

**WAJIR COUNTY GOVERNMENT**



**BIDDING DOCUMENT**

**FOR**

**CONSTRUCTION OF A 20,000 M3 WATER PAN AT BIYA ADA CENTRE IN  
ELDAS**

**TENDER REF NO: WCG/T/398/2017-2018**

**Advert Date: 16<sup>th</sup> November, 2017**

**Closing Date: 29<sup>th</sup> November, 2017**

**Time : 10.00 am**

**NOVEMBER, 2017**

**TABLE OF CONTENTS**

TABLE OF CONTENTS.....2  
ABBREVIATIONS AND ACRONYMS .....3  
SECTION 1: INSTRUCTIONS TO BIDDERS .....4  
SECTION 2: TECHNICAL SPECIFICATIONS .....20  
SECTION 3. BILL OF QUANTITIES .....33

## **ABBREVIATIONS AND ACRONYMS**

<b>CDS</b>	Contract Data Sheet
<b>GCC</b>	General Conditions of Contract
<b>IFT</b>	Invitation for Tender
<b>ITT</b>	Instruction to Tenderers
<b>PE</b>	Procuring Entity
<b>PM</b>	Project Manager
<b>PPOA</b>	Public Procurement Oversight Authority
<b>STD</b>	Standard Tender Documents
<b>SOR</b>	Statement of Requirements
<b>SP</b>	Service Provider
<b>TDS</b>	Tender Data Sheet
<b>VAT</b>	Value Added Tax

## **SECTION 1: INSTRUCTIONS TO BIDDERS**

**Note:** The bidder must comply with the following conditions and instructions. Failure to do so will result in rejection of the bid.

### **1. GENERAL**

#### **A. DEFINITIONS**

(a). **“Bidder”** means any person or persons, partnership firm or company submitting a sum or sums in the Bills of Quantities in accordance with the Instructions to Bidders, Conditions of Contract Parts I and II, Specifications, Drawings and Bills of Quantities for the work contemplated, acting directly or through a legally appointed representative.

(b). **“An Eligible Bidder”** means the bidder who has fully fulfilled the eligibility criteria as outlined in this bid document.

(c). Any noun or adjective derived from the word **“bid”** shall be read and construed to mean the corresponding form of the noun or adjective **“tender”**. Any conjugation of the verb **“bid”** shall be read and construed to mean the corresponding form of the verb **“tender”**

(d). **“Employer”** means Chief Officer, **Ministry of Water services, irrigation and sanitation.**

### **2. ELIGIBILITY AND QUALIFICATION REQUIREMENTS**

**2.1.** This invitation to bid is open to all bidders who meet the conditions set out in the indent (Invitation to Tender advertisement).

**2.2.** To be eligible for award of contract, the Bidder shall provide evidence satisfactory to the employer of their eligibility under sub clause 2.1 above and of their capability and adequacy of resources to effectively carry out the subject Contract. To this end, the Bidder shall be required to provide the following information:

(a) The qualifications and experience of key personnel proposed for administration and execution of the Contract, both on site and off site.

(b) Major items of construction plant and equipment proposed for use in carrying out the Contract. Only reliable plant in good working order and suitable for the work required of it shall be shown on this schedule. The bidder will also indicate on this schedule when each item will be available on the Works. Included also should be a schedule of plant, equipment and material to be imported for the purpose of the Contract, giving details of make, type, origin and CIF value as appropriate.

(c) Details of sub-contractors to whom it is proposed to sublet any portion of the Contract and for whom authority will be requested for such subletting in accordance with clause 4 of Conditions of Contract Part I (FIDIC).

