

GOVERNMENT OF THE REPUBLIC OF MALAWI



ROADS AUTHORITY

Bidding Document for the Procurement of Works by National Competitive Bidding

Subject of Procurement:	Capacity Improvement of Kia-Junction-Kanengo Road in Lilongwe City
Procurement Reference Number:	Project ID: MP-2-01 RA/DEV/REH/LLC/2025-25/01
Procurement Method:	International Competitive Bidding
Date of Issue:	1 st August 2025

Functional Building, Off Paul Kagame Road , Private Bag B346
Lilongwe 3, Malawi

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Section 1. Instructions to Bidders

Section 1. Instructions to Bidders

A. General

1. Scope of Bid

- 1.1 The Procuring and Disposing Entity indicated in the Bid Data Sheet (BDS), invites Bids for construction of works as specified in Section 7, Statement of Requirements.
- 1.2 The Instructions to Bidders shall be read in conjunction with the BDS. The subject and procurement reference number, and number of lots of this Bidding Document are provided in the BDS.

2. Source of Funds

- 2.1 The Procuring and Disposing Entity indicated in the BDS has an approved budget from public funds towards the cost of the procurement named in the BDS. The Procuring and Disposing Entity intends to use these funds to cover eligible payments under the Contract.
- 2.2 The Procuring and Disposing Entity shall make payments to the supplier for each call-off order which will be subject in all respects, to the terms and conditions of the resulting agreement executed with the Procuring and Disposing Entity.

3 Corruption and Fraud

- a) the Malawi Government requires that all Bidders comply with the legal framework on corrupt and fraudulent practices as outlined in Anti-Corruption legal framework; and
- b) in line with the existing anti-corruption legal framework and policy in Malawi, regulations and policy, and as provided in this clause, a Bidder, including its agents, sub-contractors, sub-consultants, service providers, suppliers, and personnel are subject to the signed Anti-Corruption Declaration in the Bidding documents as part of the qualification criteria.

4 Eligible Bidders

- 4.1 A Bidder may be a natural person, private entity, government-owned entity or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a joint venture, consortium, or association. In the case of a joint venture, consortium, or association all parties shall be jointly and severally liable.
- 4.2 A Bidder wishing to be considered for preferences and other reservation schemes like the micro, small and medium-sized enterprise preferences, shall comply with the Public Procurement and Disposal of Public Assets (Participation by Micro Small and Medium Enterprises) Order 2020 (MSME Order).

- 4.3 A Bidder found to be in conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this Bidding process, if the Bidder and parties are associated or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Government of Malawi to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids.
- 4.4 A Bidder that has been debarred from participating in public procurement in accordance with Section 79 of the Act, at the date of the deadline for Bid submission or thereafter, shall be ineligible.
- 4.5 Government-owned enterprises shall be eligible if they can establish that they are legally and financially autonomous and are not a dependent agency, directly or indirectly, of the Procuring and Disposing Entity or the Government of Malawi.
- 4.6 A Bidder shall provide evidence of their eligibility satisfactory to the Procuring and Disposing Entity, to verify that the Bidder—
- a) has the legal capacity to enter into an Agreement and is registered with appropriate professional regulatory institution as required by existing legislation;
 - b) is not 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) has fulfilled their tax obligations in accordance with the relevant tax laws.
- 4.7 To demonstrate compliance with the criteria in sub-clause 4.6, a Bidder shall submit with its Bid—
- (i) a certified copy of its business registration certificate;
 - (ii) professional registration certificates where applicable based on the business the Bidder does;
 - (iii) a declaration that the Bidder is not debarred;
 - (iv) tax registration certificates for the Bidders issued by the Malawi Revenue Authority;

- (v) tax clearance certificate for Bidders that have operated a business for a minimum of two years; and
- (vi) such other documentary evidence as may be specified in the BDS.

5 Qualification of a Bidder

- 5.1 All Bidders shall provide in the Qualification Information Form in Section 4, Bidding Forms, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.
- 5.2 In the event that prequalification of potential Bidders has been undertaken, only Bids from pre-qualified Bidders will be considered for award of Contract. These qualified Bidders should submit with their Bids any information updating their original prequalification applications or, alternatively, confirm in their Bids that the originally submitted prequalification information remains essentially correct as of the date of Bid submission. The update or confirmation should be provided in the Qualification Information Form in Section 4, Bidding Forms.
- 5.3 If the Procuring and Disposing Entity has not undertaken prequalification of potential Bidders, all Bidders shall include the following information and documents with their Bids, using the Qualification Information Form in Section 4, Bidding Forms, unless otherwise stated in Section 3, Evaluation and Qualification Criteria:
 - (a) copies of original documents defining the constitution or legal status, place of registration, and principal place of business or a copy of the Bidder's registration certificate where such documents have been provided to obtain registered supplier status; written power of attorney of the signatory of the Bid to commit the Bidder;
 - (b) total monetary value of construction work performed for each of the last five (5) years;
 - (c) experience in works of a similar nature and size for each of the last five (5) years, and details of work under way or contractually committed; and clients who may be contacted for further information on those contracts;
 - (d) major items of construction equipment proposed to carry out the Contract;
 - (e) qualifications and experience of key site management and technical personnel proposed for the Contract;
 - (f) reports on the financial standing of the Bidder including profit and loss statements and auditor's reports for the past five (5) years;
 - (g) evidence of adequacy of working capital for this Contract (access to line(s) of credit and availability of other financial resources);

- (h) authority to seek references from the Bidder's bankers;
- (i) information regarding any litigation, current or during the last five (5) years, in which the Bidder is involved, the parties concerned, and disputed amount; and
- (j) proposals for subcontracting components of the Works amounting to more than ten (10) per cent of the Contract Price.

5.4 Bids submitted by a joint venture of two or more firms as partners shall comply with the following requirements, unless otherwise stated in Section 3, Evaluation and Qualification Criteria:

- (a) the Bid shall include all the information listed in Clause 4.3 for each joint venture partner;
- (b) the Bid shall be signed so as to be legally binding on by all partners;
- (c) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
- (d) one of the partners will be nominated as being in charge, authorised to incur liabilities, and receive instructions for and on behalf of any and all partners of the joint venture; and
- (e) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.

5.5 To qualify for award of the Contract, Bidders shall meet the minimum qualifying criteria specified in Section 3, Evaluation and Qualification Criteria.

5.6 Bidders applying for eligibility for a margin of preference in Bid evaluation, if permitted in the Bid Data Sheet, shall supply all information to satisfy the criteria for eligibility as described in Section 3, Evaluation and Qualification Criteria.

6 One Bid per Bidder

Each Bidder shall submit only one Bid, either individually or as a partner in a joint venture. A Bidder who submits or participates in more than one Bid (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the Bids with the Bidder's participation to be disqualified.

7 Site Visits and pre-Bid meetings

7.1 The Bidder, at its own responsibility and risk, is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and a contract for construction of the Works. The costs of visiting the Site and attending a pre-Bid meeting shall be at the Bidder's own expense.

7.2 Where pre-Bid meeting is held, details of such meeting are given in the BDS

B. Bidding Documents

8 Sections of Bidding Documents

8.1 The Bidding Document consists of Parts 1, 2 and 3, which includes all Sections indicated below, and should be read in conjunction with any addenda issued in accordance with ITB Clause 10

PART 1 Bidding Procedures

- Section 1 Instructions to Bidders (ITB)
- Section 2 Bid Data Sheet (BDS)
- Section 3 Evaluation and Qualification Criteria (EQC)
- Section 4 Bidding Forms
- Section 5 Eligible Countries
- Section 6 Corruption and Fraud

PART 2 Schedule of Requirements

- Section 7(A) – Scope of Works (SOW)
- Section 7(B) – Bill of Quantities (BOQs) (or Activity Schedule)
- Section 7(C) – Drawings
- Section 7(D) – Technical Specifications (TS)

PART 3 Contract

- Section 8 General Conditions of Contract (GCC)
- Section 9 Special Conditions of Contract (SCC)
- Section 10 Contract Forms

8.2 The Invitation to Bid is not part of the Bidding Document.

8.3 The Procuring and Disposing Entity is not responsible for the completeness of the Bidding Documents and their addenda if they were not obtained directly from the Procuring and Disposing Entity. A Bidding Document which was not obtained directly from the Procuring and Disposing Entity shall be rejected during evaluation. Where a Bidding Document is obtained from the Procuring and Disposing Entity on a Bidder's behalf, the Bidder's name must be registered with the Procuring and Disposing Entity at the time of sale and issue.

8.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents.

8.5 Failure to furnish all information or documentation required by the Bidding Documents may result in the rejection of the Bid.

9 Clarification of Bidding Documents

- 9.1 A prospective Bidder requiring any clarification of the Bidding documents shall c the Procuring and Disposing Entity in writing at the Procuring and Disposing Entity's address indicated in the BDS.
- 9.2 The Procuring and Disposing Entity will respond in writing to any request for clarification, provided that such request is received no later than fourteen (14) days prior to the deadline for submission of Bids indicated in the BDS.
- 9.3 The Procuring and Disposing Entity shall forward copies of its response to all Bidders who have acquired the Bidding Document directly from it, including a description of the inquiry but without identifying its source.
- 9.4 Where a Procuring and Disposing Entity determines that it is necessary to amend the Bidding Document as a result of a clarification given under this paragraph, it shall amend the Bidding Document following the procedure under clause 10 and sub-clause 23.2.

10 Amendment to Bidding Documents

- 10.1 At any time prior to the deadline for submission of Bids, the Procuring and Disposing Entity may amend the Bidding Document by issuing an addendum.
- 10.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all Bidders who obtained the Bidding Document directly from the Procuring and Disposing Entity.
- 10.3 To give Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring and Disposing Entity may, at its discretion, extend the deadline for the submission of Bids, pursuant to clause 23.2.

C. Preparation of Bids

11. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Procuring and Disposing Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process

12. Language of Bid and Communications

- 12.1 All communication in the Bidding process shall be in English and in writing unless otherwise specified in the BDS.
- 12.2 The Bid including correspondence and documents relating to the Bid exchanged by the Bidder and the Procuring and Disposing Entity, shall be written in English unless otherwise specified in the BDS.

- 12.3 Supporting documents and printed literature which are part of the Bid may be in another language provided that the documents are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, such translation shall govern.

13 Documents Comprising the Bid

The Bid shall comprise the following:

- (a) Bid Submission sheet;
- (b) Bid Security or Bid Securing Declaration;
- (c) Priced Bill of Quantities or Activity Schedule;
- (d) Qualification Information;
- (e) Alternative Bids, if permissible;
- (f) written confirmation authorising the signatory of the Bid to commit the Bidder;
- (g) documentary evidence TB Clause 18 establishing the Bidder's eligibility to Bid;
- (h) Environmental, Social, Health and Safety Performance Declaration;
- (i) any other document required in the BDS.

14 Bid Submission sheet and Price Schedules

- 14.1 The Bidder shall submit the Bid Submission sheet using the form furnished in Section 4, Bidding Forms. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested as follows—

- 14.4 A Bidder shall submit the Bid Submission Sheet using the form in Section 4, Bidding Forms. The form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested, as follows—

- (a) the reference of the Bidding Document and the number of each addendum received;
- (b) a brief description of the Goods, Works and Services offered;
- (c) the total Bid price, based on the estimated quantities specified in Section 7, Statement of Requirements;
- (d) any discounts offered and the methodology for their application;
- (e) the period of validity of the Bid;
- (f) a commitment to submit any Performance Security required and the amount;
- (g) a declaration of nationality of the Bidder;

- (h) a declaration that the Bidder, including all parties comprising the Bidder, is not participating, as a Bidder, in more than one Bid in this Bidding process; except for alternative Bids in accordance with clause 13;
- (i) confirmation that the Bidder has not been suspended by the Authority;
- (j) the names and addresses of the Directors and Beneficial owners of the Bidder;
- (k) a declaration on gratuities and commissions; and
- (l) an authorised signature of the Bidder.

14.2 The Bidder shall submit the Price Schedules for Goods, Works, or Services, using the format provided in Section 4, Bidding Forms. The Price Schedule shall include—

- (a) the item number;
- (b) a brief description of the Goods, Works or Services;
- (c) their country of origin and percentage of Malawi content;
- (d) the quantity, which shall be the estimated quantity ;
- (e) the unit prices;
- (f) customs duties and all taxes paid or payable in Malawi;
- (g) the total price per item;
- (h) subtotals and totals per Price Schedule; and
- (i) an authorised signature.

15 Alternative Bids

15.1 Alternative Bids shall not be considered unless otherwise indicated in the BDS.

15.2 Where permitted, alternative Bids may not conform precisely to the Statement of Requirements, but shall at least—

- (a) meet the objectives and performance requirements prescribed in the Statement of Requirements;
- (b) be substantially within any delivery or completion schedule, budget or other performance parameters stated in the solicitation document; and
- (c) clearly state the benefits of the alternative Bid over any solution which conforms precisely to the Statement of Requirements, in terms of technical performance, price, operating costs or any other benefit.

15.3 A Bidder may submit both a main Bid which conforms precisely to the Statement of Requirements and an alternative Bid.

15.4 Where a Bidder submits more than one Bid, each Bid shall be submitted as a complete separate Bid and shall conform to the instructions for preparation and submission of Bids, without any reliance on any other Bid. Each Bid shall be separately signed, authorized, sealed, labelled and submitted in accordance with the instructions for submission of Bids and shall be accompanied by a separate Bid Security or Bid Securing Declaration, if so required. Such Bids shall be labelled "Main Bid" and "Alternative Bid".

15.5 The evaluation of alternative Bids shall use the same methodology, criteria and weights as the evaluation of main Bids, except that the detailed technical evaluation shall take into account only the objectives and/or performance requirements prescribed in the Statement of Requirements.

16 Bid Prices and Discounts

16.1 The Contract will be an Admeasurement or Lump Sum Contract, as indicated in the BDS.

16.2 The Contract shall be for the whole Works, as described in ITB Clause 1.1, based on the:

- (a) priced Bill of Quantities submitted by the Bidder in the case of an Admeasurement Contract; or
- (b) priced Activity Schedule submitted by the Bidder in the case of a Lump Sum Contract.

16.3 The Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities (or in the case of a lump sum contract, for all items of the Works described in the drawings and specifications and listed in the Activity Schedule). Items for which no rate or price is entered by the Bidder will not be paid for by the Procuring and Disposing Entity when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities or Activity Schedule.

16.4 All duties, taxes, PPDA and other levies payable by the Contractor under the Contract, or for any other cause as of the date twenty-eight (28) days prior to the deadline for submission of Bids, shall be included in the rates, prices, and total Bid price (or in the case of a lump sum contract, in the total Bid price) submitted by the Bidder.

16.5 Construction levies and all other levies payable by the contractor under the contract shall be included in the rates, prices, and total Bid price (or in the case of a lump sum contract, in the total Bid price) submitted by the Bidder.

16.6 The rates and prices (or in the case of a lump sum contract, the lump sum price) quoted by the Bidder shall not be subject to adjustment during the performance of the Contract unless provided for in the BDS and SCC and the provisions of Clause 42 of the Conditions of Contract. The Bidder shall submit with the Bid all the information required under the SCC and General Conditions of Contract (GCC).

17 Currencies of Bid

17.1 Bid prices shall be quoted in the following currencies—

- (a) for Goods, Works and Services originating in Malawi, the Bid prices shall be quoted in Malawi Kwacha unless otherwise specified in the BDS; and
- (b) for Goods, Works and Services originating outside Malawi, or for imported parts or components of Goods originating outside Malawi, the Bid prices shall be quoted in Malawi Kwacha unless otherwise specified in the BDS.

17.2 The Procuring and Disposing Entity may request that prices quoted be expressed in the currency specified in the BDS. If the Bidder wishes to be paid in a currency or a combination of currencies different from the one in which it was requested to express its quotation, it shall as part of its offer—

- (a) indicate its requirement to be paid in other currencies, including the amount in each currency or the percentage of the quoted price corresponding to each currency;
- (b) justify, to the Procuring and Disposing Entity's satisfaction, the requirement to be paid in the currencies requested; and
- (c) utilise the rate of exchange specified by the Procuring and Disposing Entity to express its offer in the currency required by the Procuring and Disposing Entity. The source, date, and type of exchange rate to be used is indicated in the BDS and shall not precede the Bid submission deadline by less than twenty (20) days.

18 Documents establishing the eligibility of the Bidder

To establish their eligibility in accordance with ITB Clause 4, a Bidder shall complete the eligibility declarations in the Bid Submission Sheet, included in Section 4, Bidding Forms, and submit the documents required in Section 3, Evaluation Methodology and Criteria.

19 Period of Validity of the Bids

- 19.1 Bids shall remain valid for the period specified in the BDS after the date of the Bid submission deadline prescribed by the Procuring and Disposing Entity. The Procuring and Disposing Entity shall reject a Bid valid for a shorter period as non-responsive.
- 19.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Procuring and Disposing Entity may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing.
- 19.3 If a Bid Security or Bid Securing Declaration is requested in accordance with clause 20 (a) or (b), it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. Similarly, a Bidder who submitted a Bid Securing Declaration may refuse the request without being penalized. A Bidder accepting the request shall not be required or permitted to modify its Bid.

20 Bid Security and Bid Securing Declaration

(a) Bid Security

20.1 Unless otherwise specified in the BDS, the Bidder shall furnish, as part of its Bid, a Bid Security in original form and the amount and currency specified in the BDS.

20.2 The Bid Security shall be in any of the following forms—

- (a) a demand guarantee;
- (b) an irrevocable letter of credit;
- (c) a cashier's or certified check; or
- (d) any other security indicated in the BDS,

from a reputable source from an eligible country. The Bid Security shall be submitted either using the Bid Security Form included in Section 4, Bidding Forms, or in another substantially similar format. In either case, the form shall include the complete name of the Bidder.

20.3 The Bid Security shall be valid for twenty-eight days after the end of the validity period of the Bid. This shall also apply if the period for Bid validity is extended.

20.4 The Procuring and Disposing Entity shall reject, as non-compliant, any Bid that is not accompanied by a substantially responsive Bid Security, if a Bid Security is required in accordance with clause 20.1.

20.5 Bid Securities for both successful and unsuccessful Bidders shall be returned as promptly as possible once the successful Bidder has signed the Agreement and furnished any required Performance Security.

20.6 The Bid Security may be forfeited—

- (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Bid Submission Sheet; or
- (b) if the successful Bidder fails to—
 - (i) sign the Agreement in accordance with clause 46;
 - (ii) furnish any Performance Security in accordance with clause 45; or
 - (iii) accept the correction of its Bid price

(b) Bid Securing Declaration

20.7 Unless otherwise specified in the BDS, a Bidder shall furnish as part of its Bid, a Bid Securing Declaration in original form and in the manner specified in the BDS.

20.8 The Bid Securing Declaration is an alternative to the Bid Security.

20.9 The Bid Securing Declaration shall be submitted using the Form included in Section 4 of the Bidding Document.

20.10 The Bid Securing Declaration shall be valid for twenty-eight days after the end of the validity period of the Bid. This shall also apply if the period for Bid validity is extended.

20.11 A Bid shall be rejected as non-compliant if the Bid is not accompanied by a substantially responsive Bid Securing Declaration, if one is required in accordance with clause 20.1.

20.12 The punitive measures of the Bid Securing Declaration shall be applied if the successful Bidder—

- (i) withdraws its Bid before opening deadline;
- (ii) fails to sign the Agreement in accordance with clause 46; or
- (iii) fails to accept the correction of its Bid price.

21 Format and Signing of Bid

21.1 A Bidder shall prepare one original of the documents comprising the Bid as per ITB Clause 13 and clearly mark it "ORIGINAL." In addition, the Bidder shall submit copies of the Bid, in the number specified in the BDS and clearly mark each of them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

21.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid. The name and position held by each person signing the authorization shall be typed or printed below the signature. All pages of the Bid, except for un-amended printed literature, shall be signed or initialed by the person signing the Bid.

21.3 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. Submission and Opening of Bids

22 Sealing and Marking of Bids

22.1 A Bidder shall enclose the original and each copy of the Bid, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes containing the original and the copies shall then be enclosed in one single plain envelope securely sealed in such a manner that opening and resealing cannot be achieved undetected.

22.2 The inner and outer envelopes shall—

- (a) bear the name and address of the Bidder;

- (b) be addressed to the Procuring and Disposing Entity in accordance with clause 23.1;
 - (c) bear the Procurement Reference number of this Bidding process; and
 - (d) bear a warning not to open before the time and date for Bid opening, in accordance with clause 26.1.
- 22.3 If all envelopes are not sealed and marked as required, the Procuring and Disposing Entity will assume no responsibility for the misplacement or premature opening of a Bid.

23 Deadline for Submission of Bids

- 23.1 Bids must be received by the Procuring and Disposing Entity at the address specified in ITB Clause 22.2(a) no later than the time and date specified in the BDS.
- 23.2** The Procuring and Disposing Entity may, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with clause 10, in which case all rights and obligations of the Procuring and Disposing Entity and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

24 Late Bids

- 24.1 The Procuring and Disposing Entity shall not consider any Bid that is submitted after the deadline for submission of Bids, in accordance with clause 23.
- 24.2 A Bid received by the Procuring and Disposing Entity after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

25. Modification, Substitution and Withdrawal of Bids

- 25.1 A Bidder may modify, substitute, or withdraw its Bid after it has been submitted at any time before the deadline for submission of Bids by sending a written notice, duly signed by an authorized representative, which shall include a copy of the authorization in accordance with clause 21.2. Any corresponding replacement of the Bid shall accompany the respective written notice. All notices shall be—
- (a) submitted in accordance with clauses 21 and 2 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "MODIFICATION", "SUBSTITUTION" OR "WITHDRAWAL,"; and
 - (b) received by the Procuring and Disposing Entity prior to the deadline prescribed for submission of Bids, in accordance with clause 23.
- 25.2 Bids requested to be withdrawn in accordance with sub-clause 25.1 shall be returned unopened to the Bidders.

25.3 No Bid may be modified, substituted, or withdrawn in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Bid Submission Sheet or any extension thereof.

25.4 Bids may only be modified by withdrawal of the original Bid and submission of a replacement Bid in accordance with sub-clause 25.1. Modifications submitted in any other way shall not be considered in the evaluation of Bids.

26 Bid Opening

26.1 The Procuring and Disposing Entity shall conduct the Bid opening in the presence of Bidders' designated representatives who choose to attend the Bid opening, at the address, date and time specified in the BDS.

26.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Bid shall not be opened but returned to the Bidder.

26.3 No Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorisation to request the withdrawal and is read out at the Bid opening

26.4 All other envelopes including those marked "REPLACEMENT" shall be opened and the relevant details read out. Replacement Bids shall be recorded as such on the record of the Bid opening. Only envelopes that are opened and read out at the Bid opening shall be considered further.

26.5 Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorisation to request the modification and is read out at Bid opening. Only envelopes that are opened and read out at Bid opening shall be considered further.

26.6 The Procuring and Disposing Entity shall prepare a record of the Bid opening that shall include, as a minimum—

- (a) the name of the Bidder and whether there is a modification, substitution, or withdrawal;

- (b) the Bid Price, per lot if applicable, including any discounts; and

- (c) the presence or absence of a Bid Security or Bid Securing Declaration, if one was required.

26.7 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 immediately after opening, be distributed to Bidders upon request or published on the website of the Procuring and Disposing Entity within one working day from the date of the Bid opening.

27 Evaluation of Bids

- 27.1 Information relating to the examination, evaluation, comparison, and post-qualification of Bids, and recommendations for the award, shall not be disclosed to a Bidder or any other persons not officially concerned with such process until the information on Agreement award is communicated to all Bidders.
- 27.2 Any effort by a Bidder to influence the Procuring and Disposing Entity's in the examination, evaluation, comparison, and post-qualification of the Bids or agreement award decisions shall result in the rejection of its Bid.
- 27.3 Notwithstanding clause 27.2, from the time of Bid opening to the time of Agreement award, if any Bidder wishes to contact the Procuring and Disposing Entity on any matter related to the Bidding process, it should do so in writing

28..Clarification of Bids

- 28.1 To assist in the examination, evaluation, comparison and post-qualification of the Bids, the Procuring and Disposing Entity may, ask any Bidder for a clarification of its Bid.
- 28.2 Any clarification submitted by a Bidder that is not in response to a request by the Procuring and Disposing Entity shall not be considered. The Procuring and Disposing Entity's request for clarification and the response shall be in writing.
- 28.3 No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring and Disposing Entity in the evaluation of the Bids, in accordance with clause 30.2

29. Compliance and Responsiveness of Bids

- 29.1 The Procuring and Disposing Entity's determination of a Bid's compliance and responsiveness shall be based on the contents of the Bid.
- 29.2 A substantially compliant and responsive Bid shall be one that conforms to all the terms, conditions, and specifications of the Bidding Documents 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 Goods, Works and Services specified in the Agreement;
 - (b) limits in any substantial way, inconsistent with the Bidding Document, the Procuring and Disposing Entity's rights or the Bidder's obligations under the Agreement; or
 - (c) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially compliant and responsive Bids.

- 29.3 If a Bid is not substantially compliant and responsive to the Bidding Document, it shall be rejected by the Procuring and Disposing Entity and may not subsequently be made compliant and responsive by the Bidder by correction of the material deviation, reservation, or omission.

30. Nonconformities, Errors and Omissions

- 30.1 Where a Bid is substantially compliant and responsive, the Procuring and Disposing Entity may waive any non-conformity or omissions in the Bid that does not constitute a material deviation.
- 30.2 Where a Bid is substantially compliant and responsive, the Procuring and Disposing 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 Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 30.3 Where a Bid is substantially compliant and responsive, the Procuring and Disposing Entity shall rectify nonmaterial nonconformities or omissions. After the rectification, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of the missing or non-conforming item or component. The cost of any missing items will be added to the Bid price using the highest price from other Bids submitted.
- 30.4 Where a Bid is substantially compliant and responsive, the Procuring and Disposing Entity shall correct arithmetic 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 and Disposing 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.
- 30.5 Where the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be rejected and its Bid Security may be forfeited. In the same manner, if the lowest evaluated Bidder submitted a Bid Securing Declaration to secure its Bid, the Authority may suspend it.

31. Preliminary Examination of Bids

- 31.1 The Procuring and Disposing Entity shall examine all legal documents and other information submitted by Bidders to verify the eligibility of Bidders and Goods, Works and Services in accordance with clauses 4 and 5.
- 31.2 If after the examination of eligibility, the Procuring and Disposing Entity determines that the Bidder's Goods, Works and Services are not eligible, the Procuring and Disposing Entity shall reject the Bid.
- 31.3 The Procuring and Disposing Entity shall examine the Bids to confirm that all documents and technical documentation requested in clause 8 have been provided, and to determine the completeness of each document submitted.
- 31.4 The Procuring and Disposing Entity shall confirm that the documents listed in this clause and information have been provided in the Bid. If any of these documents or information is missing, the offer shall be rejected.
 - (a) the Bid Submission Sheet, including—
 - (i) a brief description of the Goods, Works and Services offered;
 - (ii) the price of the Bid; and
 - (iii) the period of validity of the Bid;
 - (b) the Price Schedule;
 - (c) written confirmation of authorisation to commit the Bidder; and
 - (d) a Bid Security or a Bid Securing Declaration, if applicable

32. Detailed Technical Evaluation

- 32.1 The Procuring and Disposing Entity shall examine a Bid to confirm that a Bidder, without any material deviation or reservation, has accepted all terms and conditions specified in the Terms of Agreement and the Special Terms of Agreement.
- 32.2 If, after the examination of the terms and conditions, the Procuring and Disposing Entity determines that the Bid is not substantially responsive in accordance with clause 29, the Procuring and Disposing Entity shall reject the Bid.
- 32.3 The Procuring and Disposing Entity shall evaluate the technical aspects of the Bid submitted in accordance with clause 18, to confirm that all requirements specified in Section 7, Statement of Requirements of the Bidding Document, have been complied with, without any material deviation or reservation.
- 32.4 If, after the technical evaluation, the Procuring and Disposing Entity determines that the Bid is not substantially responsive in accordance with clause 30, it shall reject the Bid.

33 Currency for Bid Evaluation

In accordance with Clause 17, Bids shall be evaluated in Malawi Kwacha.

34 Preference Margins

- 34.1 A Procuring and Disposing Entity shall apply a margin of preference in works. Where a Preference applies the details shall be provided in Section 3 Evaluation Methodology and Criteria
- 34.2 The Procuring and Disposing Entity shall apply the margin of preference for micro, small and medium enterprises and marginalised groups in accordance with the MSME Order or Bidders qualified for Preferential Treatment as specified in the BDS. If so indicated, Bid Evaluation shall be undertaken in accordance with the procedures and criteria specified in Section 3, Evaluation and Qualification criteria
- 34.3 The Procuring and Disposing Entity shall set aside certain procurement requirements for micro, small and medium enterprises and marginalised groups by restricting Bidding to those enterprises in accordance with MSME Order
- 34.4 The Procuring and Disposing Entity shall state in the BDS all procurement that have been set aside for micro, small and medium enterprises
- 34.5 In the event that the procurement is not contained in the Schedule under the MSME Order, the PDE may reserve some portions of procurement for award to MSMEs and marginalised groups. Such reservations shall be specified in the BDS
- 34.6 The Procuring and Disposing Entity shall set aside certain procurement requirements by restricting Bidding to those enterprises that qualify in accordance with any Preferential Treatment Regulations issued under the Public Procurement and Disposal of Public Assets Act 2017
- 34.7 The Procuring and Disposing Entity may reserve some portions of procurements for award to Bidders qualified under the Preferential Treatment Regulations issued under the Public Procurement and Disposal of Public Assets Act 2017. Such reservations shall be specified in the BDS in accordance with the Regulations
- 34.8 A Bidder shall be eligible to participate in the Bidding process as a qualified Bidder under the Preferential Treatment Regulations issued under the Public Procurement and Disposal of Public Assets Act 2017 or MSME only if it furnishes the Procuring and Disposing Entity or the Authority, as the case may be evidence, proving eligibility in accordance with relevant Regulations or the Order

35 Detailed Evaluation

- 35.1 The Procuring and Disposing Entity shall evaluate each Bid that has been determined, up to this stage of the evaluation, to be substantially responsive.

- 35.2 To evaluate a Bid, the Procuring and Disposing Entity shall use all the criteria and methodologies defined in this Clause and in Section 3, Evaluation and Qualification Criteria. No other criteria or methodology shall be permitted
- 35.3 The Procuring and Disposing Entity's cost evaluation of a Bid may require the consideration of other factors, in addition to the Bid Price quoted. These factors may be related to the characteristics, performance, and terms and conditions of execution of the works. The factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Bids as specified in Section 3, Evaluation and Qualification Criteria. The factors to be used and the methodology of application shall be indicated in Section 3, Evaluation and Qualification Criteria
- 35.4 If these Bidding Documents allow Bidders to quote separate prices for different lots, and the award to a single Bidder of multiple lots, the methodology of evaluation to determine the lowest evaluated lot combinations, including any discounts offered in the Bid Submission Sheet, is specified in the BDS and detailed in Section 3 Evaluation Methodology and Criteria

36 Financial Evaluation

- 36.1 The Procuring and Disposing Entity shall financially evaluate each Bid that has been determined, up to this stage of the evaluation, to be substantially compliant and responsive.
- 36.2 To financially evaluate a Bid, the Procuring and Disposing Entity shall only use the criteria and methodologies defined in this Clause and in Section 3, Evaluation Methodology and Criteria. No other criteria or methodology shall be permitted.
- 36.3 The Procuring and Disposing Entity's financial comparison of Bids may require the consideration of factors other than costs, in addition to the Bid price quoted. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods, Works and Services. The factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Bids, unless otherwise specified in Section 3, Evaluation Methodology and Criteria. The factors to be used and the methodology of application shall be indicated of Section 3, Evaluation Methodology and Criteria.
- 36.4 To financially compare Bids, the Procuring and Disposing Entity shall—
- (a) determine the Bid price, taking into account the costs listed in Section 3, Evaluation Methodology and Criteria;
 - (b) correct arithmetic errors in accordance with ITB Clause 30
 - (c) price adjustment due to discounts offered
 - (d) make adjustments for any nonmaterial nonconformities and omissions
 - (e) apply any non-cost factors
 - (f) convert all Bids to a single currency
 - (g) apply any margin of preference
 - (h) determine the total evaluated price of each Bid.

37 Comparison of Bids

The Procuring and Disposing Entity shall compare all substantially responsive Bids to determine the lowest evaluated Bid, in accordance with ITB Clause 35.

38 Environmental and Social-economic Policies

- 38.1 Bidders shall be evaluated taking into account compliance with Environmental protection, policies, laws and regulations applicable in Malawi for sustainable development.
- 38.2 The Procuring and Disposing Entity may specify in its evaluation criteria, a method to determine or assess how Bidders promote general as well as specific policies and programmes for sustainability and environmental protection.
- 38.3 A Bidder shall be evaluated taking into account compliance with Child Labour, child protection policies, laws and regulations applicable in Malawi.
- 38.4 The Procuring and Disposing Entity may specify in its evaluation criteria, a method to determine or assess how Bidders should show compliance with Child Labour and Unfair Labour Practices general laws and regulations as well as specific policies and programmes for protection of children from any form of child labour and adherence to applicable fair labour practices.

