



KENYA URBAN ROADS AUTHORITY
Efficient & Safe Urban Roads

CONSULTANCY SERVICES
FOR
FEASIBILITY STUDY, PRELIMINARY ENGINEERING DESIGN AND ENVIRONMENTAL
AND SOCIAL IMPACT STUDY
OF
MERU TOWN ROADS
REQUEST FOR PROPOSAL

TENDER No.: KURA/DEV/HQ/231/2020-2021

FEBRUARY 2021

**DIRECTOR, POLICY STRATEGY AND
COMPLIANCE
KENYA URBAN ROADS AUTHORITY
P.O. Box 41727 ~ 00100
NAIROBI.**

**DIRECTOR GENERAL
KENYA URBAN ROADS AUTHORITY
P.O. Box 41727 ~ 00100
NAIROBI.**

TABLE OF CONTENTS

SECTION A: - LETTER OF INVITATION	1
SECTION B: INFORMATION TO CONSULTANTS	3
APPENDIX “A”	9
APPENDIX “B”	11
SECTION C: TECHNICAL PROPOSAL – STANDARD FORMS	12
SECTION D: FINANCIAL PROPOSAL – STANDARD FORMS	24
SECTION E: TERMS OF REFERENCE.....	29
1.0 STUDY BACKGROUND	29
2.0 STUDY OBJECTIVES	31
3.0 SCOPE OF WORK.....	31
4.0 DETAILED SCOPE OF WORK.....	32
5.0 REPORT AND TIME SCHEDULE.....	47
6.0 OBLIGATIONS OF CLIENT AND CONSULTANT.....	52
7.0 REQUIREMENTS	54
SECTION F: STANDARD FORMS OF CONTRACT	60
LIST OF APPENDICES	75

SECTION A: - LETTER OF INVITATION



KENYA URBAN ROADS AUTHORITY

Efficient and safe urban roads

Barabara Plaza, Mazao Road - Off South Airport Road, JKIA

Tel: 254-020-8013844 / 254-717-105233

Email: info@kura.go.ke Web: www.kura.go.ke

P.O. Box 41727-00100, GPO, NAIROBI

[Name and address of Consultant]

Dear Sir,

FEASIBILITY STUDY, PRELIMINARY ENGINEERING DESIGN AND ENVIRONMENTAL AND SOCIAL IMPACT STUDY OF MERU TOWN ROADS

TENDER No.: KURA/DEV/HQ/231/2020-2021

The Kenya Urban Roads Authority invites proposals to provide the following consulting services:

Feasibility Study, Preliminary Engineering Design and Environmental and Social Impact Study of Meru Town Roads.

More details on the Services are provided in the attached Request for Proposal.

The RFP includes the following documents:

- a) Section A – Letter of Invitation
- b) Section B – Information to Consultants
- c) Section C – Technical Proposal – Standard Forms
- d) Section D – Financial Proposal – Standard Forms
- e) Section E – Terms of Reference
- f) Section F – Standard Contract form
- g) List of Appendices

The following **MUST** be submitted together with the proposal: -

- a) Certified Copy of Certificate of Incorporation in Kenya;
- b) Certified Copy of Valid Tax Compliance Certificate (*Please note that the Tax Compliance Certificates will be verified with the Kenya Revenue Authority and Certificates found not to be in order will lead to the disqualification of the bidder at the preliminary evaluation stage*);
- c) Certified Copy of VAT Registration Certificate;
- d) Certified Copy of PIN Certificate;
- e) Curriculum Vitae (CV) of the Proposed Key Staff signed and dated by the proposed professional staff and the authorized representative submitting the proposal of not more than three pages;
- f) Certified Copies of Certificates and Testimonials of the Proposed Key Staff;
- g) Current Work Load;
- h) Litigation History; and
- i) Others as described in this RFP.

NOTE: Items a, b, c, d and f MUST be certified by Commissioner of Oaths or Notaries Public.

Please acknowledge, upon receipt:

- That you have understood the contents of this letter of invitation; and
- Whether or not you intend to submit a proposal either alone or in association.

The submission date for these proposals is **the date and time indicated in the Tender Notice or any subsequent Tender Addenda**, and the submission address is:

**Director General
Kenya Urban Roads Authority
Barabara Plaza, JKIA off Mazao Road
P.O. Box 41727 – 00100 GPO
NAIROBI**

Proposals must be deposited in the Tender Box located at **Barabara Plaza Block “D”, Ground Floor, South Wing, off Mazao Road, Nairobi**

Opening of the proposals will take place immediately thereafter at the KURA Boardroom in the presence of consultants or their representatives who choose to attend.

Yours sincerely,

**Deputy Director, Supply Chain Management
FOR: DIRECTOR GENERAL**

SECTION B: INFORMATION TO CONSULTANTS

- | | |
|---|--|
| 1. Introduction | <p>1.1 The Client named in Appendix “A” will select a firm among those invited to submit a proposal, in accordance with the method of selection detailed under this section.</p> <p>1.2 The consultants are invited to submit a Technical Proposal and a Financial Proposal, or a Technical Proposal only, as specified in Appendix “A” for consulting services required for the assignment named in the said Appendix. <i>A Technical Proposal only may be submitted in assignments where the Client intends to apply standard conditions of engagement and scales of fees for professional services as is the case with Building and Civil Engineering Consulting services. In such a case the highest ranked firm of the technical proposal shall be invited to negotiate a contract on the basis of scale fees.</i> The proposal will be the basis for Contract negotiations and ultimately for a signed Contract with the selected firm.</p> <p>1.3 The consultants must familiarize themselves with local conditions and take them into account in preparing their proposals. To obtain first hand information on the assignment and on the local conditions, consultants are encouraged to liaise with the Client regarding any information that they may require before submitting a proposal and to attend a pre-proposal conference where applicable. Consultants should contact the officials named in Appendix “A” to arrange for any visit or to obtain additional information on the pre-proposal conference. Consultants should ensure that these officials are advised of the visit in adequate time to allow them to make appropriate arrangements.</p> <p>1.4 The Client will provide the inputs specified in Appendix “A”, assist the firm in obtaining licenses and permits needed to carry out the services and make available relevant project data and reports where necessary</p> <p>1.5 Please note that (i) the costs of preparing the proposal and of negotiating the Contract, including any visit to the Client are not reimbursable as a direct cost of the assignment; and (ii) the Client is not bound to accept any of the proposals submitted.</p> |
| 2. Clarification and Amendment of RFP Document | <p>2.1 Consultants may request a clarification of any of the RFP documents only up to seven [7] days before the proposal submission date. Any request for clarification must be sent in writing by papermail, cable, telex, facsimile or electronic mail to the Client’s address indicated in Appendix “A”. The Client will respond by cable, telex, facsimile or electronic mail to such requests and will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all invited consultants who intend to submit proposals.</p> <p>2.2 At any time before the submission of proposals, the Client may for any reason, whether at his own initiative or in response to a clarification requested by an invited firm, amend the RFP. Any amendment shall be issued in writing through addenda. Addenda shall be sent by mail, cable, telex or facsimile to all invited consultants and will be binding on them. The Client may at his discretion extend the deadline for the submission of proposals.</p> |
| 3. Preparation of | <p>3.1 The Consultants proposal shall be written in English language.</p> |

Proposal

Consultant shall bear all costs associated with the preparation and submission of its Proposal, and the Client shall not be responsible or liable for those costs, regardless of the conduct or outcome of the selection process.

Technical Proposal

- 3.2 In preparing the Technical Proposal, consultants are expected to examine the documents constituting this RFP in detail. Material deficiencies in providing the information requested may result in rejection of a proposal.
- 3.3 While preparing the Technical Proposal, consultants must give particular attention to the following:
- a. If a firm considers that it does not have all the expertise for the assignment, it may obtain a full range of expertise by associating with individual consultant(s) and/or other firms or entities in a joint venture or sub consultancy as appropriate. Consultants shall not associate with the other consultants invited for this assignment. Any firms associating in contravention of this requirement shall automatically be disqualified.
 - b. For assignments on a staff-time basis, the estimated number of professional staff-months is given in Appendix “A”. The proposal shall however be based on the number of professional staff- months estimated by the firm.
 - c. It is desirable that the majority of the key professional staff proposed be permanent employees of the firm or have an extended and stable working relationship with it.
 - d. Proposed professional staff must as a minimum, have the experience indicated in Appendix “A”, preferably working under conditions similar to those prevailing in Kenya.
 - e. Alternative professional staff shall not be proposed and only one Curriculum Vitae (CV) may be submitted for each position.
- 3.4 The Technical Proposal shall provide the following information using the attached Standard Forms;
- (i) A brief description of the firm’s organization and an outline of recent experience on assignments of a similar nature. For each assignment the outline should indicate *inter alia*, the profiles of the staff proposed, duration of the assignment, contract amount and firm’s involvement.
 - (ii) Any comments or suggestions on the Terms of Reference, a list of services and facilities to be provided by the Client.
 - (iii) A description of the methodology and work plan for performing the assignment.
 - (iv) The list of the proposed staff team by specialty, the tasks that would be assigned to each staff team member and their timing.
 - (v) CVs must be recently signed by the proposed professional staff and

the authorized representative submitting the proposal of not more than three pages. Key information should include number of years working for the firm/entity and degree of responsibility held in various assignments during the last ten (10) years.

- (vi) Estimates of the total staff input (professional and support staff staff-time) needed to carry out the assignment supported by bar chart diagrams showing the time proposed for each professional staff team member.
- (vii) A detailed description of the proposed methodology, staffing and monitoring of training, if Appendix “A” specifies training as a major component of the assignment.
- (viii) Any additional information requested in Appendix “A”.

Financial Proposal

- 3.5 The Technical Proposal shall not include any financial information.
- 3.6 In preparing the Financial Proposal, consultants are expected to take into account the requirements and conditions outlined in the RFP documents. The Financial Proposal should follow Standard Forms (Section D). It lists all costs associated with the assignment including;
 - (a) remuneration for staff (in the field and at headquarters), and;
 - (b) reimbursable expenses such as subsistence (per diem, housing), transportation (international and local, for mobilization and demobilization), services and equipment (vehicles, office equipment, furniture, and supplies), office rent, insurance, printing of documents, surveys, and training, if it is a major component of the assignment. If appropriate these costs should be broken down by activity.
- 3.7 The Financial Proposal should clearly identify as a separate amount, the local taxes, duties, fees, levies and other charges imposed under the law on the consultants, the sub-consultants and their personnel, unless Appendix “A” specifies otherwise.
- 3.8 Consultants shall express the price of their services in Kenya Shillings.
- 3.9 Commissions and gratuities, if any, paid or to be paid by consultants and related to the assignment will be listed in the Financial Proposal submission Form.
- 3.10 The Proposal must remain valid for 120 days after the submission date. During this period, the consultant is expected to keep available, at his own cost, the professional staff proposed for the assignment. The Client will make his best effort to complete negotiations within this period. If the Client wishes to extend the validity period of the proposals, the consultants who do not agree have the right not to extend the validity of their proposals.

4. Submission, Receipt and Opening of Proposals

- 4.1 The original proposal (Technical Proposal and, if required, Financial Proposal; see para. 1.2) shall be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the firm itself. Any such corrections must be initialed by the persons or person authorised to sign the proposals.

- 4.2 For each proposal, the consultants shall prepare the number of copies indicated in Appendix “A”. Each Technical Proposal and Financial Proposal shall be marked “**ORIGINAL**” or “**COPY**” as appropriate. If there are any discrepancies between the original and the copies of the proposal, the original shall govern.
- 4.3 The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked “**TECHNICAL PROPOSAL**,” and the original and all copies of the Financial Proposal in a sealed envelope clearly marked “**FINANCIAL PROPOSAL**” and warning: “**DO NOT OPEN WITH THE TECHNICAL PROPOSAL**”. Both envelopes shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address and other information indicated in Appendix “A” and be clearly marked, “**DO NOT OPEN, EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE.**”
- 4.4 The completed Technical and Financial Proposals must be delivered at the submission address on or before the time and date stated in Appendix “A”. Any proposal received after the closing time for submission of proposals shall be returned to the respective consultant unopened.
- 4.5 After the deadline for submission of proposals, the Technical Proposal shall be opened immediately by the evaluation committee. The Financial Proposal shall remain sealed and deposited with a responsible officer of the client department until all submitted proposals are opened publicly.
- 5 Proposal Evaluation General**
- 5.1 From the time the bids are opened to the time the Contract is awarded, if any consultant wishes to contact the Client on any matter related to his proposal, he should do so in writing at the address indicated in Appendix “A”. Any effort by the firm to influence the Client in the proposal evaluation, proposal comparison or Contract award decisions may result in the rejection of the consultant’s proposal.
- 5.2 Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.
- Evaluation of Technical Proposals**
- 5.3 The evaluation committee appointed by the Client shall evaluate the proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria as follows:-
- | | Points |
|---|---------------|
| (i) Specific experience of the consultant related to the assignment | 10 |
| (ii) Comments on the site/TOR and site Visit | 10 |
| (iii) Adequacy of the proposed workplan and methodology in responding to the terms of reference | 20 |
| (iv) Participation by nationals | 5 |
| (v) Transfer of Knowledge (Activity workplan and Personnel schedule) | 5 |
| (vi) Qualifications and competence of the key staff for the assignment | <u>50</u> |

	Total Points	<u>100</u>
Public Opening and Evaluation of Financial Proposals		Each responsive proposal will be given a technical score (St). A proposal shall be rejected at this stage if it does not respond to important aspects of the Terms of Reference or if it fails to achieve the minimum technical score indicated in Appendix “A”.
	5.4	After Technical Proposal evaluation, the Client shall notify those consultants whose proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and Terms of Reference, indicating that their Financial Proposals will be returned after completing the selection process. The Client shall simultaneously notify the consultants who have secured the minimum qualifying mark, indicating the date and time set for opening the Financial Proposals and stating that the opening ceremony is open to those consultants who choose to attend. The opening date shall not be sooner than seven (7) days after the notification date. The notification may be sent by registered letter, cable, telex, facsimile or electronic mail.
	5.5	The Financial Proposals shall be opened publicly in the presence of the consultants’ representatives who choose to attend.
	5.6	The name of the consultant, the technical scores and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. The Client shall prepare minutes of the public opening.
	5.7	The evaluation committee will determine whether the financial proposals are complete (i.e. Whether the consultant has costed all the items of the corresponding Technical Proposal and correct any computational errors. The cost of any unpriced items shall be assumed to be included in other costs in the proposal. In all cases, the total price of the Financial Proposal as submitted shall prevail.
	5.8	While comparing proposal prices between local and foreign firms participating in a selection process in financial evaluation of Proposals, firms incorporated in Kenya where indigenous Kenyans own 51% or more of the share capital shall be allowed a 10% preferential bias in proposal prices. However, there shall be no such preference in the technical evaluation of the tenders. Proof of local incorporation and citizenship shall be required before the provisions of this sub-clause are applied. Details of such proof shall be attached by the Consultant in the financial proposal.
	5.9	The formulae for determining the Financial Score (Sf) shall, unless an alternative formulae is indicated in Appendix “A”, be as follows:-
		$S_f = 100 \times F_M / F$ where S_f is the financial score; F_m is the lowest priced financial proposal and F is the price of the proposal under consideration.
		Proposals will be ranked according to their combined technical (S_t) and financial (S_f) scores using the weights (T=the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; T + p = 1) indicated in the Appendix. The combined technical and financial score, S, is calculated as follows: - $S = S_t \times T \% + S_f \times P \%$. The firm achieving the highest combined technical and financial score will be invited for negotiations.

