Government of the Republic of Malawi



Accelerating Malawi's Economic Growth

Roads Authority

Request for Proposals Documents For the Procurement of Consultancy services (Lump Sum Contracts)

LUNZU BRIDGE - ZALEWA SECTION OF THE M001 ROAD

Subject of Procurement	Consultancy Services for the Feasibility Study and Detailed Engineering Design for Periodic Maintenance / Rehabilitation of Blantyre – Lilongwe M001 Road Section from Lunzu Bridge to Zalewa Junction (M001/M006 Junction)	
Procurement Reference Number	RA/CON/DEV/SR/BT/REH/2024-25/28	
Procurement Method	Request for Proposals	
Basis of Selection	Quality and Cost Based Selection	
Date of Issue of Request for Proposals Document	27 th June 2024	

The Chief Executive Officer
The Roads Authority, Functional building, Paul Kagame Road
Private Bag B346
Lilongwe 3, MALAWI

Table of Contents

Part 1 - Bidding Procedures

Section 1 – Instructions to Bidders

Section 2 – Bid Data Sheet

Section 3 – Evaluation Criteria

Section 4 – Bidding Forms

Section 5 – Eligible Countries

Part 2 - Schedule of Requirement

Section 6 - Terms of Reference

Part 3 - Contract

Section 7 – General Conditions of Contract

Section 8 – Special Conditions of Contract

Section 9 – Contract Forms

Part I - Section 1: Instructions to Bidders

Section 1: Instructions to Bidders

Table of Clauses

Α.	General	5
1.	Scope of Proposal	
2.	Source of Funds	
3.	Eligible Bidders	
4.	Conflict of Interest	
5.	Corrupt or Fraudulent Practices	
В.	Request for Proposals Document	
6.	Sections of Request for Proposals Document	
7.	Clarification of Request for Proposals Document	
8.	Amendment of Request for Proposals Document	7
C.	Preparation of Proposals	8
9.	Preparation of Proposals	
10.	Language of Proposals	
11.	Joint Ventures, Associations and Subcontracting	
12.	Professional Staff	
13.	Contents of Technical Proposals	
14.	Contents of Financial Proposals	
15.	Currencies of Proposal	10
D.	Submission and Opening of Proposals	10
16.	Submission of Proposal	10
17.	Validity of Proposal	
18.	Withdrawal, Substitution and Modification of Proposals	11
19.	Proposal Opening	11
E.	Evaluation of Proposals	12
20.	Confidentiality	12
21.	Clarification of Proposals	12
22.	Responsiveness of Proposals	12
23.	Nonconformities, Errors and Omissions	12
24.	Preliminary Examination of Proposals	
25.	Technical Evaluation of Proposals	
26.	Financial Proposal Opening	
27.	Financial Evaluation of Proposals	
28.	Comparison of Proposals	
29.	Negotiations	14
F.	Award of Contract	15
30	Award of Contract	15

Section I. Instructions to Bidders

A. General

1. Scope of Proposal

- 1.1 The Procuring Entity indicated in the Bid Data Sheet (BDS) invites technical and financial proposals for the consulting services described in Section 6, Terms of Reference. The proposal could form the basis for future negotiations and ultimately a contract between your firm and the Procuring Entity.
- 1.2 The procurement reference number and a brief description of the Assignment and its objectives are given in the BDS.
- 1.3 The Assignment shall be implemented in accordance with the phasing indicated in the Terms of Reference. When the Assignment includes several phases, continuation of services for the next phase shall be subject to satisfactory performance of the previous phase, as determined by the Procuring Entity.

2. Source of Funds

- 2.1 The Procuring Entity has an approved budget from public funds towards the cost of the procurement described in the BDS. The Procuring Entity intends to use these funds to place a contract for which this Request for Proposals is issued.
- 2.2 Payments will be made directly by the Procuring Entity and will be subject in all respects to the terms and conditions of the resulting contract placed by the Procuring Entity.

3. Eligible Bidders

3.1 A Bidder shall:

- (a) have the legal capacity to enter into a contract;
- (b) not be insolvent, in receivership, bankrupt or being wound up, not have had their business activities suspended and not be the subject of legal proceedings for any of the foregoing; and
- (c) have fulfilled their obligations to pay taxes according to the tax laws of their country of registration.
- 3.2 In order to demonstrate compliance with the criteria in ITB Sub-Clause 3.1, a Bidder shall submit with its Proposal appropriate documentary evidence demonstrating its compliance.
- 3.3 All bidders (including all members of a joint venture, subconsultants and Personnel) shall have the nationality of an eligible country, as defined in Section 5, Eligible Countries.
- 3.4 Government-owned enterprises in the Republic of Malawi may only participate if they are legally and financially autonomous, operate under commercial law, and are not a dependent agency to the Procuring Entity.
- 3.5 A Bidder that has been debarred from participating in public procurement in accordance with ITB Sub-Clause 5.1(c), at the date of the deadline for proposal submission or thereafter, shall be disqualified.

4. Conflict of Interest

4.1 The Government of the Republic of Malawi (hereinafter called "the Government") requires that Consultants provide professional, objective, and impartial advice and at all times hold the Procuring Entity's interests paramount, strictly avoid conflicts with other assignments or their own corporate interests and act without any consideration for future work. Without limitation on the generality of the foregoing, Suppliers, and any of their affiliates, shall be

considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:

- (a) A firm that has been engaged by the Procuring Entity to provide goods, works or services other than consulting services for a project, and any of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, and any of its affiliates, shall be disqualified from subsequently providing goods or works or services other than consulting services resulting from or directly related to the firm's consulting services for such preparation or implementation. For the purpose of this paragraph, services other than consulting services are defined as those leading to a measurable physical output, for example surveys, exploratory drilling, aerial photography, and satellite imagery.
- (b) A Consultant (including its Personnel and Sub-Consultants) or any of its affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the Consultant to be executed for the same or for another Procuring Entity. For example, a Consultant hired to prepare engineering design for an infrastructure project shall not be engaged to prepare an independent environmental assessment for the same project, and a Consultant assisting a Procuring Entity in the privatization of public assets shall not purchase, nor advise purchasers of, such assets. Similarly, a Consultant hired to prepare Terms of Reference for an assignment should not be hired for the assignment in question.
- (c) A Consultant (including its Personnel and Sub-Consultants) that has a business or family relationship with a member of the Procuring Entity's staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment, (ii) the selection process for such assignment (iii) a member of the Procuring Entity's Internal Procurement Committee, or (iv) supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Government throughout the procurement process and the execution of the Contract.
- 4.2 Consultants have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of the Procuring Entity, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Consultant or the termination of its Contract.
- 4.3 No agency or current employees of the Procuring Entity shall work as a Consultant under their own ministries, departments or agencies. Recruiting former government employees of the Procuring Entity to work for their former ministries, departments or agencies is acceptable provided no conflict of interest exists. Bidders should be aware that existing government employees can only be nominated as personnel in Technical Proposals in accordance with the Government of Malawi's current regulations concerning external employment for government employees.
- 4.4 If a shortlisted Bidder could derive a competitive advantage from having provided consulting services related to the assignment in question, the Procuring Entity shall make available to all shortlisted Bidders together with this RFP all information that would in that respect give such Bidder any competitive advantage over competing Bidders.

5. Corrupt or Fraudulent Practices

- 5.1 The Government requires that Procuring Entities, as well as Bidders and Suppliers under government-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Government:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:

- (i) "corrupt practice" means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
- (ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
- (iii) "collusive practices" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring Entity, designed to establish prices at artificial, noncompetitive levels; and
- (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.
- (b) will reject a recommendation for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question; and
- (c) will debar a Bidder from participation in public procurement for a specified period of time if it at any time determines that the firm has engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a contract.

B. Request for Proposals Document

6. Sections of Request for Proposals Document

6.1 The Request for Proposals Document consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB Clause 8.

Part 1 Bidding Procedures

- Section 1 Instructions to Bidders (ITB)
- Section 2 Bid Data Sheet (BDS)
- Section 3 Evaluation Criteria
- Section 4 Bidding Forms
- Section 5 Eligible Countries

Part 2 Schedule of Requirements

Section 6 Terms of Reference

Part 3 Contract

- Section 7 General Conditions of Contract (GCC)
- Section 8 Special Conditions of Contract (SCC)
- Section 9 Contract Forms

7. Clarification of Request for Proposals Document

7.1 Bidders requiring a clarification of the Request for Proposals Document must notify the Procuring Entity, in writing, not later than fourteen (14) days before the proposal submission date. Any request for clarification shall be sent to the Procuring Entity's address indicated in the BDS. The Procuring Entity shall respond in writing to such requests, and copies of the response shall be sent to all invited Bidders.

8. Amendment of Request for Proposals Document

8.1 At any time before the submission of proposals, the Procuring Entity may, for any reason, whether at its own initiative or in response to a clarification requested by an invited Bidder, modify the Documents by amendment. The amendment shall be sent in writing to all invited Bidders and will be binding on them. The Procuring Entity may at its discretion extend the deadline for the submission of proposals.

C. Preparation of Proposals

9. Preparation of Proposals

- 9.1 You are requested to submit separate technical and financial proposals.
- 9.2 In preparing the proposal, you are expected to examine all terms and instructions included in the Request for Proposals Document. Failure to provide all requested information shall be at your own risk and may result in rejection of your proposal.
- 9.3 To obtain first-hand information on the Assignment and on the local conditions, bidders are encouraged to pay a visit to the Procuring Entity before submitting a proposal and attend a pre-proposal conference if specified in the BDS. Bidders must fully inform themselves of local conditions and take them into account in preparing their proposal.
- 9.4 The Procuring Entity shall provide the inputs specified in the Terms of Reference, assist the Supplier in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.
- 9.5 Please note that the costs of preparing the proposal and of negotiating the contract, including a visit to the Procuring Entity, are not reimbursable as a direct cost of the Assignment;
- 9.6 Please note that the Procuring Entity is not bound to accept any of the proposals submitted.

10. Language of Proposals

- 10.1 The proposal, as well as all correspondence and documents relating to the proposal exchanged by the Bidder and the Procuring Entity, shall be written in English.
- 10.2 Study reports must be in the Language(s) specified in the Terms of Reference. Working knowledge of the national language by the firm's personnel is recommended.

11. Joint Ventures, Associations and Subcontracting

- 11.1 If a Bidder 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) or other firms or entities or by sub-contracting as appropriate.
- 11.2 Bidders shall not associate with other Bidders invited for this assignment, unless otherwise specified in the BDS.
- 11.3 International Bidders for large contracts are encouraged to seek the participation of national Consultants by entering into a joint venture with, associating with or subcontracting part of the assignment to national Consultants.
- 11.4 The same subconsultant may be included in several proposals, subject to any limitations in the BDS. Any limits on the percentage of the total proposed contract price which may be subcontracted are stated in the BDS.

12. Professional Staff

- 12.1 The estimated number of key professional staff-months required for the Assignment is stated in the BDS. Your proposal should be based on a number of key professional staff-months substantially in accordance with the above number. Alternatively, for fixed-budget assignments, the available budget is given in Section 3, Evaluation Criteria and the Financial Proposal shall not exceed this budget.
- 12.2 It is desirable that the majority of the key professional staff proposed are permanent employees of the Bidder or have an extended and stable working relationship with the Bidder.

- 12.3 Proposed staff should have experience under conditions similar to those prevailing in the Republic of Malawi.
- 12.4 No alternative to key professional staff may be proposed, and only one curriculum vitae (CV) may be submitted for each position.

13. Contents of Technical Proposals

- 13.1 Your technical proposal shall provide the following and any additional information, using the formats included in Section 4, Bidding Forms:
 - (a) The Technical Proposal Submission Sheet (Section 4, Form T1);
 - (b) A brief description of the Bidder's organisation and an outline of recent experience on assignments of a similar nature. (Section 4, Form T2). For each assignment, the outline should indicate, inter alia, the profiles of the staff provided, duration, contract amount and firm involvement;
 - (c) Any comments or suggestions on the Terms of Reference, including the data, services and facilities to be provided by the Procuring Entity (Section 4, Form T3);
 - (d) A description of the approach, methodology and work plan that the Bidder proposes to execute the services (Section 4, Form T4);
 - (e) The composition of the proposed staff team, the tasks which would be assigned to each (Section 4, Form T5);
 - (f) CVs recently signed by the proposed key professional staff or an authorized manager in the home office (Section 4, Form T6). Key information should include number of years with the firm, and degree of responsibility held in various assignments during the last ten (10) years;
 - (g) A Staffing Schedule, showing estimates of the total staff input to be provided to carry out the Assignment (Section 4, Form T7), supported by bar chart diagrams showing the time proposed for each professional staff member;
 - (h) A Work Schedule, showing the timing proposed for each activity, which must be consistent with the methodology and workplan described in the proposal (Section 4, Form T8); and
 - (i) Any additional information requested in the BDS.
- 13.2 The technical proposal shall not include any financial information.

14. Contents of Financial Proposals

- 14.1 The financial proposal shall list all costs associated with the assignment, using the following standard forms contained in Section 4, Bidding Forms:
 - (a) Financial Proposal Submission Sheet (Section 4, Form F1);
 - (b) Summary of Proposal (or Activity) Price (Section 4, Form F2);
 - (c) Summary of Fees (Section 4, Form F3);
 - (d) Summary of Reimbursables (Section 4, Form F4); and
 - (e) Any additional information requested in the BDS.
- 14.2 The total proposal price shall be broken down into the following cost components using the appropriate forms:
 - (a) Fees for staff, indicating rates for home and field work, where appropriate; and
 - (b) Reimbursable expenditure, such as subsistence, transportation (international and local for mobilisation and demobilisation), services and equipment (vehicles, office equipment, furniture, and supplies), printing of documents, surveys etc.

- 14.3 Where indicated in the BDS, the total proposal price shall be broken down into separate activities and forms F2 to F4 shall be completed for each activity.
- 14.4 The financial proposal should clearly estimate, as a separate amount, the local taxes (including social security), duties, fees, levies, and other charges imposed on the Consultant and their personnel (other than nationals of or permanent residents in the Republic of Malawi), unless the BDS specifies otherwise.
- 14.5 The completed financial proposal forms, adjusted if necessary during evaluation or negotiation, will be used in any resulting Agreement, to compile the: breakdown of Contract Price in the case of a Lump Sum contract, which will be used only to determine prices for any additional Services or costs;
- 14.6 Where commissions and gratuities have or shall be paid by the Bidder in relation to the assignment these shall be listed in the Financial Proposal Submission Sheet.

15. Currencies of Proposal

15.1 Bidders may express the price of their services in Malawi Kwacha or any freely convertible currency, unless otherwise indicated in the BDS. Bidders may not use more than three currencies. The Procuring Entity may require Bidders to state the portion of their price representing local cost in Malawia Kwacha, if so indicated in the BDS.

D. Submission and Opening of Proposals

16. Submission of Proposal

- 16.1 Bidders shall submit one original technical proposal and one original financial proposal and the number of copies of each indicated in the BDS. Each proposal shall be in a separate envelope indicating original or copy, as appropriate. All technical proposals shall be placed in an envelope clearly marked "Technical Proposal," and the financial proposals in one marked "Financial Proposal." The envelope containing the financial proposal shall also bear a warning "DO NOT OPEN WITH THE TECHNICAL PROPOSAL". These two envelopes, in turn, shall be sealed in an outer envelope bearing the address and information indicated in the BDS. The envelope shall be clearly marked: "DO NOT OPEN, EXCEPT IN PRESENCE OF THE INTERNAL PROCUREMENT COMMITTEE."
- 16.2 In the event of any discrepancy between the copies of the proposals, the original shall govern. The original and each copy of the technical and financial proposal shall be prepared in indelible ink and shall be signed by the authorized Supplier's representative. The representative's authorization shall be confirmed by a written power of attorney accompanying the proposals, unless otherwise indicated in the BDS. All pages of the technical proposal shall be initialed by the person or persons signing the proposal.
- 16.3 The proposal shall contain no interlineation or overwriting except as necessary to correct errors made by the Bidders themselves. Any such corrections shall be initialed by the person or persons signing the proposal.
- 16.4 The completed technical and financial proposals shall be delivered on or before the time and date stated in the BDS to the address indicated in ITB Sub-Clause 16.1. The Procuring Entity shall not consider any proposal that arrives after the deadline for submission of proposal. Any proposal received by the Procuring Entity after the deadline for submission of proposals shall be declared late, rejected, and returned unopened to the Bidder.

17. Validity of Proposal

17.1 The proposals shall be valid for the number of days stated in the BDS from the date of the deadline for submission. During this period, Bidders shall keep available the professional

staff proposed for the assignment. The Procuring Entity shall make its best effort to complete negotiations within this period.

18. Withdrawal, Substitution and Modification of Proposals

- 18.1 A Bidder may withdraw, substitute, or modify its proposal after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB Sub-Clause 16.2. The corresponding substitution or modification of the proposal must accompany the respective written notice. All notices must be:
 - (a) Submitted in accordance with ITB Clause 16 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "Withdrawal," "Substitution," or "Modification;" and
 - (b) Received by the Procuring Entity prior to the deadline prescribed for submission of proposals, in accordance with ITB Sub-Clause 16.5.
- 18.2 Proposals requested to be withdrawn in accordance with ITB Sub-Clause 18.1 shall be returned unopened to the Bidders.
- 18.3 No proposal may be withdrawn, substituted, or modified in the interval between the deadline for submission of proposals and expiry of the period of proposal validity specified by the Bidder on the Technical Proposal Submission Sheet or any extension thereof.

19. Proposal Opening

- 19.1 The Procuring Entity shall conduct the proposal opening in the presence of Bidders' designated representatives who choose to attend, and at the address, date and time specified in the BDS.
- 19.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding proposal shall not be opened, but returned to the Bidder. Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding proposal being substituted, and the substituted proposal shall not be opened, but returned to the Bidder. Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding proposal. No proposal withdrawal, substitution or modification shall be permitted unless the corresponding notice contains a valid authorization to request the withdrawal, substitution or modification and is read out at proposal opening. Only envelopes that are opened and read out at proposal opening shall be considered further.
- 19.3 All other outer envelopes shall be opened one at a time, the technical proposals within them opened, reading out: the name of the Bidder and any other details as the Procuring Entity may consider appropriate.
- 19.4 No proposal shall be rejected at proposal opening except for late proposals, in accordance with ITB Sub-Clause 16.4. Only proposals that are opened and read out at the proposal opening shall be considered further.
- 19.5 The financial proposals shall remain sealed until the time and date notified for the opening of the financial proposals. Evaluators of technical proposals shall have no access to the financial proposals until the technical evaluation is concluded and the result established.
- 19.6 The Procuring Entity shall prepare a record of the proposal opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders, who formally request a copy.

E. Evaluation of Proposals

20. Confidentiality

- 20.1 Information relating to the examination, evaluation and comparison of proposals, and recommendation for contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.
- 20.2 Any effort by a Bidder to influence the Procuring Entity in the examination, evaluation and comparison of the proposals or Contract award decisions shall result in the rejection of its proposal.

21. Clarification of Proposals

21.1 To assist in the examination, evaluation and comparison of the proposals, the Procuring Entity may, at its discretion, ask any Bidder for a clarification of its proposal. Any clarification submitted by a Bidder in respect to its proposal, that is not in response to a request by the Procuring Entity, shall not be considered. The Procuring Entity's request for clarification and the response shall be in writing. No change in the prices or substance of the proposal shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring Entity in the financial evaluation of the proposals, in accordance with ITB Clause 27.