39 Post-Qualification of the Lowest Evaluated Bidder

- 38.1 The Procuring and Disposing Entity shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive Bid is qualified to perform the Contract satisfactorily
- 38.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 18, to clarifications in accordance with ITB Clause 28 and the qualification criteria indicated in Section 3, Evaluation and Qualification Criteria. Factors not included in Section 3 shall not be used in the evaluation of the Bidder's qualification
- 38.3 The Procuring and Disposing Entity shall, in its own discretion, conduct due diligence on certain procurements. In doing so, it shall prepare its own budget for such an activity and shall not rely or depend on the resources of the Bidder. Due diligence reports shall form part of the evaluation data used by the evaluation teams or Internal Procurement and Disposal Teams when making decisions
- 38.4 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Procuring and Disposing Entity shall proceed to the next lowest evaluated Bid to make a similar determination of that Bidder's capabilities to perform satisfactorily

40 Procuring and Disposing Entity's Right to Accept any Bid, and to Reject Any or All Bids

The Procuring and Disposing Entity reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to contract award, without thereby incurring any liability to Bidders

E. Award of Contract

41 Award Criteria

Subject to Clause 36, the Procuring and Disposing Entity will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid price.

42 Procuring and Disposing Entity's Right to Vary Quantities at Award

At the time the Contract is awarded, the Procuring and Disposing Entity reserves the right to increase or decrease the quantity of Works and Related Goods/ Services originally specified in Section 7, Statement of Requirement, provided this does not exceed the percentages indicated in the BDS, and without any change in the unit prices or other terms and conditions of the Bid and the Bidding Documents.

43 Notice of Intention to Award the Contract, Notice of Acceptance, and Contract Negotiations

- 43.1 Prior to expiry of the period of Bid validity, where the works contract is below the threshold for publication of an intention to award a contract, the Procuring and Disposing Entity shall notify the successful Bidder, in writing, that its Bid has been accepted. At the same time, the Procuring and Disposing Entity shall also notify all other Bidders of the results of the Bidding. The notice of acceptance shall not be sent until all the necessary approvals have been obtained.
- 43.2 Prior to expiry of the period of Bid validity, the Procuring and Disposing Entity shall publish a notice of intention to award in two widely circulated newspapers and on the Authority's website for a period of fourteen (14) days for any procurement contract in accordance with the threshold set by the Director General before signing the contract.
- 43.3 Prior to the signing of the contract but after the completion of intention to award proceedings, the Procuring and Disposing Entity may enter into negotiations with the successful Bidders on the modalities for the execution of the contract not changing the material factors of the contract.

44 Performance Security

- 44.1 Within thirty (28) days of receipt of notification of award from the Procuring and Disposing Entity, the successful Bidder shall furnish the performance security included in Section 10, Contract Forms, or any other form acceptable to the Procuring and Disposing Entity, in accordance with the SCC

- 44.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for annulment of the award and forfeiture of the Bid security. In that event, the Procuring and Disposing Entity may award the Contract to the next lowest evaluated Bidder

45 Signing the Contract

- 45.1 Promptly after notification or after the elapsing of the fourteen (14) days of the still period, the Procuring and Disposing Entity shall send the successful Bidder the Contract documents
- 45.2 Within thirty (30) days of receipt of the Contract documents, the successful Bidder shall sign, date, and return the Contract documents to the Procuring and Disposing Entity to finalise the signing process

46 Settlement of Disputes

- 46.1 In the event of a dispute arising out of the performance of the contract by either party, such disputes shall be resolved amicably. Should amicable dispute resolution fail, the matter shall be taken to arbitration, depending on the agreement by two parties. However, should arbitration still not yield positive results to either party, either party so wronged shall take the matter to the local courts.
- 46.2 For purposes of this Contract, the Procuring and Disposing Entity proposes the person named in the BDS to be appointed as Adjudicator under the Contract, at an hourly fee specified in the BDS, plus reimbursable expenses. If the Bidder objects to the Adjudicator proposed by the Procuring and Disposing Entity, he should so state in his Bid, and present an alternative candidate, together with the candidate's daily fees and biographical data
- 46.3 If, in the Notice of Acceptance, the Procuring and Disposing Entity and Bidder have not agreed on the appointment of the Adjudicator, the Adjudicator shall be appointed by the Appointing Authority designated in the SCC at the request of either party

Section 2. Bid Data Sheet

Section 2. Bid Data Sheet

Instructions to Bidders (ITB) reference	Data relevant to ITB
A. General	
ITB 1.1, 2.1	The Procuring and Disposing Entity is: Roads Authority The number and identification of Lots in this Bidding Document is: 1
ITB 1.1; 22.2(b)	The subject of the procurement is: CAPACITY IMPROVEMENT OF KIA Jcn-KANENGO ROAD Project ID: MP-2-01 Procurement Reference Number is: RA/DEV/REH/LLC/2025-25/01
ITB 8.2	The Procuring and Disposing Entity Shall hold a pre-Bid meeting and/or site visit. If a pre-Bid meeting and/or site visit is to be held, it shall take place at: Location: Kia-Junction Date: 11th August 2025 Time: 9:00 Hours Central African Time
B. Bidding Documents	
ITB 10.1	For <u>clarification purposes</u> only, the Procuring and Disposing Entity's address is: Attention: Procurement Manager Street Address: Paul Kagame Road Name of Building: Functional Building Floor/Room number: First Floor, Room No. 21 Town/City: Lilongwe Postal Address: Private Bag B346 Malawi Email address: ra@ra.org.mw / ipc@ra.org.mw Deadline date for request for clarifications is: 14days prior to the submission date
C. Preparation of Bids	

Instructions to Bidders (ITB) reference	Data relevant to ITB
ITB 13 (i)	<p>The Bidder shall submit with its Bid the following additional documents:</p> <ol style="list-style-type: none"> <p>Code of Conduct for Contractor's Personnel (ES)</p> <p>The Bidder shall submit its Code of Conduct that will apply to Contractor's Personnel (as defined in Sub-Clause 1.1.17 of the General Conditions of Contract), to ensure compliance with the Contractor's Environmental and Social (ES) obligations under the Contract.</p> <p>Bidders Shall complete and include the risks to be addressed by the Code in accordance with section VII- Works' Requirements, e.g. risks associated with: labour influx, Spread of communicable diseases, sexual harassment, gender based violence, sexual exploitation and abuse, illicit behaviour and crime and maintaining a safe environment.</p> <p>In addition the Bidder shall detail how the code of conduct will be implemented. This will include: how it will be introduced into conditions of employment/engagement, what training will be provided, how it will be monitored and how the contractor proposes to deal with any breaches.</p> <p>The Contractor shall be required to implement the agreed Code of conduct</p> <p>Management Strategies and Implementation Plans (MSIP) to manage the (ES) risks</p> <p>The Bidder shall submit Management Strategies and Implementation Plans (MSIPs) to manage the following key Environmental and Social (ES) risks in alignment with the project ESIA/ESMP.</p> <ul style="list-style-type: none"> Traffic Management Plan to ensure safety of local communities and passengers from construction traffic Water Resource Protection Plan to prevent contamination of drinking water; Strategy to avoid and manage waste generation; General strategy to avoid creation of noise nuisance, vibration and air pollution (due to e.g. dust); A Grievance Redress Mechanism for the project Boundary Marking and Protection Strategy for mobilization and construction to prevent offsite adverse impacts;

Instructions to Bidders (ITB) reference	Data relevant to ITB
	<ul style="list-style-type: none"> • Strategy for obtaining Consents/Permits prior to the start of relevant works such as opening a quarry or borrow pit; • Strategy to manage occupational health and safety, incl. HIV prevention measures for contractor's staff/workers and a grievance mechanism for workers to raise workplace related concerns; • Strategy to manage community health and safety incl. Gender Based Violence, Sexual Exploitation and Abuse, Child Labour and Violence Against Children prevention and response plan; HIV/STIs prevention plan; conflict resolution; • Strategy to ensure recruitment of locals and inclusion of youth and women in employment opportunities <p>The Contractor shall be required to submit for approval, and subsequently implement, the Contractor's Environmental and Social Management Plan (C-ESMP), in accordance with the Particular Conditions of Contract Sub-Clause 4.1, that includes the agreed Management Strategies and Implementation Plans described here.</p>
ITB 15.1	Alternative Bids shall not be permitted considered
ITB 16.1	The Contract is Admeasurement .
ITB 16.6	Bid Prices will be subject to adjustment during performance of the contract.
ITB 19.1	Bids shall remain valid for 120 days.
ITB 20.2	<p>Bid Security shall not be required.</p> <p>Where a Bid Security is required, the amount of the Bid security shall be [insert amount] in Malawi Kwacha.</p>
ITB 20.3	<p>A Bid Securing Declaration shall be required.</p> <p>Where a Bid Securing Declaration is required no alteration to Bid Securing Declaration Form in Section 4</p>
ITB 22.1	In addition to the original of the Bid, the number of copies is: 2
D. Bid Submission	
ITB 23.2(a)	For Bid submission purposes only, the Procuring and Disposing Entity's address is :

Instructions to Bidders (ITB) reference	Data relevant to ITB
	<p>Attention: Chief Executive Officer</p> <p>Street Address: Paul Kagame Road</p> <p>Name of Building: Functional Building</p> <p>Floor/Room number: Floor No. 1, Room 21</p> <p>Town/City: Lilongwe</p> <p>Postal Address/Post Code: Private Bag B346</p>
ITB 23.1	<p>The deadline for Bid submission is:</p> <p>Date: 21st July 2025 Time: 10:00 Hours Central African Time</p>
ITB 26.1	<p>The Bid opening shall take place at:</p> <p>Street Address: Paul Kagame Road</p> <p>Name of Building: Functional Building</p> <p>Floor/Room number: Floor No. 1, Room 21</p> <p>Town/City: Lilongwe</p> <p>Date: 21st July 2025 Time: 10:00 Hours Central African Time</p>
ITB 34.2	<p>A margin of preference Shall apply.</p> <p>A margin of preference for micro, small and medium enterprises and other marginalised groups Shall not Apply</p> <p>A margin of preference for Preferential Treatment Shall not apply</p> <p>Where a margin of preference applies, the criteria for eligibility and the application methodology are described in Section 3 Evaluation Methodology and Criteria</p>
F. Award of Contract	
ITB 46.2	<p>The Adjudicator proposed by the Procuring and Disposing Entity is: Malawi Engineering Institution</p> <p>The hourly fee for this proposed Adjudicator shall be: MWK50,000.00</p> <p>The biographical data of the proposed Adjudicator is as attached to this Bid Data Sheet.</p>

Section 3. Evaluation and Qualification Criteria

Procurement Reference Number: _____

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 and Disposing Entity shall use to evaluate a Bid and determine whether a Bidder has the required qualifications. No other factors, methods or criteria shall be used.

A. Evaluation Methodology**1. Methodology Used**

- 1.1 The evaluation methodology to be used for the evaluation of Bids received shall be the Technical Compliance Selection (TCS) methodology.

2. Summary of Methodology

- 2.1 The evaluation shall be conducted in the following sequential stages –
- (a) A preliminary evaluation to determine the eligibility of Bidders and the administrative compliance of Bids received;
 - (b) A detailed evaluation to determine the technical responsiveness of the eligible and compliant Bids;
 - (c) A financial evaluation to compare costs of the responsive Bids received and thereafter determine the lowest evaluated Bid; and
 - (d) Post qualification to confirm whether the lowest evaluated Bidder has the capacity and resources to effectively execute the procurement. Where applicable, a thorough due diligence should be conducted
- 2.2 Failure of a Bid at any stage of the evaluation shall prevent further consideration at the next stage of evaluation. Substantial responsiveness shall be considered a pass at the detailed evaluation stage.

B. Preliminary Evaluation**3. Eligibility Criteria**

- 3.1. The eligibility requirements shall be determined in accordance with ITB Clause 4
- 3.2. The documentation required to provide evidence of eligibility shall be as prescribed in ITB 4
- 3.3. For inclusion of a provision on Joint Venture, Consortiums and Associations
- a) A certificate of registration issued by the Authority for Bidders currently registered with the Authority or a copy of the Bidder's trading license or equivalent and a copy of the Bidder's certificate of registration or equivalent for Bidders not currently registered with the Authority; and

- b) A statement in the Bid submission sheet that the Bidder meets the eligibility criteria stated in ITB 4.1 and 4.4
- c) A declaration in the Bid submission sheet of nationality of the Bidder
- d) A declaration in the Bid submission sheet that the Bidder is not under suspension by the authority
- e) Fulfillment of obligations to pay taxes where applicable

3.4 For Joint Venture or Consortiums or Associations

- a) A registered Power of Attorney from each member or partner if drawn and signed in Malawi; or a notarized Power of Attorney if drawn and signed outside Malawi, nominating a representative to conduct all business on its behalf during the Bid preparation, Bidding process and contract execution in case of award of the contract
- b) The documentation in Section 3.2 for each member or partner and a copy of the Joint Venture / Consortium / Association Agreement which is legally binding on all partners or members stating that:
 - (i) The partners or members shall jointly submit a Bid;
 - (ii) One of the parties will be nominated as lead member or partner to act for and on behalf of all members or partners;
 - (iii) The authorized representative of the lead member or partner who was granted power of attorney shall sign the Bid;
 - (iv) If the Bid is successful, the contract shall be executed in the name of the Joint Venture (JV), Consortium or Association and each member or partner shall sign the contract agreement; and
 - (v) All partners shall be jointly and severally liable for the implementation of the contract in accordance with the contract terms

3.5 Declaration: Environmental and Social (ES) past performance

A Bidder shall declare any civil work contracts that have been suspended or terminated and/or performance security called by a Client for reasons of breach of environmental, or social (including Sexual Exploitation and Abuse) contractual obligations in the past five years.

4 Administrative Compliance Criteria

- 4.1. The evaluation of Administrative Compliance criteria shall be conducted in accordance with ITB Clause 13.
- 4.2 Eligibility and administrative compliance shall be determined on a pass or fail basis and a Bid which is not eligible or administratively compliant shall be rejected at the preliminary stage of evaluation

C. Detailed Evaluation

5. Assessment of Responsiveness

The assessment of responsiveness will consider the following criteria:

- (a) Acceptance of the conditions of the proposed contract;
- (b) Acceptable completion schedule;
- (c) Acceptability of the proposed program (work method and schedule), including relevant drawings and charts.

6. Mobilization

Evaluation of the responsiveness of a Bid to the technical requirements will include an assessment of the Bidder's capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section 7 (Statement of Requirements).

7. Personnel and Equipment

A. Personnel

The Bidder must demonstrate that it will have the key personnel for the following positions that meet the following requirements:

No.	Position	General Work Experience (years)	Experience in Similar Works (years)
1.	<i>[Contract Manager]</i>		
2.			
3.	<i>[Environmental Officer]</i>		
4.	<i>[Social Development Officer]</i>		

The Bidder shall provide details of the proposed personnel and their experience records in the relevant Forms included in Section 4, Bidding Forms.

B. Equipment

The Bidder must demonstrate that it shall have access to the key equipment listed hereafter (either by ownership, lease or hire): attach documentary evidence of ownership, lease, hire such as registration books, agreements or memoranda or purchase order).

No.	Equipment Type and Description/ Capacity	Minimum required	Number

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section 4.

8. Qualifications Criteria

- 8.1. The information required from Bidders in ITB Clause 5.3 is modified as follows:
- 8.2. The requirements for joint ventures in ITB Clause 5.3 are modified as follows:
- 8.3. To qualify for award of the Contract, in accordance with ITB Clause 5.3, Bidders shall meet the following minimum qualifying criteria:
- (a) average annual volume of construction work over the past 3 Years of at least MWK15Billion;
 - (b) experience as prime contractor in the construction of at least 2 works of a nature and complexity equivalent to the Works over the last 10 years (to comply with this requirement, works cited should be at least seventy (70) percent complete);

Description	Unit	Quantity
Earth works	m ³	875,000
Concrete	m ³	800
Surfacing	m ²	270,000

- (c) proposals for the timely acquisition (own, lease, hire, etc.) of the following essential equipment:

S/N	Equipment Type and Description/ Capacity	No
1	Self-propelled graders;	4
2	Dozers;	2
3	Loaders and/or excavators;	2
4	20m ³ Tipper trucks;	20
5	pneumatic-tyred rollers (123kw, 10t);	2
6	Vibrating Rollers (123kw, 10t);	2
7	Water Bowsers (10,000 to 18,000 litre).	6
8	Concrete mixer (6 cu.m capacity)	2
9	Bitumen distributor;	2
10	Asphalt Paver (at least 5.94m width capacity).	1
11	Sheepsfoot roller	2
12	Asphalt Plant (100 tonnes per hour)	1
13	Aggregate Crushing Plant (120 tonnes per hour)	1

- (d) personnel with the following qualifications and experience:

S/N	Position	Qualifications and General Work Experience (years)	Experience in Similar Works
1	1 x Site Agent:	Minimum of degree in	with at least 3 projects

		Civil Engineering and at least fifteen (15) years of experience in road works	as a site agent;
2	1xSite Engineer	Minimum of degree in Civil Engineering and at least ten (10) years of experience in road works	with at least 2 road projects as a site engineer;
3	1xMaterials/Measurement Engineer:	Minimum of degree in Civil Engineering with at least Five (5) years' experience in road works with at least	1 road project as a Materials/Measurement Engineer;
4	1 x Land Surveyor:	Minimum of Degree in Surveying and at least five (5) years of experience in road works with or Diploma in Civil Engineering and (10) years of experience in road experience	2 road projects as a land surveyor or of 3 road projects as a land surveyor
5	1 x Environmental,	Occupational Health and Safety Expert: A minimum qualification of a degree in a relevant discipline with at least two years' experience in construction works	1 road project as an environmental expert
6	1 x Social Expert:	A minimum qualification of a degree in a relevant discipline with at least two years' experience in construction works	1 road project as a social Expert;
7	5 x Foremen:	Minimum of Diploma in Civil Engineering with at least ten (10) years' experience or least fifteen (15) years' experience in road works	5 projects as a foreman or Road Foremanship Certificate

- (e) liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, of no less than MWK8 Billion;
 - (f) Subcontracting agreement (clause 4.4 of the General Conditions of Contract) with the proposed subcontractors (the value of works proposed to be subcontracted in line with the contractors' NCIC category).
- 8.4. A consistent history of contract non-performance, litigation or arbitration awards against the Applicant or any partner of a Joint Venture may result in disqualification.

- 8.5. The figures for each of the partners of a joint venture shall be added together to determine the Bidder's compliance with the minimum qualifying criteria in (a) to (e)
- 8.6. for a joint venture to qualify, each of its partners must meet at least twenty-five (25) percent of minimum criteria (a), (b), and (e) for an individual Bidder, and the partner in charge at least forty (40) percent of those minimum criteria. Failure to comply with this requirement will result in rejection of the joint venture's Bid.
- 8.7. Subcontractors' experience and resources will not be taken into account in determining the Bidder's compliance with the qualifying criteria.

9. Participation by Micro, Small and Medium Enterprises

- 9.1 If indicated in the Bid Data Sheet, Bidders for works contracts applying for a margin of preference for participation by micro, small and medium enterprises (MSME) in Bid evaluation shall provide such information, including details of ownership, certificates of registration, certificate of the category within the MSMEs as are necessary to confirm whether a particular contractor or group of contractors qualifies for preference based on being a micro, small and medium enterprise.
- 9.2 A margin of preference may be awarded to established MSME contractors who are registered as Malawian contractors by the National Construction Industry Council, and Ministry of Trade.
- 9.3 The margin of preference for MSMEs shall be applied as follows:

After Bids have been received and reviewed by the Procuring and Disposing Entity, responsive Bids shall be classified into the following groups -

- (a) Group A, namely, Bids offered by MSMEs contractors and joint ventures eligible for the preference.
- (b) Group B, namely, Bids offered by other contractors.

For the purpose of evaluation and comparison of Bids only, an amount equal to the percentage, as indicated in the MSME Order, of the Bid amount shall be added to Bids received from contractors in Group B.

Section 4. Bidding Forms

Section 4. Bidding Forms

List of Forms

- Bid Submission Form
- Beneficial Ownership Disclosure Form
- Priced Schedules
- Bid Security Form (Bank Guarantee)
- Bid Securing Declaration
- Advance Payment Security Form
- Qualification Information Forms A to Q
- Unit Rates Analysis Form I
- Environmental, Social, Health and Safety Declaration

Note: All forms, requiring information to be completed by the Bidder in bold in square brackets e.g. **[insert date]** etc.

Note to Bidders: This Bid Submission Form 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.

Bid Submission Form

Date: **[insert date]**

Procurement Reference No.: **[insert procurement reference number]**

Page **[insert page number]** of **[insert total number of pages]** pages

To: **[insert complete name of Procuring and Disposing Entity]**

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: **[insert the number and issuing date of each Addenda]**;
- (b) We offer to execute the **[insert the name and procurement reference number of the Contract]** in conformity with the Bidding Documents for the Contract Price of **[insert amount in numbers and words]** Malawi Kwacha;
- (c) We offer to execute the works in accordance with the Work Program in conformity with the Bidding Documents for a period not exceeding **[insert number of weeks or months]**;
- (d) The advance payment required is: **[insert amount in numbers and words]** Malawi Kwacha;
- (e) Our Bid shall be valid for a period of **[specify the number of days that the Bid is valid for]** calendar days from the date fixed for the Bid submission deadline in accordance with clause 23.1 of the ITB, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) We have no conflict of interest in accordance with clause 4.3 of the ITB;
- (g) Our firm, its affiliates or subsidiaries—including any subcontractors or suppliers for any part of the contract—has not been debarred from participation in public procurement by the Government of the Republic of Malawi, in accordance with clause 4.4 of the ITB;
- (h) Our firm, its affiliates or subsidiaries, including subcontractors or suppliers for any part of the contract 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 and Disposing Entity.
- (i) The names and physical addresses of the Directors of our firm are provided in the table below:

Name	Address

- (j) The names and physical addresses of the Beneficial Owners our company are provided in the table below:

Name	Address

- (k) We understand that you are not bound to accept the lowest evaluated Bid or any other Bid that you may receive.
- (l) We accept the appointment of **[insert name of adjudicator proposed in the BDS]** as the Adjudicator. **[or]** We do not accept the appointment of **[insert name of adjudicator proposed in the BDS]** as the Adjudicator and propose instead that **[insert name]** be appointed as Adjudicator, whose daily fees and biographical data are attached.

Signed: **[insert signature of person whose name and capacity are shown]** In the capacity of **[insert legal capacity of person signing the Bid]**

Name: **[insert complete name of person signing the Bid]**

Duly authorised to sign the Bid for and on behalf of: **[insert complete name of Bidder]**

Dated on _____ day of _____, _____ **[insert date of signing]**

BENEFICIAL OWNERSHIP DISCLOSURE FORM

Date: **[insert date]**

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the Bidder. In case of joint venture, the Bidder must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Bidder is any natural person who ultimately owns or controls the Bidder by meeting one or more of the following conditions:

- 1. directly or indirectly holding 5% or more of the shares*
- 2. directly or indirectly holding 5% or more of the voting rights*
- 3. directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder.*
- 4. directly or indirectly, has a substantial economic interest in or receives substantial economic benefit from, a company, whether acting alone or together with other persons;*
- 5. has a significant stake in a company and on whose behalf activity of a company is conducted; or*
- 6. exercises significant control or influence over a person through a formal or informal agreement, and where such ownership, control or interest is through a trust, the trustee (s), beneficiaries, or anyone who controls the trust.*

Procurement Reference No.: **[insert procurement reference number]**

Page **[insert page number]** of **[insert total number of pages]** pages

To: **[insert complete name of Procuring and Disposing Entity]**

In response to your request in the Letter of Acceptance dated [insert date of letter of Acceptance] to furnish additional information on beneficial ownership: [select one option as applicable and delete the options that are not applicable]

(i) we hereby provide the following beneficial ownership information.

Details of beneficial ownership

Identity of Beneficial Owner	Directly or indirectly holding 5% or more of the shares (Yes / No)	Directly or indirectly holding 5 % or more of the Voting Rights (Yes / No)	Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent governing body of the Bidder (Yes / No)
[include full name (last, middle, first), nationality, country of residence]			

OR

(ii) We declare that there is no Beneficial Owner meeting one or more of the following conditions:

- directly or indirectly holding 5% or more of the shares
- directly or indirectly holding 5% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder.
- directly or indirectly, has a substantial economic interest in or receives substantial economic benefit from, a company, whether acting alone or together with other persons;
- has a significant stake in a company and on whose behalf activity of a company is conducted; or
- exercises significant control or influence over a person through a formal or informal agreement, and where such ownership, control or interest is through a trust, the trustee (s), beneficiaries, or anyone who controls the trust.

OR

(iii) We declare that we are unable to identify any Beneficial Owner meeting one or more of the following conditions. [If this option is selected, the Bidder shall provide explanation on why it is unable to identify any Beneficial Owner]

- directly or indirectly holding 5% or more of the shares
- directly or indirectly holding 5% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder]
- directly or indirectly, has a substantial economic interest in or receives substantial economic benefit from, a company, whether acting alone or together with other persons;

- has a significant stake in a company and on whose behalf activity of a company is conducted; or
- exercises significant control or influence over a person through a formal or informal agreement, and where such ownership, control or interest is through a trust, the trustee (s), beneficiaries, or anyone who controls the trust.

Name of the Bidder: [insert **complete name of the Bidder**]¹

Name of the person duly authorized to sign the Bid on behalf of the Bidder: [insert **complete name of person duly authorized to sign the Bid**]²

Title of the person signing the Bid: [insert **complete title of the person signing the Bid**]

Signature of the person named above: _____

Date signed [insert **ordinal number**] day of [insert **month**], [insert **year**]

¹ In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder. In the event that the Bidder is a joint venture, each reference to "Bidder" in the Beneficial Ownership Disclosure Form (including this Introduction thereto) shall be read to refer to the joint venture member.

² Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Note to Bidders: Bidders shall submit a fully priced Bills of Quantities for Admeasurement Contracts or Activity Schedule for Lump Sum Contracts as provided in Section 7 of the Bidding Documents.

Each page of the Bills of Quantities or the Activity Schedule should be initialled by a person with the proper authority to sign documents for the Bidder.

Priced Schedules

(Bills of Quantities or Activity Schedule)

PREAMBLE TO BILL OF QUANTITIES

- 1.1 This Preamble and the Bill of Quantities form an integral part of the Contract Documents. The Bill of Quantities shall be read in conjunction with the Instruction to Bidders, Conditions of Contract, Technical Specifications, and Drawings.
- 1.2 The quantities given in the Bill of Quantities are estimated and provisional. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineers' Representative and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Supervisors' Representative may fix within the terms of the Contract.
- 1.3 The rates and prices tendered in the priced Bill of Quantities shall, except in-so-far as it is otherwise provided under the Contract, include the cost of all constructional plant, labour, supervision, materials tests for quality control, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
- 1.4 A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
- 1.5 The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities. Where no items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related items of work.
- 1.6 General directions and descriptions of work and materials are not necessarily repeated nor summarised in the Bill of Quantities. The bidder is advised to refer to the relevant sections of the contract documentation before entering prices against each item in the priced Bill of Quantities.
- 1.7 Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Supervisors' Representative after obtaining approval of the Employer.
- 1.8 The method of measurement of completed work for payment shall be in accordance with the measurement and payment item in the General and Particular Specifications.

- 1.9 Errors will be corrected by the Employer for any arithmetic errors in computation or summation as follows:
- 1.10 where there is a discrepancy between amounts in figures and in words, the amount in words will govern; and
- 1.11 where there is a discrepancy between the unit rate and the total amount derived from the multiplication of the unit price and the quantity, the unit rate as quoted will govern.
- 1.12 The quantities of material or work stated in the Bill of Quantities shall not be regarded as constituting authorisation to the Contractor to order materials or execute work. The Contractor shall obtain the Supervisors' Representatives' detailed instructions for all work before ordering any materials or executing work or making arrangements therefore.
- 1.13 The short descriptions given of pay items in the Bill of Quantities are only for the purposes of identifying the items and providing specific details. Reference shall be made inter alia to the Drawings, Specifications, and Conditions of Contract for more detailed information regarding the extent of the work entailed under each item.
- 1.14 All rates and sums of money quoted in the Bill of Quantities shall be in Malawi Kwacha.
- 1.15 The Priced Bill of Quantities for the capacity improvement of KIA - Kanengo (M001) shall be priced and summed up.
- 1.16 For the purpose of this Bill of Quantities, the following works shall have the meanings hereby assigned to them:

Unit	The unit of measurement for each item of work as defined in the Project Specifications.
Quantity	The number of units of work for each item.
Rate	The payment per unit of measurement at which the Tenderer tenders to do the work.
Amount	The product of the quantity and the rate tendered for an item.
Lump sum	An amount tendered for an item, the extent of which is described in the Bill of Quantities, the Specifications or elsewhere but the quantity of work of which is not measured in any units.
Prime Cost Sum	A sum included in the Contract and so designated in the Schedule of Quantities for covering the prime cost of goods or materials to be supplied under the Contract and for delivery of such items to storage on site. The amount to be paid to the Contractor shall be the actual price paid by him

- 1.17 The Tenderer shall fill in a rate or a lump sum for each item where provision has been made for it even where no quantities are given. Items against which no rate or lump sum has been entered in the tender will not be paid for when the work is executed, as it is assumed that the contractor does not wish to receive payment for any such work.

The Tenderer shall fill in a rate against all items where the words "rate only" appear in the amount column. The provisions of Subclause 1209(f) of the Standard Specifications shall apply to rate-only items.

The Tenderer shall not group a number of items together and tender one rate or lump sum for such group of items. The Tenderer also shall not indicate against any item that full compensation for such item has been included in another item. The Tenderer may not tender a zero rate for any item, failure to comply with this requirement may result in the tender being rejected.

The tendered lump sums and rates shall be valid irrespective of any change in the quantities during the execution of the Contract.

- 1.18 The works as executed will be measured for payment in accordance with the methods described in the Contract Documents under the various payment items, notwithstanding any custom to the contrary.

Attention is directed to the provisions of Clause 1220 of the Standard Specifications regarding the measurement of quantities for payment. Except where otherwise specified as in Clause 1220, the net measurements or mass of the finished work in place shall be taken for payment but excluding any volume or mass of work in excess of that ordered.

- 1.19 The short descriptions of the payment items given in the Bill of Quantities are only for the purposes of identifying the items and providing specific details. Reference shall be made, inter alia, to the drawings, Standard Specifications, Particular Specifications, General Conditions of Contract and Special Conditions of Contract for more detailed information regarding the extent of the work entailed under each item.

- 1.20 The pay item numbers that appear in the Bill of Quantities refer to the corresponding item numbers in the Standard Specifications. Certain pay item numbers appearing in the Schedule of Quantities are prefixed by the letter PS. This letter signifies that either:

- (a) a new pay item not listed in the Standard Specification has been described and listed in the Particular Specification, or
- (b) an existing measurement and / or payment clause occurring in the Standard Specifications has been clarified and / or modified in the Particular Specifications.

The listing of pay items with or without a PS prefix where relevant has, as stated, been done to assist Bidders and in no way absolves Bidders from the obligation to familiarise themselves with, and bid on the basis of the Documents as a whole. No claim based on errors in or omissions of pay item numbers and / or the prefix PS in the columns headed "Pay Item" in the Bill of Quantities will be considered.

- 1.21 Where a Pay Item has the unit of measurement equal to % the Tenderer must enter the percentage required by him under the "Rate" column, e.g. for 5% enter 5,0 not 0,05.

2. SCHEDULE OF DAY WORK RATES

- 2.1 The Schedule of Day work Rates shall be used to calculate the payment due for work ordered as Day works, and for which no rates appear in the Bill of Quantities.
- 2.2 The description of the work, quality of materials and standard of workmanship shall be as described in the Specification.
- 2.3 The prices quoted in the Schedule shall cover all the necessary insurances, use and maintenance of ordinary plant (e.g. barrows, running planks, hand pumps, hand tools and appliances generally), superintendence, overhead charges and profit, and in the case of mechanically operated plant, the wages of the operator and assistant, consumables, stores, fuel, maintenance and transportation of plant to site.
- 2.4 The time of gangers, overseers, or charge hands working with their gangs, is to be paid for under appropriate items, but the time of Foremen is not to be included. This is to be covered by superintendence. The time actually spent by labour on work shall be recorded for this purpose.
- 2.5 The price quoted for labour shall be for straight time only and no overtime rates shall be payable. Rates shall only be paid for artisans working at their trade.
- 2.6 The rates for materials shall cover distribution within the site. Delivery to the site shall be charged in addition.
- 2.7 The cost of additional watching and lighting and other incidentals specially necessitated by Day works shall not be paid for separately.
- 2.8 The rates given in the Schedules shall be taken to be operative at the time of Bidding.
- 2.9 Day works shall be carried out on the written instructions from the Supervisors' Representative.
- 2.10 The description of the plant should be completed by the Bidder when bidding.

