidance and direction to workers and operators properly and timely		☐	☐	☐	☐	☐	☐	☐	☐		
		3-4	Communications with authority in writing is properly and timely		☐	☐	☐	☐	☐	☐	☐	☐		
4	Personnel employment	4-1	Workers and operators are deployed in accordance with Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐		
		4-2	Wage payment is properly made on time		☐	☐	☐	☐	☐	☐	☐	☐		
5	Site base facilities	5-1	Office and stockyard are prepared in accordance with Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐		
		5-2	Site is well maintained during the work execution and cleared on completion		☐	☐	☐	☐	☐	☐	☐	☐	☐	
		5-3	Material stored on site is properly managed during the work execution		☐	☐	☐	☐	☐	☐	☐	☐		
6	Quality and quantity management	6-1	Material testing, structural examination, and measurements are properly and routinely conducted based on specifications and Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐		

Filling Example : ✓ Check point is satisfactory ■ Check point is unsatisfactory N/A Not applicable

Supervision Check List (2/2)

Project Title:	
Contractor:	

	Signature
The Engineer's Representative (Project Engineer)	
Resident Engineer	

1. This check list is for Resident Engineer to check contractor's work execution process.
2. Fill in date of checking as (day/month), mark as indicated in Filling Example, and state remarks.
3. Put this check list in the Monthly Progress Report.

Item		Check Point		before	During execution								after	Remarks
				Date /	Date /	Date /	Date /	Date /	Date /	Date /	Date /	Date /	Date /	Reason for unsatisfactory performance (Site diary No.) Corrective order by authority (Date) Excellent point to be specified
6	Quality and quantity management	6-2	Results of material testing, structural examination and measurements are within the specifications.		☐	☐	☐	☐	☐	☐	☐	☐		
		6-3	Results of material testing, structural examination, and measurements are properly compiled as reports for confirmation		☐	☐	☐	☐	☐	☐	☐	☐		
7	Work scheduling	7-1	Understanding of critical path and its reflection on scheduling are proper		☐	☐	☐	☐	☐	☐	☐	☐		
		7-2	Actual proceedings are periodically compared to the planned schedule described in Works Execution Programme		☐	☐	☐	☐	☐	☐	☐	☐		
		7-3	Changes caused by site conditions are properly handled to keep Works on schedule		☐	☐	☐	☐	☐	☐	☐	☐		
		7-4	All works are completed within the contract term or within the extended term as allowed										☐	
8	Work safety management	8-1	No accident occurs to workers, operators, or third-parties.		☐	☐	☐	☐	☐	☐	☐	☐		
		8-2	Safety of workers and operators is considered		☐	☐	☐	☐	☐	☐	☐	☐		
		8-3	Accident prevention efforts for third-parties are proper		☐	☐	☐	☐	☐	☐	☐	☐		
		8-4	Traffic and site safety devices are properly installed and managed		☐	☐	☐	☐	☐	☐	☐	☐		
		8-5	Temporary facilities (e.g. scaffolding) are constantly checked		☐	☐	☐	☐	☐	☐	☐	☐		
9	Environmental and social management	9-1	Environmental and social mitigation efforts (e.g. against noise, vibration, emission, and dust) are conducted		☐	☐	☐	☐	☐	☐	☐	☐		
		9-2	Waste material from site is properly disposed		☐	☐	☐	☐	☐	☐	☐	☐		
		9-3	Damage to existing roads, works and services is avoided or are repaired when it occurs		☐	☐	☐	☐	☐	☐	☐	☐		
		9-4	Transportation by vehicles is properly done with no overloading, and neither material falling, leakage, nor spillage.		☐	☐	☐	☐	☐	☐	☐	☐		

Filling Example : ✓Check point is satisfactory ■ Check point is unsatisfactory N/A Not applicable

Form 17 Quality Assurance Form (1/2)