22. Responsiveness of Proposals

- 22.1 The Procuring Entity's determination of a proposal's responsiveness is to be based on the contents of the proposal itself.
- 22.2 A substantially responsive proposal is one that conforms to all the terms, conditions, and requirements of the Request for Proposals without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
 - (a) affects in any substantial way the scope, quality, or performance of the Consultancy Services specified in the Contract; or
 - (b) limits in any substantial way, inconsistent with the Request for Proposals, the Procuring Entity's rights or the Supplier's obligations under the Contract; or
 - (c) if rectified would unfairly affect the competitive position of other Bidders presenting substantially responsive proposals.
- 22.3 If a proposal is not substantially responsive to the Request for Proposals, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.

23. Nonconformities, Errors and Omissions

- 23.1 Provided that a proposal is substantially responsive, the Procuring Entity may waive any non-conformities or omissions in the proposal that do not constitute a material deviation.
- 23.2 Provided that a proposal is substantially responsive, the Procuring Entity may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the proposal related to documentation requirements. Such omission shall not be related to any aspect of the price of the proposal. Failure of the Bidder to comply with the request may result in the rejection of its proposal.

24. Preliminary Examination of Proposals

24.1 The Procuring Entity shall examine the proposals to confirm that:

- (a) the Bidder meets the eligibility criteria defined in ITB Clause 3;
- (b) the proposal has been properly signed;
- (c) all documents and information requested in ITB Clause 13 have been provided; and
- (d) the proposal is substantially responsive to the requirements of the RFP document.
- 24.2 The Procuring Entity shall confirm that the following documents and information have been provided:
 - (a) Technical Proposal Submission Sheet, including a brief description of the services offered and the proposal validity period;
 - (b) Separately sealed financial proposal;
 - (c) Written confirmation of authorization to commit the Bidder;
 - (d) Any other documentation as may be required by the Procuring Entity
- 24.3 If the proposal fails to meet the criteria specified in ITB Sub-Clause 24.1, it shall be rejected.

25. Technical Evaluation of Proposals

- 25.1 The Procuring Entity shall technically evaluate the proposals on the basis of the Bidder's responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria and maximum points specified in Section 3. Each responsive proposal will be given a technical score. 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 any minimum technical score indicated in Section 3.
- 25.2 The proposals proceeding to the financial evaluation shall be determined in accordance with the methodology and criteria specified in Section 3.

26. Financial Proposal Opening

- 26.1 After the technical evaluation is completed, the Procuring Entity shall notify those Bidders whose proposals will not pass to the financial evaluation, indicating that their financial proposals will be returned unopened after completing the evaluation process. The Procuring Entity shall simultaneously notify the Bidder(s) whose proposals will proceed to the financial evaluation indicating the date and time set for opening the financial proposal(s). The opening date shall not be sooner than one week after the notification date. The notification will be sent in writing.
- 26.2 The financial proposal(s) shall be opened in the presence of the Bidders' representatives who choose to attend. The name of the Bidder, the technical quality score and the proposal price(s) shall be read aloud and recorded when the financial proposal(s) are opened. The Procuring Entity shall prepare minutes of the public opening.

27. Financial Evaluation of Proposals

- 27.1 The Procuring Entity shall financially evaluate each proposal that has been opened as stated in ITB Clauses 26.1 and 26.2 above.
- 27.2 The Procuring Entity will determine whether the financial proposals are complete. In the case of lump sum contracts, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items.
- 27.3 The Procuring Entity will correct any arithmetical errors on the following basis:
 - (a) if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity there is an

- obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

If the Bidder that submitted the best evaluated proposal does not accept the correction of errors, its proposal shall be disqualified.

- 27.4 Where an activity or line item is quantified in the Financial Proposal differently from the Technical Proposal no corrections shall be applied to the Financial Proposal in this respect.
- 27.5 The Procuring Entity shall convert all proposal prices expressed in various currencies into the single currency specified in the BDS, using the official selling exchange rate established by the source 14 calendar days prior to the date of submission of the proposals, as specified in the BDS.
- 27.6 The evaluation shall include those taxes, duties, fees, levies, and other charges imposed under the applicable law; and to be applied to foreign and non-permanent resident consultants (and to be paid under the contract, unless the consultant is exempted), and estimated in accordance with ITB Sub-Clause. 14.3, unless otherwise indicated in the BDS.

28. Comparison of Proposals

28.1 The Procuring Entity shall compare all substantially responsive proposals to determine the best evaluated proposal, in accordance with the methodology specified in Section 3, Evaluation Criteria.

29. Negotiations

- 29.1 Prior to the expiry of proposal validity, the Procuring Entity shall notify the successful bidder in writing and invite it to negotiate the Contract at the location indicated in the BDS.
- 29.2 The aim is to reach agreement on all points and initial a draft contract by the conclusion of negotiations.
- 29.3 Negotiations shall commence with a discussion of the technical proposal, including the proposed methodology, work plan, staffing and any suggestions to improve the TOR. Agreement shall then be reached on the final TOR, the staffing, and the staffing and work schedules, which shall indicate activities, staff, periods in the field and in the home office, staff months, logistics and reporting. Special attention shall be paid to optimizing the required outputs from the Supplier within the available budget and to defining clearly the inputs required from the Procuring Entity to ensure satisfactory implementation of the Assignment.
- 29.4 Changes agreed upon shall then be reflected in the financial proposal, using proposed unit rates. The fee rates will not be subject to negotiation, except in the case of Quality Based Selection.
- 29.5 Having selected the lowest evaluated proposal on the basis of, among other things, an evaluation of proposed key professional staff, the Procuring Entity expects to negotiate a contract on the basis of the staff named in the proposal. Prior to contract negotiations, the Procuring Entity shall require assurances that the staff members will be actually available. The Procuring Entity shall not consider substitutions during contract negotiations except in

- cases of unexpected delays in the starting date or incapacity of key professional staff for reasons of health.
- 29.6 The negotiations shall be concluded with a review of the draft form of the contract. The Procuring Entity and the Bidder shall finalise the contract to conclude negotiations. If negotiations fail, the Procuring Entity shall invite the next ranked Bidder to Contract negotiations.

F. Award of Contract

30. Award of Contract

- 30.1 The Procuring Entity shall award the Contract to the Bidder whose proposal has been determined to be the best evaluated proposal and is substantially responsive to the Request for Proposals, subject to satisfactory negotiations and provided that such Bidder has been determined to be eligible in accordance with the provisions of Clause 3.
- 30.2 Notwithstanding ITB Sub-Clause 30.1, the Procuring Entity reserves the right to accept or reject any proposal, and to cancel the procurement process and reject all proposals, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Procuring Entity's action.
- 30.3 The Bidder whose proposal has been accepted will be notified of the award in writing by the Procuring Entity prior to expiration of the proposal validity period. Following contract award, the Procuring Entity shall promptly inform the other Bidders that their proposals have not been selected.
- 30.4 The Procuring Entity shall publish in the Malawi Government Gazette the results of the award of contract, as required by the Public Procurement and Disposal of Public Assets Act 2017.

Part I - Section 2 Bid Data Sheet

Section 2. Bid Data Sheet

Instructions to Bidders (ITB) reference	Data relevant to ITB
	A. General
ITB 1.1	The Procuring Entity is: ROADS AUTHORITY
ITB 1.2	The procurement reference number is: RA/CON/DEV/SR/BT/REH/2024-25/28
ITB 2.1	The assignment is: Consultancy Services for the Feasibility Study and Detailed Engineering Design for Periodic Maintenance / Rehabilitation of Blantyre – Lilongwe M001 Road Section from Lunzu Bridge to Zalewa Junction (M001/M006 Junction)
	B. Request for Proposals Document
ITB 7.1	For clarification purposes only, the Procuring Entity's address is: The Chief Executive Officer Roads Authority Functional Building Off Paul Kagame Road Private Bag B346 Lilongwe 3 Att: Procurement Specialist E-mail: ipc@ra.org.mw
	C. Preparation of Proposals
ITB 9.3	A pre-proposal meeting shall not be held Date: Time (local time): Venue:
ITB 10.2	The reports must be in English .
ITB 11.2	International Bidders shall be required to meet the following National Construction Industry Council (NCIC) regulations: a. Practice of Construction Services by Foreign Consulting Firms Regulations 2004.

Instructions to Bidders (ITB) reference	Data relevant to ITB
	b. Subcontracting and Joint Ventures by Foreign and Malawian Construction Firms order 2014.
ITB 11.4	Limits on subcontracting are: 45%
ITB 12.1	The estimated number of key professional staff-months shall be 38
ITB 13.1 (i)	The technical proposal shall include the following additional information: Current commitments of firm, current commitments of proposed staff
ITB 14.1 (e)	The financial proposal shall include the following additional information: Build-up of remuneration rates (eg basic salary, housing allowance, social charges etc)
ITB 14.3	The total proposal price shall be broken down into separate activities.
ITB 14.4	Only VAT on fees shall be indicated as separate amount
ITB 15.1	All bid rates and amounts shall be in Malawi Kwacha
	D. Submission and Opening of Proposals
ITB 16.1	In addition to the original of the proposal, the number of copies is: Four (4)
ITB 16.1	The address for proposal submission is:
	The Chief Executive Officer Roads Authority Functional Building Off Paul Kagame Road Private Bag B346 Lilongwe 3, MALAWI
	In addition to the address, the outer envelope shall bear the following information:
	(a) the procurement reference number;
	(b) the title of the assignment;
	(c) the name and address of the Bidder; and(d) The date and time for opening of proposals.
ITB 16.4	The deadline for proposal submission is:
	Date: 25th July 2024
	Time (local time): 10:00 hours
ITB 17.1	The proposal validity period shall be One Hundred and Twenty (120) days.

Instructions to Bidders (ITB) reference	Data relevant to ITB
ITB 19.1	For proposal opening purposes only, the Procuring Entity's address is:
	The Chief Executive Officer Roads Authority Functional Building Off Paul Kagame Road Private Bag B346 Lilongwe 3, MALAWI
	The time for proposal opening is:
	Date: 25th July 2024
	Time (local time): 10:00 hours
	E. Evaluation of Proposals
ITB 27.5	The currency that shall be used for proposal evaluation and comparison purposes to convert all proposal prices expressed in various currencies into a single currency is: Mot applicable
	The source of exchange rate shall be: Not applicable
ITB 27.6	The evaluation shall include all taxes, duties, fees, levies and other charges.
ITB 29.1	For <u>negotiations purposes</u> only, the Procuring Entity's address is:
	The Chief Executive Officer Roads Authority Functional Building Off Paul Kagame Road Private Bag B346 Lilongwe 3, MALAWI

Part I - Section 3 Evaluation Criteria

Section 3. Evaluation Criteria

This section, read in conjunction with Section 1, Instructions to Bidders and Section 2, Bid Data Sheet, contains all the factors, methods and criteria that the Procuring Entity shall use to evaluate a proposal and determine the best evaluated proposal. No other factors, methods or criteria shall be used.

1. Evaluation Methodology

The methodology for the evaluation of proposals will be **Quality and Cost Based Selection**.

2. Administrative Responsiveness Criteria

The administrative responsiveness shall be carried out prior to the technical evaluation. The administrative responsiveness check shall be based on the checklist provided in the table below. Bidders shall be required to meet <u>all</u> the administrative responsiveness requirements to be eligible for further evaluation.

S/N	A	ADMINISTRAT	IVE COMPLIANCE	CHECK LIST		
	(Doe	s the propose	al comply with RF	P requirements?)		
1	One Proposal per firm in English only					
2	One (1) original, (4) copies					
3	Letter of incorporation, or other such document indicating legal status, as well as any other document showing that it intends to associate.	L.				
4	Bid Validity in accordance with RFP.					
5	Power of Attorney on behalf of the Consultant and its associates;					
6	Form TECH 1 - Submission Form					
7	Form TECH 2 – Consultant's Organization and Experience.					
8	Form TECH 3 - Comments on the TORS					
9	Form TECH 4 – Description of the Approach, Methodology, and Work Plan					
10	Form TECH 5- Team Composition, Key Experts Inputs,					
11	Form TECH 6- Curriculum Vitae (CV) (ITB13.1 (f))					
12	Form TECH 7- Staffing Schedule					
13	Form TECH 8- Work Schedule					
14	All pages initialed by the authorized person					
	Substantially Compliant : Yes/No					

3. Technical Evaluation Criteria

The technical criteria and maximum number of points to be given under each are:

Crite	ria	Maximum Points
(a)	Specific experience of the bidder related to the assignment (A Minimum of five (5) projects of similar nature and complexity)	10
(b)	Adequacy of the proposed work plan and methodology	25
(c)	Qualifications and competence of the key staff for the Assignment	60
(d)	Participation of Nationals (as reflected by nationals among key staff)	5
	Total Points	100
rio oub	aritaria, and point system for the system of the Full Technical Propose	lo. Dointo

Criteria

ia, sub-cr	iteria, and	I point system for the evaluation of the Full Tec	hnical Proposal	s:Points	
(i)	Specific	experience of the Consultant (as a firm) releva	int to the Assign	nment:	10
(ii)		cy and quality of the proposed methodology, ar	•		
()		ling to the Terms of Reference (TORs):			25
		Technical approach and methodology	12		20
	,	Work plan	8		
		Organization and staffing	5		
		pints for criterion (ii):	25		
(iii)	Key Ex	perts' qualifications and competence for the As	signment:		60
	a)	K-1: Team Leader/Highway Design Engineer		14	
	•	General Qualifications	4.0		
		Adequacy for the assignment - Years	4.0		
		Adequacy for the assignment - Specific	4.0		
		Experience in the region and language	2.0		
	b)	K-2: Materials/Pavement Engineer		8	
		General Qualifications	2.4		
		Adequacy for the assignment - Years	2.4		
		Adequacy for the assignment - Specific	2.4		
		Experience in the region and language	0.8		
	c)	K-3: Structural Engineer		8	
		General Qualifications	2.4		
		Adequacy for the assignment - Years	2.4		
		Adequacy for the assignment - Specific	2.4		
		Experience in the region and language	0.8		
	d)	K-4: Hydrologist		6	
		General Qualifications	1.8		
		Adequacy for the assignment - Years	1.8		
		Adequacy for the assignment - Specific	1.8		
		Experience in the region and language	0.6		
	e)	K-4: Contract Document Specialist		6	
		General Qualifications	1.8		
		Adequacy for the assignment - Years	1.8		
		Adequacy for the assignment - Specific Experience in the region and language	1.8 0.6		
		Expendice in the region and language	0.6		
	f)	K-5: Transport Economist		6	
		General Qualifications	1.8		
		Adequacy for the assignment - Years	1.8		
		Adequacy for the assignment - Specific	1.8		
		Experience in the region and language	0.6		

g)	K-5: Environmental and Social Expert		6
	General Qualifications	1.8	
	Adequacy for the assignment - Years	1.8	
	Adequacy for the assignment - Specific	1.8	
	Experience in the region and language	0.6	
h)	K-5: Engineering Sirveyor		6
	General Qualifications	1.8	
	Adequacy for the assignment - Years	1.8	
	Adequacy for the assignment - Specific	1.8	
	Experience in the region and language	0.6	
Total	Points for Criteria (iii)		60

The number of points to be given under each evaluation sub-criteria for (c) qualifications and competence of the key staff for the assignment are:

	Criteria	Maximum Points
(a)	General qualifications	30
(b)	Adequacy for the assignment (The maximum points of 60 to be split as follows: Number of years in the specific field (maximum of 30 points) and number of projects carried out during the period (maximum of 30 points)	60
(c)	Experience in the region and language	10
	Total Points	100

The proposals proceeding to the financial evaluation shall be:

{For Quality & Cost Based Selection(QCBS), and Least Cost Selection}

All proposals reaching the minimum technical score of: 75%

{For Quality Based Selection(QBS)}

The proposal achieving the highest technical score only.

4. Financial Evaluation and Comparison of Proposals

Proposals will be compared using the following methodology to determine the best evaluated proposal:

{For QCBS only}

To determine financial scores for each proposal, the lowest priced proposal shall be given a financial score of 100, and other proposals shall be given a score proportionate to this, by application of the following formula:

Sf = 100 x Fm/F in which:

Sf denotes the financial score of the proposal under consideration;

Fm is the price of the lowest price proposal that passed the technical evaluation;

F denotes the price of the proposal under consideration.

A total score (S) will be determined for each proposal, by combining its technical (St) and financial (Sf) scores using the following formula and weightings:

 $S = (St \times T\%) + (Sf \times P\%)$

The weights given to the scores of the Technical and Financial Proposals are:

T = [80]

P = [20]

Proposals will be ranked and the proposal achieving the highest total score will be recommended for contract award, subject to satisfactory negotiations.

Part I - Section 4 Bidding Forms

Section 4 Bidding Forms

List of Forms

Technical Proposal – Standard Forms

- T1 Technical Proposal Submission Sheet.
- T2 Bidder's Organisation and Experience.
- T3 Comments and Suggestions on the Terms of Reference.
- T4 Description of the Approach, Methodology and Work Plan for performing the Assignment.
- T5 Team Composition and Task Assignments.
- T6 Curriculum Vitae for Proposed Professional Staff.
- T7 Staffing Schedule.
- T8 Work Schedule.

Financial Proposal - Standard Forms

- F1 Financial Proposal Submission Sheet.
- F2 Summary of Proposal (or Activity) Price.
- F3 Summary of Fees.
- F4 Summary of Reimbursables.

Note to Bidders: This Technical Proposal Submission Sheet should be on the letterhead of the Bidder and should be signed by a person with the proper authority to sign documents that are binding on the Bidder. It should be included by the Bidder in its technical proposal.

T1 Technical Proposal Submission Sheet

Date: [insert date (as day, month and year) of proposal submission]

Procurement Reference No: [RA/CON/DEV/SR/BT/REH/2024-25/28]

To: [insert complete name of Procuring Entity]

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Request for Proposals, including Addenda No.: [insert the number and issuing date of each Addenda];
- (b) We offer to provide the consulting services for **[insert a brief description of the Services]** in conformity with your Request for Proposals and our proposal;
- (c) We hereby submit our proposal which includes this technical proposal, and a financial proposal sealed under a separate envelope;
- (d) Our proposal shall be valid for a period of [specify the number of calendar days] days from the date fixed for the proposal submission deadline in accordance with the Request for Proposals, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (e) We, including any associates, Joint Venture partners or Subconsultants for any part of the contract, have nationals from eligible countries [insert the nationality of the Bidder, including that of all parties that comprise the Bidder, if the Bidder is a Joint Venture, consortium or association, and the nationality of each subcontractor];
- (f) We do not have any conflict of interest as defined in ITB Clause 4;
- (g) We, our affiliates or subsidiaries including any sub-consultants for any part of the assignment - are not suspended, or excluded from participation in any public procurement exercise by the Office of the Director of Public Procurement in Malawi in accordance with ITB Sub-Clause 5.1(c);
- (h) We are not under investigation by the Anti Corruption Bureau or any other law enforcement body in Malawi relating to participation in any public procurement tender exercise or execution of any public procurement contract relating to the purchase of goods, works and services by any Procuring Entity.
- (i) The names and physical addresses of the Directors of our firm are provided in the table below or we enclose a copy of our latest Audited Accounts (issued within the last twenty-four (24) months):

Name	Address

II	

- Our Proposal is binding upon us, subject to modifications agreed during any contract negotiations, and we undertake to negotiate on the basis of the staff proposed in our proposal;
- (k) We understand that this proposal, together with your written acceptance thereof, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (I) We understand that you are not bound to accept any proposal that you may receive;

Name: [insert com	plete name of person s	igning the proposa	il]
In the capacity of [i	nsert legal capacity of p	person signing the	proposal]
Signed: [signature	of person whose name	and capacity are s	shown above]
Duly authorised to Bidder]	sign the proposal for and	l on behalf of: [inser	t complete name of
Dated on signing]	day of		[insert date of

Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal.