- | | |
|-----------------------------|--|
| 6. Negotiations | <p>6.1 Negotiations will be held at the same address as “address to send information to the Client” indicated in Appendix “A”. The aim is to reach agreement on all points and sign a contract.</p> <p>6.2 Negotiations will include a discussion of the Technical Proposal, the proposed methodology (work plan), staffing and any suggestions made by the firm to improve the Terms of Reference. The Client and firm will then work out final Terms of Reference, staffing and bar charts indicating activities, staff periods in the field and in the head office, staff-months, logistics and reporting. The agreed work plan and final Terms of Reference will then be incorporated in the “Description of Services” and form part of the Contract. Special attention will be paid to getting the most the firm can offer within the available budget and to clearly defining the inputs required from the Client to ensure satisfactory implementation of the assignment.</p> <p>6.3 Unless there are exceptional reasons, the financial negotiations will not involve the remuneration rates for staff (no breakdown of fees).</p> <p>6.4 Having selected the firm on the basis of, among other things, an evaluation of proposed key professional staff, the Client expects to negotiate a contract on the basis of the experts named in the proposal. Before contract negotiations, the Client will require assurances that the experts will be actually available. The Client will not consider substitutions during contract negotiations unless both parties agree that undue delay in the selection process makes such substitution unavoidable or that such changes are critical to meet the objectives of the assignment. If this is not the case and if it is established that key staff were offered in the proposal without confirming their availability, the firm may be disqualified.</p> <p>6.5 The negotiations will conclude with a review of the draft form of the Contract. To complete negotiations the Client and the selected firm will initial the agreed Contract. If negotiations fail, the Client will invite the firm whose proposal received the second highest score to negotiate a contract.</p> |
| 7. Award of Contract | <p>7.1 The Contract will be awarded following negotiations. After negotiations are completed, the Client will promptly notify other consultants on the shortlist that they were unsuccessful and return the Financial Proposals of those consultants who did not pass the technical evaluation.</p> <p>7.2 The selected firm is expected to commence the assignment on the date and at the location specified in Appendix “A”.</p> |
| 8. Confidentiality | <p>8.1 Information relating to evaluation of proposals and recommendations concerning awards shall not be disclosed to the consultants who submitted the proposals or to other persons not officially concerned with the process, until the winning firm has been notified that it has been awarded the Contract.</p> |

APPENDIX “A”

Reference Clause

- 1.1 & 2.1 The name of the Client is:
**Director General,
Kenya Urban Roads Authority**
- 1.2 The method of selection is: **Quality and Cost Based Selection**
- Technical and Financial Proposals are requested: **Yes**
- A Technical Proposal only is requested: **No**
- The name, objectives, and description of the assignment are:
- FEASIBILITY STUDY, PRELIMINARY ENGINEERING DESIGN AND ENVIRONMENTAL AND SOCIAL IMPACT STUDY OF MERU TOWN ROADS**
- To carry out feasibility, preliminary and detailed engineering design of the optimum alignment and identify the most economically justified geometric and pavement design solution.
- 1.3 A **mandatory** pre-tender conference will be held: **On the date and time indicated in the Tender Notice, or any subsequent Tender Addenda at the KURA Upper Eastern Regional Offices in Meru Town. Tenders open for Consultants registered in Kenya only.**
- The name(s), address(es) and telephone numbers of the Client’s official (s) are:
- | | |
|--|---|
| Eng. Abdulrashid S. Mohammed
Director, (PS&C)
Kenya Urban Roads Authority <i>or</i>
P.O. Box 41727-00100
<u>NAIROBI</u> | Richard Kyalo
Deputy Director (S&EP)
Kenya Urban Roads Authority
P.O. Box 41727-00100
<u>NAIROBI</u> |
|--|---|
- Tel: +254-020-8013844 Tel: +254-020-8013844**
Email: asmohamed@kura.go.ke OR rkyalo@kura.go.ke
- 1.4 The Client will provide the following inputs subject to availability, at a nominal fee to be indicated at the time of tendering:
- i). Standard specifications for Road and Bridge construction (1986)
 - ii). Road Design Manual Part I – Geometric Design for Rural Roads (1979)
 - iii). Road Design Manual Part III – Pavement Design and Materials (1987)
- 1.5 The client shall also give assistance to facilitate the timely granting of the Consultant and his personnel of:
- i). Unobstructed access to all sites and locations involved in carrying out the services
 - ii). Necessary Visas and customs clearance for entry and exits
- 3.3 i) The consultant will be responsible for determining the number of professional staff months to be assigned for any activity.
- ii) The duration required to complete the assignment is: **twelve (12) months.**
- iii) The minimum required experience in years of proposed professional staff is detailed in the Terms of References under Personnel requirements (7.1).

3.4

The consultants shall not change the proposed key personels named in the RFPs when awarded the contract. The proposed personels should be available for a minimum of six months from the date of award of consultancy contract.

3.5

- (i) Training is a specific component of this assignment: **Yes**
- (a) The Consultant shall provide training of a three (3) week course at ESAMI Headquarters for two (2) No. Project supervision staff (Public Service JG 'S') nominated by the Client.
- (b) Offer two internship (with government approved allowances) during the contract period. The interns shall be nominated by the client and domiciled at Clients offices.
- (c) Provision of training to PIT in the use of HDM4 software and provide one new laptop ((HP Spectre 13*360 Convertible, 1.8GHZ, Intel Core, 8th Gen, 16GB RAM, 512 SSD, WIFI, WECAM, 13.3" 4K UHD 3840 82160, Touch Screen/Mouse, Backlit Keyboard, Bluetooth, Windows 10, 1 Year warranty) to Project Team by the first month of commencement of consultancy.
- (d) The Consultant shall include the cost of training of Clients two staff in his financial proposal, including the associated allowances and facilitation.

3.7

Taxes:

The Consultant shall be liable to pay all taxes, duties and levies including VAT in accordance with the laws of Kenya and the Client shall not reimburse any amount paid in this context.

4.2

Consultants **MUST** submit 1 (One) original and 2 (Two) additional copies of each proposal.

Proposals should be submitted not later than the following date and time:

4.3

The date and time indicated in the Tender Notice or any subsequent Addenda

The proposal submission address is:

4.4

**Director General
Kenya Urban Roads Authority
BARABARA PLAZA, Mazao Road
P. O. Box 41727 – 00100, GPO, NAIROBI
Tel: 254 – 020 – 8013844**

The outer envelope shall also be clearly marked:

FEASIBILITY STUDY, PRELIMINARY ENGINEERING DESIGN AND ENVIRONMENTAL AND SOCIAL IMPACT STUDY OF MERU TOWN ROADS

TENDER No.: KURA/DEV/HQ/231/2020-2021

5.3

The minimum technical score required to pass is 75%

5.9

Alternative formulae for determining the financial scores is the following: **None**

Weightings: T = 0.8 F = 0.2 (T- Technical F- Financial)

7.2

Commencement of Assignment: **Fourteen (14) days after order to commence**

APPENDIX “B”

EVALUATION GRID

METHODOLOGY, EXPERIENCE, COMMENTS AND ORGANISATION

Firm’s experience and organisation	10
Comments on Terms of Reference	10
Methodology and Work plan	20
Transfer of Knowledge	5
Participation by Nationals	5
Total score	50

KEY PERSONNEL

1. Project Director / Team Leader	10
2. Transport Economist	8
3. Urban Highway Design Engineer	8
4. Environmental Specialist	4
5. Socio-Economic Specialist	4
6. Materials / Geotechnical Engineer	4
7. Engineering Surveyor	4
8. Hydrologist	4
9. Structural / Drainage Engineer	4

Total Score for Key Personnel	50
--------------------------------------	-----------

The weightings for scoring the Key Personnel shall be based on Qualification and Skills (25%), General professional experience (25%) and Specific professional experience (50%)

SECTION C: TECHNICAL PROPOSAL – STANDARD FORMS

These forms shall include;

- i. Technical Proposal Submission Form.
- ii. Firm's Current Workload.
- iii. Firm's References.
- iv. Comments and Suggestions of Consultants on the Terms of Reference and on Data, Services and Facilities to be provided by the Client.
- v. Description of the Methodology and Work Plan for Performing the Assignment.
- vi. Team Composition and Task Assignments.
- vii. Format of Curriculum Vitae (CV) for Proposed Professional Staff.
- viii. Time Schedule for Professional Personnel.
- ix. Activity (Work) Schedule.
- x. Confidential Business Questionnaire

(i). TECHNICAL PROPOSAL SUBMISSION FORM

[_____ Date]

To: _____ [Name and address of Client]

Ladies/Gentlemen:

We, the undersigned, offer to provide the consulting services for _____

[Title of consulting services] in accordance with your Request for Proposal dated _____ [Date] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, [and a Financial Proposal sealed under a separate envelope-where applicable].

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

_____ [Authorized Signature]:

_____ [Name and Title of Signatory]

_____ [Name of Firm]

_____ [Address:]

(ii). FIRM'S CURRENT WORKLOAD

Using the format below, provide information on each assignment for which your firm either individually as a corporate entity or in association, is legally contracted to carry out.

Assignment Name:		Country
Location within Country:		Professional Staff provided by Your Firm/Entity(profiles):
Name of Client:		No. of Staff:
Address:		No of Staff-Months; Duration of Assignment:
Start Date (Month/Year):	Expected date of Completion Date (Month/Year):	Approx. Value of Services (Kshs)
Name of Associated Consultants. If any:		
No of Months of Professional Staff provided by Associated Consultants:		
Name of Senior Staff (Project Director/Coordinator, Team Leader) Involved and Functions Performed:		
Narrative Description of project:		
Description of Actual Services Provided by Your Staff:		

Firm's Name: _____

Name and title of signatory; _____

(iii). FIRM'S REFERENCES

Relevant Services Carried Out in the Last Five Years That Best Illustrate Qualifications

Using the format below, provide information on each assignment for which your firm either individually as a corporate entity or in association, was legally contracted (include attachments of letters from Client awarding the contract and confirming successful completion of projects).

Assignment Name:		Country
Location within Country:		Professional Staff provided by Your Firm/Entity(profiles):
Name of Client:		No. of Staff:
Address:		No. of Staff-Months; Duration of Assignment:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services (Kshs)
Name of Associated Consultants. If any:		No. of Months of Professional Staff provided by Associated Consultants:
Name of Senior Staff (Project Director/Coordinator, Team Leader) Involved and Functions Performed:		
Narrative Description of project:		
Description of Actual Services Provided by Your Staff:		
*Letter of Award: Ref. No.....Date:		
*Letter of Completion: Ref. No.....Date:		

*** Attach Correspondences**

Firm's Name: _____

Name and title of signatory: _____

(iv) COMMENTS AND SUGGESTIONS OF CONSULTANTS ON THE TERMS OF REFERENCE AND ON DATA, SERVICES AND FACILITIES TO BE PROVIDED BY THE CLIENT

On the Terms of Reference:

- 1.
- 2.
- 3.
- 4.
- 5.

On the data, services and facilities to be provided by the Client:

- 1.
- 2.
- 3.
- 4.
- 5.

(v) DESCRIPTION OF THE METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

(vi) TEAM COMPOSITION AND TASK ASSIGNMENTS

1. Technical/Managerial Staff

Name	Position	Task

2. Support Staff

Name	Position	Task

(vii). FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

Proposed Position: _____

Name of Firm: _____

Name of Staff: _____

Profession: _____

Date of Birth: _____

Years with Firm: _____ Nationality: _____

Membership in Professional Societies: _____

Detailed Tasks Assigned: _____

Key Qualifications:

[Give an outline of staff member's experience and training most pertinent to tasks on assignment. Describe degree of responsibility held by staff member on relevant previous assignments and give dates and locations].

Education:

[Summarize college/university and other specialized education of staff member, giving names of schools, dates attended and degree[s] obtained.]

Employment Record:

[Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of assignments.]

Certification:

I, the undersigned, certify that these data correctly describe me, my qualifications, and my experience.

[Signature of staff member] Date: _____

[Signature of authorized representative of the firm] Date: _____

Full name of staff member: _____

Full name of authorized representative: _____

(viii). TIME SCHEDULE FOR PROFESSIONAL PERSONNEL

Name	Position	Reports Due/ Activities	1	2	3	4	5	6	7	...	12	Number of months

Months (in the Form of a Bar Chart)

Reports Due: _____

Activities Duration: _____

Signature: _____
(Authorized representative)

Full Name: _____

Title: _____

Address: _____

(ix). ACTIVITY (WORK) SCHEDULE

(a). Field Investigation and Study Items

[M0, M1, M3 are months from the start of assignment)

	M1	M2	M3	M4	Mn	M(n+1)	M(n+2)	M(n+3)	M(n+4)
Activity (Work)									

(b). Completion and Submission of Reports

Reports	Date
1. Inception Report	
2 Preliminary Reports (a) Feasibility Study Report (b) Preliminary Design Report (c) EIA / SIA Report	
3. Draft Final Report	
4. Final Design Report	
5. Progress Reports	

(x). CONFIDENTIAL BUSINESS QUESTIONNAIRE

You are required to give the particulars indicated in Part 1 and either Part 2 (a). 2(b) or 2(c) whichever applies to your type of business.

You are advised that it is a serious offence to give false information on this Form.

Part 1 - General:

Business name.....

Location of business premises

.....

Plot No..... Street/Road.....

Postal Address..... Tel No.....

Nature of business.....

.....

Current Trade Licence No.Expiring Date.....

Maximum value of business which you can handle at any one time:

Kshs.....

Name of your Bankers.....

Branch.....

Part 2(a) - Sole Proprietor:

Your name in full.....

Age.....

NationalityCountry of origin.....

*Citizenship details.....