Note to Bidders: This Bid Security should be on the letterhead of the issuing Financial Institution and should be signed by a person with the proper authority to sign the Bid Security. It should be included by the Bidder in its Bid, in accordance with ITB Clause 20. Except for indicated fields, no changes shall be made in this template, any changes made shall result in rejection of the Bid.

Bid Security (Bank Guarantee)

Date: **[insert date]**

Procurement Reference No.: **[insert procurement reference number]**

Page **[insert page number]** of **[insert total number of pages]** pages

To: **[insert complete name of Procuring and Disposing Entity]**

Whereas **[insert complete name of Bidder]** (hereinafter "the Bidder") has submitted its Bid dated **[insert date (as day, month and year) of Bid submission]** for procurement reference no. **[insert procurement reference no]** for the construction of **[insert name of Contract]**, hereinafter called "the Bid."

KNOW ALL PEOPLE by these presents that WE **[insert complete name of bank issuing the Bid Security]**, of **[insert city of domicile and country of nationality]** having our registered office at **[insert full address of the issuing institution]** (hereinafter "the Bank"), are bound unto **[insert complete name of the Procuring and Disposing Entity]** (hereinafter "the Procuring and Disposing Entity") in the sum of **[specify in words the amount and currency of the Bid security (specify the amount and currency in figures)]**, for which payment well and truly to be made to the aforementioned Procuring and Disposing Entity, the Bank binds itself, its successors or assignees by these presents.

Sealed with the Common Seal of this bank, this **[insert day in numbers]** day of **[insert month]**, **[insert year]**.

THE CONDITIONS of this obligation are the following:

1. If the Bidder withdraws its Bid during the period of Bid validity specified by the Bidder in the Bid Submission Form, except as provided in ITB Clause 21.2; or
2. If the Bidder, having been notified of the acceptance of its Bid by the Procuring and Disposing Entity, during the period of Bid validity, fails or refuses to:
 - (a) execute the Contract; or
 - (b) furnish the Performance Security, in accordance with the ITB Clause 36; or
 - (c) accept the correction of its Bid by the Procuring and Disposing Entity, pursuant to ITB Clause 28.

We undertake to pay the Procuring and Disposing Entity up to the above amount upon receipt of its first written demand, without the Procuring and Disposing Entity having to substantiate its demand, provided that in its demand the Procuring and Disposing Entity state that the amount claimed by it is due to it, owing to the occurrence of one or more of the above conditions, specifying the occurred conditions.

This guarantee shall remain in force up to and including twenty-eight (28) days after the period of Bid validity, as stated in the Bid Submission Form or as it may be extended by the Bidder, notice of which extension(s) to the Bank is hereby waived. Any demand in respect thereof should be received by the Bank no later than the above date.

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 Bid Security]** In the capacity of **[insert legal capacity of person signing the Bid Security]**

Signed: **[insert signature of person whose name and capacity are shown above]**

Duly authorised to sign the Bid for and on behalf of: **[insert complete name of bank]**

Dated on _____ day of _____, _____ **[insert date of signing]**

Note to Bidders: This Bid Securing Declaration should be on the letterhead of the Bidder and should be signed by a person with the proper authority to sign the Bid Securing Declaration. It should be included by the Bidder in its Bid, in accordance with ITB Clause 20. Except for indicated fields, no changes shall be made in this template, any changes made shall result in rejection of the Bid.

Bid Securing Declaration

[The Bidder shall fill in this form in accordance with the instructions indicated.]

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

Procurement Reference No.: **[insert number of Bidding process]**

Alternative No.: **[insert identification No. if this is a Bid for an alternative]**

To: **[insert complete name of Procuring and Disposing Entity]**

We, the undersigned, declare that

- 1 We understand that, according to your conditions, Bids must be supported by a Bid Securing Declaration.
- 2 We accept that we will automatically be debarred from being eligible for Bidding in any contract with the Procuring and Disposing Entity and/or any other government entity for a period of **twenty-four (24) months** starting on the date as may be determined by the Government of Malawi if we are in breach of our obligation(s) under the Bid conditions, because we:
 - (a) have withdrawn our Bid during the period of Bids validity specifies by us in the Bid Data Sheet; or
 - (b) having been notified of the acceptance of our Bid by the Procuring and Disposing Entity during the period of Bid validity, (i) fail or refuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the ITB 44; or (iii) fail to accept the correction of its Bid by the Procuring and Disposing Entity, pursuant to ITB Clause 30.
- 3 We understand that this Bid Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of a copy of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the Bid.
- 4 We understand that if we are a Joint Venture, the Bid Securing Declaration must be in the
 name of the Joint Venture that submits the Bid. If the Joint Venture has not been legally constituted at the time of Bidding, the Bid Securing Declaration shall be in the names of all future partners as named in the letter of intent.

Signed: **[insert signature of person whose name and capacity are shown]** In the capacity of **[insert legal capacity of person signing the Bid Securing Declaration]**

Name: **[insert complete name of person signing the Bid Securing Declaration]**

Duly authorized to sign the Bid for and on behalf of **[insert complete name of Bidder]**

Date: on day of,..... **[insert date of signing]**

Note to Bidders: The information to be filled in by Bidders in the following pages will only be used for purposes of post-qualification or for verification of pre-qualification as provided for in Clause 5 of the Instructions to Bidder and will not form part of the Contract. Attach additional pages as necessary. If used for pre-qualification verification, the Bidder should fill in updated information only.

Qualification Information Form A

- | | |
|--|--|
| 1. Individual Bidders or Individual Members of Joint Ventures | <p>1.1 Constitution or legal status of Bidder: [attach copy]</p> <p>Certificate as a Micro, Small or Medium Enterprise: [attach copy, applicable where preference for MSMEs applies]</p> <p>Place of registration: [insert]</p> <p>Principal place of business: [insert]</p> <p>Power of attorney of signatory of Bid: [attach]</p> <p>1.2 Average annual volume of construction work performed in the previous number of years specified in Section 3, Evaluation and Qualification Criteria: [insert details in Form D]</p> <p>1.3 Work performed as prime Contractor on works of a similar nature and volume over the last five (5) years. Also list details of work under way or committed, including expected completion date. [insert details in Forms I, J, K, L & M]</p> <p>1.4 Major items of Equipment proposed for carrying out the Works. List all information requested below. [insert details in Form N]</p> <p>1.5 Qualifications and experience of key personnel for administration and execution of the Contract. Attach biographical data. [insert details in Form O & P]</p> <p>1.6 Proposed subcontracts and firms involved.</p> <p>1.7 Financial reports for the last five (5) years: balance sheets, profit and loss statements, auditors' reports, etc. List below and attach copies.</p> <p>1.8 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List below and attach copies of supporting documents.</p> <p>1.9 Name, address, and telephone, telex, and facsimile numbers of banks that may provide references if contacted by the Procuring and Disposing Entity.</p> <p>1.10 Information on any current litigation in which the Bidder is involved. [insert details in Form C]</p> |
|--|--|

1.11 Proposed Program (work method and schedule). Descriptions, drawings, and charts, as necessary, to comply with the requirements of the Bidding documents.

2. Joint Ventures

2.1 The information listed in 1.1 - 1.10 above shall be provided for each partner of the joint venture.

2.2 The information in 1.11 shall be provided for the joint venture.

2.3 Attach the power of attorney of the signatory(ies) of the Bid authorising signature of the Bid on behalf of the joint venture.

2.4 Attach the Agreement among all partners of the joint venture (and which is legally binding on all partners), which shows that

(a) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;

(b) one of the partners will be nominated as being in charge, authorised to incur liabilities, and receive instructions for and on behalf of any and all partners of the joint venture; and

(c) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.

3. Additional Requirements

3.1 Bidders should provide any additional information required in Sections 2 or 3 of the Bidding Document or to fulfil the requirements of Clause 5.1 and Clause 31 of the Instructions to Bidders, if applicable.

3. Code of Conduct for Contractor's Personnel (ES) Form

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We are the Contractor, [*enter name of Contractor*]. We have signed a contract with [*enter name of Employer*] for [*enter description of the Works*]. These Works will be carried out at [*enter the Site and other locations where the Works will be carried out*]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse and sexual harassment.

Note to the Bidder:

The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified. However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Bidder shall initial and submit the Code of Conduct form as part of its bid.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, labourers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as "**Contractor's Personnel**" and are subject to this Code of Conduct.

This Code of Conduct identifies the behaviour that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behaviour will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Contractor's Personnel shall:

1. carry out his/her duties competently and diligently;
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. maintain a safe working environment including by:
 - a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
 - b. wearing required personal protective equipment;

- c. using appropriate measures relating to chemical, physical and biological substances and agents; and
 - d. following applicable emergency operating procedures.
- 4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
- 5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
- 6. not engage in Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
- 7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
- 8. not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
- 9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
- 10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH);
- 11. report violations of this Code of Conduct; and
- 12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism. .

RAISING CONCERNS

If any person observes behaviour that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the Contractor's Social Expert with relevant experience in handling gender-based violence, or if such person is not required under the Contract, another individual designated by the Contractor to handle these matters*] in writing at this address [] or by telephone at [] or in person at []; or
2. Call [] to reach the Contractor's hotline (*if any*) and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behaviour prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

SN	Act of violation of CoC	Penalty
1.	Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;	Disciplinary action would include the following according to the nature of act of violation: <ul style="list-style-type: none"> • Suspension • Immediate dismissal • Report to Police
2.	Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;	Disciplinary action would include the following according to the nature of act of violation: <ul style="list-style-type: none"> • Suspension • Immediate dismissal • Report to Police
3.	Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;	Disciplinary action would include the following <ul style="list-style-type: none"> • Immediate dismissal • Report to Police
4.	Any form of sexual activity with individuals under the age of 18, excepting case of pre-existing marriage	Disciplinary action would include the following: <ul style="list-style-type: none"> • Immediate dismissal • Report to Police
5.	Discriminate or harass other employee or physical assault (local or foreigner) or any other person concerned with the project on grounds of sex, tribe, religion, nationality, ethnicity, marital status, disability or employment status.	Disciplinary action would include the following according to the nature of act of violation: <ul style="list-style-type: none"> • Suspension • IMMEDIATE DISMISSAL
6.	Entertaining unauthorized visitations including minors on the worksite.	Disciplinary action would include the following: <ul style="list-style-type: none"> • Suspension • IMMEDIATE DISMISSAL
7.	Verbal conduct that leads to sexual harassment	Disciplinary action would include the following according to the nature of act of violation: <ul style="list-style-type: none"> • Written warning • Suspension • IMMEDIATE DISMISSAL
8.	Retaliation against any person who raises a concern	Disciplinary action would include: <ul style="list-style-type: none"> • Suspension • IMMEDIATE DISMISSAL

FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Contractor's contact person(s) with relevant experience*] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Contractor:

Signature: _____

Date: (day month year): _____

ATTACHMENT 1: Behaviors constituting Sexual Exploitation and Abuse (SEA) and behaviors constituting Sexual Harassment (SH)

ATTACHMENT 1 TO THE CODE OF CONDUCT FORM

BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)

The following non-exhaustive list is intended to illustrate types of prohibited behaviors

(1) Examples of sexual exploitation and abuse include, but are not limited to:

- A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
- A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favor.
- A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) Examples of sexual harassment in a work context

- Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
- When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor's Personnel.
- A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

4. Additional Requirements

Bidders should provide any additional information required in Sections 2 or 3 of the Bidding Document or to fulfil the requirements of Sub-Clause 4.1 and Clause 30 of the Instructions to Bidders, if applicable.

4.5 SCHEDULE OF MALAWIAN LOCAL CONTRACTORS

With reference to Clause 4.4 of the General Conditions of Contract, the Bidder shall list below the subcontractors he intends to appoint for the various items of work on this contract.

It is an explicit requirement of the Contract that at least thirty percent (30%) of the total value of the works, excluding escalation, contingencies, provisional sums and VAT, be subcontracted to Malawian Local Contractors.

It is an explicit requirement of the contract that Bidders must submit Subcontracting agreement with the proposed subcontractors. The value of works proposed to be subcontracted shall be in line with the contractors' NCIC category.

The acceptance of this tender shall not be construed as approval of all or any of the listed subcontractors. In the event that any or all of the subcontractors are not approved subsequent to acceptance of the tender, this shall in no way invalidate this tender and the tendered unit rates for the various items of work shall remain final and binding even in the event of a subcontractor not being approved by the Engineer.

Activity	Name Of Subcontractor	Estimated Value Of Work (MWK)

AUTHORISED SIGNATORY OF THE BIDDER: _____

NAME OF AUTHORISED SIGNATORY: _____

NAME OF THE BIDDER: _____

Qualification Information Form B: Historical Contract Non-Performance

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Names: _____

Procurement Reference No.: _____

Non-Performing Contracts in accordance with the Technical Criteria			
<ul style="list-style-type: none">Contract non-performance did not occur during the stipulated period, in accordance with Factor 8 of Section 3.Contract non-performance during the stipulated period, in accordance with Factor 8 of Section 3.			
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount
_____	_____	Contract Identification: _____ Name of Client: _____ Address of Client: _____ Matter in dispute: _____	_____

Qualification Form C: Pending Litigation

Pending Litigation, in accordance with Section 3			
<ul style="list-style-type: none"> • No pending litigation in accordance with Factor 8 of Section 3 • Pending litigation in accordance with Factor 8 of Section 3, as indicated below 			
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount
_____	_____	Contract Identification: Name of Client: Address of Client: Matter in dispute:	_____
_____	_____	Contract Identification: Name of Client: Address of Client: Matter in dispute:	_____
_____	_____	Contract Identification: Name of Client: Address of Client: Matter in dispute:	_____

Qualification Form D: Environmental, Social, Health and Safety Performance Declaration

Environmental, Social, Health, and Safety Performance Declaration in accordance with Section 3, Qualification Criteria, and Requirements			
<input type="checkbox"/> No suspension or termination of contract: A Client has not suspended or terminated a contract and/or called the performance security for a contract for reasons related to Environmental, Social, Health, or Safety (ESHS) performance specified in ITB Clause 38.			
<input type="checkbox"/> Declaration of suspension or termination of contract: The following contract(s) has/have been suspended or terminated and/or Performance Security called by a Client(s) for reasons related to Environmental, Social, Health, or Safety (ESHS) performance as specified in, ITB Clause 38. Details are described below:			
Year	Suspended or terminated portion of contract	Contract Identification	Total Contract Amount (value, currency, exchange rate and MWK equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Client: <i>[insert full name]</i> Address of Client: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Client: <i>[insert full name]</i> Address of Client: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
...	...	<i>[list all applicable contracts]</i>	...
Performance Security called by a Client(s) for reasons related to ESHS Performance			
Year	Contract Identification		Total Contract Amount (current value, currency, exchange rate and MWK equivalent)
<i>[insert year]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Client: <i>[insert full name]</i> Address of Client: <i>[insert street/city/country]</i> Reason(s) for calling of performance security: <i>[indicate main reason(s)]</i>		<i>[insert amount]</i>

Qualification Form E: Current Contract Commitments / Works in Progress

[The following table shall be filled in by the Bidder, each member of a Joint Venture / Consortium / Association]

Bidder's Name: *[insert full name]* Date: *[insert day, month, year]*

Joint Venture / Consortium / Association Member's Name: *[insert full name]*

Proc. Reference No: *[insert Reference Number]*

[Bidders and each partner to a JV/ Consortium / Association should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.]

Name of contract	Client, contact address/tel/fax	Value of outstanding work	Estimated completion date	Average monthly invoicing over last six months (MWK /month)
1.				
2.				
3.				
4.				
5.				
etc.				

Qualification Form F: Financial Situation: Historical Financial Performance

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Legal Name: _____

Procurement Reference No.: _____

To be completed by the Bidder and, if JV/ Consortium / Association, by each partner

Financial information in MWK equivalent	Historic information for previous _____ (____) years (MWK equivalent in 000s)						
	Year 1	Year 2	Year 3	Year ...	Year n	Avg.	Avg. Ratio
Information from Balance Sheet							
Total Assets (TA)							
Total Liabilities (TL)							
Net Worth (NW)							
Current Assets (CA)							
Current Liabilities (CL)							
Information from Income Statement							
Total Revenue (TR)							
Profits Before Taxes (PBT)							

Attached are copies of financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following conditions:

- Must reflect the financial situation of the Bidder or partner to a JV, and not sister or parent companies
- Historic financial statements must be audited by a certified accountant
- Historic financial statements must be complete, including all notes to the financial statements
- Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted)

Qualification Form G: Average Annual Construction Turnover

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

Annual turnover data (construction only)		
Year	Amount and Currency	MWK equivalent
*Average Annual Construction Turnover		

*Average annual turnover calculated as total certified payments received for work in progress or completed over the number of years specified in Section 3, Factor 8, divided by that same number of years.

Qualification Form H: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as indicated in Section 3: Evaluation Methodology and Criteria.

Source of financing	Amount (MWK equivalent)
1.	
2.	
3.	
4.	

Qualification Form I: General Experience

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

Startin g Month / Year	Ending Month / Year	Years*	Contract Identification	Role of Bidder
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____

*List calendar year for years with contracts with at least nine (9) months activity per year starting with the earliest year

Qualification Form J: Specific Experience Form 1

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

Similar Contract Number: ____ <i>[insert specific number]</i> of ____ <i>[insert total number of contracts required].</i>	Information		
Contract Identification			
Award date			
Completion date			
Role in Contract	<input type="checkbox"/> Prime Contractor	<input type="checkbox"/> Management Contractor	<input type="checkbox"/> Subcontractor
Total contract amount			MWK _____
If partner in a JV or subcontractor, specify participation of total contract amount	_____ %	_____	MWK _____
Client's Name:			
Address:			
Telephone/fax number:			
E-mail:			

Qualification Form K: Specific Experience Form 2

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

Similar Contract No. ____<i>[insert specific number]</i> of ____<i>[insert total number of contracts]</i> required	Information
Description of the similarity in accordance with Sub-Factor 6.2.8a) of Section 3: Evaluation Methodology and Criteria.:	
Amount	_____
Physical size	_____
Complexity	_____
Methods/Technology	_____
Physical Production Rate	_____

Qualification Form L: Specific Experience in Key Activities 1

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

	Information		
Contract Identification	_____		
Award date	_____		
Completion date	_____		
Role in Contract	<input type="checkbox"/> Contractor	<input type="checkbox"/> Management Contractor	<input type="checkbox"/> Subcontractor
Total contract amount	_____	_____	_____
If partner in a JV / Consortium / Association, specify participation of total contract amount	_____ %	_____	_____
Client's Name:	_____		
Address:	_____ _____ _____		
Telephone/fax number:	_____ _____		
E-mail:	_____		

Qualification Form M: Specific Experience in Key Activities 2

Bidder's Name: _____

Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

	Information
Description of the key activities in accordance with Sub-Factor 6.2.9 b) of Section III:	

We, the undersigned, declare that the information contained in and attached to these forms is true and accurate as of the date of Bid submission:

Signed: *[signature of person whose name and capacity are shown below]*

Name: *[insert complete name of authorized person signing the Qualification Form]*

Duly authorised to sign the Qualification Form for and on behalf of: *[insert complete name of Bidder or name of Joint Venture/ Consortium / Association]*

Dated on _____ day of _____, _____ *[insert day / month / year of signing]*

Qualification Form N: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section 3, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

Item of equipment		
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured	

Omit the following information for equipment owned by the Bidder.

Owner	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental / lease / manufacture agreements specific to the project	

Qualification Form O: Key Personnel**Contractor's Representative and Key Personnel
Schedule**

Bidders should provide the names and details of the suitably qualified Contractor's Representative and Key Personnel to meet the specified requirements for each of the positions listed in Section III to perform the Contract. The data on their experience should be supplied using the Form P below for each candidate.

1.	Title of position:
	Name
2	Title of position:
	Name
3.	Title of position:
	Name
4	Title of position:
	Name:
5	Title of position:
	Name
6	Title of position:
	Name
7	Title of position:
	Name
8	Title of Position:
	Name

Qualification Form P: Key Personnel

Resume and Declaration

Contractor's Representative and Key Personnel

The Bidder shall provide all the information requested below.

Position		
Personnel information	Name	Date of birth
	Professional qualifications	
Present employment	Name of Employer	
	Address of Employer	
	Telephone	Contact (manager / personnel officer)
	Fax	E-mail
	Job title	Years with present Employer

Summarise professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	To	Company, Project, Position, and Relevant Technical and Management Experience*

Declaration

I, the undersigned [*insert either "Contractor's Representative" or "Key Personnel" as applicable*], certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

I confirm that I am available as certified in the following table and throughout the expected time schedule for this position as provided in the Bid:

Commitment	Details
Commitment to duration of contract:	<i>[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]</i>
Time commitment:	<i>[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]</i>

I understand that any misrepresentation or omission in this Form may:

- (a) be taken into consideration during Bid evaluation;
- (b) result in my disqualification from participating in the Bid;
- (c) result in my dismissal from the contract.

Name of Contractor's Representative or Key Personnel: [*insert name*]

Signature:

Date: (day month year): _____

Qualification Form Q: Schedule of subcontractors

With reference to ITB Clause 4, the Bidder shall list below the subcontractors he intends to appoint for the various items of work on these contract alternatives may be mentioned.

Sections of the Works	Value of subcontract	Subcontractor (name and address)	Experience in similar work

Qualification Form R: Analysis of Main Unit Rates (1)

SCHEDULE V-1

ANALYSIS OF MAIN UNIT RATES

Item No. (See Bills)	Materials MWK	Labour MWK	Plant, Equipment Transport MWK	Fuel Lubricants MWK	& Overheads & Profit MWK	Total Rate MWK

Signed: _____

Name and Position: _____
(Tenderer or his Representative)

ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY DECLARATION

We, _____ (*Name of Bidder*) bearing the company registration number _____, hereby:

1. PLEDGE THAT:

- (a) We have read, understood, and will comply with:
 - (i) the Environment Management legal framework or policies in conservation and management of the environment.
 - (ii) all necessary and appropriate measures to protect and manage the environment
 - (iii) all necessary and appropriate measures to conserve natural resources and to promote sustainable utilization of natural resources
 - (iv) all steps and measures necessary for ensuring that social safeguard issues including but not limited to gender, human rights, disability, Child Protection, HIV and AIDS are mainstreamed throughout all construction stages to minimize the negative impacts on the environment, social, health and safety matters

2. AGREE THAT:

- (a) In the event that our Bid is successful, we shall, within 15 days from the receipt of the Acceptance Letter comply with the requirements to produce the following environmental, social, health and safety plans as provided in Section 10:- Site Organisation Plan, Mobilisation and Construction Schedule Plan, Code of Conduct for Contractors Personnel Plan, ESHS Management Strategies and Implementation Plan.
- (b) Contract negotiations shall only commence if our plans comply with the Malawi standards on the protection and management of the environmental, social, health and safety matters.
- (c) We will automatically be suspended from being eligible for Bidding in any contract with the Procuring and Disposing Entity and any other government entity for a period of twenty-four (24) months starting on the date as may be determined by the Authority if we are in breach of our obligation(s) under the Bid conditions.

Signed: [**insert signature of person whose name and capacity are shown**] In the capacity of [**insert legal capacity of person signing the Bid**]

Name: [**insert complete name of person signing the Bid**]

Duly authorised to sign the Bid for and on behalf of: [**insert complete name of Bidder**]

Dated on _____ day of _____, _____ [**insert date of signing**]

Section 5. Eligible Countries

Procurement Reference Number:

All countries are eligible except countries subject to the following provisions.

46.1 A country shall not be eligible if:

- 46.1.1 as a matter of law of 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 works required; or
- 46.1.2 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 works from that country or any payments to persons or entities in that country.

Section 6. Corruption and Fraud

Section 6. Corruption and Fraud

1. The Malawi Government requires that Procuring and Disposing Entities, Bidders and Suppliers, participating in public procurement, observe the highest standard of ethics during the procurement and execution of such contracts.
 - (a) For purposes of this provision—
 - “coercive practices” mean practices intended at harming or threatening to harm, directly or indirectly, a person or a person’s asset, to influence that person’s participation in a procurement proceeding, or effect the execution of a procurement contract;
 - “collusive practices” means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring and Disposing Entity, designed to establish prices at artificial, noncompetitive levels;
 - “corrupt practice” has the meaning ascribed to the term by the Corrupt Practices Act (Cap7:04 of the Laws of Malawi);
 - “fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process, the execution of a contract or avoid an obligation; and
 - “obstructive practice” means deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation
 - (b) The Malawi Government 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;
 - (c) The Authority 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; and
 - (d) The Procuring and Disposing Entity will cause every Bidder to acknowledge and sign Anti-Corruption Declaration in this Section under Oath, a confirmation that the Bidder, its subcontractors, joint venture partners, or any other associate has not been convicted or is under investigation on corruption and fraud related cases. Failure to sign the Declaration shall lead to disqualification.
2. Bidders shall read and understand this provision; and will show acknowledgement of having read and understood the provision by signing compliance Form in this Section below:

ANTI-CORRUPTION DECLARATION FORM

We/I, _____ (*Name of Bidder*) bearing the company registration number _____, hereby:

1. PLEDGE THAT:

- 1.1 We have read and understood, and will comply with all applicable laws, regulations and policies relating to anti-corruption and fraud
- 1.2 We shall not, through any of our representatives, agents or any persons associated to us, commit any corruption offence or breach any of the applicable laws and/or provisions. We shall not encourage any corruption elements within our business practices, activities, operations, and transactions.
- 1.3 We have not been convicted nor are we aware that we are subject of any corrupt related investigation, inquiry, or enforcement proceedings by the relevant authorities and will report of such investigation as soon as we become aware as reasonably practicable and to the extent permitted by law.
- 1.4 We shall take all measures and implement appropriate measures to ensure compliance with the Anti-Corruption Legal Framework.
- 1.5 We shall report to any relevant Authority, a public officer attempting to solicit a bribe or advantage from us, or any other person connected to us to be awarded a contract.

2. AGREE THAT:

In the event that we are in a confirmed breach of this declaration, the Procuring and Disposing Entity may disqualify the Bid, revoke or terminate the contract if awarded to us without any liability whatsoever on its part, indemnify the Procuring and Disposing Entity for any loss.

Signed: **[insert signature of person whose name and capacity are shown] In the capacity of [insert legal capacity of person signing the Bid]**

Name: **[insert complete name of person signing the Bid]**

Duly authorised to sign the Bid for and on behalf of: **[insert complete name of Bidder]**

Dated on _____ day of _____, _____ **[insert date of signing]**

Section 7. Schedule of Requirements

A. Scope of Works

1.0 Description of the Works

a) General

The description is only an indication of the work to be executed and may change due to unforeseen conditions on-site. All construction activities are not necessarily listed below and only the main and major activities are dealt with. The scope of works may change due to changes in site conditions, or as directed by the Employer or the Engineer.

The KIA – Kanengo road starts at the junction between M001 and Chendawaka Road and it runs on a gentle to rolling terrain with a few low-level points and minor drainage features along it. It runs heading North towards Kasungu and it ends just beyond the junction with T361 (which goes to Kamuzu International Airport (KIA)). The project road covers a total distance of 12km.

The scope of the bid is for the capacity improvement of the road section to dual carriageway with designated lane width of 3.7 m separated by a raised median with two designated lay bay areas for trucks. It also involves construction of a service road on the Kanengo side running from Chendawaka Junction to Kanengo Junction. The service road is designated to have a lane width of 3.0 and 1m shoulder. The service road is 1.2 km long.

b) Pavement

The pavement structure for the KIA – Kanengo (M001) Road shall consist of 50mm hot mix asphalt surfacing, 200mm Bituminous base and 150mm Subbase constructed using crushed stone materials soaked with CBR >80%. The pavement layers shall rest on 200mm thick selected layer constructed using materials with soaked CBR>15%.

The service road shall have a pavement consisting of 50mm concrete asphalt surfacing, 150mm crushed stone base and 150mm Subbase constructed using natural gravel materials soaked with CBR >30%. 150mm thick selected layer shall be constructed using materials with soaked CBR>15%.

Fills shall be constructed as shown on drawing using materials with soaked CBR > 15%.

c) Structures

C.1. Prefabricated Pipe Culverts

The works shall involve installation of approved 900mm diameter precast concrete pipes with ogee type joint on Class A bedding. Drainage schedule has been provided in the book of drawings indicating location, size and length of each culvert. The total number of prefabricated culverts of 900mm diameter sizes is 360.

C.2. Box Culverts

The works shall involve construction or installation of 1 no. 1500mm x 1500mm single cell box culvert, 1 no. 2000mm x 1500mm single cell box culvert, 4 no. 2000mm x 2000mm single cell box culvert for the main road while the service road shall have a 1 no. 2000mm x 2000mm single cell box.

d) Appurtenant Works

D.1. General

The road will include among others, the following appurtenant works; construction of raised 2m-wide walkways, construction of bus stops, construction of concrete lined drains, construction of road reserve boundary, kerbing works and shaping of road slopes.

The project involves capacity improvement of Intersections at Chendawaka and KIA Turnoff to roundabouts while Kanengo Junction and MIM Turnoff will be improved T-Junctions. The improvements are as detailed in the book of drawings.

D.2. Road Signage

All temporally road signs used during construction shall conform to requirements of SABS 1519 and shall be in Retro-reflective material.

Road sign details have been provided in the book of drawings. Unless advised otherwise by the Engineer, the upgrading works shall install all signs as indicated in the Book of Drawings. Section 5400 of the Technical Specifications applies.

D.3. Road Markings

Road marking details are provided in the book of drawings. Retro-reflective paint complying with the requirements of SABS 731-1 for type 1 paint shall be used.

Road marking will typically involve the white centreline, yellow lane demarcation lines, stop marking, pedestrian markings among others.

1.1 Drawings

A book of drawings shall be provided comprising layout of plans, long sections, cross sections, typical sections, drainage structures, road sign schedule, standard drawings, List of Control Points and the Setting out data.

1.2 Site Facilities

(a) Site facilities available

The Contractor will be responsible for the provision of a suitable site for his construction camp and to provide accommodation for his personnel.

The Contractor shall make his own arrangements for the supply of potable water and water for construction purposes, and for electrical power and all other services as well as all safety and security measures necessary for the duration of the contract. In his Bid he must make provision for all negotiations and procurement of these services, which will be deemed to have been included in his tendered rates.

(b) Site facilities required

The following facilities shall be required on the campsite:

- i. Contractor's offices
- ii. Engineer's laboratory
- iii. Storage facility for building materials and equipment
- iv. workshop for servicing vehicles and road construction machinery
- v. Parking areas
- vi. Portable water
- vii. Sanitation and Refusal disposal facilities
- viii. Generators to compliment power supply

(c) Security and Social Issues

The Contractor will be responsible for the security of his personnel and construction plant on and around the Site of the Works and for the security of his camp, and no claims in this regard will be considered by the Employer. Special attention shall be given to vulnerable groups such as women, girls and disabled workers. No underage persons shall be employed.

1.3 Climate

The project site is in Lilongwe City and the climatic conditions for this project area is as shown in the table below;

Climatic Conditions

Item	Lilongwe
Mean Rainfall	900mm
Mean Temperature	23°C

1.4 Features Requiring Special Attention**(d) Roads and Site to be Kept Clean**

The Contractor shall make sure that roads and campsite are always kept clean. The Contractor shall provide dustbins designated for different waste types such as for biodegradable and non-biodegradable, and harmful and non-harmful. Oils from workshop and other waste from road construction shall only be disposed of in approved areas.

(e) Working Hours

The Contractor shall come up with working schedule for all employees. Working hours for all employees shall be properly spelt out. However, the working hours should be in accordance with the Malawi Government labour laws.

1.5 Construction Period

The estimated time for the construction of Capacity Improvement of KIA - Kanengo (M001) Road is twenty-four (24) calendar months.

1.6 Extension of Time Resulting from Abnormal Rainfall

It must be noted that the extension of time resulting from abnormal rainfall shall not be regarded as an event for which compensation can be claimed. This means that no payments whatsoever will be made, including any payments under time related obligations, regardless of the period of time by which the Time for Completion may be extended due to abnormal rainfall

B. Bills of Quantities or Activity Schedule

(a) Bills of Quantities

Provided separately

(b) Activity Schedule

Provided seperately

C. Drawings

(Provided separately)

D. Technical Specifications

[In drafting of the Specifications, care must be taken when drafting the Procuring and Disposing Entity's Requirements to ensure that the requirements are not restrictive. Recognized international standards should be used as much as possible for the description of the Related Goods, materials and workmanship. Where other particular standards are specified, it should be stated that goods, materials and workmanship meeting other authoritative standards and which promise to ensure equal or higher quality than the standards specified, will also be acceptable. Where a brand name of a product is specified it should always be qualified with the terms "or equivalent".]

E. TECHNICAL SPECIFICATIONS

The Technical Specifications to be used for this Contract contain two Parts as follows:

PART A: STANDARD SPECIFICATIONS

The Standard Specifications for this contract shall be the Southern African Transport Co-ordination Committee (SATCC) Draft Standard Specifications for Road and Bridge Works, September 1998, reprinted July 2001.

This Document, which forms Part of the Tender and Contract documentation, is printed by the SATCC in Maputo in Mozambique and all Tenderers should acquire their own copy of this standard document at their own cost.