T2 Bidder's Organisation and Experience Bidder's Organisation

[Provide a brief (approximately two pages) description of your firm/entity (and each associate for the assignment) – background, organisation etc.]

Bidder's Experience

[Using the format below, provide information on relevant assignments carried out in the last five years which best illustrate your experience, where your firm/entity (and each associate for the assignment) provided services similar to the ones requested under this assignment. Please provide the name and contact details of the officer responsible for management by the client for each assignment.]

Assignment Name:	Approx. value of the contract (in current US\$)	
Country:	Duration of assignment (months):	
Location within Country:		
Name of Client:	Total Nº of staff-months¹:	
Contact Name	Contact Details	
Address:	Approx. value of the services provided by your firm (in current US\$)	
Start Date (Month/Year):	Completion Date (Month/Year):	
Name of Associated Consultants, If Any:	Nº of professional staff-months provided by associated Consultants:	
Names of Senior Staff (Project Director/C functions performed:	oordinator, Team Leader) involved and	
Narrative Description of Project:		
Description of Actual Services Provided by Your Staff:		

Bidder's Name:	

Note: A completion certificate from the Client is required to back up each completed service, or a notice of acceptance letter and latest Invoice from Client for Services in progress above 70% completion.

¹ The minimum staff months to meet the minimum criteria shall be the staff months stated in ITB 12.1

Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal. If none, include form and state "None".

T3 Comments and Suggestions on the Terms of Reference (including the data, services and facilities to be provided by the Procuring Entity)

[Give any comments, suggestions or proposed improvements to the terms of reference e.g. deleting unnecessary activities, proposing additional activities, proposing different phasing etc. Any comments should be incorporated in your proposal.

Also give any comments on the data, services and facilities to be provided by the Procuring Entity e.g. administrative support, office space, local transportation, equipment, data, counterpart staff etc.] Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal.

T4 Description of Approach, Methodology and Work Plan for performing the Assignment

[It is suggested that you present your Technical Proposal divided into the following three chapters:

- a) Technical Approach and Methodology,
- b) Work Plan, and
- c) Organisation and Staffing,
- a) <u>Technical Approach and Methodology.</u> In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
- b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Procuring Entity), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form T8.
- c) <u>Organisation and Staffing.</u> In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]

It is recommended that the approach, methodology and work plan, inclusive of charts and diagrams, should be no more than 50 pages.]

Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal.

T5 Team Composition and Task Assignments

Professional Staff				
Name	FIRM	Area of Expertise	Position	Tasks Assigned

Note to Bidders: The information requested is required in the format provided below for each named member of professional staff and should be included by the Bidder in its technical proposal.

16 Curriculun	n Vitae for Proposed Professional Staff
1. Proposed Position	1: [only one candidate for each position]
2. Name of Firm:	
4. Date of Birth:	Nationality:
	college/university and other specialised education, giving names of ned and dates of obtained][*Include copies of all certificates mentioned in
	ofessional Associations: [*Include copies of membership
7. Other Training: [in	dicate other significant training not included under Education]
8. Countries of Work	Experience: [list countries of work experience in the last ten years]
	te proficiency in each language as good, fair or poor for speaking, reading
	cord: [starting with present position, list every employment held since of employment, employing organisation and positions held]
From: [year]	
Employer:	
Positions held:	

11. Detailed Tasks Assigned:	Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned:
[list all tasks to be performed under this assignment]	[indicate the following information for those assignments that best illustrate the member of staff's capability to handle the tasks listed under point 11]
	Name of assignment or project:
	Year:
	Location:
	Client:
	Main project features:
	Positions held:
	Activities performed:
12. Current Commitment	
	[indicate the following information for those assignments that you are currently undertaking]
	Name of assignment or project:
	Expected completion date:
	Location:
	Client:
	Main project features:
	Position:
	Activities being performed:
13. Certification:	
describes myself, my qualific	t to the best of my knowledge and belief, this CV correctly cations, and my experience. I understand that any wilfurein may lead to my disqualification or dismissal, i
	Date:
Signature of staff member or autho Day/Month/Year	prised representative of the staff
Full name of authorised representa	ative:

STATEMENT OF EXCLUSIVITY AND AVAILABILITY²

I, the undersigned, hereby declare that I agree to participate exclusively with the tenderer **<tenderer name>** in the above-mentioned service tender procedure. I further declare that I am able and willing to work for the period(s) foreseen for the position for which my CV has been included in the event that this tender is successful, namely:

From	То
< start of period 1	< end of period 1 >
< start of period 2	< end of period 2
< etc >	

I confirm that I am not engaged in another RA-funded project in a position for which my services are required during the above periods.

By making this declaration, I understand that I am not allowed to present myself as a candidate to any other tenderer submitting a tender to this tender procedure. I am fully aware that if I do so, I will be excluded from this tender procedure, the tenders may be rejected, and I may also be subject to exclusion from other tender procedures and contracts funded by the RA.

Furthermore, should this tender be successful, I am fully aware that if I am not available at the expected start date of my services for reasons other than ill-health or force majeure, I may be subject to exclusion from other tender procedures and contracts funded by the RA and that the notification of award of contract to the tenderer may be rendered null and void.

Name	
Signatur e	
Date	

٠

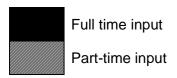
² To be completed by all key experts

Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal.

Staff input should be counted from the start date of the assignment and indicated in weeks or months, as appropriate. Professional staff should be indicated individually by name; support staff should be indicated by category e.g. clerical staff. Input should be indicated separately for input at home and in the field and for foreign and national staff, for the purpose of calculating travel, subsistence etc.

T7 Staffing Schedule

	No. Name of Staff	Foreign			Staf	f Inp	ut (s	pecif _.	y wee	eks o	r mo	nths)				Total Staff Input		
No		Nationa I	1	2	3	4	5	6	7	8	9	10	11	12	In Malawi	Outside Malawi	Total	
	Totals																	



Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal.

Indicate all main activities of the assignment, including milestones such as submission of reports and other deliverables. For phased assignments, indicate activities separately for each phase.

T8 Work Schedule

No	Antinita		Time Period (specify weeks or months)										
	Activity	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th

Note to Bidders: This Financial Proposal Submission Sheet should be on the letterhead of the Bidder and should be signed by a person with the proper authority to sign documents that are binding on the Bidder. It should be included by the Bidder in its financial proposal.

F1 Financial Proposal Submission Sheet

Date: [insert date (as day, month and year) of proposal submission]

Procurement Reference No: [insert Procurement Reference number]

To: [insert complete name of Procuring Entity]

We, the undersigned, declare that:

- (a) We offer to provide the consulting services for [insert a brief description of the Services]in conformity with your Request for Proposals and our technical and financial proposals;
- (b) The total price of our proposal is: [insert the total proposal price in words and figures, indicating the various amounts and the respective currencies], inclusive of local taxes [amend if local taxes are not required to be included];
- (c) Our proposal shall be valid for a period of [specify the number of calendar days] days from the date fixed for the proposal submission deadline in accordance with the Request for Proposals, and it shall remain binding upon us, subject to any modifications resulting from negotiations, and may be accepted at any time before the expiration of that period;
- (d) The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity. If none has been paid or is to be paid, indicate "none"];

Name and address of Recipient	Purpose Reason	Currency and Amount

(e) We understand that	t you are not boun	d to accept any p	proposal that you receive;
Name: [insert complet	te name of perso	n signing the pr	oposal]
In the capacity of [inse	rt legal capacity o	of person signir	ng the proposal]
Signed: [signature of p	person whose na	me and capacit	y are shown above]
Duly authorised to sign Bidder]	the proposal for a	nd on behalf of:	[insert complete name of
Dated onsigning]	day of		[insert date of

Note to Bidders: If BDS 14.3 requires the proposal price to be quoted separately for different Activities, complete this form as a "Summary of Activity Price" for each activity and complete one overall Summary of Proposal Price.

State the currencies under (currency 1), (currency 2) etc. Delete unused columns.

For lump sum contracts, this financial information will be used as a breakdown of contract price in Appendix C of the contract. For unit price contracts, this financial information will be used as the breakdown of cost estimates in Appendix C of the contract.

F2 Summary of Proposal (or Activity) Price

(Breakdown of Lump Sum or Cost Estimates)

State activity name or total proposal:__

	Cost item	Cost (MWK)
1	Fees	
2	Direct Costs	
3	Cost for Mentoring of Graduate Engineers	
4	Provisional Sum for Training of Client's Staff	50,000,000
5	% for Handling Costs on item 4 above	
6	VAT on Fees	
	Total	

Note to Bidders:. Complete this form for the total proposal or for each activity as indicated in the ITB.

The Bidder should complete a separate form for each currency or add currency columns and show up to three totals. Where required, enter separate rates for home and field work.

F3 Summary of Fees

State activity name or total proposal:_____ Currency:____

Name	Position	Input Qty	Unit (Days/months etc)	Rate	Total
Total					

Note to Bidders: Bidders may reproduce this form in landscape format, but are responsible for its accurate reproduction. The Bidder should complete a separate form for each currency or add currency column and show up to three totals. Complete this form for the total proposal or for each activity as appropriate.

F4 Summary of Direct Costs

State activity name or total proposal:		Currency:
--	--	-----------

Description of Cost	Quantity	Unit of Measure	Unit Price	Total Price
Total				

Notes

Local transportation costs are not to be included if local transportation is being made available by the Procuring Entity. Similarly, the project site, office rent/accommodations/clerical assistance costs are not to be included if being made available by the Procuring Entity.

All other costs related to the study not specifically provided for in the financial proposal shall be deemed to have been included in the other rates.

Section 5. Eligible Countries

Procurement Reference Number: RA/CON/DEV/SR/BT/REH/2024-25/28

All countries are eligible except countries subject to the following provisions. A country shall not be eligible if:

- (a) as a matter of law or official regulation, the Government of the Republic of Malawi prohibits commercial relations with that country, provided that the Government is satisfied that such exclusion does not preclude effective competition for the provision of the services required; or
- (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Government of the Republic of Malawi prohibits any procurement of services from that country or any payments to persons or entities in that country.

Terms of Reference

Consultancy Services for the Feasibility Study and Detailed Engineering Design for Periodic Maintenance / Rehabilitation of Blantyre – Lilongwe M001 Road Section from Lunzu Bridge to Zalewa Junction (M001/M006 Junction)

TERMS OF REFERENCE

CONSULTANCY SERVICES FOR THE FEASIBILITY STUDY AND DETAILED ENGINEERING DESIGN FOR PERIODIC MAINTENANCE / REHABILITATION OF BLANTYRE – LILONGWE Moo1 ROAD SECTION FROM LUNZU BRIDGE TO ZALEWA JUNCTION (Moo1/Moo6 JUNCTION)

1.0 Background

The policy of the Government of Malawi (GoM) towards the roads sub-sector is to build, maintain and ensure efficient utilization of the road infrastructure and other services appropriate to meet the current and future development needs of the economy. This includes helping the people in the rural areas to gain access to income generating activities, such as agricultural activities and to social services such as hospitals, schools etc. by providing reliable and durable roads; thus facilitating the continued development of the country's rural areas through increased agricultural production, the mainstay of the country's economy.

The current project contributes significantly to this objective since it is aimed at providing reliable and durable bituminous road and bridges, which will enhance the usage of the road network. Currently this is an existing paved road which is in continuous deteriorating due to traffic and environmental factors and whose travel time is increasing due to poor condition.

The Roads Authority (RA) intends to use resources from the Government of Malawi towards the cost of undertaking feasibility study and detailed engineering design for periodic maintenance/rehabilitation of Blantyre – Lilongwe Moo1 Road Section from Lunzu Bridge to Zalewa Junction (Moo1/Moo6 Junction). The improvement of the road section will contribute in achieving the Government's programme of developing the road sector in the country by raising the standards of national road network and connecting the country with neighboring countries. Furthermore, improvement in the efficiency of traffic and safety measures on the current roads, integration of the roads network in the country, will help in improving the agricultural activities and social services, reduce travel time and operation costs, which will lead to reduction in travel and transportation costs as well as maintenance costs for the current road sections.

2.0 Description of the Road Project.

The Lunzu Bridge to Zalewa Junction (Moo1) Road Section, which is 37km long, is paved but is currently in poor to fair condition with signs of pavement distress including surface cracking which is developing into potholes. Edge breaks have reduced the available road width and the unsurfaced shoulders have rendered the road dangerous for cyclists and pedestrians. The road section was last maintained around the year 2001 when some periodic maintenance was carried out. Major drainage structures on the road include the Shire River Bridge, Lirangwe River Bridge and Lunzu River Bridge. During the recent cylone Freddie, Lunzu Bridge was overtopped and the adjacent pedestrian Bailey Bridge was washed away.

The notable trading centres along the road section are Lunzu, Matindi, Lirangwe, Mdeka and Zalewa. Market days create a road safety hazard to both motorists and pedestrians since vendors display their wares on the carriageway thereby obstructing free passage of motorized traffic. The road section has seen an increase in motorized traffic including heavy vehicles. As a result of this, during peak hour, there is reduced chance of overtaking the heavy trucks thereby creating long queues of traffic moving at very reduced speed.

3.0 Objectives of the Assignment

The objectives of the assignment are to:

- (i) Investigate and determine the technical and economic feasibility, and the environmental and social impacts of the periodic maintenance/ rehabilitation of the existing section of the Lunzu Bridge to Zalewa Junction Road Section.
- (ii) Prepare detailed engineering designs based on the findings of the feasibility study as well as of the preliminary design and to prepare tender documentation for the periodic/rehabilitation works (national competitive bidding).

4.0 Scope of the Services

The services are expected to be performed in two phases, namely:

Phase 1 – Feasibility Study with Economic Assessment, Environmental and Social Impact Assessment, Resettlement Action Plan (RAP) and Preliminary Engineering Design of the road.

Phase 2 - Detailed Engineering Design, and production of Bidding Documents suitable for National Competitive Bidding.

The services are expected to be performed in line with the Guidelines and Checklists for the Monitoring of Road Design Projects (GCMRDP). In addition the design shall adopt the principle of 'Building Back Better' with respect to climate resilience.in this respect, the consultant is expected to use the Malawi Guidelines for the Road Sector to increase its resilience to the Effects of Climate Change.

4.1 Phase 1 – Feasibility Study with Preliminary Engineering Design

4.1.1 Feasibility Study - Scope of the Services

The feasibility study shall investigate the economic and social viability for carrying out the rehabilitation/periodic maintenance of the existing paved road between Lunzu Bridge and Zalewa Moo1/Moo6 Junction. The Feasibility Study

shall comprise an Economic Feasibility Study, Environmental and Social Impacts Assessment Study together with Preliminary Engineering Design. The consultant will also be required to make recommendations of the most viable option in terms of cost and environmental/social considerations.

4.1.2 Economic Feasibility Study

(a) Traffic Count Survey

The Consultant shall carry out manual classified traffic counts for a period of seven consecutive days on a minimum of 4 counting stations. The counts are to include non-motorised traffic and are to be conducted over an 18 hour period, 04:00-22:00 hours and must include at least one 24 hour weekday count and one 24 hour weekend count for purposes of estimating night traffic.

The 18 hour counts shall be grossed up to 24 hour values in the same proportion as the 18-hour/24-hour split on those days when 24 hour counts have been undertaken.

The consultant shall also count the different traffic vehicle categories for calculation of the equivalent axle loads.

Counts should be avoided at times when traffic activity is abnormal for short periods due to public holidays, public functions, market days, etc.

The counts shall be carried out using the format as per traffic count form attached as Annex 1.

Regarding traffic data, any available historical information on classified traffic counts as provided by RA shall be studied.

(b) The Socio-economic Profile of the Project

The consultant shall describe the socio-economic profile of the project road's area of influence, taking into account accessibility of local residents to:

- Workplaces
- Markets
- Key social services including health and education

(c) Traffic Forecasts

Traffic forecast shall be prepared for a 15 or 20 year period following opening of the upgraded road to traffic.

The consultant shall estimate the nature and volume of traffic forecast to use on the road by analyzing traffic counts, origin-destination studies and the present volume of freight and passenger movements on the road

under study. The Consultant shall also identify, describe and quantify existing and potential diverted and generated traffic. On the diverted and generated traffic, it will be extremely important to consider trends on recently upgraded roads as this will give a more realistic estimation of such traffic once the road is opened.

The consultant shall make an annual traffic forecast for a period of 10 years after the upgrading of the road route and more general projections of future traffic for the following 10 years.

The traffic forecast shall be given at three growth rates namely: low, medium and high. The consultant shall use these three growth rates in obtaining the economic internal rate of return (EIRR) of the project. The consultant shall give his estimate of probability of occurrence of projected growth rates and his rationale for the probabilities selected.

(d) Economic Analysis

- i. Vehicle operating costs shall be prepared by means of primary data collection on current prices and values of, inter alia, vehicles, tyres, crew and maintenance labour wages, fuel and lubricants. The consultant shall produce the motorized transport road users cost summary per vehicle km by vehicle class.
- ii. The consultant shall identify and quantify benefits using HDM-4 over the analysis period. Benefits categories shall include key items classified under road user effects in the HDM-4 terminology:
 - VOC savings
 - Passenger time savings
 - Reduction in costs arising from accidents.
 - Savings in road maintenance expenditure;

Any consideration given to significant changes in the alignments shall be included within the framework of the economic analysis.

- iii. It is important to note that the economic analysis shall include the following cost items:
 - Construction
 - Supervision
 - Maintenance
 - Land acquisition and resettlement
 - Environment mitigation and monitoring measures
 - STD/HIV/other pandemic awareness and mitigation component
 - Safety awareness and mitigation measures
- iv. The Consultant shall calculate the NPV, IRR and First Year Rate of Return including:

- All identified benefits
- VOC savings
- v. The consultant shall carry out sensitivity tests for NPV and IRR with reference to:
 - Construction cost variations of +10% and +20%
 - Variations of traffic levels over the life of the project of +/-10% and +/-20%.

The sensitivity analysis shall include a switching value analysis for construction costs and traffic levels.

The Consultant shall execute a stochastic risk analysis on the central deterministic NPV and IRR estimates. The Consultant shall utilize a recognized risk assessment software package to generate triangular type probability distributions for those variables considered most likely to influence project net benefits including investment costs and traffic growth.

4.1.3 Preliminary Engineering Design Investigations

The Consultant shall carry out the tasks as follows:

(a) Topographic Surveys

The Consultant shall promptly initiate and carry out the surveys of the project road. Surveys shall use the UTM co-ordinate system and the ARC-1950 datum consistent with Malawi topographic mapping system.