Part 2(b) - Partnership:

Give details of partners as follows:

Name	Nationality	Citizenship Details*	Shares
1.....			
2.....			
3.....			
4.....			
5.....			

Part 2(c) - Registered Company:

Private or public.....

State the nominal and issued capital of the company-

Nominal Kshs.....

Issued Kshs.....

Give details of all directors as follows:

Name	Nationality	Citizenship Details*	Shares**
1.....			
2.....			
3.....			
4.....			
5.....			

Part 2(d) - Interest in the Firm:

Is there any person / persons in the Kenya Urban Roads Authority who has interest in this firm?
Yes /No***

.....
Date Signature of Bidder

* Attach certified copy of Proof of Citizenship (Compulsory)

** Attach certified copy of Recent (Twelve Months) Form CR12

*** **Delete as necessary**

SECTION D: FINANCIAL PROPOSAL – STANDARD FORMS

These forms shall include;

- i) Financial Proposal submission form.
- ii) Summary of costs.
- iii) Breakdown of price per activity.
- iv) Breakdown of remuneration per activity.
- v) Reimbursable per activity.
- vi) Miscellaneous expenses.

FINANCIAL PROPOSAL SUBMISSION FORMS

_____ [Date]

To: _____

[Name and address of Client]

Ladies/Gentlemen:

We, the undersigned, offer to provide the consulting services for _____.

[Title of consulting services] in accordance with your Request for Proposal dated
(_____) *[Date]* and our Proposal. Our attached Financial Proposal is for the sum
of (_____) *[Amount in
words and figures]* inclusive of the taxes.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

_____ *[Authorized Signature]*
:
_____ *[Name and Title of Signatory]:*

_____ *[Name of Firm]*

_____ *[Address]*

(i) SUMMARY OF COSTS

Costs	Currency(ies)	Amount(s)
Subtotal		
Add 10% Contingency		
Taxes		
Total Amount of Financial Proposal		

(ii) BREAKDOWN OF PRICE PER ACTIVITY

Activity NO.: _____	Description: _____
Price Component	Amount(s)
Remuneration	
Reimbursable Expenses	
Miscellaneous Expenses	
Subtotal	

(iii) BREAKDOWN OF REMUNERATION PER ACTIVITY

Activity No-----	Activity Name-----		
	Names	Input(Staff Months, days ,remuneration or hours rate as appropriate)	Amount
Key Staff			
1. Project Director			
2. Highways Design Engineer			
3. Materials Engineer			
4. Structural/Drainage Engineer			
5. Surveyor			
6. Environment			
7. Sociologist			
8. Transport Economist			
9. Hydrologist			
Regular Staff			
1.			

2.			
Consultants			
Grand Total			

(iv). REIMBURSABLES PER ACTIVITY

Activity No.: _____ **Activity Name:** _____

No.	Description	Unit	Quantity	Unit Price	Total Amount
1.	Air travel	Trip			
2	Road travel				
3.	Subsistence Allowance				
4.	Training for client staff (Per diem + Training costs)				
5.	Equipment				
	I. Provision of computer to client office as specified printer				
	II. Printer				
6.	Allow for consultants overhead and profit on (Subsistence Allowance)				
	Grand Total				

(v) MISCELLANEOUS EXPENSES

Activity No. _____ **Activity Name:** _____

No.	Description	Unit	Quantity	Unit Price	Total Amount
1.	Communication costs____ (telephone, telegram, telex)				
2.	Drafting, reproduction of reports Equipment: computers etc.				
3.	Software				
4.	Grand Total				_____

SECTION E: TERMS OF REFERENCE

FEASIBILITY STUDY, PRELIMINARY ENGINEERING DESIGN AND ENVIRONMENTAL AND SOCIAL IMPACT STUDY OF MERU TOWN ROADS

1.0 STUDY BACKGROUND

1.1 General

The Government of the Republic of Kenya (GoK) has earmarked funds through the Development Vote for use in engaging the services of a Consultancy Firm to undertake Feasibility Study, Preliminary Engineering Design and Environmental and Social Impact Study Meru Town Roads.

The Government of Kenya, through its implementing Agency, the Kenya Urban Roads Authority (KURA) shall require the Consultant to render all technical support services which may be deemed relevant to the above study. The detailed description of the consulting services to be performed is described in these Terms of Reference (TOR).

1.2 Selection Criteria

The Consultant selected to undertake the activity shall have had extensive experience in the Feasibility Studies, Engineering Design, Tender Documentation and Environmental and Social Impact Assessment of road construction projects. This is a lumpsum Contract.

1.3 Project Description

1.3.1 Project Location

The project roads are located in Meru Town, Meru County with a total length of approximately **134.7 KMs** as detailed below:

A. Meru Town Roads

S/NO	ROADSNAME	LENGTH(Km)
1.	Western Bypass-Kaithe-Kinoru	1.6
2.	3steers - Mafuko	1.0
3.	3 steers-Forest edge-Kenya RE	4.0
4.	B6@Meru teachers-Bypass	1.0
5.	Mwithumwiru Primary-Karumanthi	0.8
6.	Whitestar-Karumanthi-Bypass	1.8
7.	B6@Checkmate-Karumanthi	0.7
8.	Bypass-Chugu-Kauthene-Kaithe	15.0
9.	Prisons-Winners chapel-Bypass at Mjini	1.0
10.	B6-SOS village-KEMU-Forest edge	2.0
11.	Prisons-cathedral estate-CCM-brother hood road	1.1
12.	National library-Meru museum-Police Line	1.3
13.	Gitwiki-Kinoru Milimani Hospital off Lot 16	1.0
14.	Manyatta-YMCA-Milimani Road	1.0
15.	YMCA-Mwenda-Antu Road at coca cola	0.2
16.	B6-Milimani estate-Mwendantu road	1.0
17.	Chief camp Runogone-EPCEA living waters-MCK Runogone	1.6
18.	Eastern bypass-Maenda-Gatimene Kienderu road	3.0
19.	Kongoacheke road	1.4
20.	CMC-Kooje estate road	1.0
21.	Hospital-central bank	0.4

22.	Eastern Bypass-Meru dairies	0.6
23.	Eastern bypass-B6@Kaaga Girls	1.6
24.	Eastern bypass-Mpakone-Runogone	3.0
25.	Eastern bypass-Mpakone-Kaithe Bypass	1.7
26.	KEMU-Kambakia road	4.5
27.	Western Bypass-Afya feeds	1.0
28.	Kwa Njeru-Three steers Road	0.3
29.	Kaaga school for mentally-Forest Edge	1.0
30.	Eastern bypass at Mwiringi-Kooje	0.7
31.	Eastern Bypass@Kaaaga-Kaaga Chiefs Camp	1.0
32.	Chief camp Runogone-Gaciuma-B6 @Ruiri Junction	2.0
33.	MCK Runogone-Kaithe Bypass	1.0
34.	Eastern Bypass-Gikumene opp. western Bypass junction	2.0
35.	Gitimbine-Mate Road-Western Bypass	2.0
36.	Prison-Marua-Bypass	1.0
37.	Eastern bypass @ Mwiteria polytechnic-Meru dairies	0.6
38.	Juakali-River land behind Meru dairies	0.7
39.	Eastern bypass-Gakoromone estate opp. sewerage pits	1.0
40.	Gikumene chief camp-NCPB Depot-CAM flames loop	1.5
41.	Gakoromone -Bypass	1.5
42.	Water treatment road	0.5
43.	Kplc-Nkoune-Bypass	1.4
44.	Gakoromone-Mortuary-hospital road	1.2
45.	Kenya Re estate roads	0.3
46.	Angaine plaza-National Oil	0.3
47.	Kwa Chege-Kithoka primary	1.8
48.	Kaiginyo-Meru road 2(K16)	5.0
49.	Kithaku-Kenya RE	7.7
50.	Giantune-Meru road 1(K6)	1.7
51.	Giantune-Meru road 2(K10)	0.7
52.	Giantune-Meru Road 7(K12)	1.4
53.	Giantune-Kiirua road(K2)	2.7
54.	Mjini-Meru upper Igoki road 14(K11)	0.6
55.	Mjini-Meru upper Igoki road 15(K17)	1.1
56.	Mjini-Meru upper Igoki road 1(K18)	0.2
57.	Mjini-Meru upper Igoki road 2(K7)	1.7
58.	Mjini-Meru road(K3)	0.8
59.	Mjini-upper Igoki-Lower Igoki(K4)	2.8
60.	Mjini-Makutano	2.1
61.	Gikumene-Njuki Njiru road 1(K13)	1.2
62.	Kathurine-Thimangiri road 2(K14)	0.6
63.	Kathurine-Thimangiri(K5)	5.4
64.	Kaiginyo-Meru road 1(K15)	2.4
65.	Kithoka AP camp -Themba location chief's camp	1.5
66.	Kithoka AP camp-Meru Ask Show ground	5.3
67.	Meru-Nanyuki road @Kirachene-Kirachene_Ruiri Road	2.7
68.	Kenya Re_Gitimene_Kiirua	11
Grand Total		134.7km

2.0 STUDY OBJECTIVES

The study will provide the decision makers in the Government of Kenya through Kenya Urban Roads Authority, with sufficient information to later undertake Detailed Engineering Designs and construct the road.

2.0 SCOPE OF WORK

3.1 General

The Consultant shall perform all work necessary as called for in these Terms of Reference including all technical studies, field investigations and related services. In carrying their work, the Consultant shall co-operate fully with the concerned agencies of the Government of Kenya, in particular the Strategy & Economic planning Department, Kenya Urban Roads Authority, Ministry of Transport & Infrastructure, Provincial Administration, Ministry in charge of Lands, County Governments amongst others. The Consultant shall provide the necessary support services related to and necessary for the completion of the assignment. The work shall cover but not be limited to the aspects outlined in these Terms of Reference.

3.2 Description

3.2.1 The study consists of: -

i. Feasibility Study

Collection of social, economic, environmental, operating, and physical data that is necessary to support conclusions about the technical feasibility and socio-economic viability of the road and any related feeder roads required to support the project road and preparation of Feasibility and Economic Study report.

ii. Preliminary Design

- (a) Review of the existing data on the proposed road project and social and economic activities in the project study area;
- (b) Collection of social, environmental, and physical data that is necessary to assist in the design of the project road;
- (c) Preliminary corridor definition including plot boundary information, details of encroachments and illegal allocations.
- (d) Preliminary engineering survey and design work for the optimum alignment and design standards including preliminary costs estimates and implementation schedule;
- (e) Carrying out an environmental impact and social impact assessment of the project area in relation to the proposed project including preparation of an Environmental Impact Assessment Report and preparation of a Resettlement Action Plan for project affected persons.

4.0 DETAILED SCOPE OF WORK.

4.1 General

- 4.1.1 The Consultant shall perform all economic, social, engineering, financial and environmental analyses and related work as described herein to attain the objective of the study.
- 4.1.2 The overall responsibility for support on administrative and coordination of the study rests with the Kenya Urban Roads Authority. The approval of the various study report stages will be the direct responsibility of the Strategy & Economic Planning Department of KURA.
- 4.1.3 In the conduct of his work, the Consultant shall cooperate fully with the Kenya Urban Roads Authority, Infrastructure Department (Ministry of Transport, Infrastructure, Housing, Urban Development & Public Works), the Ministry in charge of Lands and Settlement, the Provincial Administrations, County Governments, Local Authorities and all other relevant Government Departments and Agencies. The Government will provide the Consultant with the data and services outlined herein if available. The Consultant shall be responsible, however for the analysis and interpretation of all data received, and the conclusions and recommendations in his report.
- 4.1.4 The consultant shall prepare an overview of projected land acquisition requirements if necessary, this should include details of how the corridor is defined accurately, together with the areas encroached and areas of illegal land allocations.
- 4.1.5 As the study progresses, the Consultant shall maintain close liaison with the Project Technical Team and shall submit for approval from time to time, according to the work programme, report studies from inception to completion.

At the very end, the feasibility is focused on the Economic Analysis, in particular the economic indices of:

- a) Net Present Value (NPV),
 - b) Economic Internal Rate of Return (EIRR),
 - c) First Year Rate of Return (FYRR), and
 - d) Benefit Cost Ratio (BCR).
- (Preferably by HDM4 software)*

The Feasibility Study in its entirety includes review of all components which are contributing, affecting and being affected by the construction of these roads. They include (but are not limited to):

- a) Poverty and Social Assessment of project influence area, including:**
 - Public Consultation;
 - Gender Assessment;
 - Social Action Plan;
 - Indicators for Monitoring.

- b) Environmental Scoping, including:**

- Description of the Environment;
 - Screening of Potential Environmental Impacts and Mitigation Measures;
 - Environmental Management and Monitoring Plan;
 - Public Consultations and Information Disclosure;
 - Findings and Recommendations;
- c) Environmental Assessment Review Procedure, including:**
- Assessment of Legal Framework and Institutional Capacity;
 - Existing Environmental Guidelines and Policies;
 - Anticipated Environmental Impacts;
 - Environmental Assessment for Subprojects and/or Components;
 - Consultation, Information Disclosure, and Grievance Redress Mechanism;
 - Institutional Arrangement;
 - Monitoring and Reporting.
- d) Engineering: Technical Investigation & Preliminary Design, including:**
- Introduction & Description of Project Roads;
 - Technical Field Investigations;
 - Technical Design Standards and Guidelines;
 - Bio-Engineering Measures;
 - Climate Change Adaptation;
 - Proposed Road Upgrading Alternatives including “Do Nothing”;
 - Cost Estimate for various alternatives;
 - Detailed Technical Engineering Appendices.
- e) Reviews of Existing Transportation and Economic Studies and masterplans for the Town**
- f) Economic Evaluation, including:**
- Analytical Scenarios / Alternatives, including “Do Nothing”;
 - Road Characteristics & Cost Estimates of Alternative Scenarios
 - Unit Costs and Operating Data, by Vehicle Type
 - Traffic
 - Normal Traffic
 - Generated Traffic
 - Induced Traffic
 - Traffic Growth Rates
 - Road-Based Quantifiable Benefits
 - Savings on Vehicle Operating Costs (VOC)
 - Savings on Value of Time (VOC)
 - Other Quantifiable Benefits
 - Standard Economic Analysis Multiplier & Retainer Local Share of Investment/Maintenance Costs
 - Proxy for Social Benefits and Affected Population
 - Residual Share of Bridges and Special Culverts
 - Standard Economic Analysis, 12% Discount Rate
 - Alternative Economic Analysis - at 5% Discount Rate
 - Sensitivity Analysis
 - Switching Values
 - Distribution of Benefits

- Risk Analysis

4.2 STAGE 1: FEASIBILITY STUDY

A. ECONOMIC FEASIBILITY

i) Traffic Analysis

4.2.1 The Consultant shall determine the type and volume of existing traffic for the project roads by analysing all existing statistical data, and by conducting and analysing traffic counts and origin – destination studies. The Consultant shall undertake full road network analyses, in order to identify and quantify any potential for traffic diversion or reassignment that may result from improvements to the adjoining network connections. The Consultant shall undertake other field traffic investigations, as required.