- (d) Copies of original documents defining the constitution or certificate of registration under the company act and license as a driller issued by the **Ministry of Water services, irrigation and sanitation**, as a proof of the legal status, place of registration, and principal place of business; written power of attorney of the signatory of the bid to commit the Bidder of relevant registrations, financial statements and annual turnover.
- (e) A draft Program of Works in the form of a bar chart and Schedule of Payment Which shall form part of the Contract if the tender is accepted. Any change in the Program or Schedule shall be subjected to the approval of the Project Manager.
- (f) Details of any current litigation or arbitration proceedings in which the bidder is involved as one of the parties.
- (g) Details of experience and past performance of the Bidder on the works of a similar nature within the past three years and details of current work on hand and other contractual commitments.

2.3 Bids submitted by a joint venture of two or more firms as partners shall comply with the following requirements:-

- (A). The bid, and in case of a successful bid, the Form of Agreement, shall be signed so as to be legally binding on all partners.
- (b). One of the partners shall be nominated as being in charge and this authorization shall be evidenced by submitting a Power of Attorney signed by legally authorized signatories of all the partners.
- (c). The partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the Contract including payment shall be done exclusively with the partner in charge.
- (d). All partners of the joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included in the authorization mentioned under (b) above as well as in the Form of Bid and the Form of Agreement (in case of a successful bidder).
- (e). A copy of the agreement entered into by the joint venture partners shall be submitted with the bid.

### **3. COST OF BIDDING**

The bidder shall bear all costs associated with the preparation and submission of his bid and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

3.1 The bidder and any of his personnel or agents will be granted permission by the Employer to enter upon premises and lands for the purpose of such inspection, but only upon the express condition that the bidder his personnel or agents, will relieve and indemnify the Employer from and against all liability in respect of, and will be responsible for personal injury (whether fatal or otherwise), loss of or damage to property and any other loss, damage, costs and expenses however caused, which but for the exercise of such permission, would not have arisen.

3.2 Each bidder shall complete the Certificate of Bidder's site visit, whether he in fact visited the site or not. The certificate will be counter signed by the Project Manager or his appointed representative.

### **4 BID DOCUMENTS**

4.1 The bid documents comprise the documents listed here below and should be read together with any Addenda issued in accordance with Clause 7 of these instructions to bidders.

- a. Form of Invitation to Bidders.
- b. Form of Bid
- c. Appendix to form of Bid.
- d. Instructions to bidders.
- e. Appendix to Instructions to Bidders.
- f. General Conditions of Contract – Part I
- g. Conditions of Particular Application – Part II
- h. Specifications
- i. Bills of Quantities
- j. Equipment Technical data
- k. Bid and Confidential Business Questionnaires
- l. Schedules of Supplementary Information
- m. Drawings

4.2 The bidder is expected to examine carefully all instructions, conditions, forms, terms, specifications and design drawings in the bid documents. Pursuant to clause 23 of Instructions to Bidders, bids which are not substantially responsive to the requirements of the tender documents will be rejected.

4.3 All recipients of the documents for the proposed Contract for the purpose of submitting a bid (whether they submit a bid or not) shall treat the details of the documents as “private and confidential”.

## **5 CLARIFICATION OF BID DOCUMENTS**

5.1 A prospective bidder requiring any clarification of the bid documents may notify the Employer in writing or by telex, cable, facsimile or e-mail at the Employer's mailing address indicated in the Invitation to Bid. The Employer will respond in writing to any request for clarification which he receives earlier than five (5) days prior to the deadline for the submission of bids. Written copies of the Employer's response (including the query but without identifying the source of the inquiry) will be sent to all prospective bidders who invited to bid.

## **6 AMENDMENT OF BID DOCUMENTS**

6.1 At any time prior to the deadline for submission of tenders the Employer may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective bidder, modify the tender documents by issuing Addenda.

6.2 Any Addendum will be notified in writing or by cable, telex, facsimile or e-mail to all prospective bidders and will be binding upon them.

6.3 If during the period of bidding, any circular letters (bid notices) shall be issued to bidders by, or on behalf of, the Employer setting forth the interpretation to be placed on a part of the bid documents or to make any change in them, such circular letters will form part of the bid documents and it will be assumed that the bidder has taken account of them in preparing his bid. The bidder must promptly acknowledge (in writing or by cable to the Employer) any circular letters he may receive.