(i) Control Survey

- The control survey shall be carried out ahead of the topographic survey. The collection of topographic survey data shall not commence until the relevant section of the control survey has been completed, checked and errors redistributed according to normal survey practice. The control survey shall require prior verification by the Client on site.
- Control surveys shall be conducted using Optical or GPS methods.
- The control survey shall originate and terminate at a National Survey Beacon and shall take the form of an open or closed traverse.
- The control survey shall establish intervisible beacons at approximately 300m intervals along the entire length of the project road. Beacons shall be located beyond the expected limit of road and drainage works.
- Each beacon shall consist a steel pin 500mm in length set in concrete monument 300mm x 300mm x 300mm. The reference number of the beacon shall be scored indelibly into the concrete. A sketch shall be prepared for the location of

- each beacon and the co-ordinates of the beacon indicated on the sketch.
- The level of each beacon shall be established by double run spirit leveling. Ellipsoidal levels from GPS shall not be acceptable.

(ii) <u>Topographic Survey</u>

The necessary topographic surveys shall be carried out in the road reserve of the existing road. Sections will be surveyed to form a Digital Ground Model (DGM sometimes called DTM) representing the significant aspects of the landscape (road centerline, edge of surfacing, edge of shoulder, top of ditch, bottom of ditch, ditch liner, public utilities etc). The distance between the cross sections shall be 25 metres. The proposed geometric alignment is expected to generally follow the existing alignment with minimum improvements necessary to achieve the minimum design standards, as agreed with the Roads Authority (RA). The co-ordinates of all the intersection points shall be tied into the National Survey Grid and levels related to the National Benchmarks.

The following deliverables from the survey shall be presented with the draft feasibility study report;

- a. Schedule of all control beacons complete with beacon sketches and coordinates;
- b. DTM in AutoCAD format (dwg or dxf) defined using 3D faces (AutoCAD mesh);
- c. X, Y, Z data for all survey points in comma delimitated ASCII format including all coding;
- d. Existing plan and profile drawings 1:1000(H), 1:100(V) at A1 size, reduced to A3 size;
- e. Tabular presentation of the existing road vertical and horizontal geometry.

In addition to the requirements outlined above, the consultant shall follow and adhere to the checklist in Annex 2.

(b) Pavement Condition Investigations of the Road alignment

The Consultant shall carry out the following surveys to assess the pavement condition;

(i) Visual Pavement Condition

The Consultant shall carry out visual condition survey of the road to assess the severity and extent of cracking, disintergration of surfacing, deformation, smoothing of the surfacing, drainage properties etc which shall be presented on a pavement evaluation form as provided in the Code of Practice for the Rehabilitation of Road Pavements.

(ii) Pavement investigation tests

The Consultant shall carry out the following tests in accordance with the current SATCC or other internationally accepted standard such as AASHTO and ASTM or BS1377:1990.

- Dynamic cone penetration tests (DCP) shall be carried out along the existing road at least every 200m with intervals being shorter where there may be evidence of pavement failure and taking into account whether the location is on the existing pavement or on a proposed realignment. These shall be accompanied by the respective moisture tests.
- Trial pits of adequate size shall be excavated every 1000m along the existing road alignment to correspond with DCP tests described above with intervals being shorter where there may be evidence of pavement failure and taking into account whether the location is on existing pavement or on a proposed realignment. For each pit, each pavement layer shall have field density tests done and the material retrieved shall undergo plasticity tests, particle size analysis tests, moisture/density tests, California Bearing Ratio (CBR) tests. Adequate additional tests shall be carried out to test the suitability of the materials for stabilisation by cement or lime. The trial pits shall be profiled and each shall be photographed with a measuring stick/scale in the pit.
- Road roughness shall be measured along the alignment and the data converted to give the International Roughness Index.
- Deflection surveys shall be carried out using either Benkelman Beam or Falling Weight Deflectometer (FWD) as a basis for establishing subgrade conditions and residual pavement strength for design purposes. It should be noted that both the Benkelman Beam and Falling Weight Deflectometer are available at the Central Materials Laboratory of the Ministry of Transport and Public Works.

(iii) Sources of Construction Materials Tests

- Investigations for potential sources of materials for the construction of the pavement, earthworks and structures shall also be carried out and sites of potentially suitable materials surveyed and shown in the materials section of the engineering report. Analysis and testing shall be carried out as necessary on the construction materials. The Consultant shall make adequate tests to prepare alternative designs of subbase, base and wearing courses with different materials, viz naturally occurring gravel stabilized with cement or lime or blended with crushed stone.
- Samples of potential construction materials shall be tested where necessary for particle size distribution and plasticity

characteristics; linear shrinkage, maximum dry density and optimum moisture content, aggregate crushing value, ten percent fines value (dry and soaked state), bitumen affinity and chemical analysis as required. Other relevant tests that may be necessary as prescribed shall also be undertaken.

- Possible borrow pits shall be located as close to the project road as posible.
- At least one quarry as a possible source of aggregates shall be located. The aggregates shall undergo the necessary, grading tests, strength/durability tests, chemical tests, flakiness tests, bitumen adhesion tests and other tests as necessary.
- The bulk samples shall be kept permanently marked until after approval of the Detailed Engineering Design.
- The materials testing arrangements and programme shall be presented by the Consultant and approved by the Client prior to the investigation and testing commencing.
- The tests to be carried out shall include but not limited to the following:

Fill and sub-grade

- a) Grading
- b) Atterbergs Limits;
- c) Moisture/density relationship (AASHTO T180), and
- d) California bearing ratio (CBR) and swell after 4-days soaking for each typical soil type identified;

Potential gravel sources

- a) Grading;
- b) Atterberg Limits
- c) California bearing ratio
- d) Lime/Cement stablisation for the sub-base
- e) Mechanical modification for sub-base

Potential sources of hard stone

- a) Ten per cent Fines
- b) Los Angeles Abrasion
- c) Aggregate Crushing Value
- d) Sodium Sulphate Soundness
- e) Bitumen Affinity
- f) Specific Gravity and Water absorption, and
- g) Chloride and Sulphate Content.
- Sources of water and fine and coarse aggregates for construction purposes shall be investigated for quality and adequacy in quantity.

(iv) Hydrological and drainage investigations

- The investigations shall be carried out on all the existing drainage structures and their adequacy in terms of hydraulic capacity shall be assessed. This shall also apply to any envisaged new drainage structures.
- The structural condition of all the existing drainage structures shall be assessed. Wherever a structure is found to be structurally in adequate, the consultant shall design a replacement structure. Whereever a structure is found to be structurally adequate but the crossection is not compatible with the proposed road section the consultant shall proposed and design modifications to the structure to achieve the desired cross section. At major culverts and bridge sites, sub surface conditions shall be assessed by the use of trenching, hand augering or drilling as required.

(v) Road Inventory

An inventory of any existing road furniture which their corresponding locations shall be prepared.

4.1.4 Preliminary Engineering Design

The Consultant shall carry out a preliminary design of the road Project in accordance with the relevant design guideline (SATCC Draft Code of Practice for the Rehabilitation of Road Pavements - September 1998)

i. Design Options and Standards

The consultant shall, based upon the results of the traffic studies and projections and the preliminary engineering investigations, discuss and recommend alternative design options, ascertain the merits and demerits of each option, evaluate each in terms of the total transport costs, compare them and select appropriate design standards for the preferred road as follows:-

ii. Design Speed

The consultant shall discuss and recommend the appropriate design speed for the project road. Different design speeds may be applicable on different sections of the road.

iii. Cross Section

The consultant shall discuss and recommend standard cross sections for the cut and fill scenarios encountered on the project road and recommend travelled way and shoulder geometry as well as a range of side slopes, ditch profile etc. to suit all situations.

iv. Axle Loading

Taking the survey of the different traffic vehicle categories into consideration the consultant shall make use of the appropriate traffic equivalent factors in accordance with the SATCC pavement design manual and guideline.

v. Residual Life of Pavement

The Consultant shall estimate the existing residual life of the road pavement and propose alternative interventions to increase the life of the pavement for the next design life of the road which shall be 20 years.

vi. Preliminary Design Drawings

The drawings (with a soft copy in AutoCAD) shall be produced to the following scales in A3 sizes:

- Location plans as part of or whole of Malawi 1: 1,000,000
- Additional location plans at a scale of 1:50,000
- Horizontal and Vertical Alignment 1: 2,000/200
- Typical Cross-sections with the proposed pavement design 1: 25
- General layout of bridge and drainage structures 1: 50
- Cross sections are to be taken at minimum intervals of 25m

Preliminary hydraulic and structural designs shall be prepared for all suggested new bridges and drainage structures.

A schedule and location of all proposed new road furniture shall also be compiled.

(c) Preliminary Cost Estimate

The Consultant shall prepare an estimate of the construction costs based on current unit rates for similar works and the estimated quantities of work.

4.1.5 Road Safety Assessment

The Consultant shall gather basic statistics on the number of road accidents, the number of deaths, and number of injuries for each kilometre or section of the route for each of the previous three years. This data will be included, along with national statistics and trends on road accidents, as an appendix to the feasibility report. The feasibility report shall include a section on road safety, indicating typical current problems along the existing route and outlining what will be done within the project to enhance road safety. If alternative alignments and standards are considered, the evaluation must cover the road safety aspects.

4.1.6 Environmental and Social Impact Assessment

The Consultant shall conduct an Environmental and Social Screening and then write a Project Brief to Malawi Environment Protection Authority in order to get terms of reference that will be used to conduct and write Environmental and Social Impact Assessment (ESIA) report in accordance with the Environmental Management Act of 2017 and the guidelines which are appended as Annex No 5, 8, and 9, including a full Environmental Mitigation and Monitoring Plan (EMMP). In that regard, the Consultant shall also consider the socio-economic implications of the proposed road rehabilitation/upgrading works and make a preliminary assessment of the number of persons that will be displaced, if any, and the amount of compensation that will be required for structures, trees and other assets including land, that will be affected by the upgrading works. The Consultant shall also consult with affected persons and local community leaders.

4.1.7 Resettlement Action Plan

Depending on the outcome from Environmental and Social Impact Assessment under Section 4.1.7, the Consultant shall prepare either a full or an abbreviated Resettlement Action Plan (RAP) in accordance with the guidelines which are appended as Annexes No. 6 and 7.

4.2 Phase 2 – Detailed Engineering Design

The Consultant shall undertake the detailed engineering design as outlined below.

4.2.1 Topographic surveys

- (i) The Consultant shall confirm the computation and definition of the geometric characteristic of the road along the centerline. Setting out data shall also be given for points at regular intervals along curves and the longer tangent alignments. Vertical alignment is to be checked and defined.
- (ii) The construction drawings will clearly define all the relevant setting out details for all the various elements of the work.

4.2.2 Detailed Soils and Materials Investigations for major structures

At bridge sites and or other major structures, which are earmarked for replacement, sub surface conditions shall be investigated by trenching, hand augering and/or drilling as required including taking of undisturbed samples and standard penetrometer tests.

4.2.3 Detailed Geometric Road Design

The Consultant shall further detail the preliminary horizontal and vertical alignment for the upgraded road sections to ensure its compliance with the standards as stipulated in the SATCC Draft Code of Practice for the Geometric Design of Trunk Roads. The basis of the detailed geometric design shall be the agreed preferred route during the preparation of the preliminary engineering design.

4.2.4 Pavement Design

The optimum pavement design for the new road, in particular under consideration of availability of construction materials shall be confirmed after discussions with the Client. For that purpose he consultant shall review the traffic data collected with regards to traffic composition, occupancy and volume counts. Forecasts for a life span of 15/20 years (whichever is appropriate) shall include traffic of normal, generated, diverted traffic as well as future traffic growth. The traffic forecast shall be given at three growth rates, namely: low; medium and high. The correct assumptions for the growth rates are extremely crucial for the pavement design and have to be discussed with the client. The Consultant shall then use these three accepted growth rates in obtaining the cumulative equivalent standard axles (ESAs) for the three scenarios. For that discussion the pavement design shall be verified by comparison with at least two other internationally accepted methods in order to produce an optimum design for the project.

4.2.5 Structural Design

All existing data and the results of the field investigation for soils, foundations, hydrology etc. shall be analyzed and used as the basis for the design of drainage structures, which shall be supported by detailed hydraulic computations and foundation designs.

The Consultant shall verify the preliminary designs for bridge and drainage structures and produce detailed designs in accordance with the draft Bridge Design Specifications, November 1988, of the Ministry of Works and Supplies in conjunction with the provisions of BS 5400: Steel, Concrete and Composite Bridges, Parts 1, 2, 3, 4, 5, 9 and 10 as appropriate and as amended by the provisions of the relevant UK Department of Transport Memoranda. Specifications and recommendations for materials and workmanship are given in Parts 6, 7, 8 and 9.2 of BS 5400. These parts should be read in conjunction with the SATCC Standard Specifications for Roads and Bridge Works.

The provisions of BS 5400 Part 2: loading, will be adjusted and amended in consultation with the Roads Authority to take into account of local conditions in Malawi. In implementing these adjustments and amendments due guidance shall be taken from the SATTC Draft Code of Practice for the Design of Road Bridges and Culverts September 1998. Sections of BS 5400 Part 2 to which this paragraph particularly applies are as follows:

- 5.3 Wind load
- 5.4 Temperature
- 6.0 Highway Bridge live loads

4.2.6 Road Safety

a. Accidents Statistics

The consultant shall make contact with the Department of Road Traffic and Safety Services and Malawi Police Stations along the project road to obtain from them such accident statistics as may exist for the project road as well as details of the main causative factors in accidents and the locations of known accident black spots. Particular attention should be paid to accidents and black spots involving non-motorized transport and pedestrians.

b. Road Safety Audit

The reconnaissance inventories will include the location and extent of significant road side land use, particularly as it impacts on non-motorised road use and related safety issues.

The Road Safety Audit shall consider aspects such as inferior road geometry, poor sight distances, inadequate junctions or provisions for turning, slow moving traffic, informal trading and in particular any history of accident or known black spots.

4.2.7 Economic Assessment

The Consultant shall update the economic assessment prepared under Phase 1, taking into account the latest traffic data and the final estimated construction cost of the detailed design for the project. In the event of the interval between Phase 1 and Phase 2 of the services being greater than nine months, the traffic counts referred to earlier shall be repeated.

4.2.8 Bill of Quantities, Bidding Document and Cost Estimate

(a) Bill of Quantities

Calculated quantities for the items of work to be executed shall be based on the finalized construction drawings. A final detailed bill of quantities shall be produced in compliance with SATCC Draft Standard Specifications for Road and Bridge Works as closely as possible. Where items don't fall within the Standard Specifications, these shall be clarified in the Particular Specifications, based on the final detailed engineering design. A breakdown of quantities calculations will be supplied to the client in electronic form.

(b) Bidding Document

The Bidding document shall be prepared fully in accordance with the New Standard Bidding Document templates of Roads Authority. For this project, the FIDIC Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer (2017) shall apply. The Client will provide the consultant with the electronic copy of that particular template, which will then be the working basis of the new bid document and which should be changed by the Consultant only as far as the new project requires.

In terms of Technical Specifications the SATCC Standard Specifications for Road and Bridge Works, 2001, shall be applicable. All references to SABS in the standard specifications shall be reviewed and changed to the equivalent SANS. The Particular Specifications which supplement the Standard Specifications shall be changed by the Consultant only in line with the new project requirements. The Consultant shall in particular avoid significant changes to Section 1400 without consulting the Client.

(c) Engineering Drawings

The Consultant shall prepare the following detailed engineering drawings in A1 and A3 sizes for each section for which a detailed design is prepared:-

- (i) Location plans as part of or whole of Malawi at a scale of 1: 1,000,000
- (ii) Plan and profile drawings to a scale of 1:1,000 horizontal and 1:100 vertical for A1 size drawings, and 1:2,000 horizontal and 1:200 vertical for A3 size drawings showing running chainages, natural ground levels and design levels all at 25m intervals, horizontal and vertical curve details, side drain locations, descriptions and references to all drainage and bridge works, location and values of benchmarks and traverse stations, location of road furniture, contour lines superimposed on plans, the boundaries of the road reserve and any other relevant information, in a format approved by the client.
- (iii) Typical cross sections, scale 1:25 showing all details of road cross section cuts and fills, side drains, pavement thickness, camber and super elevation, shoulders and pavement widening.
- (iv) Cross sections at minimum intervals of 25m for the entire project.
- (v) Typical culverts: showing details of all types of culverts and other drainage structures, their inlets and outlets including the protection works necessary for the project.

- (vi) Major structures: For all bridge structures, detailed engineering design plans will be produced at appropriate scales, including contoured site plans, substructures and foundation details, protection or ancillary works and bar bending schedules.
- (vii) Soils plan or table showing the characteristics of soils for various sections of the route.
- (viii) Ancillary Works: showing plans of all other ancillary works including related works.
- (ix) Road furniture: Having due regard to current practice, ensure appropriate road furniture, pavement markings and traffic calming measures.
- (x) Accommodation of traffic: The Consultant shall prepare a traffic operation plan detailing the construction sequencing, use of traffic control devices and other activities designed to minimize traffic distraction. This operation plan will be complemented by drawings showing typical traffic management, including appropriate signage for the typical construction situations expected to be encountered.
- (xi) The Consultant is to produce a mass-haul diagram for the earthworks and pavement materials required to complete the project.

(d) Cost Estimate

- (i) The Consultant shall prepare an estimate of the construction cost based on the final bills of quantities. The cost estimates will be based on unit price analysis for each pay item based on current unit rates for similar works. A detailed comparison of the overall bid price/km of other similar contracts awarded through international competitive bidding shall also be included.
- (ii) The consultant shall submit "taking off" sheets for all the Bill items.
- (iii) The Consultant shall prepare separate cost estimates for supervision of the construction works for each section of the road (consultancy services). He shall provide a detailed estimate including (but not limited to) the total required inputs for construction supervision in terms of man months for senior engineering and technical staff, costs of construction and post construction services, direct operating costs, reimbursable expenses, and miscellaneous costs.

4.2.9 Work Programme and Cash Flow Forecast

In order to assist in preparing the required construction period and forward budget needs, the consultant shall prepare a work programme and cash flow requirements showing:-

- A bar chart showing the proposed sequencing and duration of the major activities for the entire construction period.
- Anticipated monthly value of work executed presented in the form of an S-curve.

In preparing this programme, the Consultant shall take into account the climatic conditions prevailing in the areas concerned.

4.2.10 Additional Services-Training of Client's and other Staff.

a) Mentoring of Graduate Engineers

The consultant, through their key personnel, shall mentor two graduate engineers nominated by the client during the performance of the consultancy services. The mentoring of the graduate engineer shall cover all aspects of the design process from undertaking the various investigations, carrying out the design and preparation of the tender documentation.

The Client will be responsible for all costs which will be incurred by the graduate engineers during the mentoring period such as transport and accommodation.

The consultant shall mentor the graduate engineers in all stages of the project cycle such as Traffic Assessment, Topographic Survey, Soil Sampling and Material Testing, Geometric Design, Pavement Design, Hydrology and Hydraulic Analysis and Design of Water Structures such as Bridges, Culverts etc, Economic feasibility studies, Environmental and Social Impact Assessments, Preparation of Bidding Documents and Road Safety,

b) Training of Client's staff and provision of training materials and equipment

The consultant shall facilitate training for Client's staff on specific areas of road and bridge design. The Consultant shall identify a qualified expert with hands on experience in a particular field and will be responsible for his travel and accomodation expenses. The expert shall be approved by the Client. The expert will, in liason with the Client, determine the duration of the training including the number of sessions. The training shall include theory and practicals. The consultant shall be responsible for paying for the venue for the training, lunch and refreshments and allowances for the staff to be trained. The consultant shall provide training

materials and equipment which may include software design application.

The client shall identify the area of interest for training and shall determine the number of staff to be trained.