PART B: PARTICULAR SPECIFICATIONS

THE PARTICULAR SPECIFICATIONS FORM AN INTEGRAL PART OF THE TENDER AND CONTRACT DOCUMENTATION AND SUPPLEMENT THE STANDARD SPECIFICATIONS.

In the event of any discrepancy with a part or parts of the Standard Specifications, the Bill of Quantities or the Drawings, the Particular Specifications shall take precedence. The Particular Specifications are contained in the pages that follow.

All references to Project Specifications in the Standard Specifications shall mean Particular Specifications for this contract. The terms "Project Specifications" and "Particular Specifications" shall be interpreted to have the exact same meaning.

All works shall be measured as described in the Bill of Quantities.

The Particular Specifications, shall supplement and modify, delete and/or add to the Standard Specifications, as stated. Where any Clause, paragraph or sub-paragraph in the Standard Specifications is supplemented by one of the following paragraphs from the Particular Specifications, the provisions of such Clause, paragraph or sub-paragraph shall remain in effect and the supplemental provisions shall be considered as added thereto, deleted, or superseded by any of the following paragraphs in the Particular Specification, the provisions of such Clause, paragraph, or sub-paragraph in the Standard Specification, not so amended, deleted or superseded shall remain in effect.

Clauses and pay items modified by the Particular Specifications are numbered "PS" followed by a number corresponding to the number of the relevant clause or pay item in the Standard Specifications. New clauses and pay items not covered in the Standard Specifications are also designated "PS" followed by a number. These numbers follow on from the last clause or payment item number used in the relevant section of the Standard Specifications.

PART B: PARTICULAR SPECIFICATIONS

SERIES 1000:GENERAL

Section 1100: Definitions and Terms

Change Clause 1126 as follows:

PS 1126 Road Prism

The areas indicated in Figures 1 and 2 in the SATCC Draft Standard Specifications for Road and Bridge Works issued by the SATCC in September 1998 (reprinted July 2001).

SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS

PS1204: PROGRAMME OF WORK

Replace the first paragraph with the following

(a) APPROVED PROGRAMME

The contractor shall submit his programme of work, within the time stated in the Particular Conditions of Contract, to the Engineer for approval. The Contractor shall ensure that he has at his disposal adequate staff with the necessary expertise to develop and maintain the network programme for the duration of the contract and to provide the information required by the Engineer as specified hereafter.

The programme shall be in a bar chart (Gantt chart) or any other time-activity format acceptable to the Engineer and shall clearly show:

- (1) The proposed rate of progress in order to complete the works within the required period as tendered, showing the various activities, their duration and proposed resources (major plant and labour) for each element of the works. Sufficient details shall be provided to enable the Engineer to be able to assess construction progress. All activities, including establishment on site, trimming and finishing and the completion of all minor ancillary works are to be included in the programme.
- (2) The sequence of activities and any dependencies (time or resource related) between them; the critical path activities; the amount of slack time for non-critical activities;
- (3) Key dates in respect of work to be carried out, or information, etc., to be provided, by others.
- (4) The anticipated value of work to be done during each month and any
- (5) Other information specifically required by the Engineer.

When drawing up his programme, the Contractor shall, take into consideration:

- (1) Testing and approval process of materials and works
- (2) Expected weather conditions and their effects.
- (3) Known physical conditions or artificial obstructions.
- (4) The accommodation and safeguarding of public traffic.
- (5) Dealing with, altering and installing services.
- (6) Expropriation and all other actions required in terms of this contract.

The following details shall be submitted together with the programme:

- (1) The number of working hours per day, working days per week, assumed holiday or shut-down periods on which the programme is based.
- (2) The overall labour and major plant resources on which the programme is based.
- (3) The detailed traffic accommodation proposals on which the programme is based (road or lane closures, lengths of sections to be worked, timing etc).
- (4) The rate of production for major works components such as layer works, subbase, base, surfacing, etc (units per day / hour) on which the programmed time for carrying out the work is based.

The Contractor shall base his initial programme of work on the scope of the work as described in the Particular Specifications. This programme shall be reviewed on a regular basis by the Contractor in accordance with changing circumstances, delays and amendments to the work ordered by the Engineer as a result of further examinations made by him.

Minor revisions to the approved programme may be introduced from time to time by mutual agreement between the Contractor and the Engineer. Should the Engineer believe that a major revision of the programme is required, the Contractor will be notified in writing and a revised programme shall be submitted within two weeks of receipt of such notification.

It should be noted that it is in the Contractor's interest to provide a comprehensive programme giving as much information as possible about the times allowed for the various activities as well as resource or other limitations affecting the programme, since the approved programme may be used to evaluate any claims in terms of the General Conditions of Contract for extensions of time.

(b) REPORTING

The Contractor shall submit to the Engineer, at least three working days before each monthly site meeting copies of the following:

- (i) The construction programme with progress charts and programme graphs updated to reflect the actual progress to date.
- (ii) A summary of progress on site over the month preceding the site meeting. The report shall be in the form of a detailed narrative to the construction programme.
- (iii) Details of activities running late, indicating what steps have been or will be taken to ensure that the work is completed within the specified time.
- (iv) A report on all labour, plant and materials on site, according to sub-clauses PCC 4.20 and PCC 6.10 of the Particular Conditions.

PS 1205 Workmanship and Quality Control

Add the following paragraphs:

(a) Inspections

The Engineer will inspect the works during the course of construction. The Contractor shall accord the Engineer every facility he may require for such inspection.

Any inspection, examination or test either of workmanship, material or performance shall not exempt the Contractor from any of his obligations under the contract. The liability of the Contractor for defective material or workmanship that may be discovered after any portion or portions of the work have been put into service shall be in accordance with the General Conditions of Contract notwithstanding that the defective item(s) may have previously been inspected and approved by the Engineer.

(b) Workmanship

(i) Testing of Materials

The Contractor shall carry out tests on materials and workmanship in order to

ensure compliance with the requirements of the Specifications. The frequency of testing shall be in accordance with the requirements of the Standard and/or Technical Specifications, but the Contractor may increase the specified frequency in order to have more control of the quality of the Works.

All tests shall be conducted in accordance with the latest published methods listed below.

1. British Standards Institution (BSI)
2. American Society for Testing and Materials (Abbreviation: ASTM)
3. American Association of State Highways and Transportation Officials (AASHTO)
4. Technical Methods For Highways (TMH): Standard Methods of Testing Road Construction Materials, TMH1 2nd Edition, published by the South African Department of Transport, 1986.
5. South African Bureau of Standard Specifications, (SABS)
6. MS-2 Asphalt Mix Design Methods (Asphalt Institute)

In addition to the above, standard specifications or test methods of other bodies may be referred to in these specifications, or test methods may be described where no acceptable standard methods exist.

The Contractor shall submit all test results to the Engineer on a weekly basis. Work for which process control test results have not been submitted to the Engineer will not be approved.

(ii) Contractor's Laboratory

The Contractor shall establish on site and maintain in good order a laboratory with approved equipment sufficient to enable him to carry out process control testing required to ensure conformity with the Specifications. As a minimum, the laboratory shall be equipped with equipment and facilities as specified for the Engineer's Laboratory.

The laboratory equipment to be used shall be tested and calibrated by the supplier or by his Agent before their use for process control testing. The calibration shall be done at the beginning of the Contract and shall be repeated every six months or at such other interval as the Engineer may decide. Proof of calibration in the form of certificates shall be submitted to the Engineer not later than seven days after calibration, failing which the Engineer shall declare the equipment unsuitable for use on the project. Results of any tests carried out prior to the testing and calibration of the equipment will be rejected.

Results of compaction densities obtained by nuclear density testing equipment shall be compared to results obtained by the sand replacement method at the rate of one sand replacement test per fifteen nuclear density tests.

The Contractor shall employ a qualified Materials Engineer with at least eight (8) years' experience to supervise the Contractor's Laboratory and quality control tests. Prior to deploying the Materials Engineer to the site, the

Contractor shall submit to the Engineer his academic details and Curricula Vitae. The Engineer reserves the right to reject the proposed personnel if in his opinion he is not qualified or sufficiently experienced to supervise or carry out quality tests.

The Contractor shall maintain record of test results in files clearly numbered in a logical sequence. The Engineer shall have access to the records at all times.

(iii) Laboratory for the Consulting Engineer

The Contractor shall establish on site and equip a laboratory for use by the Engineer. The laboratory building shall be constructed in accordance with the drawings and specifications issued by the Engineer as part of the Contract drawings. Alternatively, the Contractor can identify rented laboratory building to the satisfaction of the Engineer.

The Contractor shall supply, install and insure the laboratory equipment required by the Engineer for carrying out quality assurance tests. The laboratory shall be equipped with all equipment, chemicals, supplies, etc. necessary for the performance of the following tests and procedures as described in:

BS 1377:1975 “Methods of Testing Soils for Civil Engineering Purposes”.

Method

- 1.5 Preparation of disturbed samples for testing
- 2.1 Test 1: Determination of the moisture content
 - 1 (A): Standard method (oven-drying method)
 - 1 (B): Subsidiary method (sand bath method)
- 2.2 Test 2 Determination of the liquid limit
 - 2 (A) Method using cone Penetrometer
 - 2 (B) Method using the Casagrande apparatus
- 2.3 Test 3 Determination of the plastic limit
- 2.4 Test 4 Determination of the plasticity index
- 2.6 Test 6 Determination of the specific gravity of soil particles
 - 6 (A) Method for fine, medium-and coarse-grained soils
 - 6 (B) Method for fine-grained soils
- 2.7 Test 7 Determination of the particle size distribution
 - 7 (A) Standard method by wet sieving
- 4.2 Test13 Determination of the dry density moisture contents relation - 4.5kg Rammer method
- 4.4 Test 15 Determination of the dry density of soil on the site
 - 15 (A) Sand replacement method suitable for fine, medium and coarse-grained soils: small pouring cylinder method (minimum of 3 sets)
 - 15 (B) Sand replacement methods suitable for fine- medium, and coarse-grained soils: large pouring cylinder method (minimum of 2 sets)
- 5.1 Test 16 Determination of the California Bearing Ratio (CBR)

Notes:

- (1) Two soaking tanks 1500mm x 1000mm x 600mm deep to be provided, together with apparatuses for measuring swell (minimum 10No).
- (2) At least 25 moulds and 75 x 2 kg surcharge weights to be provided.

BS 812: 1975 “Methods for Sampling and Testing of Minerals Aggregates Sand and Fillers”.

Part 1: Sampling size, shape and classification, Sections 5 to 7 inclusive

Part 2: Physical Properties, Section 5 to 7 inclusive

Part 3: Mechanical Properties, Section 7 and 8

BS 1881: 1970 “Methods of testing Concrete”

Part 2: Slump test, Compacting factor test

Part 3: Making and curing test cubes

Note:

At least 30 moulds shall be supplied and the curing tank shall not be used for any other purpose.

Part 4: Test compressive strength of test cubes

Note:

The gap between the platens of the compressive testing machine must be capable opening to at least 200mm.

U.K. Transport and Road Research Laboratory publication - Road Note 39

“Road Note 39 – Recommendations for Road Surface Dressing”
Road Tray (Appendix1)

BS 1707: 1970 “Hot Binder Distributors for Road surface Dressing”

Depot Tray Test

Standard Methods for Testing Penetration and its Products” 1959 (Institute Petroleum)

IP 49/72 Penetration Test for Bitumen

ASTM Designation: C88-78 Standard Method of Testing for Soundness of Aggregates by use of Sodium Sulphate or Magnesium”

AASHTO Designation: T176-65 Standard Method of Test for Plastic Fines in Graded Aggregates in Soils by Use of the Sand Equivalent Test”

The equipment will be as scheduled in these Particular Specifications. All equipment furnished for use by the Engineer must be calibrated as stated above. The Contractor shall maintain throughout the contract period both the laboratory building and the laboratory equipment and shall replace any damaged equipment within seven days of receiving the Engineer’s instruction to do so.

The laboratory equipment will revert to the Employer at the end of the contract.

Payment for the provision of laboratory building and equipment shall be as tendered by the Contractor. The tendered rate shall include full compensation for procuring, furnishing, insuring, calibrating and maintaining in good order all the facilities and equipment.

(c) Cost of Testing

(i) Testing by Contractor and Provision of Samples

The cost of testing of materials and workmanship undertaken by the Contractor to ensure compliance with the Specification, including the submission of certificates that materials supplied by him comply with the relevant BS or other Specifications, shall be deemed to be covered by the prices tendered under the relevant items in the Bills of Quantities for work in which the materials are incorporated. The same applies to samples that the Contractor must supply to the Engineer for testing.

(ii) Additional Testing

The Engineer shall have the right to take samples and/or order any additional tests on workmanship or materials supplied by the Contractor. Where such additional testing is required, the cost thereof to the Contractor shall be determined. If the costs of individual tests are not itemised in the Bills of Quantities the cost of additional testing shall be classified as additional work under Clauses 7.4 and 13 of the General Conditions of Contract, provided that the test indicate compliance with the Specification otherwise the cost shall be borne by the Contractor.

PS1206 THE SETTING-OUT OF WORK AND PROTECTION OF BEACONS

Add the following at the beginning of this clause:

“Upon issuance of the order to commence, the Engineer shall issue to the Contractor a set of setting out co-ordinates and the Contractor shall set out the works accurately and shall be responsible for any error(s) which may occur in such setting out and shall amend and rectify such error(s) at his own expense.

In addition to setting out data, the Engineer shall issue to the Contractor co-ordinates of Benchmarks and control points for survey control. The Contractor shall, prior to using the benchmarks and control points, check their accuracy and confirm in writing to the Engineer that the information is sufficient for setting out the works accurately. Should discrepancies be found in the information issued by the Engineer, the Contractor shall afford the Engineer the opportunity to investigate the discrepancies and correct them within a period of seven calendar days. The Contractor shall programme his work in such a way that this requirement will not impact negatively on the rate of progress of the works, and no claim for extension of time will be entered pursuant to this requirement.

The Contractor may if he deems it necessary, establish additional control points. Any additional control points shall consist of steel pegs set in concrete at positions not likely to be affected by the works. The coordinates of the established points shall be issued to the Engineer in the form ‘Name, Y, X, Z’”

Replace the second sentence in the second paragraph with:

“In case that the reference beacons along the contract sections have been either destroyed, displaced or damaged before the handing over of the site to the contractor, then the Engineer will arrange to have new reference benchmarks reinstated by the Contractor at 500 m intervals and the cost of the re-establishment work will be paid under Section 1800 (Day Works) of the Particular Specifications”.

PS1207: NOTICES, SIGNS AND ADVERTISEMENTS

Add the following to the second paragraph:

“See Volume 2 Drawing No. CP-ILOM-TZ/TSH/601 of this document for details of the Notice Boards. These boards shall remain in position until the end of the maintenance period, and shall then be removed without delay.

PS 1208: MEASUREMENTS

Add the following clause to 1208 (c):

“Cross-sectional levels shall be taken at not greater than 20-metre intervals jointly from the Surveyor of the Engineer and of the Contractor and agreed between the Contractor and the Engineer before any clearing, grubbing, stripping of topsoil or earthworks are undertaken and at any stage thereafter that the Engineer may require.

Cross sections shall be taken at the same interval as the setting out. The cross sections shall cover the entire road reserve and shall contain a minimum of seven points consisting of centre point and three equally spaced points on either side of the centre point. The points shall be in line and perpendicular to the centre line. The results of the survey shall be certified by the Engineer as soon as possible”

PS1209 PAYMENT

(c) Rates to be inclusive

Replace “period of maintenance” in the last line of the first paragraph with “Defects Notification Period”

(c) The meanings of certain phrases in payment clauses

(i) Procuring and furnishing (materials)

Insert “duties” in the sixth line of sub-clause after “all tax”

PS 1210 CERTIFICATE OF PRACTICAL COMPLETION OF THE WORKS

Replace the words “Certificate of Practical Completion of the Works” in title and text of this clause by the words “Taking-over Certificate”

Amend the sub-clauses of this clause as follows:

In (b) add "and all storm water drainage works;"

Add the following to this clause:

“Opening of a section of road to public traffic **before** the requirements of Clause 1210 have been met, if such opening should be allowed by the Engineer, shall not entitle the Contractor to the issue of a Taking-over Certificate for the road section in question.”

PS 1214: Contractor’s Activities in Respect of Property Outside the Road Reserve and of Services Moved, Damaged or Altered

Add the following clause 1214 (f):

“Any of the Contractor’s activities outside the Site or outside the road reserve on property not belonging to the Employer shall be exclusively at the Contractor’s own risk, cost and responsibility.”

PS1215 EXTENSION OF TIME RESULTING FROM ABNORMAL RAINFALL

Method (ii) (Critical – path method) will be used for determining the extension of time due to inclement weather.

Add the following table B1215/1 at the end of section on Method (ii) (Critical Path)

Abnormal rain as shown in table B1215/1 shall be proven by rainfall records for previous five years (prior to contract start date) from Department of Climate Change and Meteorological Services. For the purposes of calculating an extension of time due to climatic conditions the number of days in excess of the number of working days anticipated to be lost due to climatic conditions as shown in Table B1215/1 shall be taken into account:

Table B1215/1: Anticipation days (“n” working days) lost due to climatic conditions:

Month	Rain days
January	18
February	13
March	12
April	6
May	1
June	0
July	0
August	0
September	0
October	1
November	4
December	13
Total	68

Source: *Department of Climate Change and Meteorological Services*

The Engineer will certify a day lost due to climatic conditions only if:

- (a) no work on the critical path according to the latest approved programme for completion of the works could be carried out during that specific working day or if
- (b) only 30% or less of the work force and plant planned for that specific day, could work.

The extension of time as a result of climatic conditions will be calculated monthly as being equal to the number of days certified by the Engineer as lost due to climatic conditions, less the number of days in Table B1215/1. The total extension of time for the contract will be the sum of the monthly extensions. If the total extension of time for the Contract is negative it will be disregarded when determining the completion date(s)."

Add the following new clauses:

PS 1230: LAND AVAILABLE

The land available to the Contractor free of charge shall be as follows:

- i. The land occupied by the Permanent Works
- ii. The land occupied by approved (usually existing and public) temporary diversion routes

Land to be identified and acquired by the contractor

The contractor shall provide and maintain such buildings and sheds as maybe required for the use of the workmen employed in the works and for the storage of materials requiring protection and shall remove the same from the site on completion of the works and make good everything disturbed. The contractor shall be responsible for identifying a suitable site for location of the temporary facilities that he may require and he shall obtain approval of usage of any piece of land from the relevant local authority

The contractor shall make all negotiations and pay all necessary compensation fees for any land he may require, including borrow areas for fill material outside the road reserve (if approved by the Engineer).

The land available to the contractor is not necessarily the land to be cleared, which shall be indicated by the Engineer. The costs of clearing for the purpose of borrowing material, opening access roads, working space, or any other purpose of work not forming part of the permanent works shall be borne by the contractor.

PS 1231: COMPENSATION

The costs of agreed compensation for disturbance of buildings, crops, trees and relocation of fences and services within the land available free of charge shall be paid by the Contractor through the Contract and he shall be reimbursed net under the relevant items in the Bill of Quantities.

The cost of all other compensation shall be borne by the Contractor.

The Contractor shall cooperate with the appropriate authorities and shall make all necessary arrangements to agree compensation. Construction of the Works shall not commence until compensation has been agreed.

PS 1232: GRAVES AND TOMBS

Areas which contain graves and/or tombs within the Site shall be cleared by the Contractor, who shall seek assistance from the District Commissioner to obtain the consent of the Village Authorities to enter into each of such areas for the removal and reburial of corpses and remains. Compensation to the Village Authorities, if any, shall be reimbursed to the Contractor through the Contract under the relevant item in the Bill of Quantities.

PS 1233: COPIES OF SUPPLY ORDERS

The Contractor shall provide the Engineer with copies of all orders for the supply of materials and goods required in connection with the Works.

PS 1234: DRAWINGS

The Contractor shall be issued with two copies of each of the Drawings forming part of the Contract documents, as well as with two copies of any further drawings which may be issued by the Engineer from time to time. Any additional copies of drawings required by the Contractor may be purchased from the Engineer."

PS 1235: AMENITY AND ACCESS

The Contractor shall ensure that, in carrying out the Works, he causes no damage by plant, workmen, flooding, dust, subsidence or otherwise to property. He shall take all precautions to the satisfaction of the Engineer to ensure that such hazards are avoided and public amenity maintained. The Contractor shall make good, forthwith and at his own cost, any damages and inconveniences caused by him; failing to do which the matter shall be treated under Sub-Clause 4.18 of the General Conditions of Contract, as amended, and the Employer shall be entitled to employ and pay other persons to carry out the same, and all costs shall be recoverable from the Contractor by the Employer in accordance with such sub-clause.

PS 1236: DUST CONTROL

The Contractor shall take appropriate measures to protect the Works and adjacent private and public property from dust contamination and nuisance."

PS1237 REPORTING OF INCIDENTS AND ACCIDENTS

"The Contractor shall report every incident and accident which occurs on the road, within the extent of the Works, to the Engineer within twenty-four (24) hours of such incident /accident, irrespective of whether such incident/accident has a bearing on the damage to the works or to persons, property or things. The report must be in writing and must contain full particulars of the incident/accident. Photographs of each incident/accident shall also be included in the report. The Engineer has the right to conduct any or all enquiries, on either the Site or elsewhere, as to the causes and consequences of any such incident/accident. The Contractor shall also keep a comprehensive record of all incidents/accidents which occur on the road and shall make such records available to the Engineer on demand."

PS 1238 MAXIMISING THE USE OF LABOUR

This Contract has been established and shall be priced as equipment-based type of road works project. However, the Roads Authority is desirous of making a contribution towards reducing the level of unemployment in the project area. To this end, the following items of work have been identified as suitable for maximising the use of manual labour.

- (a) Bush clearing and the removal of roots from the surface after grubbing has been done by machine, and loading of such roots for transport to disposal areas.
- (b) Excavation and backfilling for culverts, kerbs and channels, including for removal of existing units, all to a maximum depth of 1,5m.
- (c) Excavations for guardrail posts, road sign footings, guide blocks and erosion

- protection works, all to a maximum depth of 1,5m.
- (d) Constructing gabion baskets and stone pitching.
- (e) Placing of kerbs and concrete edging.
- (f) Erection of road signs.
- (g) Base correction.
- (h) Back chipping during surfacing operations.
- (i) Trimming of cut slopes, and final trimming of shoulder breakpoints and fill slopes.
- (j) Trimming of open drains, side drains, inlet and outlet channels of culverts.
- (k) Trimming of catch - water drains, mitre banks and mitre drains.
- (l) Finishing off the road, road reserve and borrow pits.

Tenderers are required to submit a tender for the Works under the condition that at least the items listed above must be done using manual labour. Additional information and suggestions which will further the use of labour will be viewed in a positive light.

The Employer is also desirous of making a contribution towards equal opportunities for women, not only in respect of labour, but also throughout the human resource base of the Contract. No gender restrictions shall apply throughout the workforce. In respect of the latter and as far as is practicable, the Contractor is required to employ at least 15% of his unskilled labour force from the feminine gender. In addition, only Malawian citizens shall be employed in the Contractor's unskilled labour force.

PS1239 ENVIRONMENTAL AND SOCIAL IMPACT CONTROL

Before any work is commenced on the Site, the Contractor's site management staff including foremen shall attend an environmental and social awareness-training course presented by the Engineer. The Contractor shall liaise with the Engineer prior to the Commencement Date to fix a date and venue for the course. The Engineer will provide the course content. The Contractor shall provide a suitable venue and ensure that the specified employees attend the course.

The environmental/social awareness-training course shall be held in the morning during normal working hours. The information presented at the course shall be communicated to the Contractor's employees on the site, to any new employees coming onto site after the initial training course and to his suppliers as required by the Project Specification. The Contractor shall ensure that all attendees sign an attendance register, and shall provide the Engineer with a copy of the attendance register the day after each course.

In addition to aspects of design which are intended to avoid or reduce environmental impact, and also in addition to normal good construction practice expected to the Contractor, the requirements of the Project Environmental Management Plan (see under Section 6 D Clause A: Environmental and Social Impact Management) shall be strictly followed. Any non-compliance with these requirements which could have been avoided in the opinion of the Engineer may be considered sufficient grounds for withholding payment of part or all of the amounts to be paid for the pay item PS13.05.

PS 1240 HIV/ AIDS PREVENTION PROGRAMME

The contractor shall from the commencement of the contract through his Environmental, Occupational Health and Safety Expert (EOHSE) implement a generic AIDS awareness

training programme for all permanent and temporary workers of the main contractor and all subcontractors. The type of training; the number of trainees and the cost of all training shall be as agreed by the Employer and the Engineer.

The training material for the structured training programme shall, as far as possible, be accredited by the Ministry of Health and be delivered by suitably qualified and accredited trainers. The training programme shall be subject to the approval of the Employer and the Engineer, and the Contractor shall if so, instructed by the Engineer, alter or amend the programme and course content.

The Contractor shall be responsible for the provision of everything necessary for the delivery of the training programme, including the following:

- Transport of the selected workers (as necessary)
- Stationery and all other necessary materials.

No separate payment will be made for the training venue and everything necessary for the delivery of the training.

All Training shall take place during normal working hours and the Contractor shall make adequate allowance in his programme of work to accommodate the training to be provided. All selected workers shall be remunerated in respect of all time spent undergoing skills training. The EOHSE must make sure that the specified workers attend the HIV/AIDS Prevention training courses.

The Contractor shall keep comprehensive records of the training given to each worker and whenever required shall provide copies of such records to the Engineer. At the successful completion of a course, each candidate shall be issued at the Contractor's own cost with a certificate.

The Contractor shall ensure that all attendees sign an attendance register, and shall provide the Engineer with a copy of the attendance register the day after each course. The EOHSE shall prepare a quarterly report on the programme.

SECTION 1300 CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

PS 1303: Payment

PS 13.01: The Contractor's General Obligations

Add the following paragraph after the fourth paragraph (numbered as (iii)):

- (iv) The combined total amount of pay item 13.01(a), 13.01(b) and 13.01(c) shall not exceed 15% of the tender sum

Add the following new pay items:

PS 13.02:	Authorised Compensation	Unit
(a)	Allow Provisional Sum for Authorised Compensation.....	Provisional Sum
(b)	Handling Cost and profit in respect of item PS 13.02(a)	%

The contractor has to enter the percentage in the rate column and then calculate the amount for pay item PS13.02 (b)

PS13.03: Relocation of Services:

- | | | |
|-----|---|-----------------|
| (a) | Allow Provisional sum allowed for the protection and relocation of services | Provisional sum |
| (b) | Handling Cost and profit in respect of item PS13.03 (a) | % |

The contractor has to enter the percentage in the rate column and then calculate the amount for pay item PS13.03 (b)

The provisional sum allowed under sub item (a) shall be expended to cover the actual costs for the protection and moving of services by the Contractor and others.

The provisional sums shall be expended only with the approval of the Engineer.

PS 13.04: Construction of Sign Boards No.

The unit of measurement shall be number of construction sign boards supplied.

The tendered rate shall include full compensation for procurement, erection and removal of construction sign boards after completion of the project.

The sign board has to comply with the particular drawing.

PS 13.05: Contractor's Environmental and Social Obligations

(a)	Allow for the undertaking and implementation of all the requirements of the Environmental and Social Management Plan	Lump Sum	1.00
(b)	Provide assistance and environmental training to staff	Prov. Sum	1.00
(c)	Handling costs, profit and overheads in respect of item 13.05 (b)	%	

(d)	Provide Road Safety training to staff and the surrounding community	Prov. Sum	1.00
(e)	Handling costs, profit and overheads in respect of Item 13.05 (d)	%	

The provisional sum for sub-item PS13.05 (a), allows for the undertaking and implementation of all the requirements of the Environmental and Social Management Plan as specified in the document. This money shall only be expended on the direct instruction of the Engineer. The reimbursement shall be for the final invoice amount from the training institution/s (excluding VAT) for the training.

The provisional sum allowed for pay item PS13.05 (b) is to remunerate the trainees attending the environmental training at a rate per hour for attending training. The reimbursement shall be for actual attendance (total hours).

The percentage tendered for pay item PS13.05 (c) shall be applied to the amounts expended under pay items PS13.05 (b) to generate an amount that covers all the monies required by the Contractor for managing the training, paying the trainees, and any other costs that may arise from these payments, including any Contractor's profits and overheads.

The provisional sum allowed for pay item PS13.05 (d) is to remunerate the trainees attending the Road Safety training at a rate per hour for attending training. The reimbursement shall be for actual attendance (total hours).

The percentage tendered for pay item PS13.05 (e) shall be applied to the amounts expended under pay items PS13.05 (d) to generate an amount that covers all the monies required by the Contractor for managing the training, paying the trainees, and any other costs that may arise from these payments, including any Contractor's profits and overheads.

PS13.06 HIV/Aids and Occurrence of Pandemic Awareness Training

- (a) Training..... Provisional Sum
- (b) Remuneration of the workers undergoing training Provisional Sum
- (c) Occurrence of pandemic (i.e., covid 19) Prevention Measures...Provisional Sum
- (d) Handling costs and profit in respect of sub-items PS13.06 (a), (b) and (c) (state as % and extend as an amount) %

The provisional sum for sub-item PS13.06 (a), allows for the provision of the HIV/AIDS awareness training programme delivered as specified in the document. This money shall only be expended on the direct instruction of the Engineer. The reimbursement shall be for the final invoice amount from the training institution/s (excluding VAT) for the training.

The provisional sum allowed for pay item PS13.06 (b) is to remunerate the trainees at a rate per hour for attending training. The reimbursement shall be for actual attendance (total hours).

The provisional sum for sub-item PS13.06 (c), allows for provision of prevention of any outbreak i.e COVID-19 or Cholera. The payment shall only be when there is an outbreak and the contractor is indeed employing prevention measures.

The percentage tendered for pay item PS13.06(d) shall be applied to the amounts expended under pay items PS13.04 (a) (b) and (c) to generate an amount that covers all the monies required by the Contractor for managing the training, paying the trainees, and any other costs that may arise from these payments, including any Contractor's profits and overheads.

PS13.07 Public Awareness Programmes

- (a) Television and Radio Broadcast and Print Media Publications P.S.
- (b) Sensitization of the surrounding community P.S
- (c) Handling costs and profit in respect of sub-items PS13.07(a) and (b)
 - (stated as % and extend as an amount) %

The provisional sum for sub-item PS13.07 (a) allows for the provision of the Public awareness programmes and activities provided as specified in the document. This money shall only be expended on the direct instruction of the Engineer. The reimbursement shall be for the final invoice amount from the public awareness service providers (excluding VAT).

The provisional Sum allowed for pay item PS13.07 is to remunerate the public awareness service providers at a rate agreed by the Roads Authority. The reimbursement shall be for actual costs incurred.

The percentage tendered for pay item PS13.07 (b) shall be applied to the amounts expected under pay items PS13.07 (i) to generate an amount that covers all the monies required by the Contractor for managing the public awareness activities, paying the media service providers, and any other costs that may arise from these payments, including any Contractor's profits and overheads.

SECTION 1400 HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL

Replace clause 1401 with the following:

PS 1401: SCOPE

This Section covers the provision of accommodation for the Engineer's supervisory staff. This accommodation shall be the necessary laboratory accommodation, and the provision of all the necessary services.

Replace clause 1402 with the following:

PS 1402: LABORATORY

Provision of the laboratory facilities for the use of the Engineer shall be ready for occupation and use by the Engineer within thirty (30) days (including days for mobilization) of the official commencement date.

The Contractor shall make all arrangements and pay all necessary charges for the provision and maintenance of the following services to the laboratory to the satisfaction of the Engineer:

- (a) Supply of electricity for power and light (220-250 v AC, 50 Hz) from a public utility.
- (b) Supply of clean, fresh, potable water; either from a public utility or provided directly by the Contractor.
- (c) Disposal of sewage and waste water
- (d) Split type remote controlled air conditioners. The air conditioners shall have 2.5 KW minimum power and shall be capable of heating during winter.
- (e) Laboratory furniture and equipment specified in these specifications. The furniture and equipment shall be new and of quality acceptable to the Engineer.
- (f) A full-time attendant to clean and service the laboratory including all utensils and sundries for that purpose.

Furniture and Equipment for the Engineer's Laboratory Office

The Contractor shall supply new furniture and new equipment for the Engineer's laboratory as hereinafter listed.

Furniture for the Engineer's Laboratory Office

Item	No
Desks with lockable drawers (1830 x 915mm)	2
Table (1830 x 915mm)	1
Chair (2 arm chairs) robust and comfortable	6
Shelves (1830 x 1200mm x 350mm) with backing	1
Cupboards (1730mm x 900mm x 550mm (3shelves and lock)	1
Steel filing cabinets (1300mm x 460mm x 600mm) deep with 4 drawers on runners and lock	4
Wall Board	1
Electric heater, 750watt minimum rating	1
Waste paper baskets	2
Punch	1
Stapling machine	1
Stationary as required	

Laboratory Installations and Equipment, etc.

All equipment, chemicals supplies etc. necessary for the performance of the tests and

procedures as described in BS 1377:1975 "Methods of Testing Soils for Civil Engineering Purposes" shall be supplied by the Contractor.