4.2.2 Traffic studies will include and not be limited to:

- a) Traffic composition, occupancy, and volume counts;
- b) Origin-Destination studies; and
- c) Forecasts composed of normal, generated and diverted flows, if any, by appropriate vehicle types considering three scenarios (normal, optimistic and pessimistic).
- d) Axle load surveys;
- e) Accident studies.

Traffic surveys shall be carried out for seven (7) consecutive days with at least two (2) night counts. Where considered appropriate, the Consultant shall divide the road into sections and conduct the traffic analyses and studies in relation to these separate sections.

4.2.3 The consultant shall identify local links and potential in the study area. The Consultant shall describe, and quantify existing and potential traffic generating factors in the immediate areas served by the project and areas likely to be influenced by future economic development. Such factors are, among others:

- a) Population growth in rural and urban population distribution;
- b) Regional and national economic growth;
- c) Growth of vehicle ownership;
- d) Development of agriculture, irrigation, industry, commerce and tourism within the influence area;
- e) Development of social services, medical facilities, and schools; and
- f) Other factors identified by the Consultant.

4.2.4 The Consultant shall determine appropriate growth rates per category of vehicles (i.e. light, medium and heavy vehicles) using appropriate methods acceptable to the Client. The traffic growth should take into account the current legal and institutional constraints to promote regional integration and other physical barriers, which would have been identified as part of the study.

4.2.5 Based on the above analyses, the consultant shall provide for each identified option:

- a) Detailed annual traffic forecasts for a period of 10 years after the completion of the road; and
- b) More general projections of future traffic for the following 5 and 10 years.

Although greater emphasis is given to accurate forecasting in the earlier part of the project's life, all traffic forecasts shall be given at three growth rates, namely, low, medium and high for light, medium and heavy vehicles. The Consultant shall undertake scenario based forecasting and shall investigate regional integration impact between the two countries.

4.2.6 In developing the final traffic forecasts for the different options, the Consultant shall give particular attention to the future mix of vehicles in the traffic population. Due attention should therefore be given to vehicle sizes and types that will arise when improvements are made in the condition of the road.

4.3 STAGE 2: PRELIMINARY DESIGN

General

4.3.1 The preliminary design shall be carried out as detailed hereunder, including all required field surveys and investigations. The alignment of the road section shall as much as possible follow the existing road alignment. The Consultant shall conduct all topographic surveys, hydrological/hydraulic studies, sub-surface soil explorations, material surveys and other field and laboratory investigations that are required for the preliminary engineering for the different options. This shall include:

- a) Establishment of dense network of survey controls and detailed topographical surveys, including cross-sections, plans and profiles of proposed alignment. This will include overlays of plot boundaries to show areas of encroachments and illegal allocations along the corridor;
- (b) Climatic surveys;
- (c) Material testing, soils and geotechnical investigations to identify and test appropriate materials for the construction and maintenance of the road;
- (d) Alignment, evaluation of existing pavements of the road by undertaking Benkelman Beam surveys or Falling Weight Deflectometer and roughness using Bump Integrator with recommendations for improvement to higher standards and widening;
- (e) Hydrology and hydraulic surveys;
- (f) Collection of other physical and engineering data which are necessary to justify the technical feasibility of the proposed road;
- (g) Preliminary boring and sub-surface investigations at the sites of existing and new bridges; and
- (h) Plans for land acquisition where necessary.

Climate, Geology, Land Use and Topography

- 4.3.2 The Consultant shall describe the climatic conditions of the road study area, providing details of: (a) rainfall (monthly distribution and intensity, including rainy days per month); (b) temperature (minimum, median, and monthly ranges throughout the year); and (c) other climatic features of importance (e.g. wind, erosion, effects of extreme temperatures).
- 4.3.3 The Consultant shall compile a catalogue of the relevant geological features of the study area including a description of the soils and rocks encountered along the existing and new alignments and their effect and influence on such factors as route location and design.
- 4.3.4 The Consultant shall provide a description of the type and density of vegetation as well as existing land use within the study area.
- 4.3.5 The Consultant shall provide a topographical description of the area traversed by the road covering not less than 100m wide from the centreline, including the effects of relief on the vertical alignment.

Hydrology, Drainage and Geotechnical Investigation

- 4.3.6 The Consultant shall conduct and provide a complete description of the features of the road study area including:
- a) Information about soils, drainage along the existing road, and the proposed alignment of the road and intersection locations, such as sub-soil absorption, flooding of flat area etc.;

- b) All necessary hydrological and other data for storm water and sub-surface drainage systems design;
 - c) Characteristic of required water crossings and hydrological structures; and
 - d) All necessary sub-surface investigations required for the design of foundations for bridge piers and abutments.
- 4.3.7 The Consultant shall be fully responsible for obtaining all the data and information necessary to carry out hydrological, hydraulic and drainage investigations and subsequent designs.
- 4.3.8 Sufficient information shall be collected by the Consultant for the road to justify, and provide the basis for the preliminary engineering design of all crossings, drainage systems and all structures, including initial costing for the different options.

Traffic Analysis

- 4.3.9 The Consultant shall determine the type and volume of the existing traffic for the road by analysing all existing statistical data, and by conducting and analysis such traffic counts and origin-destination studies as are required to determine the nature of the traffic and the present volume of freight and passenger movements on the road. Other field investigations shall be undertaken by the Consultant as required.
- 4.3.10 Traffic studies will include:
- i. existing traffic composition, occupancy and volume counts;
 - ii. origin – destination studies; and
 - iii. forecasts of annual average daily traffic composed of normal, generated and diverted flows, by appropriate vehicle types.
- Traffic survey shall generally be of one week duration comprising day counts with at least one night count. Where considered appropriate the Consultant shall divide the road into sections, and conduct the relevant traffic analyses and studies accordingly. Detailed proposals for the traffic surveys shall be submitted beforehand for approval by the Director (Policy, Strategy & Compliance).
- 4.3.11 The Consultant shall identify, describe and quantify existing and potential traffic generating factors in the immediate areas served by the road, or in areas likely to be influenced by its future improvements, based on the economic development of the region, and future needs for road transport. Such needs will result inter alia from:
- a. population growth and changes in rural urban population distribution;
 - b. national and regional economic growth;
 - c. development of agriculture, industry, commerce and tourism within the project area;
 - d. development of social services facilities and schools;
 - e. other factors identified by the Consultant.
- 4.3.12 Based on the analysis, the Consultant shall make:
- a. detailed annual traffic forecasts for a period of ten years after the completion of the road; and
 - b. more general projections of future traffic for the following 10 years.
- Although greater emphasis is given to accurate forecasting in the earlier part of the project's life, all traffic forecasts shall be given at three growth rates, namely low, medium and high. The Consultant shall select one of the three levels of forecasts for use in the final evaluation of the project, indicating the reasons for the selection, and shall also use the other two levels in the sensitivity analysis.
- 4.3.13 In developing the final traffic forecasts, the Consultant shall give particular attention to the future mix of vehicles in the traffic population. Due attention should therefore be given to

changes in vehicle sizes and types that will arise when improvements are made in the conditions of the road.

Soils and Materials Investigations

- 4.3.14 The Consultant shall undertake all preliminary soil investigations and tests including trenching, boring and trial pits required to carry out economic feasibility and preliminary design, including identification of type and sources of construction materials available and the necessity for imported materials.

Investigation of Alignment

- 4.3.15 For each option the Consultant shall thoroughly examine the existing alignment with due consideration to the proposed design standard and suggest any alignment changes, if any to meet the objectives.
- 4.3.16 Evaluation of the existing and new alignments for the different options shall be carried out taking into account the following, among other factors:
- a) Existing road corridor width;
 - b) Existing crossings and their residual value, if any;
 - c) Existing infrastructures;
 - d) Land use including existing villages;
 - e) Locations of sources of suitable materials;
 - f) Hydrological and drainage characteristics; and
 - g) Environmental effects.

Design Standards

- 4.3.17 The Consultant shall, to the extent possible, follow the recommended design standards contained in the Road Design Manual, Part 1 1979 (Geometric Design of Rural Roads) and Road Design manual, Part III, 1987 (Materials and Pavement Design for New Roads) both published by the then, Ministry of Transport and Communications, Republic of Kenya.

The Consultant shall be responsible for the design details within the given framework and provide adequate explanation for the standards adopted.

The methodologies used in the design of pavement, earthworks, drainage and structures shall conform to the latest techniques whilst ensuring the use of available materials and economic solutions.

- 4.3.18 Metric system shall be used throughout. The standards for design of different types of roads and bridges as adopted by the Client shall be adhered to where possible and adequate explanation given where different standards are recommended and subsequently adopted.
- 4.3.19 The Consultant shall investigate alternative alignments, pavement and structural proposals with a view to obtaining the optimum solution commensurate with the Road Design

manuals, topography, climate, aesthetics and costs. Further the Consultant shall suggest to the Director (Policy, Strategy & Compliance) ways and means of resolving any unusual problem that might arise and not covered by above mentioned manuals in the light of conditions revealed during the preliminary design work.

- 4.3.20 Based on Traffic Studies and projections, and geotechnical tests, the Consultant shall develop at least two and not more than three preliminary design standards for the road project, and shall ascertain the merits and drawbacks of each to determine the final standard to be adopted for the road, whose design life should be taken as 20 years. It will be necessary for the Consultant to provide comparative data for construction and maintenance costs for the different design standards considered, in order to support the final designs adopted for the project road.
- 4.3.21 The maximum axle load restrictions applicable in Kenya shall be observed by appropriate weighing method. Pavement design will be in accordance with the standards established by the Roads Department.
- 4.3.22 The Consultant shall prepare during this design stage preliminary proposals for the road alignment, pavements and structural work including all waterway dimensions for the approval of the Director (Policy, Strategy & Compliance). The Draft Design work shall include but not be limited to: -
- i. Preparation of maps showing the alignment alternatives. The maps shall be prepared in scale 1:5000/1:500 and critical cross-section drawings to scale 1:200. Accuracies shall comply with the road design manual.
 - ii. An analysis of land usage proposals or other likely developments that may take place along the road alignment, which may affect the layout of the road. The usage shall be considered by the Consultant in preparing his preliminary report.

Survey Standards

The Consultant shall, to the extent possible, follow the recommended survey standards contained in the survey Act Cap 299, Land Acquisition Act Cap 295 and any other relevant standard acceptable internationally while carrying out the following activities;

- i. Preparation of maps showing the alignment alternatives, where necessary and should strictly utilize the given corridor without deviations. The maps shall be prepared in scale 1:2500/1:250 and critical cross-section drawings to scale 1:100. Accuracies shall comply with the road design manual.
- ii. The accuracies for establishing Survey Controls shall be within the standards defined in the Survey Act. Detailed picking of features will be picked to standards acceptable internationally or as maybe defined by the Director, Policy, Strategy and Compliance. The consultant shall endeavour to employ the latest technologies (e.g. Airborne LIDAR, Photogrammetry or RTK GPS survey) in survey data capture to achieve these standards.
- iii. The accuracies for preparation of the acquisition plans must be within the allowable standard of fixed boundary surveys (Survey Act) and general boundary surveys where applicable

- iv. The Mapping MUST also show the overlay of cadastral information and topographical features of the area covered. Maps showing encroachments on the road reserve must also be produced in digital format preferably in CAD (DWG) or GIS enabled Shapefiles (SHP)

Preliminary Design

- 4.3.23 Based on the traffic studies, environmental impact assessment, cost analyses, and geotechnical tests, the Consultant shall develop preliminary designs for the different options of road standard with a design life of 20 years.
- 4.3.24 The Consultant shall prepare the preliminary design/drawings for the different options using the format and title sheets as required by the Client as follows:
 - a) Location plans, Scale 1:5000;
 - b) Road plans, Scale 1:500 showing road centre-line, with chainages of horizontal curves; location, description and references to all drainage and bridge works; right-of-way demarcation indicating land utilization; and other relevant natural and cadastral information; and
 - c) Typical road cross-sections providing all geometric and pavement features.

Based on Traffic Studies and projections, economic analyses (under section (B) following) and geotechnical tests, the Consultant shall develop at least two and not more than three preliminary designs for the road project, and shall analyze the merits and drawbacks of each option to determine the final standard to be adopted for the road. The design life should be taken as 20 years. It will be necessary for the Consultant to provide comparative data for construction and maintenance costs for the different designs considered, in order to support the final designs adopted for the project road.

The maximum axle load restrictions applicable in Kenya shall be observed. The use of appropriate traffic equivalence factors shall be determined by appropriate means for pavement design purposes. Pavement design shall be in accordance with the standards approved by the Project Technical Team.

Original plans shall become the property of the Client.

Preliminary Cost Estimate

- 4.3.25 For each option, based on the findings and analyses, the Consultant shall furnish:
 - a) Preliminary quantities estimate with an accuracy of +/- 10% (ten per cent) for the proposed road section.
 - b) Preliminary design cost estimates for the different options including costs of environmental mitigation measures and social costs, net of taxes. The detailed cost estimate should give justification for details of foreign and local costs as well as duties and taxes to be paid. The foreign exchange component should include equipment depreciation; imported materials; wages of foreign personnel; overhead and profit of foreign firms that may undertake the construction of the road. The local currency component should include the cost of right-of-way acquisition, local

materials, salaries and wages of local employees and taxes. The estimates shall include price escalation and contingencies. All cost estimates (both foreign and local) shall be expressed in terms of Kenya Shillings; and

- c) A detailed analysis of the taxes and duties element of the cost estimates shall be presented separately.

a) For foreign currency

- i. Imported equipment, materials and supplies
- ii. Identifiable foreign components of domestic manufactured equipment, materials and supplies
- iii. Salaries of expatriate personnel
- iv. Profit and overheads of foreign firms where appropriate

b) For local currency

- i. Right of way acquisition
- ii. Local materials, supplies and services.
- iii. Salaries and wages of local employees – both skilled and unskilled

In addition the Consultant shall present separately a detailed analysis of the taxes, levies and duties element of the cost estimates.

Economic Costs

4.3.26 The Consultant shall examine all available information on vehicle operating and road maintenance costs and shall produce valid current estimates of such costs for both “without” and “with” situations. Attention should be given in the analyses to conditions affecting costs, which are specific to the region.