At the instruction of the Client, the Consultant will be requested to purchase tools, equipment and softwares and these will be retained by the Client. The cost of these will be claimed under the provisional sum in the financial proposal.

5.0 Key Professional Staff

The Consultant shall provide sufficient resources to carry-out all the services required under this assignment phase and the input together with minimum requirements for the key professional staff are as indicated below. All the key professional staff should have graduate/first degrees as a mínimum qualification. The Consultant will be required to apportion the key professionals' contingent and inputs to the technical proposal.

Item	Description	Man Month
1	Team Leader/ Highway Design Engineer	9
2	Pavement /Materials Engineer	6
3	Structural Engineer	4
4	Hydrologist	2
5	Contract documentation specialist	4
6	Transport Economist	4
7	Environmental And Social Expert	4
Q	Engineering Surveyor	
		5

The Consultant's personnel, nominated for this project, shall be suitably qualified and experienced. As a guide, the following is an indication of the minimum level of training and experience expected of the key members of the design team:

- (a) Highway Design Engineer/Team Leader: with a minimum qualification of B.Sc. in Civil Engineering, professionally qualified, and must have at least 15 years of working experience in road works, and should have undertaken at least 10 feasibility study and detailed design projects as a Highway Design Engineer.
- (b) Materials Engineer: with a minimum qualification of B.Sc. in Civil Engineering, professionally qualified, and must have at least 10 years of working experience in road works, and should have undertaken at least 6 feasibility study and detailed design projects as a Materials Engineer.

- (c) Structural/Bridge Engineer: with a minimum qualification of B.Sc. in Civil or Structural Engineering, professionally qualified, and must have at least 10 years of working experience in road works and structures, and should have undertaken at least 6 feasibility study and detailed design projects as a Bridge Engineer.
- (d) Hydrologist: with a minimum qualification of B.Sc. in Civil Engineering or relevant discipline and must have at least 10 years of working experience in road works and structures, and should have undertaken at least 6 feasibility study and detailed design projects as a Hydrologist.
- (e) Contract Documentation Specialist: with a minimum qualification of B.Sc. in Civil Engineering or relevant discipline and must have at least 10 years of working experience in preparation of bidding documents for road works, and should have undertaken at least 6 feasibility study and detailed design projects as a Contract Documentation Specialist. Demonstrable experience in the use of SATCC standards and specifications as well as FIDIC Conditions of Contract.
- (f) Transport Economist: with a minimum qualification of a Degree in Economics and must have at least 8 years of working experience in road works or transport infrastructure. Experience in economic appraisals of road projects using the HDM-IV economic model is obligatory. The Transport Economist should have undertaken at least 5 feasibility study and detailed design projects as a Transport Economist.
- (g) Environmental and Social Expert: with a BSc. in Environmental Science and Technology or its equivalent and must have 8 years of working experience, and should have undertaken at least 5 feasibility study and detailed design projects as an Environmental and Social Expert.
- (h) Engineering Surveyor: Professionally qualified technician with Diploma in Civil Engineering or Engineering Surveying and should have 8 years of work experience, and should have undertaken at least 5 feasibility study and detailed design projects as a an Engineering Surveyor.

6.0 Timing

The Consultant shall draw up his own proposal for a time schedule, but shall make due allowance for time required by the Authority to assess and approve documents submitted by the Consultant, before subsequent project tasks can be commenced with. The following schedule is to be used as a guide:

Report No.	Report Description	Delivery Duration
i	Inception Report	4 weeks after Commencement Date
ii	Comments on Inception Report by RA	2 weeks

iii	Implementation of RA Comments	2 weeks				
iv	Draft Feasibility Study Report Submission	12 weeks after Commencement Date				
٧	Comments on Draft Feasibility Report by RA	3 weeks				
vi	Implementation of RA Comments	3 weeks				
vii	Final Feasibility Study Report Submission	18 weeks after Commencement Date				
viii	Comments on Final Feasibility Report by RA	2 weeks				
ix	Implementation of RA Comments	2 weeks				
Х	Draft Detailed Design Report Submission	30 weeks after Commencement Date				
xi	Comments on Draft Detailed Design Report	3 weeks				
xii	Implementation of RA Comments	3 weeks				
xiii	Final Detailed Design Report Submission	36 weeks after Commencement Date				

The feasibility study phase and the detailed engineering design phases are expected to be completed not later than thirty six (36) weeks, including time for comment comments and approvals by the Roads Authority and other key stakeholders.

7.0 Reporting Requirements

The Consultant shall prepare and submit the following reports and documents, in English, in an approved format to the Client. The comments of the Client shall be incorporated in the final version of the reports and documentation.

Ten (10) hard copies and one (1) soft copy of each of the reports/documents listed below shall be sent to the Client.

In addition, thirteen (13) sets of the final bidding documents in hard copy and one set in electronic copy, shall also be provided. Six sets of drawings shall be provided with A1 size drawings and thirteen (13) sets with A3 size drawings.

7.1 Phase I: Feasibility Study with Preliminary Engineering Design

(a) Inception Report

The consultant shall submit an inception report, including a quality assurance plan, within four weeks of the Commencement Date. This report

shall outline the consultant's mobilization, work plan, strategy, methodology and timetable of the entire assignment.

(b) Draft Feasibility Study Report

The Consultant shall submit a draft feasibility study report at the end of Twelve (12) weeks from the date of commencement of the study as outlined under Section 7. The following volumes have to be included:

• Draft Economic Feasibility Report

The Draft Economic Feasibility Report should attempt to comment and discuss all the elements of the entire Economic Feasibility study including the economic calculations and analysis carried out and showing detailed results of the economic feasibility under this stage, covering all the required elements included under Section 4.1.2.

• Draft Preliminary Engineering Design Report

A draft Preliminary Engineering Design Report covering all the elements included under Section 4.1. shall be submitted. The report shall include details of the services carried out and the outcomes of the preliminary design with emphasis on soils and material investigation results, preliminary designs and cost estimates. The Report should attempt to comment and discuss all the elements of the entire Preliminary Design study over and above the preliminary design issues and processes.

The report shall include the findings of the preliminary designs and cost estimates, planning requirements of the socio-economic and environment impact assessments. It shall include an executive summary, summarizing all the findings and recommendations. This report will be presented including survey data, drawings, maps, plans and diagrams in A3 size to be included in the Final Report.

• Draft Environmental and Social Impact Assessment Report

The draft Environmental and Social Impact Assessment Report shall be prepared in accordance with Section 8 of the Guidelines for an Environmental Impact Assessment of Proposed Road Works which are appended as Appendix No.1 to these ToR. The report shall also include cost estimates and STD & HIV/AIDs and other pandemic components. Ten copies of the report shall be submitted for scrutiny to the Technical Council for the Environment under the Department of Environmental Affairs and for approval by the National Council on the Environment (NCE). This report shall be submitted together with the draft feasibility study at the end of 12 weeks from the commencement of the services.

• Draft Full or Abbreviated Resettlement Action Plan

The draft full or abbreviated Resettlement Action Plan (RAP) shall be prepared in accordance with Appendix 2 or 3 of these Terms of Reference

whichever is applicable. The RAP should address all typical issues as outlined under Appendix 5 of these Terms of Reference. This report shall be submitted together with the draft feasibility study at the end of 12 weeks from the commencement of the services.

(c) Final Feasibility Study Report

After taking into account the Client's comments on the draft feasibility study report including the draft Economic Feasibility and Preliminary Design Report, the Environmental and Social Impact Assessment Statement and the Resettlement Action Plan, the Consultant shall prepare and submit the final feasibility study report complete with plans and all documents. This report will be presented including survey data, soils and material investigation results, required drawings, maps, plans and diagrams in A3 size. This report shall be submitted within 2 weeks of receipt of the Clients comments.

7.2 Phase II: Detailed Engineering Design

Under phase II of the assignment, the Consultant shall submit the following reports;

(a) Draft Detailed Design Report and Bidding Documents

The consultant shall submit a draft detailed engineering design report including soil and material investigation and pavement design report complete with cost estimates and accompanied by a set of the draft bidding documents and all drawings, maps, plans and diagrams in A1 size. For major structures, the consultant will submit all the calculations for the design as an appendix to the report. The bidding documents shall be in accordance with the latest version of the Roads Authority standard bidding documents. This report has to be submitted after 30 weeks from the date of commencement of the study.

(b) Final Detailed Engineering Design Report

After approval of the draft detailed design report, the consultant shall submit the final report with a set of bidding documents, acceptable to the Client and the Financiers. The drawings that will form part of the bidding documents shall be in A1 size as well as reduced to A3 size. Thirteen (13) sets of the final bidding documents in hard copy and one set in electronic copy (including editable copies), shall be provided. Also six sets of drawings shall be provided with A1 size drawings and thirteen (13) sets with A3 size drawings.

This report shall be submitted within three weeks after receipt of the client's comments. The consultant will also be required to submit an electronic copy (CD) of the Final Detailed Design Report and bidding documents.

Note: The consultant shall make a presentation of the preliminary design report and draft detailed design report to the Roads

Authority and other relevant stakeholders at a meeting to be arranged in consultation with the Roads Authority.

8.0 Data, Services and Facilities to be Provided by the Client

The Client shall provide the consultant with all requested and available data.

The Client will also assist in the facilitation for the co-operation of other government ministries and agencies, departments and other agencies as required for carrying out the works and in liaison as necessary for the same purpose. The Client will give the Consultant assistance to gain access to all information required for the proper conduct and completion of the studies.

9.0 Obligations of the Consultant

The consultant's obligations shall include, but not be limited to the following:-

- i. The Consultant shall employ well qualified and competent professional staff at all times in the execution of this study.
- ii. The Consultant shall make his own arrangements for all necessary office and living accommodations, transportation, office and other supplies, computers, computer software, survey equipment, engineering investigations, materials testing, printing of reports and drawings etc. in connection with the services to be provided. All costs have to be included in the Financial Proposal.
- iii. Prior to commencement of the actual services, the Consultant shall formulate a quality management system and procedures for implementation of these services in accordance with these Terms of Reference and accepted professional practice.

ANNEX 1.DATA COLLECTION SHEET FOR CLASSFIED MANUAL TRAFFIC COUNT

TRAFFIC COUNT FORM MANUAL CLASSIFIED TRAFFIC COUNTS Name of the Road (Start & End Description) **GPS** Reference Road No: Date Day Weather Link. No: Traffic Count Survey Location dd / mm / yy Sunny Cloudy Station No: Special Feature: Rainy District Name : Foggy Nearest Town Any other Remarks: Motorized Traffic Non-Motorized Traffic Passenger Vehicle Goods Vehicle Landrovers, Pickups Mini-Bus Medium Bus Large Bus Light Truck, Medium Truck Heavy Truck Others Landcruisers, Twin Cab Wheeler Semi-Trailer Time/ Direction Animal Remarks Tractor or (ST)/ Full Trailer >16 ≤50 Seats Trucks ≤ 3.0 Saloon car Tractor & Bicvcle Drawn / 4 WD Tricycle (≤ 16 seats) (>50 Seats) (2-Axle), (3-4 Axle), (FT) Count Axle Cycles) Trailer Hand Cart (5,6,...) Trucks > 3.0≤ 16 LOW BASE Trucks > 16 tons HIGH BASE 13 14 16 18 e.g. Rain, Market, Time Dir. Accident. Procession, 0 0 etc То 04 - 05 То _ To 05 - 06 _To

											1
											1
06 - 07	То										1
	То										1
											-
											<u> </u>
											1
07 - 08	То										
07 - 08	То										
											1
											1
08 - 09	То										1
	То										-
											-
											-
09 - 10	То										
05 10	То										
											1
											1
10 - 11	То										1
	То										1
											1
											_
											-
											-
11 - 12	То										1
	То										
					_	_		_		_	
	1	·	1						 ·		

}												
12 - 13												
	То								ļ		——	
	То											
												—
-										-		
ļ									ļ	ļ	\vdash	
13 - 14	То									į.		
13-14	To											
ľ												
}											-	
ļ											\vdash	
ļ												
14 - 15	То											
	To											
ľ	10											
}												
											\longrightarrow	
ļ												
l										į .		
[To											
15 - 16	To											
}	10											
-												
									ļ		\longrightarrow	
										<u> </u>		
Ī	То											
16 - 17	To										$\overline{}$	
}	То										$\overline{}$	
}										1	\vdash	
												
										<u> </u>		
j												
17 - 18	То									1	$\overline{}$	
			1		1			1	, ,			
<u> </u>	То											
<u> </u>	То											

18 - 19									
	То								
	То								
19 - 20									
	То								
	То								
20 - 21	То								
	To								
	То								
21 - 22	To								
	10								
22 - 23	То								
	То								
23 - 00	То								
	то								

		_						_			_	_		
00 - 01	To													
	То													
	10													
01 - 02	То													
	То													
02 - 03	То													
	То													
03 - 04	То													
	To													
Signature of th	e Enumerator	r:							Cons	ultants Name:	 Signature of the Sup	pervisor:		
											Name & Position of			
Name of Enumerator & Contact Details														

Annex 2 - OD Survey

Station: Direction: From: To: Interviewer: **CODES VEHICLE TYPE** TRIP PURPOSE **LOAD TYPE VEHICLE LOADING ROAD CONDITION** 1. Cars 1. Home 1. Construction materials 1. Loaded 1. Good 2. Pickup/ 4WD 2. School 2. Agricultural 2. Partially Loaded 2. Fair 3. Light goods vehicle 3. Workplace 3. Food 3. Empty 3. Poor 4.Medium goods vehicle 4. Shopping 4. Fuel TRIP FREQUENCY 5. Heavy goods vehicle 5. Social 5. General 6. Serve passengers 6. Minibus 6. Passengers To be recorded as 7. Transporting goods number of trips per day or 7. Conventional bus 8. Tractors 8. Other number of trips per week or number of trips per month

Date:

Time	Reg. No.	Vehicle Type	Number of People	Origin	Destination	Trip Purpose	Trip Frequency	Vehicle Loading	Load Type	Road Condition	Would use road if improved

Annex 3 - Control Point Data Collection Template

Client	(A)	22	Project No.			
Coordinates		92	\$2			
Station ID	1	Туре	Ground Control Points (GCP)			
Processing Level	Datum	Projection	Height Datum	Lat / Northing	Long / Easting	Height(m)
Processed Geog	Sector)	-	61 7 6	-	-	_
Processed	1 N. 70	. 	11 7 0	, .		_
Processed	350	<u> 2</u> 2	[g:			

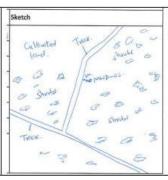
<u> </u>	N
7	
L	
Commonter	
comments.	
Personal Company of Company	

Photos





Date	52	
Start Time (Local)	0/5	- 8
End Time (Local)	N .	Ī
Slant Height (m)	1 - 1	3
Vertical Height (m)	3-8	- 103
Pillar Height (m)	9 8 8	18
Antenna Offset (m)	54%	Ï
Pin Height (m)		
True Vertical H (m)	757	
Antenna Radii (m.)		- 83





GPS Unit Serial No.		File Name N/A
GPS Model No.	-	Important Notes
Antenna Type		
Misc		
Processing Software	1020	

Annex 4 - Topographic Survey

Prepare Draft QA Plan for Topographic Survey

Relevance of Topographic Survey to project under review (Y or N)
[NB This item cannot be effectively pursued until the proposed alignment has been determined. Hence, if there is a Feasibility Study stage involving alignment selection then the item cannot be commenced until the Feasibility Study has been completed, although Items 10.01 to 10.04 could be undertaken prior to that milestone]

The following checklists present an outline of the procedures to be followed in undertaking topographic survey for road projects.

Item 10.01 – Prepare Quality Assurance [QA] Plan for Topographic Survey
Relevance of this item to project under review (Y or N)
CONFIRMATION: Submitted:

ACTIVITY:

The DCs [in collusion with their survey sub-contractor, if any] must prepare a QA Plan to describe how topographic survey will be organised and managed in a realistic way for implementation and achievement of the project objectives.

The following checklist outlines the expected contents of the QA Plan. Other elements should be included as appropriate to the specific project.

Job brief	Relevant:	Included:
Sub-contract arrangements: Particular importance must be attached to mutual agreement of the QA Plan with any topographic sub-contractor in order to impart a feeling of ownership, and thereby promote compliance	Relevant:	Included:
Job team, roles, and responsibilities	Relevant:	Included:
Communications management	Relevant:	Included:
	_	
Data / document management	Relevant:	Included:

Coding system for survey features	Relevant:	Included:
County System for Survey readures		
	•	
Job methodology; including ensuring compliance with requisite accuracy specifications	Relevant:	Included:
ob methodology, including ensuring compliance with requisite accuracy specifications	rtolovant.	moradoa.
Activity schedule	Relevant:	Included:
Activity scriedule	rtolovani.	moradou.
Resource schedule	Relevant:	Included:
Resource scriedule	ixelevalit.	iriciaaea.
Checking procedures	Relevant:	Included:
Checking procedures	ixelevalit.	iriciaaea.
Drangration and submission of deliverables	Relevant:	Included:
Preparation and submission of deliverables	Relevant.	iriciuded.
Olivet / stable balance in a section and a second section to	Relevant:	Included:
Client / stakeholder review and responding to comments	Relevant:	included:
Draguesa manifesia	Relevant:	Included:
Progress monitoring	Relevant.	included.
Other considerations:		
	[n .	
•	Relevant:	Included:
•	Relevant:	Included:
	D.L.	La ala La
•	Relevant:	Included:
	D.L.	La ala La
•	Relevant:	Included:
•	Relevant:	Included:

tem 10.02 - Review of Draft QA Plan for Topog	raphic Survey
	Relevance of this item to project under review (Y or N)
CONFIRMATION:	Completed:
RA [and Donor(s), where applicable] comments Survey	on Draft QA Plan for Topographic
ACTIVITY:	
the submission of the Draft QA Plan for Topograp	s Contract which will commence immediately upon phic Survey during which period the RA and [where draft plan and [where considered necessary] hold nich require further explanation.
The comments arising from that review will be fo	ormally forwarded to the DCs.
*	**
tem 10.03 – Finalise QA Plan for Topographic S	Survey
	Relevance of this item to project under review (Y or N)
CONFIRMATION:	Submitted:
Final QA Plan for Topographic Survey	
ACTIVITY:	
The DCs will receive the official comments of the	RA and Donor(s) [as applicable].
	Plan for Topographic Survey to incorporate the ollowing any subsequent discussion with RA for the
*	**
tem 10.04 – Implementation of QA Plan for Top	ographic Survey
	Relevance of this item to project under review (Y or N)
CONFIRMATION:	Confirmed:
Implementation of QA Plan for Topographic Surv	/ey
ACTIVITY:	
	ic Survey must be an on-going obligation on the part ork. The item can only be 'signed off' in the above ohic survey work.

Item 10.05 - Establish Detailed Network of Survey Control Points

Relevance of this item to project under review (Y or N)	

CONFIRMATION:	mpleted
---------------	---------

Establish detailed network of survey control points

ACTIVITY:

The DCs will utilise "state of the art" equipment for all survey and setting out works and to facilitate the ready transfer of digital survey data to the highway design / digital terrain model software.

The DCs must identify all existing triangulation beacons installed during previous studies [if such exist], and national survey monuments in the proximity of the project area, and install additional and / or replace existing damaged triangulation beacons, as necessary, to ensure adequate coverage of the project area. These must be of robust construction typically comprising steel pins set in concrete or alternatively set in holes drilled into solid immovable rock. The beacons will be located outside the area to be occupied by the permanent works, shall be mutually inter-visible, and at spacing and locations such that all secondary survey and setting out can be carried out from them. The beacons must be conspicuously marked at the site of each, and location diagrams must be prepared for each.