6.4 In order to allow prospective bidders reasonable time in which to take the Addendum into account in preparing their bids, the Employer may, at his discretion, extend the deadline for the submission of bids.

## **PREPARATION OF BIDS**

### **7. LANGUAGE OF BID**

The bid and all correspondence and documents relating to the bid exchanged between the bidder and the Employer shall be written in the English language. Supporting documents and printed literature furnished by the bidder with the bid may be in another language provided they are accompanied by an appropriate translation of pertinent passages in the above stated language. For the purpose of interpretation of the bid, the English language shall prevail.

## **8. DOCUMENTS COMPRISING THE BID**

8.1 The bid to be prepared by the bidder shall comprise: the Form of Bid and Appendix thereto, the Priced Bills of Quantities, Schedules, the Drawings the information on eligibility and qualification, and any other materials required to be completed and submitted in accordance with the Instructions to Bidders embodied in these bid documents. The Forms, Bills of Quantities and Schedules provided in the bid documents shall be used without exception [subject to extensions of the schedules in the same format and to the provisions of clause 13.2 regarding the alternative forms of Bid Surety].

## **9.0 BID PRICES**

- 9.1 All the insertions made by the bidder shall be made in INK. The relevant space in the Form of Bid and Bills of Quantities shall be completed accordingly without interlineations or erasures except those necessary to correct errors made by the bidder in which case the erasures and interlineations shall be initialled by the person or persons signing the bid.
- 9.2 A price or rate shall be inserted by the bidder for every item in the Bills of Quantities whether the quantities are stated or not. Items against which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bills of Quantities.
- 9.3 The prices and unit rates in the Bills of Quantities are to be the full [all-inclusive] value of the Work described under the items, including all costs and expenses which may be necessary and all general risks, liabilities and obligations set forth or implied in the documents on which the bid is based. All duties, taxes inclusive of input and output V.A.T. and other levies payable by the Contractor under the Contract or for any other cause as of the date 14 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total Bid Price submitted by the bidder.
- 9.4 Each price or unit rate inserted in the Bills of Quantities should be a realistic estimate for completing the activity or activities described under that particular item and the bidder is advised against inserting a price or rate against any item contrary to this instruction.
- 9.5 Every rate entered in the Bills of Quantities, whether or not such rate be associated with a quantity, shall form part of the Contract. The Employer shall have the right to call for any item of work contained in the Bills of Quantities, and such items of work to be paid for at the rate entered by the bidder and it is the intention of the Employer to take full advantage of unbalanced low rates.
- 9.6 Unless otherwise specified the bidder must enter the amounts representing 10% of the sub-total of the summary of the Bills of Quantities for Contingencies and Variation of Prices [V.O.P.] payments in the summary sheet and add them to the sub-total to arrive at the bid amount.



9.7 The bidder shall furnish with his bid written confirmation from his suppliers or manufacturers of basic unit rates for the supply of items listed in the Conditions of Contract clause 70 where appropriate. The Employer may require the bidder to justify such rates so obtained from the suppliers or manufacturers.

9.8 The rates and prices quoted by the bidder are subject to adjustment during the performance of the Contract only in accordance with the provisions of the Conditions of Contract. The bidder shall complete the schedule of basic rates and shall submit with his tender such other supporting information as required under clause 25 of the Conditions of Contract Part II.

## **10. CURRENCIES OF BID AND PAYMENT**

**10.1** Bids shall be priced in Kenya Shillings and the bid sum shall be in Kenya Shillings.

**10.2** Bidders are required to indicate in the Statement of Foreign Currency requirement, which forms part of the tender, the foreign currency required by them. Such currency should generally be the currency of the country of the bidder's main office. However, if a substantial portion of the bidder's expenditure under the Contract is expected to be in countries other than his country of origin, then he may state a corresponding portion of the contract price in the currency of those other countries. However, the foreign currency element is to be limited to two (2) different currencies and a maximum of 30% (thirty percent) of the Contract Price.