Please refer to **PS 1205 (b) (iii)** regarding the required tests and procedures.

Miscellaneous Laboratory Equipment

The laboratories shall be supplied and resupplied, as often as necessary, with the minimum level of ancillary equipment as detailed below:

Item	No.
Metal thermometers reading to 260°C	2
Graduated steel rule	2
1000ml capacity measuring cylinder graduated to 5ml	2
500ml capacity measuring cylinder graduated to 5ml	2
1000ml beaker	2
Hotplate gas type	4
Wire gauze for use with hotplate	12
Tablespoons	3
Chisel blade, 200mm x 25mm	4
Knife, 200mm blade with wooden handle	4
Trowel, 150mm blade approximately 100mm wide	4
Plastic bucket with lid, approximately 300mm diameter and 450mm deep	6
Pick with handle	15
Shovel with handle	15
Panga	12
Metal drying trays, 1 metre square with raised edges	10
Paint brush 25mm wide	3
Hard bristle broom with handle	2
Scientific calculator	4
Ovens (aggregate volume 1m ³ minimum)	2
Rain gauges	3

Plus printed test forms, samples bags, hessian, plastic or 4 ply paper for large disturbed samples, towels soap etc., as required.

Asphalt testing Laboratory Equipment

Stability and Flow machine (Digital)	1
Centrifugal extractor	1
Specimen Mould Assembly	6
Specimen Extractor	1
Compaction Hammer	1
Compaction Pedestal	1
Specimen Mould Holder	1
Breaking Head	1
Loading Jack	1
Oven	1
Mixing Apparatus	1
Water Bath (Controller 25°C)	1
Kinematic viscometer (complete)	1
100mm Core drilling machine with 12 core drills	1
MTD test equipment	1
Penetrometer with 5 needles	1
Softening point devices including heating	1

Miscellaneous Equipment for Asphalt Testing

– Containers	12
--------------	----

– Mixing Tools	1
– Thermometers	1
– Balance (2.5 kg)	1
– Gloves	4
– Rubber Gloves	4
– Marking Crayons	12
– Scoop	1
– Spoon	
– Sample ejecting device	
– Stability mould	
1	
– 2 Litre flasks	2
– Thin-film Oven	6
– Vernia Caliper	2
– Timer	1

For the laboratory works of the Engineer the Contractor has to provide as much semi-skilled workers as requested.

The laboratory shall at all times be provided with a sufficient stock of consumables equipment to allow for usage, breakage and deterioration. In the event of any item of equipment becoming unserviceable through any cause the Contractor shall, at his own cost, order replacements or spare parts to be air-freighted from the same supplier. This replacement equipment shall be new and as determined by the Engineer.

Protective Clothing for the Supervisor's Staff

- a) dust coats for laboratory staff including replacements as required
- b) sets of water-proof coats for all staff, mouth musk, safety boots and safety helmets for each of the staff; including replacements as required.

The reticulation network and the wiring installation of the laboratory shall be maintained at the highest standard of safety and reliability, with particular reference to the earthing installation and safety/protective devices.

The Contractor shall be responsible for providing all sanitary services necessary for keeping latrines in a clean, neat and hygienic condition. When no municipal sewage treatment is available, the Contractor shall provide the necessary septic tanks for all latrines. Waste water and septic tank effluent shall be discharged into properly designed French drains. The Contractor shall also make provision for the removal of all rubbish. Where the construction of septic tank or water - borne sewage scheme is unfeasible, the Contractor shall construct conservancy tanks and make arrangements for the removal and disposal of sewage.

The Contractor shall provide adequate 24 - hour security for the laboratory. The Contractor shall take all reasonable precautions to prevent unauthorized entry to the laboratory and to ensure overall security of camps, field laboratories and the site in general.

Maintenance or Replacement of Equipment and Provision of Consumables

All equipment provided shall be kept full serviceable at all times by the Contractor. The Contractor shall repair/replace any defective equipment within three days after notification by the Engineer's staff. The contractor shall also provide all stationary, paper (including also special photo quality paper) Laser Jet toner cartridges, colour and black ink cartridges, USB Memory sticks, CDs and CD storage containers required by the Engineer.

The Contractor shall insure the equipment against any loss, damage or theft and he shall indemnify the Engineer against any claims in this regard. This equipment shall be available for use by the Engineer at all times. The Contractor shall maintain the equipment in good working order and keep it clean

throughout the contract period.

Ownership of all the buildings, services, fittings and associated works, the laboratory furnishing shall remain with the contractor at the end of the Contract or at such earlier date as the Engineer may instruct with the exception of the laboratory equipment and furniture which shall revert to the Employer.

PS1407 MEASUREMENT AND PAYMENT

Change pay item 14.01, 14.02 and 14.03 as follows:

PS14.01 Office and Laboratory Accommodation

Item	Unit
(a) Office building as specified in drawings	Lump sum
(b) Laboratory building as specified in drawings.....	Lump Sum

Add: The tendered lump sums shall include all the materials and standards for office and laboratory in accordance with the details given in Particular Specifications and in the drawings.

PS14.02 Office and Laboratory Furniture

- | | |
|---|----------|
| (a) Office furniture as specified in the Particular Specifications | Lump sum |
| (b) Laboratory furniture as specified in the Particular Specifications..... | Lump sum |

Add: The tendered lump sums shall include all the furniture for laboratory in accordance with the details and as listed in Particular Specifications.

PS14.03 Laboratory Fittings, Installations and Equipment

- | | |
|---|----------|
| (a) Office fittings, installations and equipment (except computers) | Lump sum |
| (b) Laboratory fittings, installations and equipment..... | Lump sum |

Add: The tendered lump sums shall include all the fittings, installations and equipment for laboratory in accordance with the details and as listed in Particular Specifications.

Amend Pay Item 14.08 as follows:

PS14.08 Services

- | | |
|--------------------------------|-------|
| (a) office and laboratory..... | Month |
|--------------------------------|-------|

The tendered amounts shall include all specified services rendered to laboratory.

Create the following new pay items:

PS14.12 Security at Engineers' Office and Laboratory..... month

The unit of measurement for the supply of security guards shall be the month. The rate tendered shall be full compensation for the supply of security guards, including transport, weapons, equipment and uniforms as may be applicable, as well as all other costs necessary to provide the security service. The tendered rate shall be payable for as long as the security service is required and provided, but not after the official completion date of the Contract`

PS14.13 Provision of semi-skilled labour for use by the Engineer

- (a) Provision of Labourers P.S.
- (b) Handling cost and profit in respect of PS 14.13 (a)
(State % and extend as an amount) %

Payment under Item PS14.13 (a) shall be made monthly and the amount due to the Contractor will be equal to the total of the actual amount paid to the Engineer's semiskilled labourers plus the direct cost of medical and pension benefits, Workmen's Compensation, sick leave and holiday pay, incurred by the Contractor in respect of the Engineer's semi-skilled labourers. The Contractor shall advise the Engineer of the full monthly cost for each semi-skilled labourer engaged. No payment other than that provided above will be made in respect of the employment of semi-skilled labourers for the Engineer. Contract price adjustment will not apply to this item.

PS14.14 Survey equipment for use by the Engineer

Item	Unit
(a) Supply and maintenance of the survey equipment for use by the Engineer.....Month	

The unit of measurement for the supply and maintenance of the survey equipment as described in detail in the Particular Specifications including software programme shall be per month.

The tendered rate shall include full compensation for the supply and maintenance of the equipment. The tendered sum per month will be payable for as long as the equipment is required but not after the official completion date of the contract.

SECTION 1500 ACCOMMODATION OF TRAFFIC

PS1502 GENERAL REQUIREMENTS

Add the following new sub – clauses:

(i) Moving and display of signs

The Contractor shall adhere strictly on the sign layout and spacing shown on the drawings or directed by the Engineer. Any sign not required for or which is in contradiction with the prevailing situation, shall be removed or covered with non-transparent material without delay. Where permanent signs are to be covered it shall be done with non-plastic material.

(j) Failure to comply with provisions for the accommodation of traffic

The failure of or refusal by the Contractor to construct and / or maintain diversions, barricades, traffic signs or road markings at the proper time, or to take the necessary precautions for safety and convenience of public traffic as specified or instructed by the Engineer, shall be sufficient cause to suspend payment on this contract until the required construction or maintenance has been completed to the satisfaction of the Engineer considering that there is a risk to the public. Such stoppage of the payment will not be acceptable as a reason for extension of time or additional compensation.

PS1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

Add the following after the second paragraph:

No work may proceed in any section where accommodation of traffic is required until such time as the relevant requirements with regard to sign posting are met. The Contractor shall keep sufficient surplus signs, delineators and barricades on the site to allow for the replacement of damaged or missing items within a period of three hours of instructions having been given by the Engineer.

(a) Traffic-control devices

Add the following:

Sufficient flagmen suitably trained and equipped as detailed in sub-clause (g) below, shall be provided at all designated access points on public road to and from the working areas to the satisfaction of the Engineer. The flags shall be at least 750 mm x 500 mm on a stick of adequate length.

When movable temporary signs are used, provision shall be made for sandbags on the sign bases to prevent the signs from being overturned by wind or eddies behind moving traffic, as detailed in sub-clause (h) below.

(b) Road signs and barricades

Add the following:

Retro-reflective material for temporary road signs shall comply with the requirements of SANS 1519.

The retro-reflective coefficients determined according to the methods of SANS 1519, shall be at least 60% of the values given in Table 1 of SANS 1519.

The classes shall be as specified in Sub-clause 5402 (g) of the Standard Specifications.

Road signs that do not comply with these standards shall be cleaned and re-tested or removed from the site and replaced with approved road signs.

(c) Channelization devices and barricades

Add the following:

Delineators shall comply with the following requirements:

- (i) A minimum contrast ratio of 4 shall exist between the yellow call 1 retro-reflective material and the black non-reflective material.
- (ii) Delineators shall be affixed in a flexible manner to the base units and shall be able to withstand wind speeds of at least 60 km/h without overturning. The bases shall be stabilised by placing of sandbags.
- (iii) The bottom edge of the delineator shall not be more than 200 mm above the road surface.

Cones (red-orange, fluorescent) with minimum height of 750 mm may be used as supplementary traffic-control facilities to delineators, but only for short-term lane deviations during daylight. Lane closures or deviations continuing into night time shall be demarcated by delineators. The maximum spacing between delineators or cones is 30 m.

Add the following sub-clauses:

(g) Worker clothing and safety jackets

All construction workers shall wear high visibility clothing when on the construction site. Any worker working on or adjacent to a trafficked road shall wear a safety jacket (reflective vests). Overalls shall be either orange or red-orange or yellow in colour with retro-reflective strips. Raincoats shall be bright orange or red-orange.

In addition, all flagmen are to be distinctly dressed in high visibility orange overalls, a safety jacket similar to those worn by traffic officers as supplied by Sparks and Ellis or similar approved.

Safety jackets shall also be made available to the Engineer and all his staff free of charge.

PS 1517: Measurement and Payment

Pay item 15.09 is not applicable and deleted. Pay items 15.01, 15.02, 15.03, 15.04, 15.05, 15.06, 15.07, 15.08, 15.10, 15.11, and 15.12 are combined and included into one pay item 15.01. The layout out for accommodation of traffic shall be in accordance with drawings No. C5-02, C5-03 and C5-04.

Item	Unit
PS15.01: Accommodating traffic, including all notices, signing, construction, providing, maintaining and reinstating temporary diversions	
.....	km

SECTION 1600 OVERHAUL

PS1601 Scope

Free-haul distance for this contract will be unlimited. Subsequently no separate payment will be made for overhaul irrespective of the material or the distance hauled.

SECTION 1700 CLEARING AND GRUBBING**PS1703 EXECUTION OF THE WORK****(a) Areas to Be Cleared, Grubbed and Stripped**

At the end of this sub-clause add the following:

Removing topsoil too far in advance of excavation or filling operations may also cause re-clearing and re-grubbing. Payment for clearing and grubbing shall be made only once. Re-clearing and re-grubbing shall be at the Contractor's own cost.

(b) Cutting of Trees

At the end of this sub-clause add the following:

Individual trees designated in writing by the Engineer shall be left standing and uninjured. Penalty, depending on its size and age, shall be imposed for every tree which is unnecessarily removed or damaged. The branches of trees to be left standing shall be trimmed so as to leave a 7 m clearance above the carriageway.

PS 1704: Measurement and Payment

The tendered rate for Item No. 17.01 shall also include the full compensation for safe removal of existing road signs with the resulting holes backfilled with acceptable material. The removed road signs shall be properly stacked and stored; the Engineer shall give an instruction for the final custody. Waste material shall be disposed of in accordance with the Specifications.

Add the following new pay items:

PS 17.04: Demolition, dismantling, removal and clearing of existing structures

Item	Unit
PS 17.04(a): Masonry structures	m ³
PS 17.04(b): Mass Concrete structures	m ³

The tendered rate shall include full compensation for demolition or dismantling of the existing structures, clearing and disposal of the waste material from site including unlimited haulage costs.

Add the following new Pay Items:

Item	Unit
PS17.05 Treatment of ant or termite holes with approved Insecticide.....	Square metre (m ²)

The rate shall be for full compensation for scarifying the surface to a depth of at least 100mm, applying approved ant poison, remixing and spreading of the material. The application rate shall not be less than 5 litres of diluted ant poison per square metre or as directed by the Engineer. The concentrated chemical shall be diluted in accordance with the manufacturer's recommendations. Mixing of the poison and its application shall be carried out in the presence of the Engineer or his representative."

Create the following new section:

SECTION PS 1800: DAY WORKS**PS1801 SCOPE**

This section covers the listing of day work items in accordance with the General and/or Special Conditions of Contract determining payment for work which cannot be quantified in specific units in the Schedule of Quantities, or for work ordered by the Engineer during the construction period which was not foreseen at tender stage and for which no applicable rate exists in the Schedule of Quantities.

PS1802 ORDERING OF DAYWORK

No day work shall be undertaken unless written authorisation has been obtained from the Engineer.

PS1803 MEASUREMENT AND PAYMENT

Item **Unit**

PS18.01 PERSONNEL DURING NORMAL WORKING HOURS

(a)	Unskilled labour	Hr
(b)	Semi - skilled labour	Hr
(c)	Skilled labour	Hr
(d)	Ganger	Hr
(e)	Flagmen	Hr
(f)	Operators	Hr
(g)	Foremen	Hr
(h)	Surveyor	Hr
(i)	Lab technician	Hr

Item **Unit**

PS18.02 PERSONNEL OUTSIDE NORMAL WORKING HOURS

(a)	Unskilled labour	Hr
(b)	Semi - skilled labour	Hr
(c)	Skilled labour	Hr
(d)	Ganger	Hr
(e)	Flagmen	Hr
(f)	Operators	Hr
(g)	Foremen	Hr
(h)	Surveyor	Hr
(i)	Lab technician	Hr

Item**Unit****PS18.03 PLANT**

(a)	Tip truck 10m ³	Hr
(b)	Motor grader Complete with scarifer (CAT 14G or equivalent)	Hr
(c)	Wheeled loader (CAT 980G or equivalent)	Hr
(d)	TLB (CAT 450 or equivalent).	Hr
(e)	Water bowser self-propelled (10 000L)	Hr
(f)	Vibratory roller (123KW, 10T)	Hr
(g)	Pneumatic roller (123KW, 10T)	Hr
(h)	Grid roller with tractor (5 to 7T)	Hr
(i)	Tractor (110HP)	Hr
(j)	Tracked excavator (CAT 223 or equivalent)	Hr
(k)	Bulldozer (CAT D8R or equivalent) .	Hr
(l)	Excavator (CAT 225 or equivalent)	Hr
(m)	Concrete Mixer (15HP, 0.5m ³)	Hr
(n)	Water Pump	Hr
(o)	Light duty Vehicle	km
(p)	Flatbed truck	km

The unit of measurement for items PS18.01 to PS18.03 shall be the hour for the item of plant or personnel. Non- working hours for the plant breakdown, lack of operator or any other reason shall not be measured. The item shall be taken from the time that the personnel and /or plant depart until return.

Measurement shall only be for work instructed and directed by the Engineer where the Engineer may consider no other appropriate rates is available in the schedule of quantities. Prior to the commencement of any work by the labourers described under items PS18.01 and PS18.02, the Contractor must obtain written consent from the Engineer regarding the classification of all labourers in terms of “unskilled”, “semi-skilled”, and “skilled labourers”

The tendered rates for labour for the items PS18.01 and PS18.02 shall include full compensation to cover overhead charges and profit, leave pay, bonuses, subsistence allowances, Employer’s contributions, additional payment for over overtime where applicable, insurances, housing, site supervision, use of small hand tools and appliances, non-mechanical plant, operative and contingent costs relating to the supply of personnel.

The tendered rates for Plant for item PS18.03 shall be all-inclusive hire charge for the use of trucks or plant/equipment including driver or operator and shall apply only to vehicles, plant and equipment nominated in writing by the Engineer. The tendered rate for item PS18.04 shall include full compensation for the operating costs including fuel, maintenance, depreciation, administrative and contingent costs as well as profit

Item	Unit
PS18.04 Materials	
(a) Procurement of materials	Provisional Sum
(b) Contractor's handling costs, profit and all other charges in respect of sub item PS18.04(a). Percentage (%)	

The Unit of measurement for sub-item PS18.04(a) shall be the amount actually paid for the procurement of materials to be purchased and shall be made in accordance with the provision of the General Condition of Contract. Only the actual quantities of materials used, as verified by the Engineer, shall be paid for.

The percentage tendered for sub-item PS18.04(b) shall be the percentage of the amounts actually paid for the procurement of the materials as ordered under the sub-item PS18.04(a) and shall be in full and final compensation in respect of the Contractor's handling costs, profit, and all other charges in connection with the procurement and supply of the materials to the point of usage.

Item	Unit
PS18.05 Transport	
(a) LDV	kilometre (km)
(b) Flatbed truck	kilometre (km)

The unit of measurement for item PS18.05 shall be the kilometre distance that the vehicle travelled for transporting personnel and/or Plant. All travelling shall be approved by the Engineer.

The tendered rate for item PS18.05 shall include full compensation for the cost of the vehicle including fuel, maintenance, depreciation and running costs.

The above-mentioned tendered rates shall be in full compensation for the various items, as specified and not additional compensation shall be considered.

SECTION 2100 DRAINS

PS2103 BANKS AND DYKES

Add the following after the last paragraph

"Mitre banks, catch water banks and dykes shall be constructed using manual labour with the exception of hauling operations when haul distance in the opinion of the Engineer preclude the use of wheel barrows.

The Contractor may, however, construct certain banks and dykes using conventional plant-based methods where manual methods are not feasible provided that his reasons for using these conventional methods are adequately motivated in writing and approved by the Engineer.

Work executed using manual labour will be measured and paid for separately from work carried out using conventional methods."

PS2107 MEASUREMENT AND PAYMENT

Add the following items:

Item	Unit
PS21.20 Backfill existing drains within road prism	m ³

The unit of measure shall be the cubic metre. The tendered rate shall include for full compensation for procurement of the specified material from the Contractor's borrow pit, placing it in existing drains after the drains have been cleared to the approval of the Engineer in layers and compacting it to specified densities.

SECTION 2200: PREFABRICATED CULVERTS

PS2203 MATERIALS

Add the following sub-clause:

(j) Steel reinforcement

Steel reinforcement for inlet and outlet structures, manholes and other appurtenant structures shall comply with the requirements of section 6300 of the standard specifications.

PS2204 CONSTRUCTION METHODS

Add the following to this sub-clause:

Culverts shall be constructed using the trench method as described in paragraph (a)

PS2211 BACKFILLING OF PREFABRICATED CULVERTS

Amend the first paragraph of sub-clause (a) to read as follows:

"The material used for the back-filling alongside the culvert shall be selected material of at least G7 quality. Where the excavated material is not of adequate quality selected material shall be imported for this purpose. The material placed over the top of the culvert shall be of the same quality as that of the road pavement at a similar depth but in any event of at least G7 quality."

PS2218 MEASUREMENT AND PAYMENT

Item	Unit
-------------	-------------

PS22.02 Backfilling:

Delete the last but one paragraph of item 22.02 and substitute with the following:

The tendered rates shall include full compensation for backfilling under, alongside and over conduits, for disposing of excess excavated material, for watering and compacting the backfill material to the specified densities. In addition, the rates tendered for sub item (b) shall include full compensation for supplying selected material of subbase quality from approved sources, including the free haul distance stated in Clause 1600 and as amended herein.

Amend the description of Item 22.14 to read:

Item	Unit
PS22.14 Removing and stacking existing culverts of all sizes and types.....	m

Amend the description of item 22.23 (b) to read

Item**Unit**

PS 22.23 Service ducts

- (a) Ordinary pipes (PVC, not exceeding 300mm diameter)m
 (b) Concrete pipe culverts 900mm diameter
 m

**PS2300 CONCRETE KERBING, CONCRETE CHANNELLING, OPEN CONCRETE CHUTES
AND CONCRETE LININGS FOR OPEN DRAINS**

PS2302 MATERIALS**(d) Bedding material*****Add the following:***

"A class 15/13 semi-dry concrete mix shall be used unless otherwise directed by the Engineer"

Replace Pay Item 23.08 with the following new pay items:

Item**Unit**

- PS23.08 Concrete lining for open drains:
 (a) Cast in situ concrete lining (Concrete Class 20/19) for open drains
 (All types of drains including formwork Class F2 surface finish,
 sealing of joints with approved sealant and weep holes):
 (i) 75mm thick to vertical or inclined surfaces.....m²
 (ii) 100mm thick to horizontal surfaces.....m²
 (b) Concrete class 20/19 in precast slabs 150mm thick to bridge open drain
 Including reinforcement and all formwork (crossover slabs).....m³

The unit of measurement shall be the square metre of the drain surface lined as specified in drawings.
 The tendered rate shall include full compensation for painting open joint surfaces as specified.

The tendered rate shall include full compensation for casting concrete of the specified thickness and class, for supplying and fixing formwork, for weep holes, for forming and sealing joints, all as specified in the drawings.

Add the following new pay items**Item****Unit**

- PS 23.16 Access bridge to DWG No PCL/CON/2022-23/PCL/STD/JI/002
 (i) Type 1.....No
 (ii) Type 2.....No
 (iii) Type 3.....No
 (iv) Type 4.....No
- PS23.20 Precast concrete class 25/19 cover panels including formwork,

F2 surface finish, as per standard drawings no (RA/CON/2022-23/PCL/STD/DR/005)

- (a) 150mm thick
 - (i) Width not exceeding 2360mm.....m
- (b) 200mm thick
 - (i) Width not exceeding 2360mm.....m

The unit of measure shall be the metre of completed panel as constructed.

The tendered rate per metre shall include compensation for procuring, furnishing and installing the complete as specified in the drawings

PS 23.21 Extra over precast covers for

- (a) Panels with grates and frame.....No
- (b) Panels with lifting hooks at the specified interval.....No

PS 23.22 Concrete Pavements

- (a) Class 30/19 cast in situ concrete reinforced with mesh A393 in platforms for bus bays and lay bays as detailed in drawing RA/CON/2022-23/PCL/STD/BS/001.....m³

SECTION 3100 **BORROW MATERIAL**

PS 3101: SCOPE

Add the following to the end of this clause:

The possible locations of sites for proposed quarries and borrow pits for construction materials are indicated in the materials survey report. The Contractor shall satisfy himself as to the suitability of such sources by trial pits dug on a 25 m grid through the full depth of the material being investigated and testing samples from each pit for classification, CBR and compaction. It shall be, in any case the responsibility of the Contractor to provide sufficient material of approved quality to complete the Works.

The Contractor may, with the approval of the Engineer, locate and open up quarries and borrow pits in addition to those indicated in the materials survey, in which case he shall investigate these additional sources as specified above for borrow areas designated in the materials survey.

The Contractor must obtain a permit from the Chief Mining Engineer before opening up stone quarries.

The Contractor shall remove all ant-hills, ants' nests, vegetation, topsoil, overburden, boulders, rock, unsuitable and oversize material, and shall provide, erect, operate and maintain all plant necessary for the operation of quarries and borrow pits, together with all access roads, bridges and the like, all at his own expense unless otherwise provided as a pay item.

PS 3102: Negotiations with Owners and Authorities

Replace clause 3102 with the following:

The Contractor shall satisfy himself that all necessary negotiations have been made with the owner (if any) of the land on which any borrow pit is situated, prior to the opening of such borrow area. The attention of the Contractor is drawn to the provisions of Clause 1214.

PS 3108: Classification of Borrow Pits for Gravel Materials for Pavement Layers

Delete this clause in its entirety.

Add the following clause to Section 3100:

PS 3110: Explosives and Blasting

Blasting shall be carried out in strict accordance with the latest Government regulations, and at all times shall be carried out and supervised by fully qualified persons in terms of these Regulations. If in any situation blasting is considered dangerous, the Engineer's decision in this respect shall be final. Should any damage of any kind occur, the Contractor shall be solely responsible for such damage or any claims that may arise therefrom, and shall, at his own expense, carry out repairs or restoration as the Engineer may direct.

Care shall be taken that no undischarged cartridges are allowed to remain in the excavation. Careless or indiscriminate use of explosives will result in the Engineer withdrawing permission for their use and under such circumstances the Contractor shall resort to other methods of excavation.

The Contractor shall obtain the written permission of the Engineer for each location where the Contractor requires using explosives.

SECTION 3200 SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW PITS AND CUTTINGS, AND PLACING AND COMPACTING THE GRAVEL LAYERS

PS3202 SELECTING THE MATERIALS

Add the following:

“The quality of the materials in the borrow pit is inconsistent. Good quality material is often limited to small pockets. It may therefore be necessary to stockpile and mix materials to ensure that the quality of the material will comply with the specified requirements for a particular layer for which it will be used. The cost for these processes shall be deemed to be covered by the rates for the various items of work for which these materials are used.”

PS 3206 CONTROLLING THE MOISTURE CONTENT OF MATERIALS

Add the following to the third paragraph:

The time required for doing work to accelerate the drying out of wet material or for dealing with wet material as described above, shall not be regarded as part of a delay caused by inclement weather in terms of clause PS 1215.

SECTION 3300 MASS EARTHWORKS**PS3305 TREATING THE ROADBED****(a) Removing unsuitable material**

Add the following to the first paragraph of this sub-clause:

"Roadbed material within 1.0 m of the finished road level shall have a minimum CBR of 3 at 90% of modified AASHTO density, after compaction. Any material which does not meet this requirement shall be treated as unsuitable and removed."

(c) Preparing and compacting the roadbed

Where the roadbed is anywhere within 1.0m of the selected formation layer, it shall be compacted to 93% of modified AASHTO density. Roadbed shall be compacted to 90% of modified AASHTO density where it is more than 1.0m below the selected formation layer.

PS 3312 MEASUREMENT AND PAYMENT

Delete in pay – items 33.01, 33.02, 33.04 and 33.07 the wording “including free – haul up to 0.5 km” and replace with: “including unlimited free – haul distance”.

Amend pay Item 33.01, Cut and borrow to fill (a) and (e) with the following:

Item		Unit
PS 33.01	Cut and borrow to fill including unlimited free-haul:	
	(a) Gravel or soft fill material in compacted layer thicknesses of 200 mm or less	
	(i) compacted to 93% modified AASHTO density.....	cubic metre
	(b) Rockfill (as specified in subclause 3209(c))	cubic metre
PS33.03	Extra over 33.01 for excavating and breaking down the material	
	(a) Hard material	cubic metre
PS33.04	Cut to spoil including unlimited free haul material obtained from	
	(a) Soft excavation	m ³
	(b) Hard excavation	m ³
PS33.07	Removal of unsuitable material obtained from any type of material and excavation in any layer thickness with unlimited free haul.....	m ³
PS33.10	Roadbed preparation and the compaction material	
	(a) Compacted to 90% modified AASHTO.....	m ³
	(b) Compacted to 95% modified AASHTO.....	m ³

SECTION 3400 PAVEMENT LAYERS OF GRAVEL MATERIAL

PS3403 CONSTRUCTION

(b) Placing and compaction

(ii) Shoulders

Add the following:

Shoulders shall be constructed from the same material as the base

PS3407 MEASUREMENT AND PAYMENT

Change pay item 34.01 as follows:

Delete the wording “including free – haul up to 1.0 km” and replace with “including unlimited free – haul distance”.

Delete the second paragraph (payment paragraph) of item 34.01 and substitute with the following:

The tendered rates shall include full compensation for mixing, watering, placing and compacting the material supplied under item PS34.01, and the protection and maintenance of the layer and the conducting of control tests, all as specified.

SECTION 3500: STABILISATION

PS 3502 MATERIALS

Add the following:

e) Emulsion Treated Base Materials

The materials to be used in the construction shall conform to the required specifications. The contractor shall issue to the consultant test results of the materials to be used including certifications from the suppliers before they are used on site.

The following materials will be required:

1. Material to be treated
2. Bitumen Emulsion
3. Active filler – Hydrated lime/ Cement
4. Clean Water

The mix design is determined by the nature and proportions of the following ingredients:

- Aggregate and its performance characteristics.
- Bitumen type (foamed bitumen or bitumen emulsion), the amount added, and compatibility with the aggregate.

The full mix design procedure can be found in the “Technical Guideline: Bitumen Stabilised Materials. (2020). Southern African Bitumen Association (Sabita)”.

The mix design has to take into account the fundamental distress mechanisms which are permanent deformation and moisture susceptibility. Resistance to permanent deformation can be increased by; improving the aggregate properties, increasing the maximum particle size, improving the compaction, reducing the moisture content, limiting bitumen application to less than 3% and limiting the addition of active filler to a maximum of 1%. Moisture resistance is enhanced by; increasing the bitumen content, improving the compaction and smooth continuous grading.

The cost of bitumen stabilised materials is mainly dominated by the cost of bitumen, so it is important to effectively optimise the addition content of bitumen. Due to advances in the testing methods, like calculating the internal tensile strain of a sample, accurate and reliable refinements can be made of the amounts of bitumen required.

f) Plant and Equipment

i) Mixing Plant

The plant used to produce bitumen stabilised materials must be capable of accurately blending predetermined proportions of different input materials whilst simultaneously adding the correct amount of bitumen stabilising agent, water and active filler to consistently produce a homogenous product. The mixer should have sufficient power to mix the material at a throughput that allows economic production (± 200 tons per hour).

ii) Paver

The thickness of the layer constructed and the paving width dictate the volume of the emulsion treated material that the paver must handle.

iii) Vibratory roller

Unlike in situ treated materials where layer thicknesses in excess of 200 mm are the norm, paved layers of bitumen stabilised materials seldom exceed 150 mm in thickness. Such a layer thickness can be compacted using a vibrating roller

iv) Static Tank for Storage of Emulsion

Static tanks should be provided to cater for storing sufficient bitumen emulsion for the needs of the

project. Normally such tanks have a capacity of between 60 000 litres and 120 000 litres. The static tank must be fitted with a circulating pump system to enable the stored emulsion to be properly circulated from time to time, especially if no emulsion has been drawn or added for more than 2 days.

PS 3503 CHEMICAL STABILIZATION

Add the following:

i) Layer Construction Using a Paver/Finisher

Unlike asphalt, a bitumen stabilised material is not a cohesive material and it is paved at ambient temperatures. Paver set up and operating procedures are, therefore, different.

i. Paver Setup

Setting up the paver and screed are fundamental requirements on any paving job. Adjustments need to be made to the screed so that it achieves the consistent “float” that is imperative to obtain a smooth mat.

Trial sections for paved bitumen stabilised materials should be constructed off site to achieve the proper paver setup.

ii. Paving the Layer

The same fundamental procedures for paving hot mixed asphalt are applicable to paving a bitumen stabilised materials and shall follow clause 4207.

iii. Construction Joints

Longitudinal joints generally receive the following treatment:

- Once the first half-width is paved, the 500 mm wide section closest to the centre-line receives only one pass with the roller without vibration, leaving it in a relatively uncompacted state.
- Immediately before paving the second half-width, the exposed edge on the centre-line together with the partially compacted strip is thoroughly moistened. This is normally undertaken by a separate team equipped with hand sprayers walking ahead of the paver.
- Prior to paving the second half-width, the bevelled end plate is removed from the centre-line end of the screed. This allows the screed to butt up against the exposed step of the first half-width.

The partially compacted strip of material remaining on the first half-width then receives the full compaction and finishing treatment together with the second half-width.

Lateral joints occur at every location where paving stop and a ramp must be constructed to accommodate the traffic. The following day, or when paving restarts, the material in the ramp must be removed and the previously paved material cut back to achieve a 45° slope and a consistent level profile. The material lying on the slope is then thoroughly moistened before paving continues.

iv. Compacting the Paved layer

The primary concern when using the heavy vibrating rollers required to compact a paved layer of bitumen stabilised materials is loss of shape. The rolling pattern should be determined from the Trial Section.