DISTRICT COUNCIL							
QUALITY ASSURANCE FORM FOR ROAD WORKS							
				ASSESSMENT (Mark 0 up to 100)			
No	Maintenance activity	Parameter of quality		Contractor's marks	Supervisor's marks	Engineer's marks	Remarks
1	Road formation/ grading	i	Alignment of road section				
		ii	Defined side drains				
		iii	Backslope provision				
		iv	Chamber and center line				
		v	Watering and proof rolling				
2	Gravelling	i	is good quality gravel used?				
		ii	Dimensions of placed gravel (m)				
			Width… Depth… Length…				
		iii	Camber to centerline (8%)				
		iv	Compaction (95%MMD)				
		v	Laboratory test results				
3	Concrete work	i	Size and neatness of Sand				
	(small structure)	ii	Size and neatness of Aggregates				
		iii	Water and cement ratio (0.5)				
		iv	Quality of finished concrete				
		v	Laboratory test results				
4	Open drains excavation	i	Size of open drains				
		ii	Alignment of open drains				
		iii	Appropriate discharge of water				
		iv	Beginning and end of drains				
5	Culvert installation	i	Setting out				
	(small structure)	ii	Trench, blinding and concrete base				
		iii	Laying, aligning and jointing pipes				
		iv	Concrete surrounding quality & size				
		v	Upstream and downstream approns				
		vi	Headwalls and Wingwalls				
		vii	Backfilling and compaction				
		viii	Outfalls and infalls				
General Remarks :							
Contractor's Name				Sign :		Date :	
Technician's Name				Sign :		Date :	
Engineer's Name				Sign :		Date :	

Quality Assurance Form (2/2)

DISTRICT COUNCIL							
QUALITY ASSURANCE FORM FOR CONCRETE WORKS							
				ASSESSMENT (Mark 0 up to 100)			
No	Maintenance activity	Parameter of quality		Contractor's marks	Supervisor's marks	Engineer's marks	Remarks
1	Formwork	i	Alignment of road section				
		ii	Defined side drains				
		iii	Backslope provision				
		iv	Camber and center line				
		v	Watering and proof rolling				
2	Gravelling	i	is good quality gravel used?				
		ii	Dimensions of placed gravel (m)				
			Width… Depth… Length…				
		iii	Camber to centerline (8%)				
		iv	Compaction (95%MMD)				
		v	Laboratory test results				
3	Concrete work	i	Formwork				
		ii	Steel reinforcement class &size				
	(Steel reiforced structure)	iii	Steel reinforcement spacing & tying				
		iv	Cover thickness				
		v	Slump test (workability and mix)				
		vi	Quality of concrete				
		vii	Quality of finished concrete				
		viii	Laboratory test results				
4	Open drains excavation	i	Size of open drains				
		ii	Alignment of open drains				
		iii	Appropriate discharge of water				
		iv	Beginning and end of drains				
5	Culvert installation	i	Excavation and compact foundation				
	(Box culvert)	ii	Concrete blinding and floor slab				
		iii	Stone masonry wall/concrete wall				
		iv	Concrete top slab				
		v	Upstream and downstream approns				
		vi	Headwalls and Wingwalls				
		vii	Backfilling and compaction				
		viii	Installation of gabion box				
General Remarks :							
Contractor's Name				Sign :			Date :
Supervisor's Name				Sign :			Date :
Engineer's Name				Sign :			Date :

Form 18 Value for Money Form (VFM)

VALUE FOR MONEY (VFM) FORM

Agency:		Contract Price:	
Project:		Project Length	
Contract Number:		Contract Period:	
Supervising Engineer:		Start Date:	
Contractor:		Actual Completion Date:	
Audit Date:			