**10.3** The rate or rates of exchange used for pricing the bid shall be selling rate or rates of the Central Bank ruling on the date thirty (30) days before the final date for the submission of bids.

**10.4** Bidders must enclose with their bids, a brief justification of the foreign currency requirements stated in their bids.

## **11. BID VALIDITY**

**11.1** The bid shall remain valid and open for acceptance for a period of ninety (90) days from the specified date of bid opening or from the extended date of bid opening (in accordance with clause 7.4 here above) whichever is the later.

**11.2** In exceptional circumstances prior to expiry of the original bid validity period, the Employer may request the bidder for a specified extension of the period of validity. The request and the responses thereto shall be made in writing or by cable, telex or facsimile. A bidder may refuse the request without forfeiting his Bid Surety. A bidder agreeing to the request will not be required nor permitted to modify his tender, but will be required to extend the validity of his Bid Surety correspondingly.

## **12. BID SURETY**

**12.1** The bidder shall furnish as part of his bid, a Bid Surety in the amount stated in the Appendix to Instructions to Bidders.

**12.2** The unconditional Bid Surety shall be in Kenya Shillings and be in form of a certified cheque, a bank draft, an irrevocable letter of credit or a guarantee from a reputable Bank approved by the Employer located in the Republic of Kenya.

**12.3** The format of the Surety shall be in accordance with the sample form of Bid Surety included in these bid documents. Other formats may be permitted Subject to the prior approval of the Employer. The Bid Surety shall be valid for twenty eight (28) days beyond the Bid validity period.

**12.4** Any bid not accompanied by an acceptable Bid Surety will be rejected by the Employer as non-responsive.

**12.5** The Bid Sureties of unsuccessful bidders will be returned as promptly as possible but not later than twenty eight (28) days after both parties signing the Contract Agreement and after a Performance Security has been furnished by the successful bidder. The Tender Surety of the successful bidder will be returned upon the bidder executing the Contract Agreement and furnishing the required Performance Security.

**12.6** The Bid Surety may be forfeited:

(a). If a bidder withdraws his bid during the period of bid validity

**OR**

(b). In the case of a successful bidder, if he fails, within the specified time limit;

(i). to sign the Contract Agreement, **OR**

(ii). to furnish the necessary Performance Security.

(c). If a bidder does not accept the correction of his tender price pursuant to clause 24.

### **13. NO ALTERNATIVE OFFERS**

**13.1** The bidder shall submit an offer which complies fully with the requirements of the bid documents.

**13.2** Only one bid may be submitted by each bidder either by himself or as partner in a joint venture. A bidder who submits or participates in more than one bid will be disqualified.

**13.3** The bidder shall not attach any conditions of his own to his tender. The bid price must be based on the bid documents. The bidder is not required to present alternative construction options and he shall use without exception, the Bills of Quantities as provided, with the amendments as notified in bidder notices, if any, for the calculation of his bid price.

- Any bidder who fails to comply with this clause will be disqualified.

#### **14. PRE – BID MEETING**

**14.1** The bidder’s designated representative may be invited to attend a pre-bid meeting, which if convened, will take place at the venue and time in the Invitation to Bid. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

**14.2** The bidder is requested as far as possible to submit any questions in writing or by cable, to reach the Employer not later than five (5) days before the meeting. It may not be practicable at the meeting to answer questions received late, but questions and responses will be transmitted in accordance with the following:

**(a).** Minutes of the meeting, including the text of the questions raised and the responses given together with any responses prepared after the meeting, will be transmitted without delay to all bidders who were invited to bid. Any modification of the bid documents listed in – Clause 9 which may become necessary as a result of the pre- bid meeting shall be made by the Employer exclusively through the issue of a bid notice pursuant to Clause 7 and not through the minutes of the pre- bid meeting.