The network must be linked to the National Survey Grid, and benchmarks to the National Benchmarks system, where practicable. Where this cannot be practicably achieved a local triangulation and / or benchmark level system may alternatively be established. However, it is vital that such a systems be tied-in to carefully chosen, 'indestructible', and <u>easily identifiable</u> landmarks. These basic reference landmarks must not be susceptible to damage or movement by agricultural activity, erosion, flood, vandalism or any other such reasonably foreseeable threat. There must be a redundancy in the number of such basic reference landmarks so that, in the unlikely event of one or more actually being disturbed, there will be sufficient remaining to still enable restoration of the system. THIS IS VITALLY IMPORTANT.

The accuracy of observations for the x [easting], y [northing] coordinates must be within 10 mm + 1 part per million e.g for 2 points located 5 km apart:

Acceptable deviation = 10 mm + 1 ppm Distance = 5 million mm

Error = $10 + 1 \times 5,000,000/1,000,000 = 15 \text{ mm}$

The accuracy for the z coordinate [elevation / reduced level] must be within 5 mm x \sqrt{k} [where k is distance in km between successive beacons] e.g. for two points 5 km apart:

Error tolerance = $5 \times \sqrt{5} = 11 \text{ mm}$

Item 10.06 - Compile Detailed Digital Terrain Model

Relevance of this item to project under review (Y or N)	

CONFIRMATION:	Completed:
Compile detailed digital terrain model	

ACTIVITY:

The DCs must carry out detailed secondary surveys using "state of the art" equipment. The surveyed strip width must be sufficient to accommodate all the envisaged design components plus a margin beyond so that the adjacent terrain configuration can, where relevant, influence the nature of the nearby works. This is especially important in respect of roadside drainage. As a general indication, the strip width should be about twice that of the nominal RoW width [but not less than 100m], to allow for full control of all designed elements within the RoW and also for moderate modifications in geometric alignment during fine detailing. Good judgment will be required with regard to the actual selected detailed survey width to reflect degree of complexity of the alignment geometrics, and also with regard to the need for additional coverage where dictated by special circumstances such as side roads realignment, frontage [service] roads and other access roads, intersections, slip roads and interchanges, grading and realignment of watercourses, and structures.

The DCs will record x [easting], y [northing], z [elevation] coordinates of all surface features. A coding system for all features should have been outlined in the QA plan.

Judgement will be necessary on the frequency of ground points surveyed to create the contour string lines based on the particular terrain but the intensity must be sufficient to accurately support 1/1000 scale mapping with a 1 metre contour interval for general design and 1/500 scale mapping with a 0.5 metre contour interval in special areas where a larger scale is required for clarity of presentation, eg for such locations as those outlined in the last sentence of the first paragraph of this 'Activity' box.

The actual features captured in the topographic survey work will vary from project to project, particularly between existing road rehabilitation and new road alignment, and these will require agreement prior to commencement of the survey work.

Tolerances for detail survey:

<u>Feature</u>	Tolerances [mm]	
	x and y	Z
Structures, buildings, asphaltic pavements	± 50	± 25
Gravel pavements	± 100	± 50
All others	± 200	± 100

The following tabulation provides a comprehensive list of potential features for incorporation into the Digital Terrain Model [DTM] from which the actual features surveyed should be selected and agreed as per the requirements of the specific project. In the event of other features special to the project area, and not listed, they should be added in the blank spaces provided

National Survey trigonometric stations, with coordinates and all other details	Relevant:	Included:
	-	_
Survey stations	Relevant:	Included:
Benchmarks, with coordinates and reduced level	Relevant:	Included:
Temporary benchmarks	Relevant:	Included:

Spot levels	Relevant:	Included:
		T
Contours [normal, prominent]	Relevant:	Included:
North symbol	Relevant:	Included:
Earthworks (General)	Relevant:	Included:
Embankments / cuttings, bottom and top	Relevant:	Included:
Watercourses [natural rivers, streams], upper edges and bottom profile	Relevant:	Included:
Areas of crops, including various types	Relevant:	Included:
Areas of woodland, including types of trees	Relevant:	Included:
Grass [rough]	Relevant:	Included:
Scrub	Relevant:	Included:
Trees [small, medium, large]	Relevant:	Included:
Boundary strings	Relevant:	Included:
Centrelines	Relevant:	Included:
Dood corriemations and added	Relevant:	Included:
Road carriageways and edges	relevant.	included.

Kerbs	Relevant:	Included:
Roadway drainage gulley	Relevant:	Included:
Shoulders	Relevant:	Included:
Verges, footpaths, and tracks	Relevant:	Included:
Road Signs [large, small]	Relevant:	Included:
Ditches, upper edges and bottom	Relevant:	Included:
Culverts	Relevant:	Included:
Drainage manhole / catchpit [type], with invert level and size of pipework	Relevant:	Included:
Railway track, with track profile [all lines] for [say] 50m each side of alignment	Relevant:	Included:
Buildings [frontage, general, solid-sided, open-sided, type of wall structure, type of roof]	Relevant:	Included:
Fences [various types]	Relevant:	Included:
Walls [low 0.1m - 0.5m, > 0.5m / various types]	Relevant:	Included:
Gates	Relevant:	Included:

Overhead electricity cables and pole positions, including voltage	Relevant:	Included:
Electricity box [pillar]	Relevant:	Included:
Electricity chamber, including depth to cables	Relevant:	Included:
Pylon locations, including voltage carried	Relevant:	Included:
Water supply chamber cover, including depth to pipe and pipe size	Relevant:	Included:
Water Meter	Relevant:	Included:
Stop Valve	Relevant:	Included:
Fire Hydrant	Relevant:	Included:
Overhead telecommunications cables, and pole positions	Relevant:	Included:
Telecommunications box [pillar]	Relevant:	Included:
Telecommunications chamber , including depth to top and bottom of cables	Relevant:	Included:
Retaining walls	Relevant:	Included:

Additional areas of survey at larger scale [see above 'Activity' box for this item] related	Relevant:	Included:
to such special circumstances as: • side roads realignment,		
 frontage [service] roads and other access roads, 		
 intersections, 		
slip roads and interchanges, grading and realignment of watercourses, and		
grading and realignment of watercourses, andstructures.		
Text Strings	Relevant:	Included:
Other features:		
•		Included:
	_	
•		Included:
•		Included:
•	_	Included:
	_	
•		Included:

and 40.07. Completed Board Orecas Continue Comment		
em 10.07 – Conduct Road Cross Section Survey		
Relevance of this item to project unde	r review (Y or	N)
ning appropriate road design aeftwere gross sections through the proposed roa	d and grou	nd profile
sing appropriate road design software cross sections through the proposed roa an readily be obtained from the DTM. Hence, for projects where the ToR requires TM it will not be necessary to undertake separate <u>field survey</u> to produce cross so e proposed road at specific chainage intervals.	the prepar	ation of a
owever, for projects where a DTM is not called for, such as a simple road recometric realignment, it may be more efficient and economical to undertake a cruitable intervals sufficient to accurately depict the profile of the existing road.		
CONFIRMATION:		Completed:
· · · · · · · · · · · · · · · · · ·		

Road cross section survey

ACTIVITY:

Where a road cross section survey is required as described above the typical cross section interval would be 20 metres but this may require adjustment from road section to road section depending on the severity of the existing road geometry or on such matters as extreme topography, urban areas, junctions, property accesses, nearby structures, specific drainage improvements etc.

Each cross section of an on-site cross section survey should extend over at least the full width of the RoW, and also any adjacent ditches or drainage channels [even outside the RoW] should be captured by the survey so that positive drainage can be designed for the location.

In the event of a project consisting of part new alignment and part simple rehabilitation the on-site cross section information will be included in the overall DTM.

Where existing roadside utility lines will be affected by a road rehabilitation project then their details must also be accurately recorded during the on-site cross section survey work, with the parameters recorded as described in the previous item for the preparation of a DTM.

Item 10.08 - Alignment and Right-of-Way Staking

CONFIRMATION:	Relevant:	Included:
Alignment staked on site		
CONFIRMATION:	Relevant:	Included:
RoW boundaries staked on site [with property update]		

ACTIVITY:

Alignment and RoW staking must be effected using robust markers with high visibility markings and the physical nature of the markers must be as approved by the RA.

In the case of a road rehabilitation project without realignment the existing RoW may remain largely unchanged and, accordingly, it may not be necessary to stake out the RoW boundaries.

Where the project requires new RoW boundaries to be established due to realignment of an existing road or for a new road alignment these must be staked out when their final details have been determined. This is an essential component in the assessment and evaluation of land acquisition and compensation. It should be noted that traditionally most roads have had a uniform RoW width generally related to the class of road involved, which greatly simplifies the process of staking out the boundaries. However, in some cases the more sophisticated roads of the present and future, with their attendant special features, such as side roads realignment, frontage [service] roads and other access roads, complex intersections, slip roads and interchanges, realignment of watercourses, and complex drainage outfall facilities will commonly require many localised additional areas beyond the nominal RoW width to accommodate those features.

Whilst the alignment should be staked out at the site as soon as it has been finalised, it is important not to stake out the RoW boundaries before the final land areas required in each location have been finally determined since modification and re-staking can cause distress to project-affected people who are required to lose land and property.

Where involuntary resettlement (physical and/or economic displacement) will arise the alignment and ROW staking much be coordinated with the resettlement and compensation action planning process. This is particularly important to avoid opportunistic settlers moving into the area, looking to benefit from compensation packages.

Concurrently with the staking process the DTM must be updated with any changes in property features, to facilitate the most accurate subsequent inventory of property loss due to the project.

Item 10.09 - Conduct Verification Survey Checks

Relevance of this item to p	project under review (Y or N	1)
-----------------------------	------------------------------	----

Confirmed:

Conduct verification survey checks

ACTIVITY:

CONFIRMATION:

Checking procedures are vitally important to ensure the overall accuracy and professional standards of the topographic survey. These must include regular checking of instrument calibration, random independent checks to validate the three dimensional accuracy of survey points, and site reconnaissance to provide a visual appreciation of field conditions compared to the survey data.

Whilst this must be an on-going obligation on the part of the DCs throughout the topographic survey work the item can only be 'signed off' in the above 'Confirmation' box upon completion of all topographic survey work.

Item 10.10 - Prepare Draft Topographic Survey Report

Relevance of this item to project under review (Y or N)	

CONFIRMATION:	Submitted:
Draft Topographic Survey Report	

ACTIVITY:

The draft Topographic Survey Report will outline the methodology used by the DCs to carry out the primary control survey and detailed secondary surveys and must include the following deliverables.

- Unedited digital files of all raw survey data for both the Primary Traverse and secondary surveys together with legible copies of any field books / notes.
- Traverse layout drawing(s) and computations.
- Correlation with the Malawian topographic Grid System, where appropriate.
- The final x, y, z coordinates for all Control Points; point number, easting (x), northing (y), elevation (z).
- Levelling computation sheets.
- Monographs for each triangulation beacon comprising a brief description of the location, numeric photography, and triangulation data.
- The complete DTM in electronic format.
- Details of equipment calibration.
- Staffing of the topographic survey work.

The report and accompanying data must be prepared in a user-friendly manner for ease of reference subsequently by the construction contractor and construction supervising consultants during the construction stage.

Item 10.11 - Review of Draft Topographic Survey Report

Relevance of this item to project under review (Y or N)

) 1**1**)

Completed:

CONFIRMATION:

RA [and Donor(s), where applicable] comments on Draft Topographic Survey Report

ACTIVITY:

There should be a defined period in the Services Contract which will commence immediately upon the submission of the Draft Topographic Survey Report during which period the RA and [where applicable] the Donor(s) perform a review of the report and [where considered necessary] hold discussions with the DCs to clarify any points which require further explanation.

The comments arising from that review will be formally forwarded to the DCs.

Item 10.12 - Finalise Topographic Survey Report

Relevance of this item to project under review (Y or N)	

CONFIRMATION:	Submitted:
	odomitod.
Finalise Topographic Survey Report	

ACTIVITY:

The DCs will receive the official comments of the RA and Donor(s) [as applicable].

They will finalise and formally submit the Topographic Survey Report to incorporate the received comments or modification(s) of same following any subsequent discussion with RA for the purpose of clarification or debate.

ANNEX 5

GENERIC CONTENTS OF AN ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT REPORT

The typical contents of an ESIA Report are presented hereafter. It shall be noted that the presentation of the report may be adapted depending on the nature and specific requirements of the project.

Executive Summary

This section shall present in a non-technical language a concise summary of the ESIA Report with a particular attention on the processes and procedures used, baseline conditions, alternatives considered, mitigation/enhancement measures, monitoring programme, consultations with stakeholders, capabilities of environmental and social units and actions to strengthen those capacities and associated cost implications. This Executive Summary shall be written in English and a local language, if necessary, for public consultations.

Introduction

The introduction shall indicate the purpose of the ESIA, present an overview of the proposed project to be assessed as well as the project's purpose and needs. This section identifies the project sponsor and the consultant assigned to carry out the ESIA. It shall also briefly mention the contents of the ESIA Report and the methods adopted to complete the assessment.

Policy, Legal and Administrative Framework

This chapter concerns the policy, legal and administrative framework within which the ESIA is carried out. It presents the relevant environmental and social policies of the country as well as the national legal requirements and related constraints (e.g. practices that may discriminate or exclude any stakeholder group) relevant to the project.

Project Description and Justification

The first part of this chapter shall describe the proposed project and its geographic, ecological, social, economic and temporal context, project location, various project components, capacity, construction activities, facilities, staffing, working conditions, availability and source of raw materials, production methods, products, schedule of works, land tenure, land use system, potential beneficiaries, affected groups (directly and indirectly) and offsite investments that may be required.

This section shall determine and characterise the anticipated liquid, solid and gaseous discharges from the processes as well as the sources of nuisance such as noise, odours, visual nuisances, etc. It shall indicate the need for any resettlement plan or

vulnerable groups' development plan. It shall at least include a map showing the project location and area of influence.

The project justification should be based on combined economic, environmental and social assessments. To this end, this chapter shall describe the current situation in the sector, explain the problems or the needs to be satisfied by the project and present the constraints associated with the project implementation.

Description of the Project Environment

This chapter shall first determine the limits of the study area that shall be defined in order to encompass all project direct and indirect impacts. The description and analysis of the physical, biological and human conditions shall be addressed. Relevant environmental and social issues within this area, including any changes anticipated before project implementation shall also be described.

Within the human environment, key issues that shall be considered include population characteristics and trends, revenue disparities, gender differences, health problems, natural resource access and ownership, land use patterns and civil society organisation level. For further information on typical issues to consider in an ESIA, refer to **Annex 9.**

It shall also address the interrelations between the environmental and social components and the importance (value) that the society and local populations attach to these components, in order to identify the environmental and social components of high value or presenting a particular interest. Particular attention shall be given to the rare, threatened, sensitive or valorised environmental and social components.

The information presented shall be relevant to decisions about project location, design, operations as well as environmental and social management. Maps, figures and tables shall be included in this chapter to better illustrate the various environmental and social components.

Project Alternatives

This part of the ESIA Report consists an analysis of various feasible alternatives of the project including the "without project" option. It normally comprises two sections. The first section identifies and describes the potential feasible alternatives that would allow reaching the project objectives. The second section presents a comparison of the potential alternatives on the basis of technical, economic, environmental and social criteria as well as of public views and concerns.

The alternative comparison shall address the proposed project site, technology, design and operation in terms of their potential environmental and social impacts and the feasibility of mitigating these impacts. For each of the alternatives, the environmental and social impacts shall be quantified as much as possible including their economic values where feasible. The selected alternative shall be the most environmentally and socially sustainable taking into account the technical and economical feasibility.

Potential Impacts and Mitigation/Enhancement Measures

This chapter presents a detailed analysis of beneficial and adverse impacts of various components of the selected project alternative on the physical, biological and human (social, cultural and economic) environments. The methodology of assessment, based on a rigorous scientific method, shall be first presented. Then all environmental and social, direct and indirect, short and long-term, temporary and permanent impacts shall be described and assessed, indicating their importance levels and their probability of occurrence. The importance levels may be assessed on the basis of the nature, extent, intensity and duration of the impact, as well as on the sensitivity of the concerned environmental and social components and perceptions of the public. Irreversible or unavoidable impacts shall be clearly identified. Cumulative effects shall also be addressed taking into account other projects or actions planned in the study area.

Appropriate mitigation measures shall be identified to prevent, minimise, mitigate or compensate for adverse environmental and/or social impacts. Moreover, enhancement measures shall be developed in order to improve project environmental and social performance. Roles and responsibilities to implement measures shall be clearly defined. The cost of the measures shall be estimated, including the cost for environmental and social capacity building and gender mainstreaming, if necessary. Residual impacts shall be presented.

Environmental Hazard Management

Whenever relevant, this chapter shall describe the security measures and propose a preliminary contingency plan for the construction and operation phases of the project (possible contingency situations, major actions to properly react to accidents, responsibilities and means of communications).

For projects that may cause major technological accidents whose consequences may exceed the project site, the ESIA shall include an analysis of the technological accident risk: identification of hazard and potential consequences, estimation of the consequences' magnitude and frequency and risk estimation and evaluation.

Environmental and Social Monitoring Program

The first section of this chapter shall describe the surveillance measures aimed at ensuring that the proposed mitigation and enhancement measures are effectively implemented during the implementation phase. The second section concerns the environmental and social monitoring activities designed to measure and evaluate the project impacts on some key environmental and social components of concern and to implement remedial measures, if necessary. Indicators, roles and responsibilities shall be clearly defined. The cost of the programme shall be estimated, including the cost for environmental and social capacity building, if necessary.

Public Consultations

This chapter shall summarise the actions undertaken to consult the groups affected by the project as well as other concerned key stakeholders including Civil Society Organisations. The detailed record of the consultation meetings shall be presented in annex to the ESIA Report.

Conclusion

The Conclusion shall specify the environmental and social acceptability of the project, taking into account the impacts and measures identified during the assessment process. It shall also identify any other conditions or external requirements for ensuring the success of the project.

Annexes

- List of the professionals and organizations having contributed to the preparation of the ESIA Report.
- ii. List of consulted documents including project-related reports.
- iii. Baseline data referred to in the Report.
- iv. Record of consultation meetings with primary and secondary stakeholders.

OUTLINE OF A TYPICAL FULL RESETTLEMENT ACTION PLAN

1. Description of the Project, Project Area and Area of Influence Provide a general description of the project and the area of influence.

2. Potential Impacts

Description of the project components or activities that would give rise to resettlement, zone of impact of such activities and the alternatives considered to avoid or minimize resettlement.

3. Organizational Responsibility

The institutional arrangements within the executing agency and provision of adequate resources to the executing agency should be discussed and all interagency coordination should be described. The capacity and commitment of the executing agency to carry out the resettlement plan should also be evaluated. If necessary, strengthening of the executing agency should be considered and the steps that will be taken, together with a timetable and budget, should be described at the project preparation phase. There should be considerable scope for involving the local people and Non Governmental Organizations (NGOs) in planning, implementing and monitoring resettlement.

4. Community Participation

A description of consultations and participation of the displaced and hosts communities in the design and implementation of the resettlement activities including a summary of the views expressed and how these views were taken into account in preparing the resettlement plan.