Tandem smooth drum rollers are always used to compact the layer behind the paver. Equipped with two vibrating (and/or oscillating) drums, these rollers normally achieve the required density with relatively few passes. However, operators need training to prevent over-rolling and shape loss since the technique required to compact bitumen stabilised material is very different from compacting hot mixed asphalt.

v. Curing and Trafficking

On compaction, the increase in density is not sufficient to ensure resistance to traffic damage. An increase in cohesion is required for resistance to traffic damage, which is dictated by the time required for the bitumen emulsion to break out of suspension. This normally takes a few hours at the surface where evaporation triggers the break, but can take several days for the bitumen emulsion deeper in the layer.

vi. Surfacing

Prior to applying Asphalt surfacing, the surface needs to be thoroughly cleaned to expose the texture of the material aggregates. A prime coat should not be applied on emulsion treated bases because the dispersed bitumen present at the surface of the cleaned layer provides adequate adhesion for a bituminous surfacing layer.

PS 3506 QUALITY OF MATERIALS AND WORKMANSHIP

Add the following:

d) Emulsion treated base process control

In-Plant treatment of the materials, provides the ability to control the quality and blend proportions of input materials increases the degree of confidence that the mixed product meets performance expectations. In addition, the application rate of bitumen stabilising agent and active filler can be minimised with confidence knowing that the material to be mixed will be similar to that used in the mix design.

Where the base layer is paver laid, the location selected for constructing the Trial Section should be a side road away from the permanent work. Trial Sections provide an opportunity to determine an appropriate rolling pattern as well as the number of roller-passes required to achieve the target density.

The important process controls when placing the base layer include:

- Checking that the surface on which the new layer is to be constructed has been properly prepared by removing all loose material and spraying with sufficient water to prevent the material from being placed on a dry floor (that will suck the moisture from the new material, making it difficult to compact). Similarly, all construction joints have been thoroughly moistened before placing the abutting

fresh material.

- When placing by paver:
 - Check the critical screed settings. Once the screed has been set up and an acceptable mat achieved, the settings must not be altered.
 - Care must be taken to prevent segregation. Material tipped into the paver's hopper at the start of work must remain in the wings until the end of work when it can be removed from site. This means that the wings must not be tilted to feed this material through to the screed.
 - As with all paving operations, paving should be continuous by limiting the advance speed to the delivery rate of material.
 - Trucks delivering material are to be engaged by the paver meeting the waiting truck (not the truck reversing into the paver).

When compacting the new layer; to prevent the material from drying out, ensure that the correct combination of rollers compact the material as soon as it has been placed. The operation of each roller, the rolling pattern and the sequence of rolling are all determined by constructing a Trial Section and these must be followed meticulously to achieve the required density without rolling the layer out of shape. Finishing is usually carried out with a Pneumatic Tyred Roller (PTR) adding sufficient water through the wheel sprinklers to achieve a tightly knit surface.

e) Core Specimens for testing

A series of cores can be extracted from the layer and tested for compliance. Core samples may be extracted from the full thickness of the completed layer, measured to determine the thickness of the layer and then tested for ITS (Indirect tensile strength) values. Cores cannot be successfully extracted until the layer has developed sufficient strength and the delay period is dictated by the rate of moisture loss from the material which is primarily a function of weather conditions and layer thickness. When conditions are warm and dry, cores can usually be extracted from a 150 mm thick layer after 7 days. The delay period is further influenced by the stability of the emulsion and delays in excess of 30 days are normal.

PS3507 MEASUREMENT AND PAYMENT

Amend pay item 35.01 and 35.02

Item	unit
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PS35.01 Chemical Stabilization	
--------------------------------	--

- | | |
|---|--|
| (a) 200mm thick extra over unstabilized compacted layers of crushed stone base.....m ³ | |
| (b) 200mm thick extra over unstabilized compacted layers of natural gravel subbase layer.....m ³ | |

The unit of measurement shall be the cubic meter of stabilized material, the quantity of which shall be determined in accordance with the authorized dimensions of the layers treated as instructed by the Engineer.

Item	unit
PS35.02 Chemical Stabilizing agent	
(a) Ordinary Portland Cement	tonne
(e) Anionic Stable Grade Bitumen emulsion.....	litres

SECTION 3600: CRUSHED-STONE BASE OR SUBBASE

PS 3602 MATERIALS

Add the following:

Existing crushed stone base shall be scarified and removed to stockpile for re-use as subbase material in the new construction.

The crushed stone material for base course shall be obtained from commercial sources or from approved quarry pits and crushed by the Contractor.

SECTION 4100 PRIME COAT

PS 4102 MATERIALS

(a) Priming material

Add the following:

The prime coat shall be MC 30 cut-back bitumen.

SECTION 4300: MATERIALS AND GENERAL REQUIREMENTS FOR SEALS

PS 4303: Plant and Equipment

(a) General

Add the following:

The Contractor shall ensure that he has a very good competent surfacing team, which is capable of delivering a high quality standard of workmanship; i.e. Competent and experienced Asphalt Foreman, operators and attendants, who have abilities of carrying out binder distribution and seal work operations within specified tolerance of applications and according to final product requirements.

The Engineer will instruct the removal of incompetent staff from site and a replacement thereof with a competent staff if satisfactory performance is not achieved and maintained.

(b) Binder distributor

Add the following:

"The binder distributor shall be capable of spraying the binder to the specified application rates and to the satisfaction of the Engineer. It is important that the pump of the distributor shall be capable of delivering the binder at the spray bar nozzles at the correct pressure to obtain the specified application rates, irrespective of the viscosity properties of the proposed binder. The spray bar of the distributor shall be fitted with fishplates at the outside edge of the bar to prevent over spraying onto shoulders or staining of concrete elements on the edge of the surfacing of the road. If instructed by the Engineer, the outside nozzles of the spray bar shall be turned to a 45° angle to achieve a thickened edge of binder along the outside limits of the seal area.

The variation in the rate of application between two adjoining 100 mm strips shall not exceed 5%, excluding the outside 300 mm on either side of the spray bar. The coefficient of the variation shall not exceed 10%. The test procedure shall be as prescribed in the Modified Tray-test contained in TRH 3 and shall be carried out each time the distributor is established on site or at least once per week. The binder distributor shall thus carry a set of troughs at all times in order to allow the execution of this test.

A calibration certificate, not older than 3 months, for the binder distributor shall be presented to the Engineer in order to ensure accurate application rates.

The binder distributor shall be fitted with a suitable valve or other access gate for taking of samples of the binder for testing purposes."

PS 4304: GENERAL LIMITATION AND REQUIREMENTS

(a) Weather limitations

(i) Non-homogeneous Modified Binders (summer grade)

The minimum road surface temperature for applying bitumen-rubber binder shall be 25°C, and if below 25°C, the air temperature shall be at least 20°C and rising. As soon as the minimum air temperature at night is recorded to fall below 10°C, seal-work shall cease until warmer weather conditions are experienced.

Application of binders shall not be allowed if the existing cracks in the road contain moisture after rain.

(d) Preparation of areas to be sealed

(ii) Newly constructed seals

For the repair and filling of uneven spots in the completed base shallower than 12mm, a slurry complying with the requirements of clause 4604 (c) shall be used, based on one of the gradings of a Fine slurry.

60% stable mix-grade emulsion prepared from 70/100 penetration grade bitumen shall be used as binder.

The mix of fine aggregate, which shall be used for repairs shall comply with the

following requirements by volume in the case of the irregularities exceeding 12mm in depth:

9.5mm nominal sized aggregate	1 part
6.7mm nominal sized aggregate	1 part
Fine –graded crusher sand	1 part

Each patch shall be compacted by means of two passes of a steel-wheeled roller of minimum mass of one comma five (1.5) tons, which compaction must be applied within four (4) hours after the emulsion has broken.

(iii) Existing Surfaces to be resealed

If so instructed the Contractor shall seal wide cracks by hand-application of Petrol seal. Payment will be made at Dayworks rates. Localised undulations shall be repaired as for base corrections, where and if so instructed, also on Dayworks rates.

Except at the intersections, the existing surfacing shall be cut back to a width of 7.4m with a roller cutting blade attached to a heavy self-propelled roller. The redundant surfacing strips shall be removed and edge break repairs shall be carried out before completion of the reconstruction of the shoulders, where such reconstruction is instructed.

Three (3) weeks prior to commencements of resealing operations an MSP 3 inverted emulsion rejuvenator shall be applied over the full width of the narrowed existing road seal, plus 100mm to 300mm wider along each side. The MSP 3 rejuvenator spray, shall be applied in half widths at an application rate of 0.5 l/m² during the summer months, before the start of the rains and the sprayed section kept closed to traffic for at least five (5) hours before re-opening.

PS 4305: HEATING AND STORAGE OF BITUMINOUS BINDERS

(b) Non- homogenous (heterogeneous) modified binders (summer grade)

Bitumen rubber binder shall not be stored at all. Once the rubber is added to the base bitumen, the product shall be applied to the road as soon as it is adequately digested and at spraying temperature. Any binder left in the distributor at the end of the allowable spraying period, or not applied due to an unforeseen stoppage lasting till beyond the spraying period, shall be removed from site. Even a forced stoppage in the blending period between addition of the rubber and heating to spraying temperature shall not be considered as a reason for the approval of storing the binder for later use. Reference shall be made to the specified limitations regarding the programme of work and lengths of construction areas described in section 1200 and 1500 of these specifications.

The Engineer's supervisory staff shall, through timeous notification by the Contractor, be afforded the opportunity to attend to all bitumen rubber blending operations in order to exercise control sampling and testing on the binder from the stage just prior to the addition of the rubber to the base bitumen up to the end of the allowable spraying period. Failure to conform to the requirements will be considered reason enough by the Engineer to reject the batch of binder.

PS 4310: Dust Control

Delete paragraph two.

SECTION 5100 MARKER AND KILOMETRE POSTS

PS 5101 SCOPE

Add the following to this Clause:

Road reserve demarcation beacons shall be constructed according to details on drawing No. RA/CON/2022-23/PCL/STD/MB/001 at an interval of 200m on either side of the road.

PS 5106 MEASUREMENT AND PAYMENT

Add the following pay item:

Item

Unit

PS 51.03 Road reserve demarcation beacons as per drawing no RA/CON/2022-23/PCL/STD/MB/001..... No.

The unit of measurement shall be the number of beacons installed to the satisfaction of the Engineer

The tendered rate shall include full compensation for excavation, materials, construction, backfilling and plastering of the beacon.

SECTION 5200: GUARDRAILS

PS 5202 MATERIALS

5202(b) Guardrail posts

Add the following:

(iii) Concrete posts

Guardrail posts shall be of prefabricated concrete according to the detail on the drawings. Timber spacer blocks shall comply with specifications of Clause 5202.

PS 5203 CONSTRUCTION

5203(a) Erection

Add the following to the 3rd paragraph:

The bolts shall be tack welded to the nuts in order to reduce the risk of vandalism.

PS 5206 MEASUREMENT AND PAYMENT

Add the following pay item:

Item	Unit
PS52.13 Galvanised and painted guardrails on concrete posts including end units and reflective plates as per drawing no. RA/CON/2022-23/PCL/STD/GR/001-005.....	metre (m)

The unit of measurement shall be the metre of guardrail erected including concrete posts, end units and reflective plates.

The tendered rate shall include full compensation for furnishing all materials and labour and for erecting the galvanized guardrails painted as specified on the drawings or as directed by the Engineer, complete with prefabricated concrete posts, spacer blocks, bolts, nuts, washers and reinforcing plates, bull noses and for excavating and backfilling post holes with 15Mpa concrete and/or selected excavated material and removing surplus excavated material.

SECTION 5400: ROAD SIGNS**PS 5401 SCOPE**

Substitute the second paragraph with the following:

All Road Traffic Signs shall comply with the South African Development Community (SADC) Road Traffic Sign Specifications.

- (1) The Traffic Sign details shown on the drawings give general information on the erection, placing and details of several of the required signs. Details of signs not shown on the drawing shall be in accordance with Regulations. The specifications information regarding the dimensions and locations of signs reference should be made to "The SADC Road Traffic Signs Manual".
- (2) The exact location of signs shall be as directed by the Engineer.
- (3) Sign faces will be constructed of sheet steel of a minimum thickness of 1.6 mm and the back of the sign shall be painted grey.
- (4) Regulatory and warning signs shall be similarly mounted; larger signs shall be mounted on two or more 75mm diameter galvanised mild steel posts. Where the horizontal or vertical dimension exceeds 900mm, the sign shall be stiffened by means of 25mm x 25mm rectangular hollow sections as detailed on the drawings. All guide or information sign posts are to be painted grey. Sign posts for regulatory and warning signs shall be painted with alternating bands of yellow and black.
- (5) The size of guide or information signs shall be as specified in the regulations. The layout of the sign (letter spacing, size, border size, etc.) and colours shall be as given in the SADC Regulations.
- (6) The size, colours and letter series type for regulatory signs will be as given in the SADC Regulations, or as shown on the drawings or as instructed by the Engineer.

All warning and regulatory traffic signs on the Main Road shall be at least size 1200mm for the design speed of 120km/hr.

All warning and regulatory traffic signs on the Access Roads shall be at least size 914mm for the design speed of 80km/hr.

- (7) Warning signs will be on an equilateral triangle with a white reflectorized symbol on a blue reflectorized background. The size of the triangle will be as given in the SADC Road Traffic Sign Specification or as shown on the drawings or as instructed by the Engineer.
- (8) All signs are to be reflectorized with engineering grade retro reflective materials. The material is to be good quality and is to be affixed to the sheet metal according to the manufacturer's recommendations".

PS 5409 MEASUREMENT AND PAYMENT

Delete pay items 54.01, 54.02 and 54.03 and replace with the following:

Item		Unit
PS54.01	Road sign boards with painted or coloured background. Symbols, lettering and borders in Class 1 retro-reflective material, complete with posts and supports pre-painted galvanised steel plate (Chromadek or approved equivalent) position as shown on the drawings:	
(a)	Area not exceeding 2m ²	m ²
(b)	Area exceeding 2m ² but not 10m ²	m ²
(c)	Area exceeding 10m ²	m ²

Add the following new pay item:

Item	Unit
PS54.10 Erection of Standard Road Signs.....	No

The unit of measurement shall be the number of specified road signs erected. The tendered rate shall include full compensation for the provision and fixing in position of sign faces, posts, nuts, for painting the surfaces, lettering, excavation for posts, concreting, backfilling, removal of excess excavated materials, etc. and all that is necessary to make the work comply with the specifications.

- **SECTION 5500: ROAD MARKINGS**
- **PS 5501 SCOPE**

Add the following: -

After sections of road are completed and before being opened to traffic all road markings are to be completed. The road studs will not be placed at this stage. The Contractor shall return during the Defects Notification Period to re-paint all road marking as specified as well as the placement of road studs.

All Road Traffic Markings shall comply with the South African Development Community (SADC) Road Traffic Sign Specifications.

The Contractor may use thermoplastic marking material and shall provide a three year guarantee for the road traffic markings. Towards the end of the Defects Notification Period the Contractor shall repaint all road traffic markings. No separate payment shall be payable. The Contractor shall make appropriate allowance in his programme and his tender rates for re-painting at the end of the Defects Notification Period.

The Employer shall withhold retention monies due until the Contractor has repainted the road markings to the satisfaction of the Engineer. Should the Contractor fail to remobilize the road marking unit team and attend to the notified defects within the Defects Notification Period, the Employer may use the retention money to engage other Contractors to carry out the outstanding work and deduct these costs from the retention monies. Should these retention moneys be insufficient to cover the cost of correcting the road traffic markings then the Employer may recover the shortfall from the Contractor by legal processes.

- **PS 5502 MATERIALS**
- **5502(b) Road studs**

Delete the first paragraph of the sub clause and substitute with the following:

Road studs shall consist of an acrylic plastic shell filled with a tightly adherent potting compound. The shell shall contain two prismatic retro-reflective faces to reflect incident light from opposite directions. The colour shall conform to the colour requirements of ASTM D4280.

The shell shall be moulded of methyl methacrylate conforming to ASTM D788 Grade 8. The outer surface of the shell shall be smooth. The base of the marker shall be substantially free from gloss and substances that may reduce its bond to adhesive.

The filler shall be a potting compound capable of supporting a minimum load of 909 kg when tested in accordance with ASTM D4280.

The size, colour and spacing of road studs shall be as indicated on the Drawings or directed by the Engineer.

- **PS 5504 MECHANICAL EQUIPMENT FOR PAINTING**

Insert the following additional paragraph after the first paragraph:

Equipment for thermoplastic marking shall consist of at least one truck mounted storage boiler, a screed box on wheels and an extruder or spraying machine. A steel manual screed shall be used to paint arrows and other symbols. The extruder may be truck-mounted or self-propelled. Boilers must be fitted with mechanical stirrers to keep the mineral matter and glass beads in suspension. Accurate thermometers and thermostats are required on all boilers.

- **PS 5507 APPLYING THE PAINT**

Add the following at the end of the third paragraph:

The thickness of thermoplastic laid in the trial and for each day's work shall be checked by applying the material to a clean steel plate. The plate sample shall be taken while marking is in progress by positioning the plate on the road in the projection of the line which is about to be marked. The thickness shall then be confirmed with callipers. Gaps left within the road markings due to testing shall be immediately reinstated.

- **Add the following to end of the last but one paragraph:**

The rate of application of thermoplastic road paint shall be related to volume and be that amount sufficient to achieve the specified nominal line thickness.

- **Add the following to the last paragraph:**

After completion of a section of asphalt surfacing and before opening the section to traffic, the pre-marking of the centre and edge lines shall be done. At least two weeks shall elapse after completion of the surfacing before the permanent road markings shall be applied, unless otherwise directed by the Engineer.

- **PS 5508 APPLYING THE RETRO-REFLECTIVE BEADS**

Add the following to the end of the first paragraph:

In the case of thermoplastic paint, the rate of application of beads shall be 0.5kg/m² of marking. This amount shall be in addition to the quantity already mixed within the composition of the thermoplastic.

- **PS 5514 MEASUREMENT AND PAYMENT**

Delete pay item 55.04: Variation in the rate of paint application.

The Contractor shall be deemed to have included the cost of this item in the rates tendered for road marking.

SECTION 5700 LANDSCAPING, TOPSOILING AND GRASSING

PS 5702: Materials

Add the following to the relevant sub-clauses:

(a) Fertiliser/Soil-Improvement Material

Fertilisers shall not be used in this Contract.

(b) Grass Cuttings

Grass cuttings shall be fresh cuttings of the species as specified by the Engineer

(c) Grass Seeds

The Contractor may use grass seeding in lieu of planting, but no additional payment shall be made for hand seeding or hydro-seeding.

(d) Trees, Shrubs and Hedge Plants

This sub-clause is deleted.

(e) Grass Sods

Delete this sub-clause and replace it with the following:

“Veld sods may be obtained from approved areas where a suitable type and density of grass are found. No additional payment shall be made for sods.”

(f) Anti-Erosion Compounds

This sub-clause is deleted.

(g) Topsoil

Delete paragraphs two, three and four, and replace them with the following:

“Topsoil shall be obtained from stripping operations under embankments and in cuttings in accordance with Sub-Clauses 1702(c) and 1703(a). Topsoil stripped from borrow areas shall not be used for top-soiling elsewhere but must be used to rehabilitate the borrow areas themselves. If the Contractor fails to conserve the topsoil as prescribed in Sub-Clause 1702(C), he shall obtain suitable topsoil from other sources at his own cost.

“Care shall be taken to prevent the compaction of the topsoil in stockpiles or in the Works in any way, particularly by trucks driven over such material.”

PS 5704: Preparing Areas for Grassing

(a) Soil Ripping

This sub-clause is deleted.

(b) Areas Which Do Not Require Topsoil

This sub-clause is deleted.

(c) Areas Which Require Topsoil

Add the following to this sub-clause:

All surfaces to be grassed shall immediately before grassing be roughened to ensure a proper bond with the topsoil. Topsoil free from stones shall be placed on the prepared surface and trimmed to a thickness slightly higher than the final thickness.

Where shown on the Drawings or directed by the Engineer the verges and the slopes of cuttings and embankments shall be covered with topsoil and lightly rolled to the required final thickness.

(d) Fertilising

This sub-clause is deleted.

PS 5705 Grassing

The Contractor shall choose the method of establishing grass. No additional payment shall be made regardless of the method of grassing employed by the Contractor.

Add the following to this sub-clause:

(a) Planting Grass Cuttings

Fresh grass cuttings of the “Kapinga” species or other approved species shall be planted by the Contractor at 250 mm centres and watered at frequent intervals to ensure the grass takes root and spreads out quickly. Grass cuttings that have been allowed to dry out shall not be planted.

All grass shall be planted before the start of the defects liability period for any section of the road.

Add the following to this sub-clause:

(c) Hydroseeding

The Engineer shall approve the types and mixtures of seeds to be used before the Contractor orders any seed. Hydroseeding shall be carried out with an approved hydroseeding machine at a rate of application of not less than 38 kg of seed mixture per hectare. Mulch shall be added to the hydroseeding mix at an approved rate.

(d) Top-soiling Only

This sub-clause is deleted.

Add the following to this sub-clause:

(e) Grassing with an Approved Grass Planter

Grassing shall be done with an approved grass planter which plants the seeds in rows spaced not more than 250 mm apart. The planter shall plant the seeds approximately 6 mm deep and shall lightly compact the topsoil.

(g) Other Methods

This sub-clause is deleted.

(h) The Grassing of Borrow Pits, Temporary Bypasses, Camp Sites, Access Roads and Stockpile Sites

This sub-clause is deleted.

PS 5706: Maintaining the Grass

(a) Watering, Weeding, Mowing and Replanting

On line one of paragraph two delete “mow” and replace with “cut”.

(b) Acceptable Cover

At the beginning of this sub-clause add the following as first paragraph:

“The Contractor shall be solely responsible for establishing an acceptable grass cover and for the cost of re-establishing grass by any method where no acceptable cover has been established.”

(c) Maintenance Period

The maintenance period in respect of grass shall commence when an acceptable grass cover as defined in (b) above has been established and shall last one year or to the end of the period of the Contract, whichever expires later.

The Contractor shall be responsible for watering, cutting and maintenance of all grassed areas during the period of maintenance.

(d) Proprietary Brand Materials Used for Erosion Prevention

This sub-clause is deleted.

(e) Responsibility for Establishing an Acceptable Cover

This sub-clause is deleted. Sub-Clause 5706(b) applies.

(f) Re-Fertilising

This sub-clause is deleted.

PS 5707(C): TREES AND SHRUBS

Add the following:

All trees and shrubs grass shall be planted prior to the start of the defects liability period for any section of the road.

PS 5709: Measurement and Payment

Merge pay items 57.01 and 57.02 as follows

Item	Unit
------	------

PS 57.01 Trimming and shaping by hand and/or machine.....Kilometre (km)

The unit of measurement shall be the kilometre of road trimmed on both sides. In the last paragraph under Item 57.01, payment shall **NOT** distinguish between machine trimming which can reasonably be done by bulldozer or motor grader, and hand trimming.

Add the following pay item:

Item	Unit
PS 57.12 Paving walkways with interlocking blocks	
(a) On walkway and Median with 60mm thick, 25Mpa interlocking blocks.....	m ²
(b) 30mm thick sand bedding for interlocking blocks.....	m ²

The tendered rate shall include the full compensation for the supply and laying of approved sand bedding and paving units in accordance with the specifications. Sand and Paving blocks shall be obtained from sources identified by the contractor and haulage distance shall be unlimited

Add the following section:

SERIES 8000: SPEED CALMING FEATURES

PS8100 HUMPS AND RUMBLE STRIPS

Humps and rumble strips shall be constructed, arranged and spaced according to details provided in the drawings.

PS8101 Measurement and Payment

Item	Unit
PS81.01 Humps and Rumble Strips	
(a) Installation of humps as per drawing detail RA/CON/2022-23/PCL/STD/TCM/001-002.....	No.
(b) Installation of rumble strips in sets of five as per drawing detail RA/CON/2022-23/PCL/STD/TCM/001-002.....	Set

The tendered rate shall include cost of preparing the area for the hump or strip, setting-out, transport, materials, installation, trimming, cleaning and clearing the area and all other costs associated with the construction of the hump or strips.

Add the following section:

SECTION 9000: SUPPLY, INSTALLATION AND COMMISSIONING OF STREET LIGHTING SYSTEM

PS 9001: Installation of Glass Fibre poles

Add the following Clause.

The Contractor shall Install glass fibre poles manufactured in accordance with SANS 1749 under the ISO 9002 quality system. If an access opening is required, the access

door cover shall be manufactured from glass filled nylon impregnated in the same colour as that of the surface coat. A cable entry with a minimum diameter of 34mm shall be provided at a minimum depth of 400mm below the ground surface. Poles for direct embedment in the ground shall be provided with a 300 x 300 x 1.6mm hot dipped galvanised base plate.

The details of the poles shall be as indicated on the drawings.

PS 9002: Installation of 50w all in one solar street light

Add the following Clause.

The Contractor shall supply and install solar panel power 18v/50Wp (Monocrystalline PV). Life-span 25 years Batteries Capacity/Type 12.8V/36AH (460.80WH) / LiFePO4 Lithium. Lifespan 5+ years (2,000 circles) Controller Type MPPT / Waterproof class IP65 Sensor Microwave Radar (PIR & Timing as optional). LED Light Source Rated Power 12V/ 50W (36Wx2 modules) LED Brand CREE/OSRAM (LED Lumen: 150lm/W) Lumens (LM) 2000-3000lm Life-span 50,000 hours Viewing Angle 1400 x 700 Full Charge Time By Solar 6-8 hours (STC: 1000W/m², 25° C) Discharge Time Bright Mode >14 hours , Dim Mode >70 hours Working Temp. -30°C~+80°C Color Temp. Cool White 3000K (3000~3500k) / Space Between Lights 30~35m Materials aluminium alloy Certificate ROHS / IP65/ STQC/MNRE warranty-36 months from the date of supply. "specialized for street lighting purposes"

PS 9003 MEASUREMENT AND PAYMENT

Add the following pay items:

Item	Unit
PS 90.01 Glass Fibre Reinforced Polyester (GRP) poles as per drawing No RA/CON/2021-22/LL-KIA/PCL/308	No

The unit of measurement shall be in No. The tendered rates shall include procuring, logistics, installation and including any other works, operation or activity necessary for completing the installation of poles in compliance with the specifications and drawings.

Add the following pay items:

Item	Unit
PS90.02 Supply and installation of 50W all in one solar street light	No

The unit of measurement shall be in No. The tendered rates shall include all items listed above

PART B-2: PARTICULAR SPECIFICATIONS FOR ENVIRONMENTAL MANAGEMENT PLAN

1.0 ENVIRONMENTAL MANAGEMENT TEAM (EMT)

The Contracting Authority will be represented on site by a Resident Engineer (RE) and his inspection team will include an Environmental Control Officer (ECO) who shall determine members of the site supervision team as the Environmental Management Team (EMT) that will report on the activities to the Contracting Authority through RE.

The EMT will be responsible for monitoring the performance of the Contractor during the construction phase with regard to Environmental issues and to assess the effectiveness of the impact mitigation measures in protecting the environment on behalf of the Roads Authority and the local communities. The role of the EMT will be “pro-active” with regard to impacts seeking to predict and prevent negative impact and pollution.

The Contractor will provide one full time Contractor’s Environmental, Occupational Health and Safety Expert (EOHSE) to be responsible for the implementation of all environmental mitigation measures. The EOHSE will also undertake liaison with local community leaders and ensure that the Contractor’s compliance with the requirements of the Malawi Environmental Affairs Department, the District Valuer’s Office, and other relevant authorities in connection with environmental and social considerations.

The Contractor shall prepare a Project Environmental Management Plan (PEMP) based on the headings, risks and responsibilities given in the EMP Table.

This Plan shall be particular to the works required under this Contract. The draft PEMP will be discussed, reviewed, where necessary amended and finally agreed in the EMT. The PEMP will form the principal document upon which all Environmental Monitoring will be based throughout the project.

2.0 IMPACT MITIGATION MEASURES

2.1 Landscape Preservation

(1) General

The Contractor shall exercise care to conserve the natural landscape and shall conduct his construction operations so as to prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the works. Except where clearing is required for permanent works, diversions or excavation operations, all trees, native shrubbery and vegetation shall be preserved and shall be protected from damage by the contractor’s construction operation and equipment. The edges of clearing and cuts through trees, shrubbery, and vegetation shall be irregularly shaped to soften the undesirable visual impact of straight lines. Movement of labour and equipment within the right-of-way and over routes provided for access to the work shall be performed in a manner to prevent damage to grazing land, crops or property.

Except as otherwise provided special reseeding or replanting will not be required under these specifications; however, on completion of the work all work areas not seeded shall be scarified and left in a condition which will facilitate natural re-vegetation provided for proper drainage and prevent erosion. All unnecessary destruction, scarring, damage or defacing reseeded or the landscape resulting from the Contractor’s operations shall be repaired, replanted reseeded or otherwise corrected as directed by the Resident Engineer and at the Contractor’s expense.

(2) Construction Roads

The location, alignment, and grade of construction roads shall be subject to approval of the Resident Engineer. When no longer required by the Contractor, construction roads shall, if required by the Resident Engineer, be restored to the original contour and made impassable to vehicular traffic. The surfaces of such diversions shall be scarified as needed to provide a condition that will facilitate natural re-vegetation provided for proper drainage and prevent erosion.

(3) Construction Facilities

The Contractor's workshops office and yard area shall be located and arranged in a manner to preserve trees and vegetation to the maximum practicable extent. On completion of the project all temporary buildings including concrete footings and slabs, and all construction materials and debris shall be removed from the site. The area shall be regarded, as required, so that all surfaces drain naturally, blend with natural terrain, and are left in a condition that will facilitate natural re-vegetation, provide for proper drainage and prevent erosion.

(4) Blasting Precautions

In addition to any requirements of local regulations, the contractor shall adopt precautions when using explosives that will prevent scattering rocks, stumps, or other debris outside the work area, and prevent damage to surrounding trees, shrubbery and vegetation.

2.2 Preservation of Trees and Shrubby

(1) Preservation

All trees and shrubbery which are not specifically required to be cleared or removed for construction purposes shall be protected from any damage that may be caused by the construction operations and equipment. Special care shall be exercised where trees or shrubs are exposed to injuries by construction equipment, blasting excavating, dumping, chemical damage or other operations; and the Contractor shall adequately protect such trees by use of protective barriers or other methods approved by the Resident Engineer. The removal of trees or shrubs will only be permitted after prior approval by the Resident Engineer.

The layout of the Contractor's construction facilities such as workshops, warehouse storage areas and parking areas; location of access and haul routes; and operation in borrow and spoil areas shall be planned and conducted in such a manner that all trees and shrubbery not approved for removal by the Resident Engineer shall be preserved and adequately protected from either direct or indirect damage by the Contractor's operations.

Except in emergency cases or when otherwise approved by Resident Engineer, trees shall not be used as anchorages. Where such use is approved, the trunk shall be wrapped in with a sufficient thickness of approved protective material before any rope, cable, or wire is placed.

(2) Repair or Treatment of Damage

The Contractor shall be responsible for injuries to trees and shrubs caused by his operations. The term "injury" shall include without limitation, bruising, scarring, tearing and breaking of roots, trunk or branches. All injured trees and shrubs shall be repaired or treated without delay, at the Contractor's expense. If damage occurs, the Resident Engineer will determine method of repair or treatment to be used for injured trees and shrubs as recommended by an experienced horticulturist or a licensed tree surgeon provided by and at the expense of the Contractor.

(3) Replacement

Trees or Shrubs that in the opinion of the Resident Engineer are beyond savings shall be removed and replaced early in the next planning season. The replacement shall be the same species or other approved species and of the maximum size that is practicable to plant and

sustain growth in the particular environment. Replacement trees and shrubs shall be stayed, watered and maintained for a period of 1 year from the date of replacement.

2.3 Prevention of Water Pollution

(1) General

The Contractor's construction activities shall be performed by methods that will prevent entrance or accidental spillage, of solid matter, contaminants, debris, and other pollutants and wastes into streams, flowing or dry watercourses, lakes, and underground water sources, concrete, sanitary waste, industrial waste, radioactive substances, oil and other petroleum products, aggregate processing tailings, mineral salts and thermal pollution.

Dewatering work for structure foundations or earthworks operations adjacent to or encroaching on streams or watercourses shall be conducted in a manner to prevent muddy water and eroded materials from entering the streams or watercourses by construction of intercepting ditches, bypass channels, barriers, settling ponds or by other approved means. Excavated materials or other construction materials shall not be stockpiled or deposited near or on-stream banks, lake shorelines or other watercourse perimeters where they can be washed away by high water or storm runoff or can in any way encroach upon watercourse itself.

Turbidity increases in a stream or other bodies of water after that are caused by construction activities shall be strictly controlled. When necessary to perform required construction work in a stream channel, the turbidity may be increased, as approved by the Resident Engineer, for the shortest practicable period required to complete such work. This required construction work may include such work as diversion of a stream, construction or removal of cofferdams, specified earthworks in or adjacent to a stream channel, pile driving, and construction of turbidity control structures. Mechanised equipment shall not be operating in flowing water except as necessary to construct crossing or to perform the required construction.