**(b).** Non- attendance at the pre-tender meeting will not be cause for disqualification of a bid.

#### **15. FORMAT FOR SIGNING OF BIDS**

**15.1** The bidder shall prepare his tender as outlined in clause 9 above and mark appropriately one set “**ORIGINAL**” and the other “**COPY**”.

**15.2** The copy of the bid and Bills of Quantities shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the bidder. Proof of authorization shall be furnished in the form of the written power of attorney which shall accompany the bid. All pages of the bid where amendments have been made shall be initialed by the person or persons signing the bid.

**15.3** The complete bid shall be without alterations, interlineations or erasures, except as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

#### **SUBMISSION OF BIDS**

#### **16.0 SEALING AND MARKING OF BIDS**

**16.1** The bidder shall seal the original and copy of the bid in separate envelopes, duly marking the envelopes as “**ORIGINAL**” and “**COPY**”. The envelopes shall then be sealed in an outer separate envelope.

**16.2** The inner and outer envelopes shall be addressed to the Employer at the address stated in the Appendix to Instructions to Bidders and bear the name and

identification of the Contract stated in the said Appendix with a warning not to open before the date and time for opening of bids stated in the said Appendix.

16.3 inner envelopes shall each be indicated the name and address of the bidder to enable the bid to be returned unopened in case it is declared “late”, while the outer envelope shall bear no mark indicating the identity of the bidder.

16.4 If the outer envelope is not sealed and marked as instructed above, the Employer will assume no responsibility for the misplacement or premature opening of the bid. A bid opened prematurely for this cause will be rejected by the Employer and returned to the bidder.

## **17.0 DEADLINE FOR SUBMISSION OF BIDS**

17.1 Bids must be received by the Employer at the address specified in clauses in here and on the date and time specified in the Letter of Invitation, subject to the provisions of clause in this document.

Bids delivered by hand must be placed in the “Tender box”, as stated in the “Form of Invitation to Bid” provided in the office of the Employer.

Proof of posting will not be accepted as proof of delivery and any bid delivered after the above stipulated time, from whatever cause arising will not be considered.

17.2 The Employer may, at his discretion, extend the deadline for the submission of bids through the issue of an Addendum in accordance with clause 7, in which case all rights and obligations of the Employer and the bids previously subject to the original deadline shall thereafter be subject to the new deadline as extended.

17.3 Any bid received by the Employer after the prescribed deadline for submission of bid will be returned unopened to the bidder.

## **18. MODIFICATION AND WITHDRAWAL OF BID**

18.1 The bidder may modify or withdraw his bid after bid submission, provided that written notice of the modification or withdrawal is received by the Employer prior to prescribe deadline for submission of bids.

18.2 The bidder’s modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions for the submission of bids, with the inner and outer envelopes additionally marked “**MODIFICATION**” or “**WITHDRAWAL**” as appropriate.

18.3 No bid may be modified subsequent to the deadline for submission of bids.

18.4 No bid may be withdrawn in the interval between the dead line for submission of bids and the period of bid validity specified on the bid form. Withdrawal of a bid during this interval will result in the forfeiture of the Bid Surety.

18.5 Subsequent to the expiration of the period of bid validity prescribed by the Employer, and the bidder having not been notified by the Employer of the award of the Contract or the bidder does not intend to conform with the request of the Employer to extend the tender validity, the bidder may withdraw his bid without risk of forfeiture of the Bid Surety.

### **BID OPENING AND EVALUATION**

#### **19.0 BID OPENING**

19.1 The Employer will open the bids in the presence of the bidders' representatives who choose to attend at the time and location indicated in the Letter of Invitation to Bidders. The bidders' representatives who are present shall sign a register evidencing their attendance.

19.2 Bids for which an acceptable notice of withdrawal has been submitted pursuant to clause 19 will not be opened. The Employer will examine the bids to determine whether they are complete, whether the requisite Bid Sureties have been furnished, whether the documents have been properly signed and whether the bids are generally in order.