4.3.27 Since the greatest element of measurable and quantifiable user benefits to be derived from the improvement of existing motorable roads are, in practice, derived from savings in vehicle operating costs, the consultant shall give particular attention to the development of valid current estimates of such costs. In particular, the Consultant shall ensure that all individual factor unit costs (such as vehicle prices, interest rates, tyres, fuel, crew wages, insurance, etc.) input into the economic model are derived from direct investigation of present costs.

4.3.28 The Consultant shall ensure that the individual parameters such as roughness, which are input into the model to determine different component cost of vehicle operations shall be those that apply to the design standard being evaluated. In particular, the Consultant shall ensure that the base case (without) is well justified and is in accordance with the existing and expected future road maintenance policies and capabilities. It is expected that where design standards evaluated in the study have significantly different parameters they will be reflected in vehicle operating costs.

4.3.29 The Consultant shall carefully detail in the reports all the data, assumptions, and parameters used in developing estimates for current vehicle operating costs.

- 4.3.30 For construction costs of different options including all environmental mitigative measures costs and social costs, the Consultant shall give estimates separated into foreign and local currency components according to the details for estimated construction costs.
- 4.3.31 For road maintenance costs for different identified options the Consultant shall ensure that such costs are strictly related to current and forecast traffic volumes. The Consultant shall detail in the reports all the data assumptions and parameters used to develop estimates of current and future road maintenance costs, separated into foreign and local costs following the same method of construction costs.
- 4.3.32 In determining the economic costs for all factors in the study, the Consultant shall ensure that costs are net of all taxes and duties, or any other transfer payments to Government, and shadow priced where appropriate to reflect the true scarcity value of the resources being used.

Economic Benefits

- 4.3.33 Economic benefits for each identified option shall be expressed primarily in terms of:
- a) Savings in vehicle operating cost;
 - b) Savings in road maintenance expenditure;
 - c) Residual value of the road structure at the end of the evaluation period; and
 - d) Any other factor(s) that the Consultant shall consider relevant for the analyses, e.g. employment generation, accident reduction, time saving, etc.

The last factor(s) must be of demonstrable value added within the Kenyan economy.

- 4.3.34 In view of the fact that some indirect economic and social benefits arising from the improvements in road conditions are intangible or difficult to quantify accurately, the Consultant shall undertake detailed qualitative analyses of these benefits. Only those benefits that can be firmly demonstrated in quantitative terms shall be included in the economic evaluation of the project. The remaining qualitative benefits that have not been quantified may be used as secondary justification for project implementation.

Economic Evaluation

- 4.3.35 The Consultant shall undertake evaluation of the economic viability of each option following the completion of the study of the road using HDM III or HDM IV as directed by the Client. The Consultant shall calibrate the HDM III or HDM IV as the case may be. For this, the economic costs of the option being evaluated shall be compared with the relevant level of economic user benefits arising from implementation of the project.

- 4.3.36 The economic viability for each option shall be expressed in terms of :

- a) The Economic Internal Rate of Return,
- b) The Net Present Value in relation to the Government's current opportunity cost of capital,
- c) The Benefit-Cost ratio, and
- d) First Year Rate of Return.

Preferred software for analysis is HDM4 software

- 4.3.37 The Consultant shall also express the results of the analysis in terms of the first year Rate of Return to indicate the optimum year of construction and opening of each road.
- 4.3.38 In view of the inevitable uncertainty about the precise values of some key variables of the cost/benefit equation, the Consultant shall subject these key variables to a sensitivity analysis. The Consultant shall also undertake sensitivity analysis and risk analysis for the different identified options.
- 4.3.39 Based on the results of different options, the Consultant will rank them and make recommendations for the Client and the Fund. The recommendations will then be presented to and discussed with the Client and the Fund.
- 4.3.40 The consultant shall also conduct and give a report on the socio-economic base line survey of the road projects preferably one kilometre radius for future economic impact analysis.

Environmental Impact and Social Assessment (ESIA)

- 4.3.41 The Consultant shall conduct analyses which shall detail the positive and negative effects of the development of the project on the environment, and prepare an EIA project report recommending appropriate solutions to minimize any undesirable effects resulting from improvements of the road. The analyses shall include, but not limited to the following factors:
- i) The role of the project in the development plans at national and regional level;
 - ii) Preservation of areas and land use of particular value including agricultural and, natural conservation areas, forests and other important natural resources, cultural and historic sites, etc;
 - iii) Assessment of direct impact on agriculture and forestry, particularly the utilization of the fuel wood and water;
 - iv) Disturbance of vegetation, and plans for re-vegetation;
 - v) The prevention of soil erosion and sedimentation;
 - vi) The presentation of health hazards arising from pounding water and pollution of water courses and/or sources;
 - vii) Measures for the rehabilitation of construction materials, borrow pits and quarries;
 - viii) Health and sanitation for the road construction labour units;
 - ix) The avoidance of reduction of visual intrusion; and
 - x) Assessment of the impact on demographic factors including the prevention of undesirable roadside developments, and recommended regulations and measures to limit negative impact on adjacent communities and areas.

This Terms of Reference have been compiled in accordance to the requirements of the Environment Management and Coordination Act (EMCA), 1999 of Kenya and the Environmental Impact Assessment and Audit Regulations of Kenya (2003). They will serve to guide the ESIA study to produce an Environmental and Social Scoping/Project and Environmental and Social Impact Assessment Study Reports compliant with EIA guidelines and to correctly inform decision-making on the environmental and social impacts and management requirements of the proposed Project.

4.3.42 EIA Process

Under the requirements of the EMCA, 1999 and the Environmental (Impact Assessment and Audit) Regulations of Kenya, 2003, prior to undertaking or commissioning of any project a proponent is required to undertake and submit an EIA scoping/project report to the National Environment Management Authority for review and approval. The Environmental Impact Assessment study is to be undertaken to determine the potential environmental impacts of this project and where appropriate design mitigation measures for the adverse impacts.

The main focus of the EIA is to predict environmental impacts (i.e., both positive and negative) that may result from the proposed Project or from the null alternative or Status Quo, and their potential significance. Predictions must consider all aspects and phases of the proposed Project/Status Quo, and any indirect environmental effects, cumulative environmental effects, and any environmental effects that may result from accidents or malfunctions. In addition, potential effects of the environment on the proposed Project/Status Quo must be predicted.

4.3.43 Environmental Scoping For the Project Roads

The Consultant shall prepare a Comprehensive Environmental and Social Scoping/Project Report for the Project roads as per Part II of the Environmental (Impact Assessment and Audit) Regulations, 2003. The Environmental and Social Scoping/Project Report will outline the major items to be considered before implementation and preparation of an Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP) for the proposed Project. The Consultant will further provide related cost estimates for the implementation of the ESMP.

The Consultant will carry out the following tasks among others:

- (i) Review and assess the bio-physical and socio-economic environment of the study area and identify constraints that will have to be addressed during implementation of the Project;
- (ii) Review national environmental and social legislation, administrative and regulatory frameworks and international conventions and treaties relevant to the proposed Roads Project and identify legal requirements that will have to be taken into account;
- (iii) Identify potential adverse environmental and social impacts due to the implementation of the proposed Roads Project and the mitigation measures to be taken during and after implementation of the project;
- (iv) Prepare an action plan for the prevention and management of possible accidents during the proposed Roads Project cycle;
- (v) Prepare a plan to ensure the health and safety of the workers and neighbouring communities;
- (vi) Seek the views of the public regarding the proposed Project;
- (vii) Identify and discuss potential alternatives and recommend one that is environmentally and socially sustainable in the long run;
- (viii) Propose capacity building measures for environmental and social management under the implementation of the ESMP as appropriate, including cost estimates;
- (ix) Assist the Client in following up NEMA approvals; and
- (x) Any other information the Authority (NEMA) may require.

A comprehensive Environmental and Social Scoping/Project Report shall be prepared by an Environmental Impact Assessment Expert registered as such under the Environmental (Impact Assessment and Audit) Regulations, 2003.

In preparing a comprehensive Environmental and Social Scoping/Project Report, the Consultant shall pay particular attention to the issues specified in the Second Schedule of the Environmental (Impact Assessment and Audit) Regulations, 2003.

The Environmental Scoping/Project Report shall be submitted with the **Preliminary Designs** to the Client.

4.3.44 Environmental and Social Impact Assessment Study for the Project roads

As stipulated in Regulation (3) of the Environmental (Impact Assessment and Audit) Regulations, 2003, if the Authority (NEMA) finds that the project will have a significant impact on the environment, and the project report discloses no sufficient mitigation measure, NEMA shall require that the proponent undertake an Environmental Impact Assessment Study in accordance with the Environmental (Impact Assessment and Audit) Regulations, 2003.

The Consultant will therefore be required to carry out the following tasks among others:

- (i) Develop a Terms of Reference with information gathered during the scoping exercise of Assessment Study Report. Conduct Environmental and Social Impact Assessment Study in accordance with the NEMA approved Terms of Reference;
- (ii) Conduct an Environmental and Social Impact Assessment Study in accordance with the general environmental impact assessment guidelines and sector environmental impact assessment guidelines set out in the Third Schedule of the Environmental (Impact Assessment and Audit) Regulations, 2003;
- (iii) Take into account environmental, social, cultural, economic and legal consideration, and shall – identify the anticipated environmental impacts of the project and the scale of the impacts; identify and analyze alternatives to the proposed Project including project site, design and technologies and reasons for preferring the proposed site, design and technology; propose mitigation measures to be taken during and after the implementation of the Project; and develop an environmental and social management plan with mechanisms for monitoring and evaluating the compliance and environmental performance which shall include the cost of mitigation measures and the timeframe of implementing the measures;
- (iv) Seek the views of the persons who may be affected by the proposed Project in consultation with NEMA;
- (v) Describe the potentially affected environment;

The Environmental and Social Impact Assessment Study Report shall be submitted to the Client alongside other reports.

- 4.3.45 The Consultant shall also prepare the ESIA project report in accordance with the environmental policies, guidelines and procedures of the National Environmental Management Authority (NEMA), as well as in accordance with the International Environmental Conventions signed by the government.

Project Sustainability and Institutional Capacity

- 4.3.46 The Consultant shall make recommendations concerning the sustainability of different options. In order to achieve this, the Consultant shall assess the existing practices of financing the maintenance of the urban roads network in the country and recommend possible solutions towards their improvement. This will include, but not be limited to, sources of road funding, allocation of funds and institutional set-up.
- 4.3.47 The Consultant shall also examine the local road construction industry, assess the capacity and identify the constraints of the road agency and the local contractors for carrying out routine and periodic road maintenance works. The Consultant shall propose measures to mitigate the constraints, if any, and which will encourage the local private sector to participate in road maintenance and construction in order to facilitate improvements to the urban road network activities.

Participatory Approach

- 4.3.48 The Consultant shall undertake a stakeholder analysis to identify relevant participants/participatory groups. The Consultant shall work closely with stakeholders, NGO's, donors, transport operators, and the local communities at different stages of the study. In addition, with the assistance of the Government, and immediately after submission of draft feasibility study reports, the Consultant will initiate and organize seminars on the improvements proposed to the study road section areas and take into account any suggestions for consideration and inclusion in the study.

5.0 REPORT AND TIME SCHEDULE

5.1 Commencement

5.1.1 The Consultant shall commence the study as specified in Clause 5.9 of Appendix “A”.

5.2 Reports

5.2.1 The Consultant shall prepare and submit to the Project Manager, KURA Technical Team the following reports. All reports shall be in English and prepared on A4 metric size paper. All reports will be submitted in described hard copies and two soft copies in CD ROM format. The consultant will discuss and get approval of the software format used to prepare the soft copies for drawings to ensure compatibility with available software in the Client’s establishment. In order to facilitate speedy review by the Client of Consultant’s work, the Consultant is encouraged to organize parts of the main reports into working papers for prior discussion with the Client before compilation into deliverables.

a) **Inception Report (One (1) Month)**

This shall summarize initial findings and give proposals covering methodologies of the preliminary engineering studies, and the detailed work plan for the conduct of the preliminary design – 5 hard copies and two softcopies for the client.

b) **Preliminary Feasibility Study Report (Five (5) Months)**

This shall summarize the findings, analysis, results, and recommendations of the study, and shall contain all supporting material and include an executive summary.

The Consultant shall prepare preliminary design drawings and reports in accordance with the format and title sheets as directed by the Team Leader, Project Technical Team. These documents to be submitted in five hard copies and two softcopies to be submitted to the Team Leader-Project Technical Team shall include a description of: -

- i. Feasibility Study, Environmental and Social Impact Assessment
- ii. Topography, geology, rainfall, vegetation and land use
- iii. Hydrological analysis, existing drainage structures and requirements.
- iv. Traffic survey and forecast
- v. Soil and materials investigations
- vi. Recommendations for the new construction
- vii. Estimate of the quantities and construction cost within an accuracy of approximately +/- 20% and a description of physical and pricing problems that may arise during the construction
- viii. Location plans to scale 1:50,000, plan and longitudinal profile drawings to a scale of 1:2,500 and 1:250 vertical, typical cross-section details, and
- ix. General arrangement drawings for the main drainage structures.
- x. **Preliminary Design Report:** This shall incorporate all revisions deemed necessary arising from comments received from the Team Leader, Project Technical Team, following discussions and agreement between him and the Consultant. It shall include a concise executive summary in which the project design standards and cost estimates broken down into foreign and local currencies shall be shown clearly – 5 hard copies and two softcopies to be submitted to the Team Leader-Project Technical Team.

The report will generally incorporate comments generated from the presentation of the Inception Report as well as comments from the Client’s Technical Team.

c) Draft Final Feasibility Study Report (Four (4) Months)

This report will encompass the entire scope of the consultancy in detail, including all technical investigations and studies: engineering; traffic; socio-economic and environmental, preliminary engineering design, including topographic surveys, alternative alignment design drawings, alternative upgrading scenarios, cost estimates, land acquisition plans and material source plans. The report shall also include economic evaluation and financial viability analysis.

The report will generally incorporate comments generated from the presentation of the Preliminary Feasibility Study Report as well as comments from the Client's Technical Team - 5 hard copies and two softcopies to be presented to the Team leader-Project Technical Team.

The Draft Feasibility Study Report shall conform to the report structure shown in section 5.5 of the Terms of Reference.

d) Final Feasibility Study Report (Two (2) Months)

The report will generally incorporate comments generated from the presentation of the Draft Final Feasibility Study Report as well as comments from the Client's Technical Team. Ten hard copies and two soft copies to be presented to the Team leader-Project Technical Team. The Final Feasibility Study Report shall conform to the report structure shown in section 5.5 of the Terms of Reference as a bare minimum.