Wastewater from aggregate processing, concrete batching, or other construction operations shall not enter streams, watercourses, or other surface waters without the use of such turbidity control methods as settling ponds, gravel-filter entrapment dikes, approved flocculating processes that are not harmful to fish, re-circulation systems for washing of aggregates or other approved methods. Any such wastewaters, discharged into surface of these specifications, settle-able material is defined as that material possible. For the purpose of these specifications settle-able material is defined as material which will settle from the water by gravity during a 1- hour quiescent detention period.

(2) Compliance with law and regulations

The Contractor shall comply with applicable laws and regulations and water quality standards concerning the control and abatement of water pollution.

2.4 Abatement of Air Pollution

The Contractor shall comply with applicable laws and regulations concerning the prevention and control of air pollution. Notwithstanding the above in conduct of construction activities and operation of equipment, the Contractor shall utilize such practicable methods and devices as are reasonably available to control prevent and otherwise minimize atmospheric emissions or discharges of air contaminants.

The emission of dust into the atmosphere shall be strictly controlled during the manufacture, handling and storage of concrete and road aggregates, and the Contractor shall use such methods and equipment as are necessary for the collection and disposal or prevention of dust during these operations. The Contractor's methods of storing and handling cement and lime

shall also include means of eliminating atmospheric discharges of dust. Equipment and vehicles that show excessive emissions of exhaust gases due to poor engine adjustments or other inefficient operating conditions. Shall not be operated until corrective repairs or adjustments are made.

Burning of materials resulting from clearing of trees and bush, combustible construction materials, and rubbish will be permitted only when atmospheric conditions for burning are considered favourable and when authorized by the Resident Engineer. In lieu of burning, such combustible materials may be disposed of by other methods as provided in Clause 2.10 hereof. Where open burning is permitted, the burn piles shall be properly constructed to minimize smoke, and in no case shall unapproved materials such as tires, plastic rubber products, asphalt products, or other materials, that create heavy black smoke or nuisance odours, be burned.

2.5 Dust Abatement

During the performance of the work required by this specifications or any other appurtenant thereto, whether on right-of-way provided by the Employer or elsewhere, the Contractor shall furnish all the labour, equipment, materials, and means required, and shall carry out proper and efficient measures wherever and as often as necessary to reduce the dust nuisance and to prevent dust which has originated from his operations from damaging crops, orchards, cultivated fields and dwellings or causing nuisance to obtain adequate control.

2.6 Noise Abatement

The Contractor shall comply with applicable National laws, orders and regulations concerning the prevention, control and abatement of excessive noise.

Blasting, the use of jackhammers, pile driving, rock crushing or other operations producing high-intensity impact noise may be not be performed during the night.

2.7 Light Abatement

The Contractor shall exercise special care to direct all stationary flood-light to shine downwards at an angle less than horizontal. These floodlights shall also be shielded so as not to be a nuisance to surrounding areas. No lighting shall include a residence in its direct beam.

The Contractor shall be responsible for correcting light problems when they occur as directed by the Resident Engineer.

2.8 Preservation of Historical & Archaeological Data

Should the Contractor or any of his employees in the performance of his contract discover evidence of possible scientific, prehistoric, or archaeological data he will notify the Resident Engineer immediately, giving the location and nature of the findings. Written confirmation shall be forwarded within 2 days. The Contractor shall exercise care so as not to damage artefacts or fossils uncovered during excavation operation and shall provide such co-operation and assistance as may be necessary to preserve the findings for removal or other disposition by the employer. The Contractor will also report his findings for the Ministry of Forestry, Fisheries and Environmental Affairs and the authority responsible for antiquities.

Where appropriate by reasons of a discovery the Resident Engineer may order delays in the time of performance, or changes in the work, or both. If such delays, or changes or both are ordered, the time of performance and contract price shall be adjusted in accordance with the applicable clause in the conditions of contract.

The Contractor shall insert this Clause in all subcontracts that involve the performance of work on the project site.

2.9 Pesticides

Pesticides include herbicides, insecticides, fungicides rodenticides, and pesticides, surface disinfectants animal repellent and insect repellent. Should the Contractor find it necessary to use pesticides in work areas of this contract, he shall submit his plan for such use to the Resident Engineer for written approval.

The Contractor shall read and comply with all labelling requirements when using pesticides.

2.10 Clean-Up and Disposal of Waste Materials

(1) Clean – Up

The Contractor shall, at all times keep the construction area, including storage areas used free from accumulation of waste material or rubbish.

All waste water and sewerage from office, residential and mobile camps shall be piped to soak pits or other disposal areas constructed in accordance with local government regulations, and where and when regulations require it the Contractor shall obtain a permit or other appropriate documentation approving the disposal methods used.

All used fuels, oils, other plant or vehicle fluids, and old tyres and tubes shall be collected to a central disposal area on a daily basis and disposed of in a manner approved by the Resident Engineer.

Servicing of plant equipment and vehicles shall whenever possible be carried out at a workshop area. This workshop area shall be equipped with secure storage areas for fuels oils and other fluids and constructed in such a way as to contain any spillage, which may occur, and similar storage where fluids can be stored securely prior to their disposal.

When servicing of plant, equipment and vehicles is carried out away from the workshop area it shall be done at locations and in such a manner as to avoid spillage and contamination of streams and other drainage courses. Any spillage shall be cleaned up by either burning in place or collecting the contaminated soils and burning them at the central disposal area, all to the satisfaction of the Resident Engineer.

Prior to the completion of the work, the Contractor shall remove from the vicinity of the work all facilities, buildings, rubbish, unused materials, concrete forms and other like material, belonging to him or used under his directions during construction.

All work areas shall be graded and left in a neat manner conforming to the natural appearance of the landscape as provided in these specifications.

Any residue deposited on the ground from washing out truck mixers, agitating trucks or any other similar concrete operations shall be buried or cleaned up in a manner acceptable to the Resident Engineer.

In the event of the Contractor's failure to perform the above work, the work may be performed by the Employer at the expense of the Contractor, and his surety or sureties shall be liable therefore.

(2) Disposal of Waste Material

(a) General

Waste materials including, but not restricted to refuse, garbage, sanitary wastes industrial wastes and oil and other petroleum products, shall be disposed of by the Contractor. Disposal of combustible materials shall be by burying, where burial of such materials is approved by the Resident Engineer by burning, where burning of approved materials is permitted; or by removal from the construction area. Disposal of non-combustible materials shall be by burying where burial of such materials is approved by the Resident Engineer or by removal from the construction area. Waste materials removed from the construction area shall be dumped at an approved dump

(b) Disposal of Material by Burying

Only materials approved by the Resident Engineer may be buried. Burial shall be in pits and the location, size and depth of which shall be approved by the Resident Engineer. The pits shall be covered by at least 0.6 metre of earth material prior to abandonment.

(c) Disposal of Material by Burning

All materials to be burned shall be piled in designated burning areas in such a manner as will cause the least fire hazards. Burning shall be through and complete and all charred pieces remaining after burning, except for scattered small pieces, shall be removed from the construction area and disposed of as otherwise provided in this Clause.

The Contractor shall at all times, take special precautions to prevent fire from spreading beyond the piles being burned and shall be liable for any damage caused by this burning operation. The Contractor shall have available, at all times, suitable equipment and supplies for use in preventing and suppressing fires and shall be subject to all laws and regulations locally applicable for pre-suppression, suppression and prevention of fires.

(d) Disposal of Material by Removal

Material to be disposed of by removal from the construction area shall be removed from the area prior to the completion of the work under these specifications. All materials removed shall become the property of the Contractor.

Materials to be disposed of by dumping shall be hauled to an approved dump. It shall be the responsibility of the Contractor to make any arrangements of such dumping. Any fees for charges required to be paid for dumping of materials shall be paid by the Contractor and shall be included in the prices tendered in the Bill of Quantities for other work.

3.0 PROJECT ENVIRONMENTAL MANAGEMENT PLAN (PEMP)

The Contractor will be deemed to have prepared his tender upon sound environmental practice and the guidelines contained in this section together with the entire contents of the Guidelines to Environmental Impact Assessment issued by the Ministry of Forestry,

Fisheries and Environmental Affairs in December 1997 and the heading applicable to this contract in the Environmental Management Plan that follows this Section; as well as Environmental and Social Management Guidelines in the Road Sector issued by the Roads Authority in March 2008.

The PEMP will be read in conjunction with and shall be deemed to include all descriptions of environmental protection and mitigation described elsewhere in the Specification, Design Standards and Conditions of Contract. The PEMP will supplement but not supersede normal Regulatory Controls from Health and Safety Inspectorates and shall be made available to all parties.

The following is a summary of the guidelines to be incorporated into the PEMP:

(a) Specific proposals

(i) Drainage

Drainage and Proper installation of drainage structures

(ii) Soil erosion

- Controlling and management of excavation activities
- Installation of erosion control measures such as check dams, scour checks and impact dissipaters
- Landscaping and re-vegetating road embankment and gravel sites

(iii) Pollution (air, noise, water)

- Supervision of construction traffic, including control of speed
- Sensitisation of workforce
- Maintenance of plant and equipment
- Proper disposal of construction debris, proper handling, storage and disposal of oil and oil wastes, and disposal of wastewater / sewage at Contractor's
 - /workmen's camps

(iv) Materials sources

- Planned, controlled and restricted access to all materials sites
- Proper management of excavation activities
- Landscaping, terracing where necessary, and grassing and re-vegetation of materials sites
- Compensation of individuals/ communities as required for use of material
- Controlled blasting of hard stone material

(v) Water Sources

- Consultation with communities during identification of sources
- Management of water usage

(vi) Deviations

- Planning of deviations
- Reinstating deviations (and old tracks) to original condition

(vii) Vegetation

- Prohibition of use of herbicides
- Landscaping and planting all disturbed areas (pits, deviations, embankments, camps sites)

- Planting of trees at main towns/trading centres along road for aesthetics and as pollution screens.
- (viii) Demobilisation/ Decommissioning
 - Proper removal and disposal of construction buildings and structures required for the contractors'/workmen's camp, and construction wastes including oil, solid wastes, and debris after construction works are complete, and restoration to original condition where applicable.
- (ix) Land/property and crops
 - Notification to people about non – compensation for annual crops within road reserve
 - Evaluate land/property loss due to deviations, materials sites and Contractor's camp
 - Compensation to be paid for land, crops and all property on land temporarily acquired for road construction works (camps and deviations) and for all crops outside road reserve that are removed/destroyed for clearing of carriageway, gravel pits and deviations
- (x) Public Health and Occupational Safety
 - Provision of water supply for the workforce, and proper facilities for the disposal of solid and sanitary waste
 - Provision of protective gear to workforce
 - Provision of a first aid kit on site
- (xi) Road Safety
 - Supervision of construction traffic and management of construction activities
 - Provision of safe access/egress to work sites
 - Warning signs are erected.
- (xii) Site of cultural, historical and traditional value
 - All findings to be reported to the Resident Engineer, RA Ministry responsible for antiquities and Department of Environmental Affairs.
 - All graves are avoided.
- (b) Planning and prevention**
 - (i) Frequency of Environmental site meetings to be chaired by the Environmental Control Officer and attended by relevant parties.
 - (ii) Adoption of time scale and planning for all relevant measures
 - (iii) Procedure for correction of bad practice
 - (iv) Reinstatement of borrow pits

(c) Borrow areas

Borrow areas shall be reinstated in compliance with the following minimum specifications in the table below:

PIT AND QUARRY REINSTATEMENT SPECIFICATION	
1.	At the completion of operations, the Contractor shall rehabilitate used, exhausted and obsolete pits and quarries.
2.	The sides and floors of pits shall be formed to a flowing finish with side slopes not steeper than 1 vertical to 6 horizontals.
3.	During pit reshaping any material carried to the pit shall be spread uniformly over the entire shaped surface. The Contractor shall ensure that non – biodegradable and inert waste is removed and disposed of in licenced sites. The same will apply to toxic waste.
4.	Topsoil shall be spread over the shaped batters, filled areas and bare areas of the pits to a reasonable depth.
5.	Following the spreading of topsoil, the entire pit shall be ripped along the contours to a depth of 500mm and at not more than 500mm spacing.

REVEGETATION SPECIFICATION	
1.	Planting and direct seeding shall be carried out after the topsoil has been placed, shaped and prepared for planting and seeding operations
2.	The Contractor shall prepare a plant and seed species list that is representative of the native vegetation (trees, and understorey species) in adjacent areas and the list is to be included in the Environmental Management Plan.
3.	The plant and seed list shall describe the plant size and spacing of all plants, the quantities by seed species in a seed mix and the seeding rate (kg per hectare) to be used in any revegetation of the area to be rehabilitated.

REVEGETATION SPECIFICATION	
4.	The Contractor shall supply and hand-plant tube stock in good condition using the species and spacing chosen in the plant list.
5.	The Contractor shall supply and direct seed the areas to be seeded using the seed species mix and seeding rate (kg per hectare) as described in the plant list.
6.	All planting, seeding and or weed control operations shall be undertaken in accordance with basic principles of REVEGETATION AND LANDSCAPING.
7.	The completion criteria for revegetation shall be in accordance with the Environmental Management Plan.

4.0 ENVIRONMENTAL TRAINING

The ECO will be responsible for organising the environmental training of all the Engineer's and Contractor's staff. It is suggested that this training is coupled with the safety training that the Contractor should include in his own site management plan. The Contractor shall ensure that the Resident Engineer is informed of all staff that will work on the site and their general responsibilities and shall make sure that they are available to attend suitable briefing sessions arranged by the ECO on the environmental mitigation measures that are to be in place on the site.

The Contractor shall provide the ECO with a suitable room for the briefing and such administrative support and facilities as shall be ordered by the ECO.

5.0 MEDICAL AND HIV/AIDS PREVENTION PROGRAMMES

To assist in the general health and well-being of both all the site staff and the residents in the community local to the works, the Roads Authority will organize and coordinate appropriate awareness training as well as health screening (other than accident prevention and medical aid facilities provided by the Contractor).

The Contractor shall ensure that the Resident Engineer is informed when any new staff commence work on the site such that health and HIV awareness and counselling can be provided either in group sessions or on an individual basis. The Contractor shall ensure that staff are available for briefing by the RA's staff and shall make available suitable rooms, administrative support and provide any facilities or supplies against an order from the RA. The Contractor shall ensure that condoms provided as part of the HIV/STD control programme are readily available to all staff.

The RA will also arrange for the health screening of site workers in local medical facilities and the Contractor shall cooperate fully in these programmes by making staff available. The Contractor shall ensure that the Resident Engineer and local medical officials are informed promptly of any workers suffering from the symptoms of infectious disease so appropriate help and treatment can be arranged promptly.

6.0 ROAD SAFETY TRAINING

The RA will be arranging road safety training and awareness sessions in local schools and community centres. The Contractor will assist the RA when requested with administrative support and where ordered the provision of supplies for these courses and programmes.

7.0 RESPONSIBLE AUTHORITIES

The Contractor is advised that the following authorities have an interest in the environmental and social protective measures associated with this road construction project.

- Environmental Affairs Department Public Health Department
- Health and Safety Office
- Each District Assembly of Districts through which the road traverses.

8.0 SITE CLEARANCE

No trees are to be cut or removed unless required to be cleared or removed for construction works. Where there are branches overhanging roads or traffic diversion routes the Contractor shall agree with the SR the cutting back necessary to provide for clear vehicle access. The Branch cutting shall then be carried carefully using saws to leave a clean-cut face with no damages or snags.

9.1.9 FINISHING OF VERGES AND OTHER WORKS AREA

Verges, routes of diversion roads, site camps and all other areas where the Contractor's work has heavily compacted the soil shall be loosened, spread with a thin layer of grass plant rich soil and firmed by foot or a light roller so as to encourage the re-growth of natural vegetation.

9.1.10 WATER POLLUTION

The Contractor shall observe the requirements to avoid the pollution of watercourses and ground water. Sanitary facilities for all site workers convenient to the working sites shall be provided to enable environmentally sensitive disposal of the waste. The storage of bitumen fuel and oil for the works operations shall be arranged in working sites, refuelling of all plant and equipment and servicing practices shall be arranged to prevent the uncontrolled spilling of any oil-based products.

Mitigation measures shall include drip trays, working on paved surfaces with waste collection arrangements and the provision of oil absorbing material for spills that can be subsequently disposed safely by burning.

Environmental and Social Management Plan Table

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
ENVIRONMENTAL MANAGEMENT					
Changes in hydrology impeded drainage	<ul style="list-style-type: none"> • Install drainage structure properly • Efficiency of drainage structures 	Design consultant Supervising Engineer Supervising Engineer	Contractor District Works Offices	Inspection (o) routine maintenance and road condition survey	(c) during construction and on completion of each structure
Soil erosion	<ul style="list-style-type: none"> • Control earthworks • Install drainage structures properly • Install erosion control measures • Landscape and re-vegetate gravel sites • Management of excavation activities • Impact on erosion (on road, off road, embankments, riverbanks, etc) • Efficiency of erosion control measures • Landscape and grass road embankment 	Supervising Engineer and Contractor Designer /RA District Works Offices RA	Supervising Engineer and Contractor	(c) inspection (o) routine maintenance and road condition survey (c) inspection (o) routine maintenance and road condition survey	(c) daily erosion control measures during construction and on completion of measures (o) once in 6 months (c) once a month
Air pollution	<ul style="list-style-type: none"> • Control speed of construction vehicles • Prohibit idling of vehicles • Sensitive workforce • Maintenance of plant and equipment • Plant trees in towns as pollution screens • Impose speed limits for all vehicles, especially at towns and villages • sensitize motorists/road users 	Supervising Engineer and Contractor Designer/ RA	 TA Health and Environment committees Traffic police	(c) inspection/ observation (o) observation	(c) Daily /random (o) random
Noise pollution	<ul style="list-style-type: none"> • Sensitize workforce • Supervise construction traffic • Sensitise drivers of construction vehicles • Maintain plant and equipment 	Supervising Engineer and Contractor	TA Health and environment Committees Traffic police	(c) inspection/ observation (o) observation	(a) Daily /random (o) random

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	<ul style="list-style-type: none"> Impose speed limits for all vehicles, especially at towns and villages Sensitize motorists /road users 				
Water pollution	<ul style="list-style-type: none"> Incorporate erosion control measures Works on culverts to be done in the dry season Proper disposal of construction debris Proper handling, storage and disposal of oil and oil wastes Proper disposal of wastewater /sewerage at Contractor's workmen's camps 	Designer/ RA Supervising Engineer and Constructor	Contractor	(c) inspection	(c) daily
Oil pollution	<ul style="list-style-type: none"> Construct parking bays at larger trading centres for heavy vehicles. Proper storage, handling and disposal of oil and oil wastes Maintain plant and equipment Maintenance of construction vehicles should be carried out in the Contractor's camp 	Design Consultant Supervising Engineer and Contractor Supervising Engineer and Contractor	Contractor	(c) Inspection (o) routine maintenance	(c) during construction and on completion (o) once in 6 months (c) daily
Gravel sites	<ul style="list-style-type: none"> Inform people living at/near the sites that the pits have been selected for exploitation. Plan access to gravel sites Control and restrict access to gravel sites (e.g. by fencing) Control earthworks Proper management of excavation activities Landscape terrace if necessary, and grass site s. Replace trees that were removed during excavation Discourage pits being made into water 	Supervising engineer and Contractor Supervising Engineer and Contractor		(c) meeting (c) Inspection (c) Payment records (o) Inspection	(c) Once immediately after selection of sites (c) daily (o) once before excavation begins and at specified periods as agreed thereafter (c) once in 2 months (o) once in 6

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	pans after construction	Contractor Supervising Engineer	District Works offices RA		months
	Rehabilitate old unused gravel pits <ul style="list-style-type: none"> • Compensate individuals/ communities as required for use of material • Progress of rehabilitated gravel sites (use of site, established vegetation) 				
Hard stone sources	<ul style="list-style-type: none"> • Inform communities living at/near the sites that the sites have been selected for exploitation. • Plan access to hard stone sites • Control and restrict access to hard stone sites (e.g. by fencing) • Control blasting • Proper management of exploitation activities • Landscape site after exploitation and grass sites. Replace trees or vegetation that were removed during excavation • Compensate individuals / communities as required for use of material 	Supervising Engineer and Contractor Supervising Engineer and Contractor Contractor		(c) meeting (c) inspection (c) payments records	(c) Once immediately after selection of sites (c) daily (o) once before excavation begins and at specified periods as agreed thereafter
Sand sources	<ul style="list-style-type: none"> • Take sand from beds of large rivers only • Extraction to be done during low flow 	Supervising Engineer and Contractor	n/a	(c) inspection	(c) during mining
Water sources	<ul style="list-style-type: none"> • Consult with communities during identification of sources • Management of water usage 	Designer /RA	n/a	(c) meetings, inspection , check plans and schedule	c) during rains during abstraction at source and at random
Deviations	<ul style="list-style-type: none"> • Plans deviations • Adhere to road reserve if possible • Obtain permission from 	Supervising Engineer and Contractor	Contractor	(c) check plans inspections	(o) daily when deviations are in use
	inhabitant/comm unity if deviation goes beyond road reserve				(c) once before constructing

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	<ul style="list-style-type: none"> Re-instate deviations (and old tracks) to original condition Pay compensation for crops/property removed/destroyed by deviations Monitor rehabilitation of deviations 	Contractor	District Works Offices RA	(o) Payment records	deviations (o) Once in 6 months
Vegetation / flora / forests	<ul style="list-style-type: none"> Control clearing Prohibit clearing using herbicides Replant areas where vegetation is unnecessarily removed Landscaping and planting all disturbed areas (pits, deviations embankments, camp sites) Plant trees at main towns/ trading centres along road 	Supervising Engineer and Contractor TA Health and Environment Committees	Contractor	(c) inspection	(c) daily
	<ul style="list-style-type: none"> Planting and grassing should be done just before the rains Discourage use of firewood/charcoal by providing alternatives Care for tree/plants 		TA Health and Environment Committees	(c) observation (o) observation	(c) weekly (o) Random
Workmansh ip	<ul style="list-style-type: none"> locate camp in terminal town provide water supply provide proper sanitation facilities on site Provide proper solid waste disposal facilities Have central canteen facilities Discourage use of firewood/charcoal by providing alternatives Manage water use in camps 	Supervising Engineer and Contractor	Contractor	(c) inspection	(c) daily
Visual Enlargemen t	<ul style="list-style-type: none"> Landscaping and planting of deviations, gravel sites and camp Plant trees at terminal towns 	Designer /RA TA health and Environment committees	Contractor TA Health and	(c) inspection (c) observation (o) observation	(c) daily / random

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	and trading centres • Care for plants and trees		Environment Committees		(c) Weekly (o) random
Construction waste	• Proper disposal of construction wastes including oil, solid wastes and debris	Supervising Engineer and Contractor	Contractor	(c) inspection	(c) weekly
Demobilisation	• Clean up site • Remove all debris • Remove to original condition	Supervising Engineer and Contractor	Contractor	(c) inspection and certificate of completion	(c) on completion of road construction works
SOCIAL MITIGATION					
Settlement	• Plan for increased population and subsequent expansion of terminal towns and trading centres • Conduct STD/AIDS awareness campaign • Plan for local security	District Physical Planning Department Supervising Engineer TAs	District Physical Planning Department	(c) meetings, Barraza's (o) reports (c) inspection records (c) meetings, deployment of local police	(c) once during construction (o) annually (c) continuous (c) continuous (o) continuous
Loss of Land /property	• Identify project affected people • Notify people about non- compensation for annual crops within road reserve • Evaluate land/property loss due to deviations, materials sites and contractor's camp • Compensation to be paid for land and all property on land to temporally acquired for road construction works	RA Contractor	n/a	(c) inspection (c) notices, meetings (c) inspection (c) payments records	(c) Once before construction commences (c) compensation paid once after assessment of loss before construction
Loss of crops	• Limits clearing of crops as much as possible • Pay compensation for	RA Supervising Engineer and Contractor	Supervising Engineer and Contractor	(c) inspector (c) payment records	(c) Daily (c) Once after assessment of
	all crops outside road reserve that are removed/destroyed for clearing of carriage				loss before construction

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	<ul style="list-style-type: none"> way , gravel pits and deviations • Compensation to be paid for perennial crops within road reserve 	RA			
Employment	Recruit local people, of which at least 25% should be women	Contractor	n/a	(o) certificate of employment	(o) quarterly
Public Health and Occupational safety	<ul style="list-style-type: none"> • Reduce/minimize pollution as above • Provide water supply at camps • Proper disposal of solid and sanitary waste at camps • Design and locate pit latrines prudently • Have communal ablution facilities • Conduct STD/AIDS, awareness campaign and distribute condoms • Provide potable water for workforce • Provision of protective gear to workforce • First Aid Kit on site • Appoint Health Safety and Environment officer on site • Contractor should have workmen's compensation cover • Monitor impact on public health (incidence of malaria, respiratory diseases such as Covid-19, STDs HIV/AIDS) 	Supervising Engineer and Contractor	Contractor	(c) Inspection	(c) daily
	<ul style="list-style-type: none"> • Conduct Covid-19 awareness campaign and provide prevention measures. 	RA/Ministry of health	RA Ministry of Health	(o) Independent study	(o) once in 6 months
Disturbance to public	<ul style="list-style-type: none"> • Conduct Covid-19 awareness campaign and provide prevention measures. • Minimise pollution as above • Erect information and warning signs • Control construction activities 	Supervising Engineer	Contractor District Works Offices	(c) Inspection	(c) daily
		Supervising Engineer		(c) Inspection (c) Inspection	(c) when affected (c)
		Supervising Engineer and		(c) Inspection (o) routines maintenance	daily (c)

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	<ul style="list-style-type: none"> Construct special parking bay at terminal towns for trucks/heavy vehicles 	Contractor Design Consultant			during construction and on completion (o) once in 6 months
Road Safety	<ul style="list-style-type: none"> Install speed bumps near school and trading centres Supervise construction traffic Ensure safe access/egress to work sites Erect warning signs Construct shoulders which can be used by pedestrians and non motorized traffic Construct special parking bay at large trading centres for trucks/heavy vehicles Impact on road safety (number of accidents) 	Design Engineer Supervising Engineer and Contractor Design Consultant	Supervising Engineer and Contractor District Works Offices District Works offices RA	(o) (c) Inspection (c) Inspection (o) routine maintenance (c) Inspection (o) routine maintenance (o) Police report	(c) daily (c) when designed (o) once in 6 months
Socio-economic status	<ul style="list-style-type: none"> Changes in income level Change in health status 	n/a	RA	(o) Independent Study	(o) once in 5 years
	<ul style="list-style-type: none"> Changes in education levels. Changes in gender equality 				
Economic activity in project area	<ul style="list-style-type: none"> Changes in agricultural production and marketing Changes in livestock production and marketing 	n/a	District Agricultural Officers/RA	(o) Independent study	(o) once in 5 years

F. Environmental, Social, Health and Safety Requirements

[The Procuring and Disposing Entity shall use the services of suitably qualified environmental, social, health and safety specialists to prepare the specifications for ESHS. The Procuring and Disposing Entity shall attach or refer to its environmental, social, health and safety policies that will apply to the project.

If these are not available, it shall use the guidance in the User Guide in drafting an appropriate policy for the works]

ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY DECLARATION

We, _____ (Name of Bidder) bearing the company registration number _____, hereby:

1. PLEDGE THAT:

(a) We have read, understood, and will comply with:

- (i) the Environment Management legal framework or policies in conservation and management of the environment.
- (ii) all necessary and appropriate measures to protect and manage the environment
 - (i) all necessary and appropriate measures to conserve natural resources and to promote sustainable utilization of natural resources
 - (ii) all steps and measures necessary for ensuring that social safeguard issues including but not limited to gender, human rights, disability, Child Protection, HIV and AIDS are mainstreamed throughout all construction stages to minimize the negative impacts on the environment, social, health and safety matters

2. AGREE THAT:

- (a) In the event that our Bid is successful, we shall, within 15 days from the receipt of the Acceptance Letter comply with the requirements to produce the following environmental, social, health and safety plans as provided in Section 10:- Site Organisation Plan, Mobilisation and Construction Schedule Plan, Code of Conduct for Contractors Personnel Plan, ESHS Management Strategies and Implementation Plan.
- (b) Contract negotiations shall only commence if our plans comply with the Malawi standards on the protection and management of the environmental, social, health and safety matters.

Signed: **[insert signature of person whose name and capacity are shown]** In the capacity of **[insert legal capacity of person signing the Bid]**

Name: **[insert complete name of person signing the Bid]**

Duly authorised to sign the Bid for and on behalf of: **[insert complete name of Bidder]**

Dated on _____ day of _____, _____ **[insert date of signing]**

G. Completion Schedule

H. Supplementary Information

Section 8. General Conditions of Contract

SECTION 7: GENERAL CONDITIONS OF CONTRACT

- The applicable conditions of contract shall be the “Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer, Second Edition, 2017” published by the International Federation of Consulting Engineers (FIDIC). The address and contact details of the Federation is as follows:

- - International Federation of Consulting Engineers
(FIDIC) World Trade Centre
 - P.O. Box
311 1215
Geneva 15
SWITZERLAND
 - Telephone: +41227994905
 - Facsimile:
+41227994901
 - Email: fidic.pub@fidic.org
 - Website: <http://www.fidic.org>

Section VIII. Particular Conditions of Contract

Section 8: Particular Condition (PC) The following Particular Conditions shall supplement the GC. Whenever there is a conflict, the provisions herein shall prevail over those in the GC.

NOTE: The Clauses of the Particular Conditions of Contract are numbered “PCC” followed in each case by the number of the relevant Clause or Sub-clause in the General Conditions of Contract and its relevant heading, or where new and unrelated Conditions of Contract are introduced by numbers following the last Clause number in the General Conditions of Contract and appropriate headings.