NO.		ASPECT	EVALUATION SCORE				COMMENTS
			Poor	Fair	Good	INA	
		Assess all project implementation aspects listed under stages A1-A4 below and rate them as poor, fair or good. If the aspect lacks the required information, its evaluation score should be zero (under "INA" column)					
A		**Planning, Design and Tender Documentation**	1	2	3	0	
	1	Compliance of project planning with requirements of the Performance Agreement, particularly with respect to:					
		- Assessment of competing alternatives based on updated road inventory and condition survey					
		- Analysis of feasibility based on appropriate road maintenance software (such as HDM 4, DROMAS, or RMMS)					
		- Timely appointment of independent design professional or Consultant					
	2	Accuracy and completeness of design calculations and technical drawings					
	3	Accuracy, appropriateness and completeness of technical specifications					
	4	Overall appropriateness of the design in terms of economy and function (fitness for purpose)					
	5	Accuracy and completeness of BOQs for the works and their consistency with the drawings and technical specifications					
	6	Accuracy of the Engineer's estimates					
	7	Accuracy and completeness of tender documents					
		Average Performance: Planning, Design and Tender Documentation				#DIV/0!	#DIV/0!
B		**Procurement Stage**	1	2	3	0	
	1	Appropriateness of the method of procurement					
	2	Compliance of the procurement process with PPA 2004 and its Regulations (GN 97 of 2005), particularly with respect to:					
		- Use of standard tender and contract documents [Reg. 83 of G.N. No. 97]					
		- The tender notice [section 61 (2)]					
		- The selection method (section 59)					
		- Prequalification and shortlisting (section 47)					
		- Time for submitting bids					
		- Communication of clarification to bidders					
	3	Evaluation process and award of contract					
		- Composition of tender evaluation committee (section 37)					
		- Members of evalaution team signing code of ethcis [section 37(6) of PPA 2004; Reg. 9091) of GN. No. 97 & Reg. 5892) of GN. No. 98]					
		- Evaluation done as per the evaluation criteria contained in the tender dossier or Request forProposal					
		- Notification of evaluation results to unsuccessful bidders [Regulation 97(11)] of G.N. No. 97					
		- Publication of awards [Regulations 21 and 97(12)] of G.N. No. 97					
		Quality and comprehensiveness of the tender evaluation report					
	4	Competitiveness of rates quoted for major items of construction when compared with prevailing market prices					
	5	Overall competitiveness of the most economic tender when compared with prevailing market prices in both private and public sectors					
	6	Capacity and competence of the selected contractor in relation to project size and complexity					
		Average Performance: Procurement Stage				#DIV/0!	#DIV/0!

C	Construction Stage		1	2	3	0	COMMENTS
	1	Timeliness of site possession					
	2	Quality of project programme (schedule of work)					
	3	Adherence to project programme					
	4	Quality of contractor's site organization and staff					
	5	Quality of supervising engineer's site staff					
	6	Quality of quality assurance programme					
	7	Adherence to quality assurance programme					
	8	Quality of Environmental Management Plan (EMP)					
	9	Management of contractual documents, including surety and insurances bonds					
	10	Quality and management of project documentation with respect to:					
		- general correspondence					
		- site instructions					
		- minutes of site meetings					
		- progress reports					
		- works measurement and inspection records					
		- material testing records					
		- interim and final payment certificates					
		- variation orders					
		- claims					
	11	Assessment (including validity) of variations					
	12	Assessment (including validity) of claims and related cost overruns					
	13	Assessment (including validity) of project delays and extensions of time					
		Average Performance: Construction Supervision and Contract Adminstration				#DIV/0!	#DIV/0!
D	**Project Completion and Closure Stage**						
	1	Quality and completeness of as-built-drawings					
	2	Compilation and Management of snag list					
	3	Timely issuance of Substantial Completion Certificate, Final Certificate and settlement of Final Account					
	4	Management of the defects liability period					
	5	Quality and adequacy of the final project report					
	6	Compliance of final quantities paid for with those reflected by the actual investment as per as-built-drawings					
	7	Compliance of project cost as per final account with accepted tender price					
	8	Compliance of actual project completion time with the contract period					
		Average Performance: Project Completion and Closure Stage				#DIV/0!	#DIV/0!

E	Executed Works	1	2	3	0	COMMENTS
1	Based on visual assessment, determine whether the completed works are satisfactory in terms of:					
	• Overall quality of workmanship					
	• Overall quality of materials used					
	• Overall quality of riding surface					
	• Absence of defects, such as cracks, ruts and localized potholes					
	• Camber and/or super-elevation					
2	Based on physical site measurements, determine whether dimensions of the following major items of construction of the completed works comply with the drawings and technical specifications:					
	• Pavement structure					
	• Road carriageway					
	• Foot paths					
	• Road side drains					
	• Mitre drains					
	• Road signs					
3	Based on site measurements, determine whether dimensions of culverts and bridges ccomply with the technical drawings and specifications					
4	Based on sample field tests determine whether the quality of materials used in the pavement structure comply with the technical specifications					
5	Based on sample field tests determine whether the quality of materials used in concrete and masonry works comply with the technical specification					
6	Assess compliance of site clean-up and restoration of disturbed and/or damaged areas with EM					
7	For uncompleted projects, assess compliance of on-going construction activities with safety and EMP requirements					
	Average Performance Quality of Works				#DIV/0!	#DIV/0!
	Evaluation Scale **1 = Poor**					
	2 = Fair					
	3 = Good					
	0 = Information not available (INA)					
	Overall Project Performance				#DIV/0!	#DIV/0!