A review of the resettlement alternatives presented and choices made by displaced persons, including choices related to forms of compensation and resettlement assistance to relocating as individual families or as part of pre-existing communities and to retaining access to cultural property (e.g. places of worship, cemeteries, etc).

Description of procedures for redress of grievances by people affected to project authorities throughout the planning and implementation.

5. Integration with Host Communities

Consultations with host communities and local governments and arrangements for prompt tendering of any payments due to the hosts for land or other assets should be provided to resettlers. Arrangements for addressing any conflict that may arise between the resettlers and host communities should also be made.

Appropriate measures should be taken to augment public services (e.g. education, water, health and production) in host communities to make them comparable to services provided to resettlers.

6. Socio-economic Studies

- (a) A population census covering current occupants of the affected area including the description of the production systems, household organization, baseline information on livelihoods and standards of living of the displaced population.
- (b) An inventory of assets of displaced households, the magnitude of the expected loss (total or partial) for individual or group assets and the extent of physical and economic displacement.
- (c) Information on disadvantaged groups or persons for whom special provisions may have to be made.
- (d) Provisions to update information on the displaced people's livelihoods and standards of living at regular intervals so that the latest information is available at the time of their displacement.
- (d) Description of land tenure systems including common property and non-title based land ownership or allocation system recognized locally and related issues.
- (e) Public infrastructure and social services that will be affected
- (f) Social and cultural characteristics of displaced communities.

7. Legal Framework including Mechanisms for Conflicts Resolution and Appeals

- (a) The applicable legal and administrative procedures including a description of the remedies available to displaced persons in the judicial process and the normal timeframe for such procedures and available alternative dispute resolution mechanisms that may be relevant to the project.
- (b) Laws and regulations relating to the agencies responsible for implementing resettlement activities.
- (c) Any legal steps necessary to ensure the effective implementation of resettlement activities including a process for recognizing claims to legal rights to land including claims that derive from customary and traditional law and usage.

8. Institutional Framework

- (a) The identification of agencies responsible for resettlement activities and NGOs that may have a role in project implementation.
- (b) An assessment of the institutional capacity of such agencies and NGOs.

9. Eligibility

Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance including relevant cut-off dates.

10. Valuation of and Compensation for Losses

- (a) The methodology to be used in valuing losses to determine their replacement cost, a description of the proposed types and levels of compensation under local laws and such supplementary measures to achieve replacement cost for lost assets.
- (b) A description of the packages of compensation and other resettlement measures that will assist each category of eligible displaced persons to achieve the objectives of this policy.

11. Identification of Alternative Sites and Selection of Resettlement Site(s), Site Preparation and Relocation

- (a) Institutional and technical arrangements for identifying and preparing relocation sites for which a combination of productive potential, locational advantages and other factors are at least comparable to the ancillary resources.
- (b) Procedures for physical relocation under the project including timetables for site preparation and transfer.
- (c) Any measures to prevent influx of ineligible persons at the selected sites.
- (d) Legal arrangements for regularizing tenure and transferring titles to resettlers.

12. Shelter, Infrastructure and Social Services

Plans to provide or finance housing, infrastructure (e.g. roads, water supply, etc) and social services (schools, health services), plans to ensure comparable services to host populations and any necessary site development.

13. Environmental Protection

An assessment of the environmental impacts of the proposed resettlement and measures to mitigate and manage the impacts.

14. Implementation Schedules

An implementation schedule covering all resettlement activities from preparation through implementation including target dates for achievement of expected benefits to resettlers and hosts and terminating the various forms of assistance.

15. Costs and Budget

Tables indicating breakdown of cost estimates for all resettlement activities including allowances for inflation and other contingencies, timetable for expenditures, sources of funds and arrangements for timely flow of funds.

16. Monitoring and Evaluation

Arrangements for monitoring of resettlement activities by the implementing agency supplemented by independent monitors as appropriate to ensure complete and objective information, performance monitoring indicators to measure inputs, outputs and outcomes for resettlement activities, evaluation of the impacts of resettlement for a reasonable period of time after the resettlement activities have been completed.

AN ABBREVIATED RESETTLEMENT ACTION PLAN

- A census survey of the expected size of the displaced persons, their socioeconomic status including the value of their assets and other sources of livelihood should be carried out
- Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance including relevant cut-off dates.
- 3. The displaced people and the host population should be consulted about acceptable project alternatives and should be informed about project's potential impacts on them.
- 4. Description of compensation options to be offered and other resettlement assistance to be provided should be documented and discussed with the resettlers including their preferred choice. It would be preferable to use local NGOs in this process.
- 5. Institutional responsibilities for implementation of the resettlement plan including involvement of NGOs in monitoring the plan should be established.
- 6. The schedules, budget and sources of funds should be agreed upon with the executing agency.

GENERIC CONTENTS OF AN ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

An Environmental and Social Management Plan (ESMP) shall follow the Environmental Impact Assessments Guidelines (1997).

TYPICAL ENVIRONMENTAL AND SOCIAL ISSUES TO CONSIDER IN ESIA

Environmental and Social Impact Assessment studies shall address key crosscutting issues in accordance with the Environmental Management Act, national legislation and policies as well as Roads Authority Environmental and Social Management Guidelines in the Road Sector. For donor funded projects, the consultant shall review donor's policies and guidelines on Environmental and Social safeguards. While assessment contents depend on the nature and scope of the project, plan or program, there are typical environmental and social components in the human and natural environments that shall be considered. The following components may not require to be thoroughly analyzed in ESIA studies, but their importance and significance in relation to the nature and scope of the considered project, plan or program shall at least be assessed.

1. Human environment

The components to consider in the human environment include the elements and characteristics of the social, cultural and economic environments as well as infrastructures and services and land use patterns in the project area and its zone of influence.

2 Social Environment

2.1 Population

- Demographic situation: population size, age and sex composition, geographic distribution, density, ethnic groups, literacy and education, languages, etc.
- Demographic trends (fertility, birth and mortality rates, growth, forecast, etc.) and pressures/problems associated with demographic trends.
- Characteristics of poor people and other vulnerable groups: who they are, where they live, employability level, economic activities, access to productive factors, etc.
- Migration patterns (internal and trans-border) and problems associated with migration (male migration, rural depopulation, urbanisation, refugees, ethnic conflicts, etc).

2.2 Gender

- Gender perspective in legal and policy framework (marriage codes and law, inheritance laws, property law, labour law, immigration laws, education and health policy, agricultural and rural development policy, economic policy with regard to gender budgeting; etc).
- Socio-cultural norms regarding the gender division of labour, rights and responsibilities, access to and control over resources.
- Participation in decision making at all levels: family, community and national.

- Existence and capacity of Gender/Womens' machinery.
- Existence and capacity of Civil Society Organizations (CSOs) and women's organizations.
- Types of developmental programmes and projects targeting women and key government agency and donors.

2.3 Health

- HIV/AIDS epidemiological situation, especially among the 15-24 and 25-34 years' age groups.
- Malnutrition status, socio-economic characteristics of malnourished people, initiatives targeting nutritional security.
- Communicable diseases (acute respiratory infection, diarrhea, cholera, malaria, sexually transmitted diseases, etc): frequency, importance per age group and sex, major causes, etc.
- Non-communicable diseases (lung diseases, cancers, heart diseases, mental problems, poisoning, etc): frequency, importance per age group and sex, major causes, etc.
- Tropical diseases (yellow fever, dracunculosis, onchocerciasis, etc): frequency, importance per age group and sex, major causes, etc.
- Injuries and violent assaults, particularly against women, youth, elderly and other vulnerable groups.
- Health and safety at work (work related injuries, contamination associated with pesticide or fertilizer use, existing control programmes and regulations, etc).
- Environmental health issues (traffic accidents, air pollution, sanitation, water supply contamination, etc): frequency, importance per age group and sex, major causes, etc.
- Mortality (particularly maternal, infantile (under 1 year) and among children (under 5 years)), morbidity and disability.
- Hygiene and health awareness.

2.4 Civil Society

- Composition and size of the Civil Society Organizations (local, regional, national and international CSOs active in the study area): communitybased organisations, non-governmental organizations, professional associations, interest groups, women groups, religious groups, private sector associations, etc.
- Key decision makers at the local and regional levels.
- Dynamism of CSOs in the study area: spontaneous establishment of CSOs (no government or donor funding), CSO survival when external funding decreases, level of participation, success of sponsored projects, etc.
- Types of developmental projects and programs supported by key CSOs.
- Organisational structures of CSOs and co-operation mechanisms.

 Level of organisation of vulnerable groups (youth, elderly, vulnerable ethnic groups, etc), poor and women and participation in political and community activities.

2.5 Societal Framework

- Country's position on human rights and gender equality and implementation levels.
- National laws, policies and programmes aiming to address social problems, particularly population growth pressures and inequalities.
- Governments' priorities in terms of development (social, economic, institutional, etc), especially in the study area.
- Governmental spending priorities and funds allocated to social sectors (particularly primary education, preventive health care and nutrition programs).
- Governmental institutions and administrative structures.
- Capacities in the environmental and social sectors (including local, regional and national institutions involved in the study area).
- Local and regional political and administrative structures (traditional and modern) and their interrelations.

2.6 Cultural Environment

- Cultural heritage: customs and traditions, traditional activities, fundamental values, religious and/or ancestral beliefs, ethnic dialects, leisure, etc.
- Right and use of natural resources related to cultural practices (religious sacrifices, traditional medication, etc).
- Cultural factors contributing to excluding some groups from development benefits.
- Major concerns, opinions, interests, and aspirations of local populations;
- Environmental problems awareness, attitude towards nature.
- Architectural, archaeological and landscape heritage, as well as any other heritage element protected or not by laws or regulations.

2.7 Economic Environment

- Major economic activities at the local and regional levels and growth trends.
- Relative importance of the formal and informal sectors.
- Primary sector activities in the region: agricultural production (major crops, production system, markets, etc), animal husbandry (herd composition, migration patterns, major products, etc), mine production, etc.
- Secondary sector activities in the region: major industries, particularly transformation industries for primary sector products, etc.
- Tertiary sector activities in the region: handcrafts, trading, tourism, financial services, etc.

- Right, use and dependence on renewable natural resources (forests, water, animals, soils, etc) and non-renewable resources (minerals, petroleum, gas, etc) for income generation and self-consumption.
- Inequality patterns (per-capita income among major groups, wealth distribution, rural-urban differences, etc) and poverty determinants (growth distribution, employment situation, socio-economic constraints, etc).
- Economic differences between men and women, in particular in the division of labour, income level, property rights, access to and control over resources, employability, etc.
- Working conditions and employment situation in the region: active population, unemployment rate, incomes and salaries, availability of qualified manpower, etc.

2.8 Infrastructures and Services

- Energy sector: diesel access, electric network, affordability, etc.
- Communications: mail service, radio, telephone network (fixed and mobile), internet access, television, affordability, etc.
- Transportation: road and trail network, railways network, waterways network, ports, airports and air transport, transport conditions in different seasons, public and private transportation means, isolation level, affordability, etc.
- Water supply: facilities (open wells, distribution systems, etc), ratio per capita, water quality, affordability, etc.
- Waste and sanitation: management practices, facilities (sewage, disposal site, etc), affordability, etc.
- Health services: facilities (hospitals, health centres, drugstores, etc), inputs (drugs/pharmaceuticals), personnel, ratio per capita, affordability, etc.
- Education services: facilities (schools, classes, alphabetisation centres, etc), material, personnel, ratio per capita, affordability, etc.
- Other services or programmes well implemented in the study area: organized sportive activities, community centres, youth centres, delinquency reduction programmes, etc.
- Supply of social services to poor people (education, health, water supply, sanitation, food security, etc);
- Inequalities in service access.

GENERAL CONDITION OF CONTRACT

Section 7: General Conditions of Contract Table of Clauses

A.	General Frovisions	102
1.	Definitions	102
2.	Corrupt Practices	
3.	Contract Documents	
4.	Law Governing the Contract	
5.	Language	
6.	Notices	
7.	Location	
8.	Authorized Representatives	
9.	Taxes and Duties	
10.	Eligibility	
B.	Commencement, Completion, Modification and Termination of Contract	
11.	Effectiveness of Contract	
12.	Commencement of Services	
13.	Expiration of Contract	
14.	Modification	
15.	Force Majeure	
16.	Termination	105
C.	Obligations of the Consultant	106
17.	General	106
18.	Conflict of Interests	106
19.	Confidentiality	107
20.	Insurance to Be Taken Out by the Consultant	
21.	Consultant's Actions Requiring Client's Prior Approval	
22.	Reporting Obligations	
23.	Documents Prepared by the Consultant to Be the Property of the Client	108
D.	Consultant's Personnel	108
24.	Description of Personnel	108
25.	Removal and/or Replacement of Personnel	
E.	Obligations of the Client	
26.	Assistance and Exemptions	
27.	Change in Laws	
28.	Services and Facilities	
F.	Payments to the Consultant	
29.	Contract Price and Currency	
30.	Payment	
31.	Payment Schedule and Advance Payment	
32.	Payment Terms	
33.	Price Adjustments	
G.	Settlement of Disputes	
34.	Amicable Settlement	
35.	Dispute Settlement	
55.	Diopate Cottlement	111

Section 7. General Conditions of Contract

A. General Provisions

1. Definitions

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

"Contract" means the Agreement entered into between the Parties and includes the Contract Documents.

"Contract Documents" means the documents listed in GCC 2.1, including all attachments, appendices, and all documents incorporated by reference therein, and shall include any amendments thereto.

"Contract Price" means the sum stated in the Agreement representing the maximum, total or estimated amount payable for the provision of the Services.

"Days" are calendar days; "months" are calendar months.

"Eligible Countries" means the countries and territories eligible as listed in the SCC.

"GCC" means these General Conditions of Contract.

"Government" means the Government of the Republic of Malawi.

"Member", in case the Supplier consists of a joint venture of more than one entity, means any of these entities; "Members" means any of these entities, and "Member in charge" means the entity specified in the SCC to act on their behalf in exercising all the Suppliers' rights and obligations towards the Procuring Entity under this Contract.

"Party" means the Procuring Entity or Supplier, as the case may be, and "Parties" means both of them.

"Personnel" means persons engaged by the Supplier or by any Sub-consultant as employees and assigned to the performance of the Services or any part thereof; "Foreign Personnel" means such persons who at the time of being so engaged had their domicile outside the Republic of Malawi; "Local Personnel" means such persons who at the time of being so engaged had their domicile inside the Republic of Malawi; and "Key Personnel" means those Personnel that are regarded by the Supplier as essential to the successful completion of the Services and related tasks.

"Procuring Entity" means the Roads Authority of Malawi, purchasing the Services, as specified in the Agreement, hereinafter called "the Client".

"SCC" means the Special Conditions of Contract.

"Services" means the consultancy services to be performed by the Supplier as described in the contract.

"Supplier" means the natural person, private or government entity, or a combination of the above, whose proposal to perform the Contract has been accepted by the Procuring Entity and is named as such in the Agreement, and includes the legal successors or permitted assigns of the Supplier, hereinafter called "the Consultant".

"Sub-consultant" means any natural person, private or government entity, or a combination of the above, including its legal successors or permitted assigns, to whom any part of the Services to be provided is subcontracted by the Supplier.

"Time-Based contract" means a contract under which the Services are provided on the basis of fixed fee rates and payments are made on the basis of time actually spent.

2. Corrupt Practices

- 2.1 It is the Government's policy to require that Procuring Entities, as well as Bidders and Consultants under Government financed contracts, observe the highest standards of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Government:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
 - (ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
 - (iii) "collusive practices" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring Entity, designed to establish prices at artificial, noncompetitive levels; and
 - (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.
 - (b) will debar a Bidder from participation in public procurement for a specified period of time if it at any time determines that the firm has engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a contract.
- 2.2 In pursuit of the policy defined in GCC Clause 2.1, the Procuring Entity may terminate a Contract in accordance with GCC Clause 16 if it at any time determines that corrupt, fraudulent, collusive or coercive practices were engaged in by representatives of the Procuring Entity or of a Consultant, during the procurement or the execution of that contract.

3. Contract Documents

- 3.1 The documents forming the Contract shall be interpreted in the following order of priority:
 - (a) Contract Agreement, including all appendices;
 - (b) Special Conditions of Contract;
 - (c) General Conditions of Contract; and
 - (d) Terms of Reference
 - (e) any other document listed in the SCC as forming part of the Contract.
- 3.2 All documents forming the Contract are intended to be correlative, complementary, and mutually explanatory.
- 3.3 No amendment, modification or other variation of the Contract shall be valid unless a Modification to Contract is made in writing, is dated, expressly refers to the Contract, and is signed by a duly authorised representative of each party thereto.
- 3.4 If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.
- 3.5 Any action required or permitted to be taken, and any document required or permitted to be executed, under the Contract by the Client or the Consultant may be taken or executed by the authorised representatives specified in the SCC.
- 3.6 The Contract constitutes the entire agreement between the Client and the Consultant and supersedes all communications, negotiations and agreements (whether written or oral)

of parties with respect thereto made prior to the date of Contract. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.

4. Law Governing the Contract

4.1 This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the laws of the Republic of Malawi, unless otherwise specified in the SCC.

5. Language

5.1 This Contract has been executed in English, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract, unless otherwise specified in the SCC.

6. Notices

6.1 Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered to an authorised representative of the Party at the address specified in the SCC.

7. Location

7.1 The Services shall be performed at such locations as are specified in the Terms of Reference and, where the location of a particular task is not so specified, at such locations, whether in the Republic of Malawi or elsewhere, as the Client may approve.

8. Authorised Representatives

8.1 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 authorised representatives specified in the SCC.

9. Taxes and Duties

9.1 Unless otherwise specified in the SCC, the Consultant, Sub-consultants, and their Personnel shall pay such taxes, duties, fees, and other impositions as may be levied under the law of the Republic of Malawi, the amount of which is deemed to have been included in the Contract Price.

10. Eligibility

- 10.1 The Consultant and its Subconsultants shall have the nationality of an eligible country. A Consultant or Subconsultant shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.
- 10.2 The Consultant and its Sub-consultants shall provide Personnel who shall be citizens of eligible countries.

B. Commencement, Completion, Modification and Termination of Contract

11. Effectiveness of Contract

11.1 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 in the SCC.

12. Commencement of Services

12.1 The Consultant shall begin carrying out the Services thirty (30) days after the date the Contract becomes effective, or at such other date as may be specified in the SCC.

13. Expiration of Contract

13.1 Unless terminated earlier pursuant to Clause 16, this Contract shall terminate at the end of such time period after the Effective Date as is specified in the SCC.

14. Modification

14.1 Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, may only be made by written agreement between the Parties.

15. Force Majeure

Definition

15.1 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.

No Breach of Contract

15.2 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.

Extension of Time

15.3 Any period specified within the Contract by which a Party is required to complete any action or task, if as a result of Force Majeure, shall be extended for a period equal to the time during which the Party was unable to perform the action or task.

Payments

15.4 During the period of their 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 it during such period for the purposes of the Services and in reactivating the Service after the end of such period.

16. Termination

By the Client

- 16.1 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 paragraphs (a) through (e) of this Clause 16.1 and sixty (60) days' in the case of the event referred to in (f):
 - (a) if the Consultant does not remedy a failure in the performance of its 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 become insolvent or bankrupt;
 - (c) the Consultant fails to comply with any final decision reached as a result of dispute settlement proceedings pursuant to GCC Clause 35;

- (d) the Consultant, in the judgement of the Client, has engaged in corrupt, fraudulent, collusive or coercive practices in competing for or in executing the Contract;
- (e) if, as the 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
- (f) if the Client, in its sole discretion, decides to terminate the Contract.