Part A - Contract Data

Conditions	Sub-Clause	Data
Employer's name	1. 1.1.31	The Government of Malawi represented by Roads Authority
Engineer's name	1.1.35	TBA
Section	1.1.73	N/A
Time for Completion	1.1.84	730 days
Notices and other Communications	1.3 (a) (ii)	Electronic transmission systems include email and file sharing web sites. Electronic transmission of documents shall be followed by a hard copy
Notices and other Communications	1.3 (d)	The address for the Employer is: Chief Executive Officer Roads Authority of Malawi Private Bag B346 Lilongwe MALAWI Email: ra@ra.org.mw
Notices and other Communications	1.3 (d)	The address for the Contractor is:
Law and Language	1.4	The Contract shall be governed by the Laws of Republic of Malawi. The ruling language of the contract shall be English. The Language for communication shall be English
Care and supply of documents	1.8	The additional paper copies shall be One (1) .
Right of access to the Site	2.1	No later than the Commencement Date
Engineer's Duties and Authority	3.2	The Engineer shall obtain the specific approval of the Employer before taking action under the following Clauses: a) Clause 5.1 Subcontractors b) Clause 8.5 Extension of Time for Completion

Conditions	Sub-Clause	Data
		c) Clause 8.9 Employer's Suspension d) Clause 10.2: Taking Over Parts e) Clause 13.3: Variation Procedure f) Clause 20.1: Claims and Clause 20.2 Claims for Payment and/or EOT
Performance Security	4.2	The performance security will be in the form of a Bank Guarantee in the amount(s) of Ten (10) percent of the Accepted Contract Amount and in the same currency (ies) of the Accepted Contract Amount.
Sub-Contractors	5.1 (a)	50 percent
Normal working hours	6.5	Monday to Saturday 7:30am – 17:00 hours with exception of Gazetted Public Holidays at a maximum of 45 hours in a week.
Staff Removal	6.9	Insert after 6.9(f); (g) acts in a manner that breaches the Code of Conduct (ES) (e.g. sexual harassment, gender-based violence, illicit activity or crime).”
Commencement	8.1	ES Management Strategies and Implementation Plans The following is inserted at the end of 8.1: “Notwithstanding the Commencement Date as specified in this Sub-Clause, the Contractor shall not proceed implementing the works 28 days after the commencement date unless the Engineer is satisfied that appropriate measures are in place to address environmental and social risks and impacts. At a minimum, the Contractor shall apply the Management Strategies and Implementation Plans and Code of Conduct, submitted as part of the Bid and agreed as part of the Contract. The Contractor shall submit, on a continuing basis, for the Engineer's prior approval, such supplementary Management Strategies and Implementation Plans as are necessary to manage the ES risks and impacts of ongoing works. These Management Strategies and Implementation Plans collectively comprise the Contractor's Environmental and Social Management Plan (C-ESMP). The C-ESMP shall be approved prior to the commencement of construction activities (e.g. excavation, earth works, bridge and structure works, stream and road diversions, quarrying or extraction of materials, concrete batching and asphalt manufacture). The approved C-ESMP shall be reviewed, periodically (but not less than every six (6) months), and updated in a timely manner, as required, by the Contractor to ensure that it contains measures appropriate to the Works activities to be undertaken. The updated C-ESMP shall be subject to prior approval by the Engineer.”
Programme	8.3(d) (iv)	Insert at end of GC 8.3(d)(iii): (iv) “In addition to the progress report, the Contractor shall also provide a report on the Environmental and Social (ES) metrics set out in

Conditions	Sub-Clause	Data
		<p>Part C and D. In addition to Part C and D reports, the Contractor shall also provide immediate notification to the Engineer of incidents in the following categories. Full details of such incidents shall be provided to the Engineer within the timeframe agreed with the Project Manager.</p> <p>(a) confirmed or likely violation of any law or international agreement;</p> <p>(b) any fatality or serious (lost time) injury;</p> <p>(c) significant adverse effects or damage to private property (e.g. vehicle accident, damage from fly rock, working beyond the boundary)</p> <p>(d) major pollution of drinking water aquifer or damage or destruction of rare or endangered habitat (including protected areas) or species; or</p> <p>(e) any allegation of sexual harassment or sexual misbehavior, child abuse, defilement, or other violations involving children.</p>
Delay damages for the Works	8.8 & 14.15(c)	0.05% of the Contract Price per day.
Maximum amount of delay damages	8.8	5% of the final Contract Price.
Defects Notification Period	11.3	365 days.
Provisional Sums	13.4.(b)(ii)	A percentage for adjustment of Provisional Sums is 7.5 %
Adjustments for Changes in Cost	13.7	Not applicable.
Advance Payment	14.2	The total advance payment shall be 20% Percentage of the Accepted Contract Amount payable in the currencies and proportions in which the Accepted Contract Amount is payable, subject to acceptance of an Advance Payment Guarantee.
Percentage of Retention	14.3	5%
Limit of Retention Money	14.3	2.5% of the Accepted Contract Amount
Plant and Materials intended for the works	14.5(b)(i)	If Sub-Clause 14.5 applies: Plant and Materials for payment when shipped. N/A.
	14.5(c)(i)	Plant and Materials for payment when delivered to the Site. <ol style="list-style-type: none"> 1. Bitumen 2. Steel

Conditions	Sub-Clause	Data
Minimum Amount of Interim Payment Certificates	14.6.2	7 % of the Accepted Contract Amount (This requirement will be waived for the first 4 months from commencement of the contract).
Payment	14.7 (a)	42 days
Payment	14.7 (b) (ii)	42 days
Publishing source of commercial interest rates for financial charges in case of delayed payment	14.8	Prime Lending Rate of the Commercial Bank of Malawi + 1% or if not available the Inter Bank offered rate and shall be calculated at simple interest
Currencies of payment	14.15	The Contract Price shall be paid in Malawi Kwacha
Insurance to be provided by the Contractor	19.2	The permitted deductible limits shall be: (a) The minimum cover for insurance of equipment is MK450 million
Insurance to be provided by the Contractor	19.2.3 (a)	1.2 times the value of the Works
Insurance to be provided by the Contractor	19.2.4	(a) The minimum cover for insurance of property is: MK450 million (b) The minimum cover for personal injury or death insurance is MK300 million
Constitution of the DAAB	21.1	The DAAB shall comprise of one suitably qualified person. The sole member shall be selected from a list of qualified arbitrators from the Malawi Engineering Institution
Failure to appoint DAAB member(s)	21.2	The president of the Malawi Engineering Institution

Section 9. Special Conditions of Contract

Section 9. Special Conditions of Contract

GCC Clause Reference or new SCC Clause No	Special Conditions
GCC 1.4	<p>Law and Language</p> <p>Add the following new sub-paragraph:</p> <p>The Contractor shall keep himself informed of all the latest laws of Malawi, regulations and bylaws promulgated by the government or any other statutory authority, which may have relevance to the execution of the Contract.</p>
GCC 1.5	<p>Delete the sequence of the documents presented in Clause GCC 1.5 in its entirety and replace with the following sequence:</p> <ul style="list-style-type: none"> (a) the Agreement (if completed) (b) Minutes of Contract Negotiations (if any) (c) the Notice of Acceptance (d) the Letter of Tender (e) the Particular Conditions part A- Contract Data (f) the Particular Conditions part B- Special Provisions (g) these General Conditions (h) the Particular Specifications (i) the Standard Specifications (SATCC 1998, reprinted 2001) (j) the Drawings and (k) the priced Bill of Quantities (l) the completed Qualification Information Forms and any other documents forming part of the Contract.
GCC 2.1	<p>Right of Access to the Site</p> <p>Add the following after the first paragraph:</p> <p>For this Contract, the Employer shall, on the Commencement Date, give the Contractor right of access to the Site and possession of so much of the Site as may be required to enable the Contractor to commence and proceed with the construction of the Works.</p>
GCC3.2	<p>Add the following to this Clause:</p> <p>The Engineer shall obtain the specific approval of the Employer before taking action under the following clauses</p> <ul style="list-style-type: none"> (i) Clause GCC 5: Subcontracting (ii) Clause GCC 8.5: Extension of time for Completion (iii) Clause GCC 10: Employer's Taking Over (iv) Clauses GCC 13: Variations and adjustments (v) Clause GCC 20: Employer's and Contractor's Claims <p>Notwithstanding the obligation as set out above to obtain approval, if in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the works or of adjoining property, the Engineer may without relieving the Contractor of any of his duties and responsibilities under the Contract instruct the Contractor to execute all work or to do all things as may, in the opinion of the Engineer be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of the approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the contract price in respect of such instruction if and as may be relevant and shall notify the Contractor accordingly, with</p>

	a copy to the Employer.
GCC 4.1	<p>The following is inserted after the paragraph “The Contractor shall, whenever required by the Engineer...”:</p> <p>“The Contractor shall not proceed with implementation of works 28 days after commencement unless the Engineer gives a Notice of No-objection to the Contractor, a Notice that shall not be unreasonably delayed, to the measures the Contractor proposes to manage the environmental and social risks and impacts, which at a minimum shall include applying the Management Strategies and Implementation Plans (MSIPs) and Code of Conduct for Contractor’s Personnel submitted as part of the Bid and agreed as part of the Contract.</p> <p>The Contractor shall submit, to the Engineer for Review and approval, any additional MSIPs as are necessary to manage the ES risks and impacts of ongoing Works (e.g. excavation, earth works, bridge and structure works, stream and road diversions, quarrying or extraction of materials, concrete batching and asphalt manufacture). These MSIPs collectively comprise the Contractor’s Environmental and Social Management Plan (C-ESMP). The Contractor shall review the C-ES, periodically (but not less than every six (6) months), and update it as required to ensure that it contains measures appropriate to the Works. The updated C-ESMP shall be submitted to the Engineer for Review</p> <p>The C-ESMP and the Contractor’s Code of Conduct shall be included as Contractor’s Documents. The procedures for Review of the C-ESMP and its updates shall be as described in Sub-Clause 4.4.1 <i>[Preparation and Review]</i>.”</p>
GCC 4.2.1	<p>Performance Security</p> <p>Delete wording of the first Paragraph and replace with the following:</p> <p>The Contractor shall deliver the Performance Security to the Employer within 28 days after receiving the Letter of Acceptance, and shall send a copy to the Engineer. The Performance Security shall be issued by a bank registered in the Republic of Malawi or licensed to do business in that country.</p> <p>The Performance Security shall be presented in accordance with the Form of Performance Security included in these Tender Documents.</p> <p>The Performance Security shall be in the form of a Bank Guarantee issued by:</p> <ul style="list-style-type: none"> (a) A bank located in Malawi or (b) A foreign bank through a correspondent bank located in Malawi. <p>The Performance Security for this Contract shall be ten percent (10%) of the accepted contract amount.</p>
GCC 4.8	<p>Safety Procedures</p> <p>Add the following item:</p> <p>36. Provide, install and maintain adequate personnel and measures to ensure the safety of road users during construction of the works. In particular, the site must be left in a safe, trafficable condition with adequate traffic control measures outside normal working hours.</p>
GCC 4.10	<p>Use of Site Data</p> <p>Add the following at the end of the first Paragraph:</p>

	<p>The information issued by the Employer is for information only and shall neither form part of the Contract nor relieve the Contractor of his obligations under the Contract.</p>
GCC 4.17	<p>Contractor's Equipment</p> <p>Add the following at the end of the Paragraph:</p> <p>The Employer is not liable for compensation in regards to any construction equipment or material brought on the site which was not fully used during the construction and maintenance of the works, and the Employer cannot be held liable for the loss or damage of any of the said equipment or material brought on the site by the Contractor or which was used during the execution of this Contract.</p>
GCC 4.18	<p>Protection of the Environment</p> <p>Add the following Paragraph at the end:</p> <p>The Contractor shall adhere at all times to the Environmental and Social Management Plan contained in the Particular Specifications. The Contractor will be held accountable for any costs arising from his negligence with regard to the environment. The Employer reserves the right to recover any such costs by deducting the relevant amount from interim payment certificates.</p>
GCC 4.21	<p>Security of the Site</p> <p>Add to Clause 4.21 the following item:</p> <p>(c) The Contractor shall note that the site is a public road and therefore the public is entitled to the continued use of the road. Notwithstanding, the Contractor is still responsible for ensuring the safe passage of the public through the site and for preventing unauthorised entry to areas where work is in progress.</p>
GCC 4.22	<p>Contractor's Operations on Site</p> <p>Add the following after the first sentence of the first Paragraph:</p> <p>For the additional land required, the Contractor shall arrange with the owners or tenants the necessary rent and cost in connection therewith. The Contractor shall be responsible for all damage to such land and property and shall indemnify the Employer and hold him harmless in respect of all claims, demand proceedings, damage costs including attorney's and client costs charges and expenses arising in respect thereof. The Contractor shall furnish the Engineer for his approval, copies of letters of consent from owners of additional land acquired.</p>
<p>Sub- Clause 4.24</p> <p>Code of Conduct</p>	<p>Add the following sub-clause</p> <p>The Contractor shall have a Code of Conduct for the Contractor's Personnel.</p> <p>The Contractor shall take all necessary measures to ensure that each Contractor's Personnel is made aware of the Code of Conduct including specific behaviors that are prohibited, and understands the consequences of engaging in such prohibited behaviors.</p> <p>These measures include providing instructions and documentation that can be understood by the Contractor's Personnel and seeking to obtain that person's signature acknowledging receipt of such instructions and/or documentation, as appropriate.</p>

	<p>The Contractor shall also ensure that the Code of Conduct is visibly displayed in multiple locations on the Site and any other place where the Works will be carried out, as well as in areas outside the Site accessible to the local community and project affected people. The posted Code of Conduct shall be provided in languages comprehensible to Contractor's Personnel, Employer's Personnel and the local community.</p> <p>The Contractor's Management Strategy and Implementation Plans shall include appropriate processes for the Contractor to verify compliance with these obligations.</p>
GCC 5.1	<p>Subcontracting</p> <p>Add the following to Clause GCC 5.1:</p> <p>It is an explicit requirement of the Contract that thirty percent (30%) of the total value of the works, excluding escalation, contingencies, provisional sums and VAT, be subcontracted to Malawian Local Contractors. These Small to medium Size Malawian Business Enterprises are solely and wholly owned by one or more Malawians Persons and whose management and daily business operations are under the control of, and performed by one or more Malawian persons who effectively own and control it. They shall be functioning as the subcontractor to the main Contractor, which assigns Commercially Useful Work Item to be executed under a subcontract agreement to them.</p> <p>Commercially Useful Work is the performance of real and actual work or provision of the services, in the discharge of any contractual obligation which shall include but not be limited to the performance of a distinct element of the work, which the business has the skills and expertise to undertake, as well as the responsibility for managing and supervising that function.</p> <p>The Contractor shall prepare and attach to his payment certificates in a form provided by the Employer:</p> <ul style="list-style-type: none"> (a) A brief report which describes the Commercially Useful Work Items performed by the Malawian Local Contractors in the execution of the Contract, both over the interim period and on cumulative basis; (b) A schedule reflecting the estimated total value of goods to be supplied and work and services to be performed, the cumulative value of goods supplied and/or performed, over the period for which the payment is claimed in respect of each and every Malawian Local Contractor. <p>The acceptance of the Main Contractor bid shall not be construed as approval of all or any of the listed Malawian Local Contractors in Form 4.6 of the Bidding Forms (Section 4) Should any or all the Malawian Local Contractors not be approved as a Sub contractor subsequent to the acceptance of the Tender, this shall in no way invalidate this tender and tendered units rates for various items of works which shall remain final and binding even in the event of Malawian Local Contractor not approved by the Engineer.</p> <p>Should random inspection conducted by the Project Manager on the Main Contractor's activities indicate that Main Contractor is not adhering to the requirements of this Specification; this may constitute sufficient grounds for cancellation of the contract depending on the seriousness of such non-conformance.</p> <p>The Contractor shall enter into a written Sub contract with each Specialist and Malawian Local Contractor and submit to the Project Manager and Employer details of all such Sub-Contract agreements which shall comply with all terms and conditions of this contract.</p>

GCC 5.2	<p>Nominated Subcontractors</p> <p>Add the following new Sub-Clause:</p> <p>PCC 5.2.5 Employer's assumption of subcontract</p> <p>If the Contract shall have been terminated in terms of Clause 15, the Employer shall have the right, by written notice given to any Nominated Subcontractor no later than 28 days after the said cancellation, to convert the subcontract concerned to a direct contract between the Employer and the Subcontractor provided that:</p> <p>(a) the terms of the said direct contract shall mutatis mutandis be those of the subcontract concerned and</p> <p>(b) The Employer shall have the right notwithstanding any breach of the subcontract by the Contractor subject to his forthwith paying to the Subcontractor all amounts then owing to the Subcontractor by the Contractor and perform any obligation, which the Contractor has failed to perform.</p>
GCC 6.1	<p>Engagement of staff and Labour</p> <p>Add the following at the end of the paragraph:</p> <p>The Contractor shall enter into written contract with all his personnel detailing their engagement terms and conditions.</p>
GCC 6.6	<p>Facilities for Staff and Labour</p> <p>Add the following sentence at the end of the first Paragraph:</p> <p>The facilities in particular for housing and ablutions shall be decent with lockable doors and cubicles and shall have privacy and be acceptable to the Engineer.</p>
<p>Sub- Clause 6.9</p> <p>Contractor's Personnel</p>	<p>The Sub-Clause is replaced with:</p> <p>"The Contractor's Personnel (including Key Personnel, if any) shall be appropriately qualified, skilled, experienced and competent in their respective trades or occupations.</p> <p>The Engineer may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative and Key Personnel (if any), who:</p> <p>(a) persists in any misconduct or lack of care;</p> <p>(b) carries out duties incompetently or negligently;</p> <p>(c) fails to comply with any provision of the Contract;</p> <p>(d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment;</p> <p>(e) based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution of the Works;</p> <p>(f) has been recruited from the Employer's Personnel in breach of Sub-Clause 6.3 [Recruitment of Persons];</p>

	<p>(g) undertakes behaviour which breaches the Code of Conduct for Contractor's Personnel (ES).</p> <p>If appropriate, the Contractor shall then promptly appoint (or cause to be appointed) a suitable replacement with equivalent skills and experience. In the case of replacement of the Contractor's Representative, Sub-Clause 4.3 [<i>Contractor's Representative</i>] shall apply. In the case of replacement of Key Personnel (if any), Sub-Clause 6.12 [<i>Key Personnel</i>] shall apply.</p> <p>Subject to the requirements in Sub-Clause 4.3 [<i>Contractor's Representative</i>] and 6.12 [<i>Key Personnel</i>], and notwithstanding any requirement from the Engineer to remove or cause to remove any person, the Contractor shall take immediate action as appropriate in response to any violation of (a) through (g) above. Such immediate action shall include removing (or causing to be removed) from the Site or other places where the Works are being carried out, any Contractor's Personnel who engages in (a), (b), (c), (d), (e) or (g) above or has been recruited as stated in (f) above."</p>
GCC 6.10	<p>Contractors Records</p> <p>Add the following to Sub-Clause 6.10:</p> <p>The information required by the Engineer in respect of the Contractor's Personnel shall be submitted three working days before each monthly site meeting.</p> <p>The information required by the Engineer in respect of the Contractor's Equipment shall also be presented three working days before each monthly site meeting, and shall include details of plant availability, reasons for downtime, source of plant whether hired or owned, and manufacturer's ratings.</p>
GCC 6.12	<p>Add the following to Sub-Clause 6.12</p> <p>Foreign Personnel</p> <p>The Contractor may import any personnel who are necessary for the execution of the Works, provided that these personnel are in possession of the required residence visas and work permits. The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of imported Contractor's Personnel. In the event of the death in Malawi of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.</p> <p>No employee of the Contractor originating from any other country shall enter Malawian territory without a work and residence permit, which is obtainable from the Ministry of Home Affairs.</p> <p>The Contractor shall note that he is responsible for the procurement of work and residence permits for his staff. Ample time shall be allowed for the processing of the applications by the Ministry of Home Affairs. The Employer will not honour any claim resulting from the late issuance of work and residence permits. The legal spouse and children of the Contractor's personnel shall not be entitled to employment themselves, unless the necessary work permits have been obtained from the relevant authorities</p>
	Add the Following New sub clauses:
GCC 6.13	Employment of Local Personnel

	<p>It is an explicit Particular Condition of this contract that no unskilled labour may be employed on the works unless he or she is a Malawian citizen. It is a further condition that no skilled or semi-skilled non-Malawian person may be employed on the works unless the Contractor can prove that there is no suitable trained Malawian citizen available.</p> <p>Tenderers are required to specify the non-Malawian personnel they intend bringing to Malawi for the sole purpose of executing the works. This listing does not absolve the Contractor from compliance with Clause 6.12.</p> <p>Contractors shall further note that they must reinvestigate the availability of Malawian persons every six months, and if a suitable person is then available, he shall be employed in the place of the Non-Malawian person, who shall then leave the country.</p> <p>The Contractor is also required to employ at least 10% of his labour force from the female gender.</p> <p>Failure to comply with this clause may result in the contract being stopped until the contractor has fulfilled this requirement. The Employer will not honour claims resulting from the stoppage of the contract due to the contractor's failure to comply with this clause.</p>
GCC 6.14	<p>Funeral Arrangements</p> <p>The contractor shall make all necessary arrangements for the transport, to any place as required for burial, of any of his expatriate employees or members of families who may die in Malawi. The contractor shall also be responsible, to the extent required by the local regulations, for making any arrangements with regard to burial of any of his local employees who may die while engaged upon the works.</p>
GCC 6.15	<p>Alcoholic Liquor and Drugs</p> <p>The Contractor shall not, otherwise than in accordance with the statuses, Ordinances and Government Regulations or Orders for the time being in force, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or suffer any such importation, gift, barter or disposal by his Sub-contractors, agents, staff and labour.</p>
GCC 6.16	<p>Arms and Ammunition</p> <p>The Contractor shall not give, barter, or otherwise dispose of to any person or persons any arms or ammunition of any kind or permit or suffer the same as aforesaid.</p>
GCC 6.17	<p>Festival and Religious Customs</p> <p>The Contractor shall, in all dealings with his staff and labour, have due regard to all recognized festivals, days of the rest and religious or other customs prevalent in the country of the Employer prior to submission of Tender. The Contractor is required to satisfy himself with the respective said holidays, customs and festivals.</p> <p>If unscheduled official events take place on designated project working days (e.g., special election days) for which the Contractor could not have known during Tender Stage, the Contractor is required to submit to the Employer for his approval ahead of the event taking place, with a copy to the Engineer, the official notifications, any proposed action to be undertaken and any resultant time or financial aspects.</p>

GCC 6.18	<p>Epidemics</p> <p>In the event of any outbreak of illness of an epidemic nature, the Contractor, at his own cost, shall comply with and implement such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities, for the purpose of dealing with and overcoming the same.</p>
GCC 6.19	<p>Books and Records</p> <p>The Contractor shall keep proper wages' books and time sheets, showing the wages paid to and time worked by the workmen in and about the execution of the Contract. He shall be bound, whenever required, to furnish such wages books and time sheets for the inspection of the Engineer, the Government Agent, or the Employer.</p>
GCC 6.20	<p>Evidence of Compliance</p> <p>The Contractor shall, from time to time, furnish to the Engineer any detailed information and evidence the Engineer may require in order to satisfy himself that the labour conditions of the contract have been complied with.</p>
GCC 6.21	<p>Breach of Wages</p> <p>Any Contractor or Sub-Contractor who is found to be in breach of the wages enforced pursuant to Clause 6.2 shall cease to be approved as a Contractor or Sub-Contractor for any further public contracts.</p> <p>Should a claim be made to the Employer alleging the Contractor's default in payment of wages of any workmen employed on the Contract and if complaints are brought to the notice of the Engineer and satisfactory proof thereof is furnished to the Engineer, the Engineer may, failing payment by the Contractor, arrange for the payment of such claim out of the monies due to the Contractor under the said Contract.</p>
GCC 6.22	<p>Employment Records of Workers</p> <p>The Contractor shall keep complete and accurate records of the employment of labour at the site. The records shall include the names, ages, genders hours worked and wages paid to all workers. These records shall be summarised on a monthly basis and submitted to the Engineer, and these records shall be available for inspection by Auditors during normal working hours. These records shall be included in the details to be submitted by the Contractor under GC Clause 6.10 [Records of Contractor's Personnel and Equipment].</p>
GCC 6.23	<p>Employment of Local Personnel</p> <p>It is an explicit Particular Condition of this contract that no unskilled labour may be employed on the works unless he or she is a Malawian citizen. It is a further condition that no skilled or semi-skilled non-Malawian person be employed on the works unless the Contractor can prove that there is no suitable trained Malawian citizen available.</p> <p>Tenderers are required to specify the non-Malawian personnel they intend bringing to Malawi for the sole purpose of executing the works. This listing does not absolve the Contractor from the compliance with Clause 6.12.</p> <p>Contractors shall further note that they must reinvestigate the availability of</p>

	<p>Malawian persons every six months, and if a suitable person is then available, he shall be employed in the place of the Non-Malawian person, who shall then leave the country.</p> <p>The contractor is also required to employ at least 10% of his labour force from the female gender.</p> <p>Failure to comply with this clause may result in the contract being stopped until the contractor has fulfilled this requirement. The Employer will not honour claims resulting from the stoppage of the contract due to the Contractor's failure to comply with this clause.</p>
GCC 7.7	<p>Ownership of Plant and Materials</p> <p>Add the following at the end of Clause 7.7:</p> <p>All Plant and Materials owned by the Contractor, or by any company in which the Contractor has a controlling interest, shall, when delivered on the Site for incorporation into the works, be deemed to be the property of the Employer.</p> <p>Provided always that the vesting of such property in the Employer shall not prejudice the right of the Contractor to the sole use of the said Contractor's Plant and Materials for the purpose of the Works nor shall it affect the Contractor's responsibility to operate and maintain the same under the provisions of the Contract.</p>
GCC 7.9	<p>Overloading of Vehicles</p> <p>The Contractor shall implement sufficient measures on site to prevent overloading of construction vehicles. No vehicle on site shall be loaded more than the load for which the vehicles was designed or is licensed to carry, whichever is smaller.</p> <p>The Engineer shall have the right to instruct the Contractor to reduce loads on construction vehicles if in his opinion the vehicles damage any part of the asphalt road network. The Engineer shall also be entitled to check the weight to ensure that no vehicle was overloaded.</p> <p>A penalty in line with applicable penalties for overloading of Ministry of Transport and Public Works will be payable by the Contractor to the Employer for every incident of overloading. Such penalties will be deducted from payments due to the Contractor by the Employer.</p>
GCC 8.2	<p>Time for Completion</p> <p>Add the following sentence at the end:</p> <p>The time for completion of the works stated in PCC Part A (Contract Data) is inclusive of special non-working days and the normal construction industry holidays.</p>
GCC 8.3	<p>Programme</p> <p>Add the following sub-item in item (d):</p> <p>(iii) The critical path and the planned production rates of all activities shall be clearly indicated on the programme, with due allowance being made for non-working periods, and periods where for any reason, for instance weather conditions, when production rates will be reduced.</p>

	<p>Add the following at the end of the clause.</p> <p>The Employer shall withhold 5% of Current Interim Payment Certificate amount for late submission of an updated Programme.</p>
GCC 12.3	<p>Valuation of the works</p> <p>Add the following Paragraph at the end of this Sub-Clause:</p> <p>If, on the issue of the Taking-Over Certificate for the whole of the Works, it is found that as a result of variations issued and all adjustments upon measurement of the estimated quantities set out in the Bill of Quantities, excluding Provisional Sums and price adjustments, there have been additions or deductions from the Accepted Contract Amount which taken together are in excess of fifteen (15) percent of the Accepted Contract Amount less Provisional Sums, Budget Amounts and Contingencies, then and in such event, after due consultation by the Engineer with the Employer and the Contractor, there shall be added to or deducted from the Contract Price ten (10) percent of the total amount of additions or deductions.</p>
GCC 14.3	<p>Application for Interim Payment Certificates</p> <p>Add the following at the end of the Clause:</p> <p>The estimated contract value of the Works executed during the month shall be agreed with the Engineer's Representative on site prior to the preparation of the Statement. The quantities claimed for the various items shall be accurate and not simply guessed or based on a percentage of the scheduled quantity.</p>
GCC 14.8	<p>Delayed Payment</p> <p>Calculation of Financing Charges for delayed payment shall be Prime Lending Rate of the Contractors Commercial Bank + 1% and shall be calculated at simple interest</p>
GCC 18.1	<p>Add the following to the list of exceptional events</p> <p>unforeseeable events not within the control of either party and which by the exercise of due diligence neither party is able to overcome.</p>

Section 10. Contract Forms

Agreement

Procurement Reference No:

THIS AGREEMENT made the ... day of, ,20.., between of (hereinafter called "the Employer"), of the one part, and of (hereinafter called "the Contractor"), of the other part:

WHEREAS the Employer is desirous that the Contractor execute (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein for the sum of (hereinafter called the Contract Price).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
 - (a) the General Conditions of Contract;
 - (b) the Special Conditions of Contract;
 - (c) the Schedule of Requirements;
 - (d) the Bid Submission Form and the priced Activity Schedule or priced Bill of Quantities submitted by the Contractor; and
 - (e) the Employer's Notification to the Contractor of award of contract;
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price 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.
5. The Contract Price or such other sum as may be payable shall be paid in Malawi Kwacha.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed in accordance with the law specified in the Special Conditions of Contract on the day, month and year indicated above.

for the Procuring and Disposing Entity

Namein the capacity of

Signature.....

WitnessSignature.....

For and on behalf of the Contractor

Name in the capacity of

Signature.....

WitnessSignature

Note for Bidders: The Performance 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.

Performance Security

(Bank Guarantee)

Performance Bank Guarantee (Unconditional)

Date: **[insert date]**

Procurement Reference No.: **[insert procurement reference number]**

To: **[name and address of Employer]**

WHEREAS **[name and address of Contractor]** (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. **[number]** dated **[date]** to execute **[name of Contract and brief description of Works]** (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognised bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE WE hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of **[amount of Guarantee] [amount in words]**, such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of **[amount of Guarantee]** as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition, or modification.

This Guarantee shall be valid until a date twenty-eight (28) days from the date of issue of the Certificate of Completion.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

Signature and seal of the Guarantor:

Name of Financial Institution:

Address:

Date:

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

Advance Payment Security

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

Procurement Reference No.: **[insert Procurement Reference number]**

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 Contractor]** (hereinafter called "the Contractor") 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 Contractor, 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 Contractor, 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 Contractor 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.

Name: **[insert complete name of person signing the Security]**

In the capacity of **[insert legal capacity of person signing the Security]**

Signed: **[signature of person whose name and capacity are shown above]**

Duly authorised to sign the Security for and on behalf of: **[insert complete name of the Bank]**

Dated on _____ day of _____, _____ **[insert date of signing]**

Site Organization and Method Plan

The Bidder shall:

- (a) provide a comprehensive Method Statement, with drawings where applicable, showing the methods proposed by the Bidder for carrying out the Works, including:
 - proposed location of main office on the site, workshops, stations (steel/concrete/asphalt structures), warehouses, laboratories, accommodation, etc. (sketches to be attached as required)
 - site organization
 - the method including the number of equipment, labour and materials to be used for carrying out each major category of Works
 - the logical sequence and correlation between the major categories of activities (Works)
 - traffic measures during the Works
- (b) provide details of the temporary and permanent Works to be constructed, taking into account the prevailing climatic conditions and the requirement to obtain various permits and approvals and that the existing system must remain functioning during construction.

As a minimum the Method Statement shall include the following

- 1) Location of Sites (e.g. site offices, stocks, warehouses)
- 2) Project Organisation (e.g. Project Management, Elaboration of Shop Drawings, Material Procurement)
- 3) Method for Removal of existing Surfaces and their Reinstatement
- 4) Method for Earthworks
- 5) Method for pipe installation
- 6) Method for Demolition Works, incl. separation into and handling of hazardous waste, residue and recyclable material
- 7) Method for Concrete Works
- 8) Method for Block Works
- 9) Method for Electrical Works
- 10) Health and Safety Plan
- 11) Environmental and Social Management Plan

Mobilization and Construction Schedule

The Contractor shall not carry out mobilization to Site unless the Engineer gives consent that appropriate measures are in place to address environmental and social risks and impacts, which as a minimum shall include applying the Management Strategies and Implementation Plans (MSIPs) and Code of Conduct for Contractor's Personnel, submitted as part of the Bid and agreed as part of the Contract.

1. **Attach a Graphic Work Schedule (critical milestone bar chart) for mobilisation, preparation of designs and drawings (Shop Drawings), ordering, manufacturing and delivery of equipment and material, construction, detailing the relevant activities, dates, allocation of labour and plant resources, etc. The planned input of the joint venture members and sub-Contractors shall be highlighted as well (in terms of activities undertaken, timing, etc.).**

ESHS Management Strategies and Implementation Plans

- (a) The Bidder shall submit comprehensive and concise Environmental, Social, Health and Safety Management Strategies and Implementation Plans (ESHS-MSIP) as required by ITB 38. These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Contractor, and its subcontractors.
- (b) In developing these strategies and plans, the Bidder shall have regard to the ESHS provisions of the contract including those as may be more fully described in the following:
 - 1. ***[the Works Requirements described in Section 7];***
 - 2. ***[Environmental and Social Management Plan (ESMP)]***

Code of Conduct: Environmental, Social, Health and Safety (ESHS)

1. The Bidder shall submit the signed Code of Conduct that will apply to the Contractor's employees and subcontractors as required by ITB 38 of the Bid Data Sheet. The Code of Conduct shall ensure compliance with the ESHS provisions of the contract, including those as may be more fully described in the following:
 - (a) [the Works Requirements described in Section 7];*
 - (b) [Environmental and Social Management Plan (ESMP)];*
2. In addition, the Bidder shall submit an outline of how this Code of Conduct will be implemented. This will include: how it will be introduced into conditions of employment/engagement, what training will be provided, how it will be monitored and how the Contractor proposes to deal with any breaches.

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

Note to the Bidder: The minimum content of the Code of Conduct form as set out by the Client shall not be substantially modified. However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks. The Bidder shall initial and submit the Code of Conduct form in support of its Bid.

We are the Contractor, [*enter name of Contractor*]. We have signed a contract with [*enter name of Client*] for [*enter description of the Works*]. These Works will be carried out at [*enter the Site and other locations where the Works will be carried out*]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation and assault and gender-based violence.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, labourers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as “**Contractor's Personnel**” and are subject to this Code of Conduct.

This Code of Conduct identifies the behaviour that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behaviour will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Contractor's Personnel shall:

1. carry out his/her duties competently and diligently;
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. maintain a safe working environment including by:
 - a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
 - b. wearing required personal protective equipment;
 - c. using appropriate measures relating to chemical, physical and biological substances and agents; and
 - d. following applicable emergency operating procedures.
4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
6. not engage in any form of sexual harassment including unwelcome sexual advances, requests for sexual favours, and other unwanted verbal or physical conduct of a sexual nature with other Contractor's or Client's Personnel;
7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. In Bank financed projects, sexual exploitation occurs when access to or benefit from Bank financed Goods, Works, Consulting or Non-consulting services is used to extract sexual gain;
8. not engage in Sexual Assault, which means sexual activity with another person who does not consent. It is a violation of bodily integrity and sexual autonomy and is broader than narrower conceptions of "rape", especially because (a) it may be committed by other means than force or violence, and (b) it does not necessarily entail penetration.
9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Assault (SEA);
11. report violations of this Code of Conduct; and
12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the [Project Grievance [Redress] Mechanism].

RAISING CONCERNS

If any person observes behaviour that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the Contractor's Social Expert with relevant experience in handling gender-based violence, or if such person is not required under the Contract, another individual designated by the Contractor to handle these matters*] in writing at this address [] or by telephone at [] or in person at []; or
2. Call [] to reach the Contractor's hotline (*if any*) and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behaviour prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.
FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Contractor's contact person with relevant experience in handling gender-based violence*] requesting an explanation.

Signed: [**insert signature of person whose name and capacity are shown**] In the capacity of [**insert legal capacity of person signing the Bid**]

Name: [**insert complete name of person signing the Bid**]

Duly authorised to sign the Bid for and on behalf of: [**insert complete name of Bidder**]

Dated on _____ day of _____, _____ [**insert date of signing**]

**ATTACHMENT 1 TO THE CODE OF CONDUCT FORM
BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND
BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)**

The following non-exhaustive list is intended to illustrate types of prohibited behaviours:

(1) Examples of sexual exploitation and abuse include to:

- A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
- A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favour.
- A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) Examples of sexual harassment in a work context

- Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
- When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor's Personnel.
- A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.