The environmental and social impact assessment reports, as well as the Preliminary Engineering design Report shall be packaged as separate volumes.

e) Progress Reports (Monthly)

These shall be submitted monthly and shall detail all work performed during the reporting period and utilization of the study personnel. This shall contain preliminary conclusions (covering such topics as traffic studies and design standards), based on the analyses substantially completed, and shall also identify actual and anticipated difficulties and delays in the work, their causes and the remedies proposed to solve them – 5 hard copies and two softcopies to be presented to the Team leader-Project Technical Team

Records of Documents

5.2.2 After delivery of all final documentation, the originals of the following documents are to be deposited with the Director (Policy, Strategy & Compliance).

- i) All drawings, both in full size and photo-reduced, inclusive of land acquisition drawings, all in transparent Engineering Matte film material.
- ii) Tabulated test result of the materials investigations and any interpretation there from inclusive of materials charts
- iii) Earthworks computations inclusive of mass-haul diagram
- iv) Structural calculations
- v) Hydrological and water way calculations.
- vi) Setting out data and earthworks computation on a mass storage device.

5.3 Time Schedule

The feasibility study and preliminary engineering designs shall be completed and forwarded to the Team Leader, KURA Technical Team within Twelve (12) months of the commencement of the assignment. The Consultant should be prepared to attend meetings with the Client to discuss the assignment at any stage.

Schedule: Proposed Time Schedule for Consultancy

ACTIVITY	MONTHS								
	M 1	M 2	M2	M3	M4	M5	M6	M7	M....
Inception Report									
Comments KURA									
Preliminary Design Report									
Comments by KURA									
Draft Final Feasibility Report									
Comments by KURA									
Final Feasibility Study Report									

5.4 Lateness in reporting

Where a report required is delayed beyond the stipulated time for submission, the consultant shall provide to the Client an explanation satisfactory to the Client for the delay in submission and the remedial measures to be undertaken.

5.5 Report Structure

The “Feasibly Study Report shall include the following Chapters, Sub-Chapters, and Appendices as a bare minimum:

Executive Summary

Chapter 1 – Introduction

- Background
- Objectives and Scope of the Project
- Terms of Reference – Feasibility Study
- Report Structure

Chapter 2 - Socio-Economic Review

- Introduction
- National Economic Framework – Vision 2030
- Population and Land Area
- Transport Implications
- Selected Socio Economic Characteristics
- Predominant Economic activity and related Facilities

Chapter 3 - Strategic Development Plan

- General
- National Transportation Planning Framework
- National Roads Network – Goals & Strategy (Road Sector Investment Programme, Annuity Programme, Low Volume Sealed Roads programme)
- The National Development Goals and Planning

Chapter 4 – Preliminary Engineering Design

- Introduction & Description of Project Roads
- Technical Field Investigations
- Technical Design Standards and Guidelines
- Climate Change Adaptation
- Proposed Road Upgrading Alternative Scenarios (including “Do Nothing” as base scenario)
- Cost Estimates
- Engineering Appendices:
 - Appendix 1. Preliminary Topographic Survey data
 - Appendix 2. Preliminary Engineering Design Drawings
 - Appendix 3. Proposed Land Acquisition Plans and estimated costs
 - Appendix 4. Materials Source Maps

➤ Appendix 5. Cost Estimates

Chapter 5 - Social & Poverty Assessment and Safeguards

- Socio-Economic Context of Regions and Districts
- National Poverty Reduction Strategy
- Causes and Characteristics of Poverty
- Poverty in the Project Area
- Socio-Economic Profile of the Study Area
- Consultation Meetings
- Beneficiary Profile
- Poverty and Social Impact Assessment (PSA)
- Gender Assessment
- Social Action Plan
- Indicators for Monitoring
- Resettlement Framework
- Conclusions
- Social Appendices
 - Appendix 1 - Resettlement Screening
 - Appendix 2 - Resettlement Action Plan
 - Appendix 3 - Poverty reduction and social strategy
 - Appendix 4 - Socio – Economic Profile

Chapter 7 - Environmental Impact Assessment

- Introduction
- Assessment of Policy, Legal Framework and Institutional Capacity
- Anticipated Environmental Impacts
- Environmental Assessment for Subprojects and/or Components
- Consultation, Information Disclosure, and Grievance Redress Mechanism
- Institutional Arrangement
- Monitoring and Reporting
- Appendices
 - Appendix 1- Environmental Assessment Checklist Form
 - Appendix 2 - Environmental Impact Assessment Report

Chapter 8 - Climate Change Adaptation

- Climate Change
- Identified Environmental Risks and Climate Change Vulnerability
- Climate Change as a Development Challenge
- Anticipated Risks of Climate Change on Road Upgrading

Chapter 9 – Traffic – Reviews of Existing Studies

- Background and Data Sources
- Road Network in the Study Area
- Survey Methodology
- Surveys Conducted
- Average Daily Traffic (ADT) & Average Annual Daily Traffic (AADT)
- Road Side Survey (O-D) in respect of the Bypass roads
- Induced Traffic
- Estimated Traffic Growth Rate
- Future Traffic Generators
- Traffic Demand Forecast for the Project roads
- Appendices:
 - Traffic Survey Forms
 - Detailed Traffic Data, by Vehicle Type
 - Traffic Demand Forecasts

Chapter 11 - Economic Evaluation

- Introduction
- Objectives of Economic Evaluation
- Analytical Scenarios/Alternatives
- Road Characteristics & Cost Estimates of Alternative Scenarios
- Unit Costs and Operating Data, by Vehicle Type
- Traffic
- Quantifiable Benefits
- Estimating Multiplier & Retainer Local Share of Investment/Maintenance Costs
- Proxy for Social Benefits and Affected Population
- Residual Share of Bridges and Special Culverts
- Environmental/Road Safety Impacts
- Standard Economic Analysis, 12% Discount Rate - Summary Results
- Alternative Economic Analysis - at 5% Discount Rate
- Sensitivity Analysis
- Distribution of Benefits
- Risk Analysis
- Conclusion and Recommendations

Chapter 11: Financial Viability Analysis

- Financing options
- Repayment Plan
- Repayment capacity analysis
- Conclusions and recommendations

6.0 OBLIGATIONS OF CLIENT AND CONSULTANT

6.1 Documents and Reports

6.1.1 Kenya Urban Roads Authority (KURA) shall supply all pertinent data and information and give such assistance as shall reasonably be required for the conduct by the Consultant of his duties under this contract save that such assistance shall not be extended to the provision of any supplies or services. The Consultant will be required to pay for purchase fee of maps, manuals and other documents. The following will on request be supplied by the Director (Policy, Strategy & Compliance) to the Consultant who will be awarded the consultancy: -

- Standard specifications for Road and Bridge Construction 1986
- Road Design Manual Part I – Geometric Design of Rural Roads 1979
- Road Design Manual Part III – Pavement design and Materials 1987
- Analysis of Contract Rates, latest edition
- Sample standard drawings

Please note that appropriate charges will be levied for certain documents.

6.1.2 The Client will:

- i) Ensure free access to all sites and locations connected with the execution of the study;
- ii) Provide the Consultant with any assistance as the Consultant may be entitled to in accordance with the Terms of Reference
- iii) Provide the Consultant with all documents, data, any existing photographs and other information pertaining to the study that are available with the KURA
- iv) Provide, at their option, two counterpart personnel (interns) for on-the-job training with the consultant during the contract period paid at Government approved Rates
- v) Facilitate the issuance of work permits and entry visas for the Consultant's expatriate staff.

6.1.3 In particular, the Government shall provide the following

- All data and reports pertaining to the design studies that have been carried out for the road under study if any;
- Available data and information on road inventory and traffic counts;
- Recent road construction and maintenance costs; and
- Unhindered access to pertinent data.

6.2 Liaison

6.2.1 The Directorate of Policy, Strategy & Compliance shall provide liaison with other Ministries and Departments in order to introduce the Consultant to them. The Consultant shall be fully responsible for collecting data and information from these agencies, including paying for it where necessary.

6.3 Taxes and Duties

The Consultant shall be liable to pay all duties and taxes in connection with this assignment including VAT and other taxable payable under the laws of Kenya. No tax or duty exemption shall be given to the Consultant. The Consultant shall be deemed to have taken the above into consideration while preparing his financial proposal.

6.4 Correspondence

6.4.1 The Client shall ensure that correspondence exchange in respect of the implementation of the study is treated promptly in order to avoid any delay. Correspondence by e-mail shall be on Microsoft Outlook (for Client).

6.5 Consultant's Obligations

6.5.1 All information, data and reports obtained from the Client in the execution of the services of the Consultant shall be properly reviewed and analysed by the Consultant. The responsibility for the correctness of using such data shall rest with the Consultant. All such information, data, and reports shall be treated as confidential and returned to the Client upon completion of the assignment.

6.5.2 The consultant shall be responsible for analyses, interpretation, and conclusion made from the data and information provided by the client.

6.5.3 The Consultant shall be responsible for arranging for all necessary office and living accommodation, transportation (**including 200 days per diem allowance at JG 'S' and transport for Client supervision staff and provide a vehicle for the supervision team for Thirteen (13) Months**), equipment and supplies, surveys, investigations, materials testing, secretarial services, related to the performance of the works. Specifications and provisions for vehicle are as follows: 4WD Double Cab less than 4 years old, a driver, travel per month of 4,000Kms and vehicle shall revert back to consultant after 13 months use by client.

6.5.4 The Consultant shall be responsible for the printing of all reports, drawings, maps, etc.

6.5.5 The Consultant shall provide a training plan for the counterpart personnel as approved by the Client.

6.5.6 All reports and documents relevant to the project, maps, field survey notes, computer programs and electronic data, etc. shall become the property of the Client. The Consultant shall provide the originals of maps, plans and all drawings with final tender documents both in hard and soft copies in CD ROMs and in acceptable electronic format.

6.5.7 The consultant shall remunerate the two counterpart personnel (intern) provided by the client as per government approved rate for 12 Months. The interns will be identified and domiciled at Clients offices and shall be paid night out allowances while on duty outside Nairobi.

7.0 REQUIREMENTS

7.1. Staff Requirements

The Consultant shall provide all the staff required for the performance of the duties described in the ToR. Curriculum Vitae not exceeding three (3) pages per person shall be provided in respect of each key staff.

It is anticipated that **40 staff man– months** of key professional staff stated below would be required to accomplish the tasks stated in the TOR of the assignment.

The profiles of the key experts to be provided by the Consultant for this assignment are as follows:

a) **Project Director (PD)**

The PD will oversee, plan, manage and monitor the consultancy and will advise the Client on all aspects of works contract implementation. The PD will provide the overall backstopping for the project, to ensure timely execution and completion of the project.

The PD should be a qualified and competent registered professional civil engineer with a recognized degree in Civil Engineering or equivalent and a minimum of 15 years post qualification experience in management and supervision of similar works contracts in developing countries, particularly in the Africa region.

The PD shall have at least 10 years' experience at Project Director level on road construction and rehabilitation projects of similar nature. The PD should be able to combine this engineering experience with management and communication skills in order to support the Kenya Urban Roads Authority in ensuring that all objectives and deliverables of the consultancy and the works contract are achieved. The candidate must have a proven record as Project Director/ Deputy Project Director for at least three successfully completed large assignments of similar nature in the last five years. Fluency in both written and spoken English is essential.

b) **Transport Economist (TE)**

The TE will lead the Feasibility Study activities. The TE will perform the following specific tasks:

- Lead the feasibility sub-study task team;
- Ensure all deliverables are prepared in accordance with quality and time constraints;
- Research and review data, including that associated with planned government or private development in the area of influence of the road and incorporate in the economic analysis as appropriate;
- Determine financial and economic vehicle operating costs for representative vehicle types;
- Prepare an economic evaluation of the proposed road upgrading options following National Guidelines for the Economic Analysis of Projects. Reduction in travel time and transport costs, cost of accidents, increased agricultural production and other net social benefits arising from the project will be taken into account;
- Identify the cost benefits of climate change adaptation options and provide recommendations based on most cost effective measures;
- Undertake switching value calculations and sensitivity analysis for variations in key parameters and budget constraints.
- Undertake risk analysis in accordance with National Guidelines for

Integrating Risk Analysis of Projects;

- Analyse how limited access to transportation services contributes to poverty in the project area of influence;
- Based on the economic analysis, estimate the expected distribution of project net benefits among freight transport users, passenger transport users, vehicle owners, NMT and the government;
- Prepare feasibility reports for submission to the Client. The report should be prepared following National guidelines, taking into account direct and indirect impacts during pre- construction, construction and operation, and of implementing mitigation measures and monitoring plans.

The TE shall be a qualified with a graduate degree in Transportation Engineering, Transport Economics, Transport Planning or equivalent and a minimum 10 years post-graduate experience, of which not less than 5 years have been in undertaking studies in road upgrading and construction projects. Must have at least 5 years of recent experience in transportation planning, transportation engineering and economic analysis in the roads sector. Knowledge of inter-modal transport systems is desirable.

c) Urban Highway Design Engineer (UHDE)

The HE will be responsible for the preliminary designs underpinning the feasibility studies. The HE will perform the following tasks:

- Lead the preliminary engineering design sub-study task team;
- Ensure all deliverables are prepared in accordance with quality and time constraints;
- Review available engineering data, including any data relating to availability and quality of construction materials.
- Identify potential future climate change impacts that should be catered for design of the road and evaluate costs associated with incorporation of adaptation measures in the project design.
- Assess recommendations and inputs from the Structural / Drainage Engineer and Environment Specialist for other potential adaptation measures which could be incorporated into the design.
- Guide topographic and other preliminary physical surveys.
- On the basis of projected traffic levels, determine cost effective options for upgrading the road taking into account varying terrain characteristics along the route, and minimum serviceability standards.
- In conjunction with the Materials / Geotechnical Engineer, survey areas of actual and potential slope instability, analyse their cause and develop preliminary recommendations for mitigating them.
- Review road safety implications for each design alternative and prepare preliminary designs for road safety features.
- Review environmental implications of construction, including those related to opening of borrow pits and disposal of spoil.
- Estimate the civil works costs for each design alternative, separately identifying taxes and duties to an accuracy of +/-15%.
- Prepare a preliminary engineering design report, consolidating all technical inputs from other specialists as appropriate.