By the Consultant

- 16.2 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 events specified in paragraphs (a) to (d) of this Clause 16.2:
 - (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 forty-five (45) days after receiving written notice from the Consultant that such payment is overdue;
 - (b) If the Client is in material breach of its obligations pursuant to the Contract and has not remedied the same within forty-five days (or such longer period as the Consultant may have subsequently approved in writing) following the receipt by the Client of the Consultant's notice specifying such breach;
 - (c) If, as the 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 Client fails to comply with any final decision reached as a result of dispute settlement proceedings pursuant to GCC Clause 35.

Payment upon Termination

- 16.3 Upon termination of this Contract pursuant to Clauses 16.1 or 16.2, the Client shall make the following payments to the Consultant:
 - (a) Remuneration pursuant to Clause 29 or 30 for Services satisfactorily performed prior to the effective date of termination:
 - (b) Except in the case of termination pursuant to paragraphs (a) to (d) of Clause 16.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the contract, including the cost of the return travel of the Personnel and their eligible dependents.

C. Obligations of the Consultant

17. General

17.1 The Consultant shall perform the Services and carry out its 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 a faithful adviser to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub-consultants or third parties.

18. Conflict of Interests

Consultant Not to Benefit from Commissions, Discounts etc

18.1 The remuneration of the Consultant pursuant to Clause 29, 30 or 33 shall constitute the Consultant's sole remuneration in connection with this Contract or the Services, and the Consultant shall not accept for its 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 its obligations under the Contract, and the Consultant shall use its best

efforts to ensure that the Personnel, any Sub-consultants, and agents of either of them similarly shall not receive any such additional remuneration.

Consultant and Affiliates Not to Be Otherwise Interested in Project

18.2 The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and its affiliates, as well as any Sub-consultant and any of its affiliates, shall be disqualified from providing goods, works, or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

Prohibition of Conflicting Activities

- 18.3 Neither the Consultant nor its Sub-consultants nor the Personnel shall engage, either directly or indirectly, in any of the following activities:
 - during the term of the Contract, any business or professional activities in the Republic of Malawi which would conflict with the activities assigned to them under the Contract; or
 - (b) after the termination of this contract, such other activities as may be specified in the SCC.

19. Confidentiality

19.1 The Client and the Consultant shall keep confidential and shall not without the written consent of the other party hereto, divulge to any third party any reports or data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Consultant may furnish to its Sub-consultant such documents, data, and other information it receives from the Client to the extent required for the Sub-consultant to perform its work under the Contract, in which event the Consultant shall obtain from such Sub-consultant an undertaking of confidentiality similar to that imposed on the Consultant under the Contract.

20. Insurance to Be Taken Out by the Consultant

- 20.1 The Consultant shall take out and maintain, and shall cause any Sub-consultants to take out and maintain, at its (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 SCC.
- 20.2 The Consultant, 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.

21. Consultant's Actions Requiring Client's Prior Approval

- 21.1 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 of the personnel not listed by name in the Contract; and
 - (c) any other action that may be specified in the SCC.

22. Reporting Obligations

22.1 The Consultant shall submit to the Client the reports and documents specified in the Terms of Reference in the form, in the numbers, and within the periods set forth in the said Terms of Reference.

23. Documents Prepared by the Consultant to Be the Property of the Client

23.1 All plans, drawings, specifications, designs, reports, and other documents and software submitted by the Consultant in accordance with the Contract 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. Restrictions about the future use of these documents, if any, shall be specified in the SCC.

D. Consultant's Personnel

24. Description of Personnel

24.1 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 the Contract. The Key Personnel and Sub-consultants listed by title as well as by name in Contract are hereby approved by the Client.

25. Removal and/or Replacement of Personnel

- 25.1 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.
- 25.2 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) have 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 therefor, provide as a replacement a person with qualifications and experience acceptable to the Client.
- 25.3 The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

E. Obligations of the Client

26. Assistance and Exemptions

- 26.1 Unless otherwise specified in the SCC, the Client shall use its best efforts to ensure that the Government shall:
 - (a) Provide the Consultant, Sub-Consultants and Personnel with work permits and such other documents as shall be necessary to enable the Consultant, Sub-Consultants or Personnel to perform the Services.
 - (b) Arrange for the Personnel and, if appropriate, their eligible dependents to be provided promptly with all necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in the Republic of Malawi.
 - (c) Facilitate prompt clearance through customs of any property required for the Services and of the personal effects of the Personnel and their eligible dependents.
 - (d) Issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services.
 - (e) Provide assistance to the Consultant's international personnel and, where applicable international Sub-Consultants employed by the Consultant, to obtain registration or obtain any permit to practice their profession in the Republic of Malawi.
 - (f) Grant to the Consultant, any Sub-Consultants and the Personnel of either of them the privilege, pursuant to the laws of the Republic of Malawi, of bringing into the Republic of

- Malawi reasonable amounts of foreign currency for the purposes of the Services or for the personal use of the Personnel and their dependents and of withdrawing any such amounts as may be earned therein by the Personnel in the execution of the Services.
- (g) Provide to the Consultant, Sub-Consultants and Personnel any such other assistance as may be specified in the SCC.

27. Change in Laws

27.1 Unless otherwise specified in the Contract, if after the date of the Request for Proposals, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in the Republic of Malawi (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the period for completion of the Services and/or the Contract Price, then such time period and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Consultant has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for by a contract modification or a price adjustment.

28. Services and Facilities

28.1 The Client shall make available to the Consultant the Services and Facilities listed in the Contract.

F. Payments to the Consultant

29. Contract Price and Currency

- 29.1 The Contract Price shall be expressed as a specific amount or amounts in the Agreement representing the estimated amount for a Time-Based contract.
- 29.2 Payments shall be made in the currency or currencies of the contract price, unless otherwise specified in the SCC.
- 29.3 In consideration of the Services performed by the Consultant under the Contract, the Client shall make to the Consultant such payments in such manner as is provided by the Contract.

30. Payment

- 30.1 The Contract Price shall be an estimated amount, based on the Breakdown of Cost Estimates in the Contract.
- 30.2 Payment shall be made for the time actually spent and for reimbursable expenses actually incurred by the Consultant in the performance of the Services.
- 30.3 Fees for the Personnel shall be determined on the basis of time actually spent by the Personnel in the performance of the Services after the date determined in accordance with the Commencement Date of the Services, or such other date as the Parties may agree in writing, and at the rates specified in the Contract. Personnel time spent in the performance of the Services shall include time for necessary travel via the most direct route, at the rates detailed in the Contract, unless otherwise specified in the SCC.
- 30.4 Reimbursable expenditures shall include costs actually and reasonably incurred by the Consultant in the performance of the Services, as specified in the Contract.

- 30.5 The Consultant's total remuneration shall not exceed the ceiling amount stated in the SCC. The Consultant shall notify the Client as soon as cumulative charges incurred for the Services have reached 80% of the ceiling amount.
- 30.6 Separate invoices shall be submitted for fees and for reimbursable expenditure. Invoices shall be supported by the documentation specified in accordance with GCC 32.2.
- 30.7 A final payment shall be made against submission by the Consultant of a final statement, identified as such and approved by the Client. The final statement shall be deemed approved by the Client ninety calendar days after receipt by the Client unless the Client, within this period, gives written notice to the Consultant specifying in detail deficiencies in the Services, the deliverables or the final statement.
- 30.8 Any amount which the Client has paid or caused to be paid which is in excess of the amounts actually payable in accordance with the provisions of the Contract, shall be reimbursed by the Consultant to the Client within thirty days after receipt by the Consultant of a notice thereof. Any such claim by the Client for reimbursement must be made within twelve months after receipt by the Client of a final statement approved by the Client.

31. Payment Schedule and Advance Payment

- 31.1 All payments under the Contract shall be made in accordance with the payment schedule specified in the SCC.
- 31.2 Unless otherwise stated in the SCC, where any payment is made in advance of any deliverables as an advance payment, the payment shall be made against the provision by the Consultant of a bank guarantee for the same amount, and shall be valid for the period stated in the SCC.
- 31.3 Should the advance payment guarantee cease to be valid and the Consultant fails to revalidate it, a deduction equal to the amount of the advance payment may be made by the Client from future payments due to the Consultant under the contract.
- 31.4 If a Contract is terminated for any reason, the guarantee securing the advance may be invoked in order to recover the balance of the advance still owed by the Consultant.

32. Payment Terms

- 32.1 Unless otherwise specified in the SCC, payments shall be made by the Client, no later than sixty days after submission of a request for payment by the Consultant.
- 32.2 The Consultant's request for payment shall be made to the Client in writing, accompanied by invoices and supporting documents. The supporting documentation required shall be as specified in the SCC.
- 32.3 The Client shall notify the Consultant of the inadmissibility of a request for payment due to an error, discrepancy, omission or any other reason so that the Parties may resolve such error, discrepancy, omission or other fault and agree a solution to enable payment of the corrected request for payment. The Client shall not unreasonably withhold payment of any undisputed portion of a request for payment. Should any discrepancy be found to exist between actual payment made and costs authorised to be incurred by the Consultant, the Client may add or subtract the difference from any subsequent payments.
- 32.4 If the Client has delayed payments beyond fifteen (15) days after the due date stated in the SCC, interest shall be paid to the Consultant for each day of delay at the rate stated in the SCC.

33. Price Adjustments

33.1 Prices charged by the Consultant for the Services performed under the Contract shall not vary from the prices quoted in the Contract, with the exception of any price adjustments authorised in the SCC.

G. Settlement of Disputes

34. Amicable Settlement

34.1 The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

35. Dispute Settlement

35.1 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 submitted by either Party for settlement in accordance with the laws of the Republic of Malawi.

SPECIAL CONDITIONS OF CONTRACT

Section 8: Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC Clause	Special Conditions of Contract	
GCC 1.1	The Procurement Reference Number for the contract is: RA/CON/DEV/SR/BT/REH/2024-25/28	
GCC 1.1	The Eligible Countries are those described in Section 5 of the Request for Proposals document.	
GCC 3.1	GCC 3.1 is ammended in its entirety as follows: The documents forming the contract shall be interpreted in the following order of priority: Agreement Notice of Acceptance Minutes of Contract Negotiations Special Conditions of Contract (SCC) General Conditions of Contract (GCC) Terms of Reference Technical Proposal with Standard Forms T4, T5, T6 Financial Proposal with Standard Forms F2, F3, F4	
GCC 4.1	The Contract shall be governed by the laws of Malawi	
GCC 5.1	The language of the contract shall be English.	
GCC 6.1	The addresses for Notices are: For the Client: Roads Authority Functional Building Off Paul Kagame (Chilambula) Road Private Bag B346 Lilongwe 3 Attention: The Chief Executive Officer E mail: ra@ra.org.mw For the Consultant: (Insert Name) Street Address: (Insert) Town/City: (Insert) Country: (Insert) Telephone: Email:	
	The Authorised Representatives are: for the Roads Authority Eng. Ammiel Champiti, Chief Executive Officer for the Consultant: (Insert Name and position)	
GCC 11.1	Date of signing of the contract by both parties (Insert) Add the following to this clause:	
	Termination of Contract for Failure to Become Effective If this Contract has not commenced within 30days after the effective date, either Party may, by not less than twenty two (22) days written notice to the other Party, declare this Contract to be null and void.	
GCC 12.1	The Consultant shall commence the Services 14 days after Contract becomes effective.	

GCC 13.1	The period for expiration of the contract is: 9 months after the Commencement Date.	
GCC 16.1	Add the following sub-clause 16.1(g):	
(g)	If the Consultant fails to act, in respect of any matter relating to this Contract or to the Services, as a faithful adviser to the Client, or fails to support and safeguard the Client's legitimate interests in any dealings with third parties. In this case the Client shall give at least thirty (30) calendar days' written notice of termination to the Consultant.	
	Add the following sub-clause 16.1(h):	
	If the Consultant does not perform the Services in accordance with the Contract and the agreed Work Program for a period of thirty (30) days. In this case the Client shall give at least thirty (30) calendar days' written notice of termination to the Consultant.	
GCC 17.1	Add the following to this Clause:	
	If the Consultant fails to perform the Services and fails to carry out his obligations with all due diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, thereby rendering major elements of the designs unusable, then the following penalties shall apply;	
	The consultant will be barred from participating in any design works with the Roads Authority for a period of 2 years.	
	If the Consultant does not perform the Services in accordance with the Contract and the agreed Work Program then a deduction of 0.1% of the Lumpsum Contract Price per delayed calendar day shall apply. The maximum deduction shall be 3% of the lump sum contract price.	
GCC 18.3(b)	The following activities are prohibited: <u>N/A</u>	
GCC 20.1	The risks and coverage shall be:	
	 (i) Third Party motor vehicle liability insurance in respect of motor vehicles operated in the Client's country by the Consultant or its Experts or Subconsultants, with a minimum coverage in accordance with the applicable law in Malawi (ii) Third Party liability insurance, with a minimum coverage in accordance with 	
	(ii) Third Party liability insurance, with a minimum coverage in accordance with the applicable law in Malawi	
	 (iii) Employer's liability and workers' compensation insurance in respect of the experts and Sub-consultants in accordance with the relevant provisions of the applicable law in Malawi, as well as, with respect to such Experts, any such life, health, accident, travel or other insurance as may be appropriate. (iv) Professional liability with a minimum coverage of 1.2 times the professional fees. 	
	(v) Insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, (ii) the Consultant's property used in the performance of the Services, and (iii) any documents prepared by the Consultant in the performance of the Services	
GCC 22.1	Failure to submit reports whether at intermediate stages or overall in relation to the time periods specified in the Terms of Reference shall result to imposition of liquidated damages equal to 1/1000 th (one thousandth) of the value of the consultant's contract for the relevant phase payable per day of delay up to a maximum of 15% (fifteen percent) of the consultant's contract price.	
GCC 23.1	The future use of documents is restricted as follows: the document shall not be used for the purposes unrelated to the contract without the prior written approval	
GCC 29.2	of the Client Payments shall be made in Malawi Kwacha	
GCC 29.2 GCC 30.5	Payments shall be made in Malawi Kwacha. The ceiling amount is the Contract Price	
30000.0	The coming amount to the contract time	

GCC 31.1	The services will be executed on a Lump Sum Contract basis and the payment schedule shall be as follows:-			
	 10% of the Contract Price shall be paid on submission and acceptance by the client of the Inception Report. 			
	 30% of the Contract Price shall be paid on submission and acceptance by the client of the draft Economic Feasibility and Preliminary Design Reports. 			
	 10% of the Contract Price shall be paid on submission and acceptance by the client of the Final Economic Feasibility and Preliminary Design Reports. 			
	30% of the Contract Price shall be paid on submission and acceptance by the client of the Draft Detailed Design Report.			
	 20% of the Contract Price shall be paid on submission and acceptance by the client of the Final Detailed Engineering Design Report. 			
	Mentoring of graduate Engineers			
	 50% of the Cost on submission and acceptance of the Training Report at Draft Feasibility study reporting stage. 50% of the Cost on submission and acceptance of the Training Report at Draft Detailed Design reporting stage. 			
	Training of Clients Staff A provisional Sum, where training is applicable, has been included in the Financial Proposal against which all training expenses will be paid on submission of receipts.			
GCC 31.2	An Advance Payment Guarantee shall be required in the format of the example given in Section 9, Contract Forms, or similar approved in advance by the Client. The period of validity of the Advance Payment Guarantee shall be: 12 months			
GCC 32.2	The following documentation shall be required to support requests for payment:			
	 Inception Report Draft Economic Feasibility and Preliminary Design Reports. Final Economic Feasibility and Preliminary Design Reports Draft Detailed Design Report. Final Detailed Engineering Design Report Training Reports 			
	- Receipts			
GCC 32.4	Interest shall be paid on late payments at the rate of: Prime lending rate of the Reserve Bank of Malawi plus 1% or if not available the Inter Bank Offered Rate and shall be calculated at simple rate.			
GCC 33.1	This contract is not subject to price adjustment			

Section 9: Contract Forms

Part 3: Section 9. Contract Forms

Section 9: Contract Forms

Agreement 115

Advance Payment Security 117

Con	tract	Agre	ement

This	Agreem	ent is made the day of the month of
betw	een The	e Government of Malawi acting through the Roads Authority of Private
Bag	B346, L	<u>.ilongwe 3</u> (the "Client ") and of
		(the "Consultant").
WHE	EREAS	
(a)		ent has requested the Consultant to provide certain consultancy services after called the "Services") as defined herein and attached to this ct;
(b)	profess	nsultant having represented to the Client that it has the required ional skills, personnel and technical resources, has agreed to provide the s on the terms and conditions set forth in this Contract;
NOV	V THER	EFORE the parties hereto agree as follows:
1		documents forming the Contract shall be in the order of priority and ed below as follows:
	•	Agreement
	•	Notice of Acceptance
	•	Minutes of Contract Negotiations
	•	Special Conditions of Contract (SCC)
	•	General Conditions of Contract (GCC)
	•	Terms of Reference
	•	Technical Proposal with Standard Forms T4, T5, T6
	•	Financial Proposal with Standard Forms F2, F3, F4
2.		itual rights and obligations of the Client and the Consultant shall be as in the Contract, in particular:
	(a)	The Consultant shall carry out the Services in accordance with the provisions of the Contract; and
	(b)	the Client shall pay the Consultant the Contract Price of
		(MWK) or such other sum as may become payable under the provisions of the Contract, at the times and in the manner prescribed by 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.

Signed bythe Client)	(for
Name: Eng. Ammiel Champiti, Authorised Representative	
Position: Chief Executive Officer	
Witnessed by:	
Name:	
_	
Signed by	(for the
Consultant)	
Name:	_ Authorised
Representative	
Position:	
Witnessed by:	
Name:	
_	

Note to Bidders: The Advance Payment Security should be on the letterhead of the issuing Financial Institution and should be signed by a person with the proper authority to sign documents that are binding on the Financial Institution.

Advance Payment Security

Date: [insert date (as day, month, and year) of Advance Payment Security]

Procurement Reference No.: [Insert Procurement Reference No]

To: [insert complete name of Client]

In accordance with the payment provision included in the Contract, in relation to advance payments, [insert complete name of Consultant] (hereinafter called "the Consultant") shall deposit with the Client a security consisting of [indicate type of security], to guarantee its proper and faithful performance of the obligations imposed by said Clause of the Contract, in the amount of [insert currency and amount of guarantee in words and figures].

We, the undersigned [insert complete name of Guarantor], legally domiciled in [insert full address of Guarantor] (hereinafter "the Guarantor"), as instructed by the Consultant, agree unconditionally and irrevocably to guarantee as primary obligor and not as surety merely, the payment to the Client on its first demand without whatsoever right of objection on our part and without its first claim to the Consultant, in the amount not exceeding [insert currency and amount of guarantee in words and figures].

This security shall remain valid and in full effect from the date of the advance payment received by the Consultant under the Contract until [insert day and month], [insert year].

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded.

Name: [insert complete name of person signing the Security]
In the capacity of [insert legal capacity of person signing the Security]

Signed: [signat	ure of person whose name	and capacity are shown above]
Duly authorised the Financial Ir	9	on behalf of: [insert complete name of
Dated on signing]	day of	, [insert date of