The UHDE should be a qualified and competent registered professional civil engineer with a recognized degree in Civil Engineering or equivalent and a minimum of 12

years post qualification professional experience as a Highway Design Engineer on major road contracts of similar nature. Knowledge of various internationally accepted design codes and methodologies and familiarity with internationally ‘best practices’ as well as proficiency in latest computer aided road design software is essential. Experience in roads design, supervision and construction management will be required. Fluency in both written and spoken English is essential.

d) Environmental Expert (EE)

The EE will undertake an environmental assessment of the project in accordance with the EMCA Act. The Environmental Specialist will perform the following tasks:

- Ensure that the project is prepared in compliance with both the government’s environmental policies and environmental assessment guidelines;
- Assess the potential environmental impacts of the project in accordance with the EMCA Act and other national policies and guidelines;
- Prepare an Environmental Impact Assessment Report taking into consideration direct and indirect impacts during pre-construction, construction and operation, and identifying costs of mitigation measures and implementation of a monitoring plan;
- Identify potential impacts of the road on surrounding vulnerability;
- Synthesize the most recent and relevant assessments of future climate changes, within the scope of the project objectives, and provide recommendations to the project team of expected climate changes, including their probabilities of occurrence and certainty;
- Prepare recommendations for integrating climate change considerations into the design of the project.

The Environmentalist shall be a Registered Lead Expert and having a Valid Practicing License issued by NEMA, registered as a member of Environment Institute of Kenya (EIK) and must hold at least a Graduate Degree in environmental science, environmental engineering or any other relevant field and at least 10 years professional experience after graduation, of which not less than 5 years have been in undertaking environmental impact assessments of road sector related projects. Familiarity with World Bank, Africa development Bank and NEMA environmental impact assessment guidelines is essential. Fluency in both written and spoken English is essential.

e) Socio- Economic Specialist (SES)

The SES will undertake screening and scoping for social impacts. The Social Safeguards Specialist will perform the following tasks:

- Undertake screening and scoping and prepare the resettlement and indigenous peoples screening forms and checklists for the project.
- Assess land acquisition and resettlement impacts in accordance with the National resettlement guidelines and prepare a resettlement plan (RP).
- Submit the RP;
- Assess the social impacts of the project and prepare analyses for inclusion in the feasibility study reports and in the IEE. Recommend mitigation measures where needed and estimate their cost.

Must possess University Degree (BSc or BA) in socio – Economic Studies or equivalent. Must have a minimum of 15years practical post-qualification experience.

Must have broad experience in socio – economic assessment and of at least three (3) roads construction project of comparable magnitude within urban setup. Previous experience on road projects in East Africa will be an added advantage.

f) Materials / Geotechnical Engineer (MGE)

The ME will provide inputs relating to slope stability, availability of construction materials and design of pavement options. The ME will perform the following tasks:

- Identify potential geotechnical constraints on the proposed road upgrading, particularly identifying specific locations where mitigation measures will be required.
- Guide site specific surveys as required for preliminary assessment and design of mitigation measures for geotechnical instabilities.
- Prepare preliminary designs in sufficient detail for assessment of cost, and social and environmental impacts, particularly resettlement impacts.
- Assess potential sources of materials, particularly pavement materials required for the works, along with processing requirements and oversee preliminary laboratory testing.
- Prepare a detailed program, implementation schedule and budget for geotechnical investigations necessary for the design of the works.

The MGE should be a qualified and competent registered professional civil engineer with a recognized degree in Civil Engineering and a minimum professional experience of 12 years (post qualification) as a materials engineer of which 5 years should be on major road contracts. Thorough knowledge of modern techniques of materials investigation and laboratory testing is essential. The PME shall have at least 10 years of experience in pavement engineering including design using diverse pavement materials and methods, in preparing specifications and in construction control of pavement structures. The PME shall have at least 6 years of on-site experience in construction control. Fluency in both written and spoken English is essential.

g) Engineering Surveyor (ES)

The ES will be responsible for all topographic survey. The Survey Manager will:

- Acquire necessary physical / cadastral plans from the relevant Government bodies, and use the same to identify existing road corridors;
- Manage a team of technician surveyors, ensuring best practice and appropriate accuracy;
- Conduct control surveys and install permanent and stable benchmarks suitable for reference during detailed design work and construction;
- Conduct preliminary topographic surveys of the road corridor, sufficient for preliminary design work;
- Ensure timely and accurate transfer of survey information to the design engineers;
- Prepare land acquisition plans.

The ES will be a competent and qualified candidate, with a degree in Survey & Photogrammetry and a minimum of 10 years post qualification professional experience, of which not less than 5 years have been in survey for design and construction of major highway contracts of similar nature. The candidate should be conversant with modern methods of survey including the use of Total Stations and GPS equipment. Fluency in both written and spoken English is essential.

h) Structural / Drainage Engineer (SDE)

The SDE will be responsible for the preliminary design and cost estimation of drainage and drainage structures including bridges, culverts and side drains. The Structural Engineer will undertake the following tasks:

- Study the existing hydrological regime based on an analysis of rainfall, flood records and local inquiry.
- Estimate the required hydraulic capacity of bridge structures, including an estimate of the incremental capacity needed to cater for climate change considerations. A period of 50 years will be considered for major drainage structures and bridges, and 20 years for minor drainage structures including side drains and culverts.
- Assess existing structures and bridges along the route and recommend retention or otherwise.
- Assess the need for new drainage structures, where the existing structure is inadequate, or realignment requiring new drainage structures is proposed and prepare preliminary designs and cost estimates,
- Assess the need for new bridges and large drainage structures, where the existing structure is inadequate, or realignment requiring new structures is proposed and prepare preliminary designs and cost estimates,
- Prepare a program of geotechnical investigation needed for the design of drainage structures and bridges. Estimate the cost of the proposed geotechnical investigations;
- Prepare a program of geotechnical investigation needed for the design of drainage structures. Estimate the cost of the proposed geotechnical investigations.

The SDE shall have at least 10 years relevant experience and shall be a professionally qualified civil engineer. Fluency in both written and spoken English is essential.

i) Hydrologist

The hydrologist shall be responsible for the following tasks:

- The collection of climatological data.
- Record and evaluate this data prior to use for drainage design purposes.
- Establish the ideal rainfall, intensity, duration and frequency data and ensure it corresponds to the data being applied to the design of drainage structures.
- Prepare individual watershed areas for drainage structures located along the proposed road alignment.
- Conduct interviews with local residents in the area regarding flood history of the waterway to include flood height, duration, and frequency.
- Must be resourceful in collection of available recorded data and topographical maps of the project areas.
- Review and analyse designs to include storm water management plan requirements

The Hydrologist will be a competent and qualified candidate, with a degree in Civil Engineering/Water Engineering and a minimum of 10 years post qualification professional experience, of which not less than 5 years have been

in the design and construction of major highway contracts of similar nature.

7.2 Support Staff – 30 Man-months

The consultants shall provide the necessary support staff – including junior engineers, draftsmen, field surveyors, laboratory technicians, field supervisors and office support staff – needed in order to carry out their tasks and fulfill their responsibilities effectively.

It is anticipated that about **30 staff-months** of support staff would be required

7.3 Work Schedule

The consultant shall propose a schedule of activities and corresponding deployment of manpower, which will ensure that all duties entrusted to him/her, will be adequately performed. This schedule, together with a comprehensive statement justifying the proposed deployment will be incorporated in the methodology statement.

SECTION F: STANDARD FORMS OF CONTRACT

CONTENTS

Special notes

Contract for Consultant's Services

I Form of Contract

II General Conditions of Contract

General Provisions

Definitions

Law Governing the Contract

Language

Notices

Location

Authorized Representatives

Taxes and Duties

Commencement, Completion, Modification and

Termination of Contract

Effectiveness of Contract

Commencement of Services

Expiration of Contract

Modification

Force Majeure

2.5.1 Definition

2.5.2 No Breach of Contract

2.5.3 Extension of Time

2.5.4 Payments

2.6 Termination

2.6.1 By the Client

2.6.2 By the Consultant

2.6.3 Payment upon Termination

3. Obligations of the Consultant

3.1 General

Conflict of Interests

Consultant Not to Benefit from Commissions,
Discounts, etc

Consultant and Affiliates Not to Be
Otherwise Interested in Project

3.2.3 Prohibition of Conflicting Activities

3.3 Confidentiality

3.4 Insurance to be Taken Out by the Consultant

3.5 Consultant's Actions Requiring Client's Prior
Approval

3.6 Reporting Obligations

3.7 Documents Prepared by the Consultant to
Be the Property of the Client

- 4 Consultant's Personnel
 - 4.1 Description of Personnel
 - 4.2 Removal and/or Replacement of Personnel
- 5 Obligations of the Client
 - 5.1 Assistance and Exemptions
 - 5.2 Change in the Applicable Law
 - 5.3 Services and Facilities
- 6 Payments to the Consultant
 - 6.1 Lump-Sum Remuneration
 - 6.2 Contract Price
 - 6.3 Payment for Additional Services
 - 6.4 Terms and Conditions of Payment
 - 6.5 Interest on Delayed Payments
- 7 Settlement of Disputes
 - 7.1 Amicable Settlement
 - 7.2 Dispute Settlement
- III Special Conditions of Contract
- IV Appendices
 - Appendix A – Description of the Services
 - Appendix B – Reporting Requirements
 - Appendix C – Key Personnel and Sub consultants
 - Appendix D – Breakdown of Contract Price in Foreign Currency
 - Appendix E – Breakdown of Contract Price in Local Currency
 - Appendix F – Services and Facilities Provided by the Client

Special Notes

1. The Lump-Sum price is arrived at on the basis of inputs – including rates – provided by the Consultant. The Client agrees to pay the Consultant according to a schedule of payments stipulated under clause 6.4 of Special Conditions of Contract.
2. The Contract includes four parts: Form of Contract, the General Conditions of Contract, the Special Conditions of Contract and the Appendices.

CONTRACT FOR CONSULTANT'S SERVICES

between

[name of the Client]

AND

[name of the Consultant]

Dated: _____ *[date]*

I. FORM OF CONTRACT

This Agreement (hereinafter called the “Contract”) is made the _____) day of the month of _____[month], [year], between _____, [name of client] of [or whose registered office is situated at _____] _____[location of office] (hereinafter called the “Client”) of the one part AND _____[name of consultant] of [or whose registered office is situated at] _____[location of office](hereinafter called the “Consultant”) of the other part.

WHEREAS

the Client has requested the Consultant to provide certain consulting services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the “Services”);

the Consultant, having represented to the Client that he has the required professional skills and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the Parties hereto hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:

The General Conditions of Contract;

The Special Conditions of Contract;

The following Appendices: [**Note:** If any of these Appendices are not used, they should be deleted from the list]

Appendix A: Description of the Services

Appendix B: Reporting Requirements

Appendix C: Key Personnel and Sub consultants

Appendix D: Breakdown of Contract Price in Foreign Currency

Appendix E: Breakdown of Contract Price in Local Currency

Appendix F: Services and Facilities Provided by the Client

2. The mutual rights and obligations of the Client and the Consultants shall be as set forth in the Contract; in particular:

The Consultant shall carry out the Services in accordance with the provisions of the Contract; and

The Client shall make payments to the Consultant in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

For and on behalf of _____ [name of client]

[full name of Client's
authorised representative] _____

[title] _____

[signature] _____

[date] _____

For and on behalf of _____ [name of consultant]

[full name of Consultant's
authorized representative] _____

[title] _____

[signature] _____

[date] _____

GENERAL CONDITIONS OF CONTRACT

GENERAL PROVISIONS

1. GENERAL PROVISIONS

1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract shall have the following meanings:

“Applicable Law” means the laws and any other instruments having the force of law in the Republic of Kenya as they may be issued and in force from time to time;

“Contract” means the Contract signed by the Parties, to which these General Conditions of Contract (GC) are attached together with all the documents listed in Clause 1 of such signed Contract;

“Contract Price” means the price to be paid for the performance of the Services in accordance with Clause 6 herebelow;

“Contract Period” means the amount of time allowed for the performance of the Services herebelow including any extension of time;

“Foreign Currency” means any currency other than the Kenya Shilling;

“GC” means these General Conditions of Contract;

“Government” means the Government of the Republic of Kenya;

“Local Currency” means the Kenya Shilling;

“Joint Venture (JV)” means an association with or without a legal personality distinct from that of its members, of more than one entity where one member has the authority to conduct all businesses for and on behalf of any and all the members of the JV, and where the members of the JV are jointly and severally liable to the Client for the performance of the Contract.

“Member”, in case the Consultant consists of a joint venture of more than one entity, means any of these entities; “Members” means all these entities, and “Member in Charge” means the entity specified in the SC to act on their behalf in exercising all the Consultant’s rights and obligations towards the Client under this Contract;

“Party” means the Client or the Consultant, as the case may be and “Parties” means both of them;

“Personnel” means persons hired by the Consultant or by any Subconsultant as employees and assigned to the performance of the Services or any part thereof;

“Key Expert(s)” means an individual professional whose skills, qualifications, knowledge and experience are critical to the performance of the Services under the Contract and whose Curricula Vitae (CV) was taken into account in the technical evaluation of the

II. General Conditions of Contract

“SC” means the Special Conditions of Contract by which the GC may be amended or supplemented;

“Services” means the work to be performed by the Consultant pursuant to this Contract, as described in Appendix A; and

“Sub-consultant” means any entity to which the Consultant subcontracts any part of the Services in accordance with the provisions of Clauses 3 and 4.

- 1.2 Law Governing Contract** This Contract, its meaning and interpretation and the the Contract relationship between the Parties shall be governed by the Laws of Kenya.
- 1.3 Language** This Contract has been executed in English language which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.
- 1.4 Notices** Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed or when sent by registered mail, telex, telegram or facsimile to such Party at the address specified in the SC.
- 1.5 Location** The Services shall be performed at such locations as are specified in Appendix A and, where the location of a particular task is not so specified, at such locations, whether in the Republic of Kenya or elsewhere, as the Client may approve.
- 1.6 Authorised Representative** Any action required or permitted to be taken and any document required or permitted to be executed under this Contract by the Client or the Consultant may be taken or executed by the officials specified in the SC.
- 1.7 Taxes and Duties** The Consultant, Sub-consultant [s] and their personnel shall pay such taxes, duties, fees and other impositions as may be levied under the Laws of Kenya, the amount of which is deemed to have been included in the Contract Price.

2. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

- 2.1 Effectiveness of Contract** This Contract shall come into effect on the date the Contract is signed by both Parties or such other later date as may be stated.
- 2.2 Commencement of Services** The Consultant shall begin carrying out the Services not later than after the effective specified in the SC.
- 2.3 Expiration of Contract** Unless terminated earlier pursuant to Clause 2.6, this Contract shall terminate at the end of such time period, after the Effective Date, as is specified in the SC.
- 2.4 Modification** Modification of the terms and Conditions of this Contract, including any modification of the scope of the Services or the Contract Price, may only be made by written agreement between the Parties.

2.5 Force Majeure

2.5.1 Definition

For the purposes of this Contract, “Force Majeure” means an event which is beyond the reasonable control of a Party and which makes a Party’s performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

2.5.2 No Breach of Contract

The failure of a Party to fulfill any of its obligations under the Contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

2.5.3 Extension of Time

Any period within which a Party shall, pursuant to this Contract complete any action or task shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

2.5.4 Payments

During the period of his inability to perform the Services as a result of an event of Force Majeure, the Consultant shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by him during such period for the purposes of the Services and in reactivating the Service after the end of such period.

2.6 Termination

2.6.1 By the Client

The Client may terminate this Contract by not less than thirty (30) days’ written notice of termination to the Consultant, to be given after the occurrence of any of the events specified in this Clause;

- a. if the Consultant does not remedy a failure in the performance of his obligations under the Contract within thirty (30) days after being notified or within any further period as the Client may have subsequently approved in writing;
- b. if the Consultant becomes insolvent or bankrupt;
- c. if, as a result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
- d. if the Consultant, in the judgment of the Client, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause;

“corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the selection process or in Contract execution.

“fraudulent practice” means a misrepresentation of facts in order to influence a selection process or the execution of Contract to the detriment of the Client, and includes collusive practice among consultants (prior to or after submission of proposals) designed to establish prices at artificial non-competitive levels and to deprive the Client of the benefits of free and open competition.

- e. if the Client in his sole discretion decides to terminate this Contract.

- 2.6.2 By the Consultant** The Consultant may terminate this Contract by not less than thirty (30) days' written notice to the Client, such notice to be given after the occurrence of any of the following events;
- (a) if the Client fails to pay any monies due to the Consultant pursuant to this Contract and not subject to dispute pursuant to Clause 7 within sixty (60) days after receiving written notice from the Consultant that such payment is overdue; or
 - (b) if, as a result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days.

- 2.6.3 Payment upon Termination** Upon termination of this Contract pursuant to Clauses 2.6.1 or 2.6.2, the Client shall make the following payments to the Consultant:
- (c) remuneration pursuant to Clause 6 for Services satisfactorily performed prior to the effective date of termination;
 - (d) except in the case of termination pursuant to paragraphs (a) and (b) of Clause 2.6.1, reimbursement of any reasonable costs incident to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel and their eligible dependents.

3. OBLIGATIONS OF THE CONSULTANT

- 3.1 General** The Consultant shall perform the Services and carry out his obligations with all due diligence, efficiency and economy in accordance with generally accepted professional techniques and practices and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful adviser to the Client and shall at all times support and safeguard the Client's legitimate interests in any dealing with Sub-consultants or third parties.

3.2 Conflict of Interests

- 3.2.1 Consultant Not to Benefit from Commissions, Discounts, etc.**
- i. The remuneration of the Consultant pursuant to Clause 6 shall constitute the Consultant's sole remuneration in connection with this Contract or the Services and the Consultant shall not accept for his own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of his obligations under the Contract and the Consultant shall use his best efforts to ensure that his personnel, any sub-consultant[s] and agents of either of them similarly shall not receive any such additional remuneration.

3.3 Confidentiality

The Consultant, his sub-consultant [s] and the personnel of either of them shall not, either during the term of this Contract or within two (2) years after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract or the Client's business or operations without the prior written consent of

- 3.4 Insurance to be Taken Out by the Consultant** The Consultant (a) shall take out and maintain and shall cause any sub-consultant[s] to take out and maintain, at his (or the sub-consultants', as the case may be) own cost but on terms and conditions approved by the Client, insurance against the risks and for the coverage, as shall be specified in the SC; and (b) at the Client's request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums have been paid.
- 3.5 Consultant's Actions Requiring Client's Prior Approval** The Consultant shall obtain the Client's prior approval in writing before taking any of the following actions;
- a) entering into a subcontract for the performance of any part of the Services,
 - b) appointing such members of the personnel not listed by name in Appendix C ("Key Personnel and Sub-consultants").
- 3.6 Reporting Obligations** The Consultants shall submit to the Client the reports and documents specified in Appendix A in the form, in the numbers, and within the periods set forth in the said Appendix.
- 3.7 Documents Prepared by the Consultant to be the Property of the Client** All plans, drawings, specifications, designs, reports and other documents and software submitted by the Consultant in accordance with Clause 3.6 shall become and remain the property of the Client and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents and software to the Client together with a detailed inventory thereof. The Consultant may retain a copy of such documents and software. Neither Party shall use these documents for purposes unrelated to this Contract without the prior approval of the other Party.

4. CONSULTANT'S PERSONNEL

- 4.1 Description of Personnel** The titles, agreed job descriptions, minimum qualifications and estimated periods of engagement in the carrying out of the Services of the Consultant's Key Personnel are described in Appendix C. The Key Personnel and Sub-consultants listed by title as well as by name in Appendix C are hereby approved by the Client.
- 4.2 Removal and/or Replacement of Personnel**
- (a) Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If for any reason beyond the reasonable control of the Consultant, it becomes necessary to replace any of the Key Personnel, the Consultant shall provide as a replacement a person of equivalent or better qualifications.
 - (b) If the Client finds that any of the Personnel have:-
 - (i) committed serious misconduct or have been charged with having committed a criminal action, or
 - (ii) the Client has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultant shall, at the Client's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to the Client.
 - (c) The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

5. OBLIGATIONS OF THE CLIENT

- 5.1 Assistance and Exemptions** The Client shall use his best efforts to ensure that provides the Consultant such assistance and exemptions as may be necessary for due performance of this Contract.
- 5.2 Change in the Applicable Law** If after the date of this Contract, there is any change in the Laws of Kenya with respect to taxes and duties which increases or decreases the cost of the Services rendered by the Consultant, then the remuneration and reimbursable expenses otherwise payable to the Consultant under this Contract shall be increased or decreased accordingly by agreement between the Parties and corresponding adjustments shall be made to the amounts referred to in Clause 6.2 (a) or (b), as the case may be.
- 5.3 Services and Facilities** The Client shall make available to the Consultant the Services and Facilities listed under Appendix F.

6. PAYMENTS TO THE CONSULTANT

- 6.1 Lump-Sum Remuneration** The Consultant's total remuneration shall not exceed the Contract Price and shall be a fixed lump-sum including all staff costs, Sub-consultants' costs, printing, communications, travel, accommodation and the like and all other costs incurred by the Consultant in carrying out the Services described in Appendix A.
- 6.2 Contract Price** (a) The price payable in foreign currency is set forth in the SC.
(b) The price payable in local currency is set forth in the SC.
- 6.3 Payment for Additional Services** For the purposes of determining the remuneration due for additional services as may be agreed under Clause 2.4, a breakdown of the lump-sum price is provided in Appendices D and E.
- 6.4 Terms and Conditions of Payment** Payments will be made to the account of the Consultant and according to the payment schedule stated in the "Special Conditions of Contract".
- 6.5 Interest on Delayed Payment** Payment shall be made within Ninety (90) days of receipt of invoice and the relevant documents specified in Clause 6.4 and only after approval of the relevant reports. The counting of the days start after the approval and acceptance of the relevant reports. If the Client has delayed payments beyond ninety (90) days after the due date hereof, simple interest shall be paid to the Consultant for each day of delay at a rate one percentage points above the prevailing Central Bank of Kenya's average rate for base.

7. SETTLEMENT OF DISPUTES

- 7.1 Amicable Settlement** The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.
- 7.2 Dispute Settlement** Any dispute between the Parties as to matters arising pursuant to this Contract that cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be referred by either Party to the arbitration and final decision of a person to be agreed between the Parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed by the Chairman of the Chartered Institute of Arbitrators, Kenya Branch, on the request of the applying party.

SPECIAL CONDITIONS OF CONTRACT

Number of GC Clause	Amendments of and Supplements to Clauses in the General Conditions of Contract
1.1(i)	The Member in Charge is _____ [name of Member]
1.4	The addresses are: Client: Director General Kenya Urban Roads Authority (KURA) P. O. Box 41727 – 00100 <u>Nairobi, Kenya</u> Attention: Director, Policy Strategy & Compliance Consultant: _____ Attention: _____ Telephone; _____ Telex: _____ Facsimile: _____
1.6	The Authorized Representatives are: For the Client: Director, Policy Strategy & Compliance For the Consultant: _____
2.1	The date on which this Contract shall come into effect is (_____) [date]. Note: The date may be specified by reference to conditions of effectiveness of the Contract, such as receipt by Consultants of advance payment and by Client of bank guarantee
2.2	The date for the commencement of Services is _____ [date]
2.3	The period shall be <u>12</u> _____ [length of time]. The Consultant shall be charged Liquidated Damages at the rate of 0.05% of the contract sum per day for the extra days beyond the official contract period plus any time extensions granted by the Client, to a maximum of 5% of the Contract Sum, beyond which the Contract shall be terminated in accordance with the conditions of this contract. Note: Fill in the period, e.g., four months or such other period as the Parties may agree in writing.
2.4	The Consultant shall sign a Service Level Agreement with the Client which shall quantify the minimum acceptable service to the Client and the Consultant's performance will be assessed every quarterly during the implementation of the Contract. The format of the Service Level Agreement is attached in Appendix K of this RFP.
2.5	The consultant shall be held responsible for the accuracy of the data up to the time of implementation e.g. survey data, material investigation, land acquisition, etc
3.1	Notwithstanding Clause 3.1 of the GC:-

- i) The consultant shall be held responsible for the accuracy of the data up to the time of implementation.

3.4 The risks and coverage shall be:

- i. Professional Liability: **Full amount of this Contract**
- ii. Loss of or damage to equipment and property: **KShs 5,000,000**
- iii. Third party Liability: **KShs 5,000,000**
- iv. Comprehensive motor vehicle insurance: **KShs 5,000,000**
- v. Employer's Liability and workers compensation: **KShs 5,000,000**

4.1 All the proposed/approved key staff must be present during presentation of the design reports to the client.

6.2(a) The amount in foreign currency or currencies: **Nil**

6.2(b) The amount in local Currency is _____ [Insert amount]

Payments shall be made according to the following schedule:

Twenty (20) percent of the Contract Price shall be paid upon submission and acceptance by the Project Manager of the inception report

Thirty (30) percent of the Contract Price shall be paid upon submission and acceptance by the Project Manager of the Preliminary Feasibility Study Report.

Thirty (30) percent of the Contract Price shall be paid upon submission and acceptance by the Project Manager of the Draft Final Feasibility Study Report.

Twenty (20) percent of the Contract Price shall be paid upon submission and acceptance by the Project Manager of the Final Feasibility Study Report.

Payments in Ksh shall be made to the following Account

Account Number: _____

Account Name: _____

Bank: _____

Address: _____

4.39.1 Payments will be made within 90 (ninety) days of receipt of the invoice and the relevant documents specified in Clause 6.4 above. Late payment will attract interest from the client.

4.39.2 The Consultancy services rendered by the Consultant shall be carried out to the full satisfaction of Director (Policy, Strategy & Compliance) following which a contract

completion certificate shall be issued and final payment made under clause 6.2 (b) of the Special Conditions.

7.2 Disputes shall be settled by arbitration in accordance with the following provisions:

1. Selection of Arbitrators. Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator or an arbitration panel composed of three arbitrators, in accordance with the following provisions:
 - (a) Where the Parties agree that the dispute concerns a technical matter, they may agree to appoint a sole arbitrator or, failing agreement on the identity of such sole arbitrator within thirty (30) days after receipt by the other Party of the proposal of a name for such an appointment by the Party who initiated the proceedings, either Party may apply to ***the Institution of Engineers of Kenya*** for a list of not fewer than five nominees and, on receipt of such list, the Parties shall alternately strike names therefrom, and the last remaining nominee on the list shall be the sole arbitrator for the matter in dispute. If the last remaining nominee has not been determined in this manner within sixty (60) days of the date of the list, ***the Institution of Engineers of Kenya*** shall appoint, upon the request of either Party and from such list or otherwise, a sole arbitrator for the matter in dispute.
 - (b) Where the Parties do not agree that the dispute concerns a technical matter, the Client and the Consultant shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the arbitrators named by the Parties do not succeed in appointing a third arbitrator within thirty (30) days after the latter of the two arbitrators named by the Parties has been appointed, the third arbitrator shall, at the request of either Party, be appointed by ***the Chartered Institute of Arbitrators of Kenya***.
 - (c) If, in a dispute subject to Clause SC 7.2 1 (b), one Party fails to appoint its arbitrator within thirty (30) days after the other Party has appointed its arbitrator, the Party which has named an arbitrator may apply to ***the Chartered Institute of Arbitrators of Kenya*** to appoint a sole arbitrator for the matter in dispute, and the arbitrator appointed pursuant to such application shall be the sole arbitrator for that dispute.
2. Rules of Procedure. Except as stated herein, arbitration proceedings shall be conducted in accordance with the rules of procedure for arbitration of the ***Chartered Institute of Arbitrators of Kenya*** as in force on the date of this Contract.
3. Substitute Arbitrators. If for any reason an arbitrator is unable to perform his function, a substitute shall be appointed in the same manner as the original arbitrator.
4. Nationality and Qualifications of Arbitrators. The sole arbitrator or the third arbitrator appointed pursuant to paragraphs (a) through (c) of Clause SC 7.2 1 hereof shall be a nationally recognized legal or technical expert with extensive experience in relation to the matter in dispute and shall be a Kenyan.

Miscellaneous. In any arbitration proceeding hereunder:

- (a) proceedings shall, unless otherwise agreed by the Parties, be held in ***Nairobi, Kenya***
- (b) ***English*** language shall be the official language for all purposes; and
- (c) the decision of the sole arbitrator or of a majority of the arbitrators (or of the third arbitrator if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.

LIST OF APPENDICES

APPENDIX A:	TERMS OF REFERENCE (to be inserted)
APPENDIX B:	COMMENTS ON TERMS OF REFERENCE (to be inserted)
Appendix C:	DESCRIPTION OF THE METHODOLOGY AND WORKPLAN FOR PERFORMING THE ASSIGNMENT (to be inserted)
APPENDIX D:	TIME SCHEDULE FOR PROFESSIONAL PERSONNEL (to be inserted)
APPENDIX E:	TEAM COMPOSITION AND TASK ASSIGNMENTS (to be inserted)
APPENDIX F:	CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF (to be inserted)
APPENDIX G:	ACTIVITY (WORKPLAN) SCHEDULE (to be inserted)
APPENDIX H:	BREAKDOWN OF CONTRACT PRICE IN KSHS (to be inserted)
APPENDIX I:	OTHER SUBMISSIONS <i>Technical proposal submission form</i> <i>Firm's References</i> <i>Financial proposal submission form</i>
APPENDIX J:	THE REQUEST FOR PROPOSALS (to be inserted)