19.3 At the bid opening, the Employer will announce the bidder's names, total bid price, bid price modifications and bid withdrawals, if any, the presence of the requisite Bid Surety and such other details as the Employer, at his discretion, may consider appropriate. No bid shall be rejected at the bid opening except for late bids.

19.4 The Employer shall prepare minutes of the bid opening including the information disclosed to those present.

19.5 Bids not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances.

#### **20.0 PROCESS TO BE CONFIDENTIAL**

20.1 After the public opening of bids, information relating to the examination, clarification, evaluation and comparisons of bids and recommendations concerning the award of Contract shall not be disclosed to bidders or other persons not officially concerned with such process until the award of Contract is announced.

20.2 Any effort by a bidder to influence the Employer in the process of examination, evaluation and comparison of bids and decisions concerning award of Contract may result in the rejection of the bidder's bid.

## **21.0 CLARIFICATION OF BIDS**

21.1 To assist in the examination, evaluation and comparison of bids, the Employer may ask bidders individually for clarification of their bids, including breakdown of unit prices. The request for clarification and the response shall be in writing or by cable, facsimile or telex, but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetical errors discovered by the employer during the evaluation of the bids in accordance with clause 24.

21.2 No bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the Employer, he shall do so in writing.

## **22.0 DETERMINATION OF RESPONSIVENESS**

22.1 Prior to the detailed evaluation of bids the Employer will determine whether each bid is substantially responsive to the requirements of the bid documents.

22.2 For the purpose of this clause, a substantially responsive bid is one which conforms to all the terms, conditions and specifications of the bid documents without material deviation or reservation and has a valid Bid Surety Bank Guarantee. A material deviation or reservation is one which affects in any substantial way the scope, quality, completion timing or administration of the Works to be undertaken by the bidder under the Contract, or which limits in any substantial way, inconsistent with the bid documents, the Employer's rights or the bidder's obligations under the Contract and the rectification of which would affect unfairly the competitive position of other bidders who have presented substantially responsive bids.

22.3 Each price or unit rate inserted in the Bills of Quantities shall be a realistic estimate of the cost of completing the works described under the particular item including allowance for overheads, profits and the like. Should a bid be seriously unbalanced in relation to the Employer's estimate of the works to be performed under any item or groups of items, the bid shall be deemed not responsive.

22.4 A bid determined to be not substantially responsive will be rejected by the Employer and may not subsequently be made responsive by the bidder by correction of the non-conforming deviation or reservation.

## **23.0 CORRECTION OF ERRORS**

Bids determined to be substantially responsive shall be checked by the Employer for any arithmetic errors in the computations and summations. Errors will be corrected by the Employer as follows:

- a) Where there is a discrepancy between the amount in figures and the amount in words, the amount in words will govern.

- b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will prevail, unless in the opinion of the Employer, there is an obvious typographical error, in which case adjustment will be made to the entry containing that error.
- c) In the event of a discrepancy between the bid amount as stated in the Form of Bid and the corrected bid figure in the main summary of the Bills of Quantities, the amount as stated in the Form of Bid shall prevail.
- d) The Error Correction Factor shall be computed by expressing the difference between the bid amount and the corrected bid sum as a percentage of the corrected contracts works (i.e. corrected bid sum less P.C. and Provisional Sums).
- e) The Error Correction Factor shall be applied to all contract works (as a rebate or addition as the case may be) for the purposes of valuations for Interim Certificates and valuations of variations.
- f) The amount stated in the bid will be adjusted in accordance with the above procedure for the correction of errors and, with concurrence of the bidder, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount, the bid may be rejected and the Bid Security may be forfeited in accordance with clause 13.

## **24.0 CONVERSION OF SINGLE CURRENCY**

24.1 For compensation of bids, the bid price shall first be broken down into the respective amounts payable in various currencies by using the selling rate or rates of the Central Bank of Kenya ruling on the date twenty eight (28) days before the final date for the submission of bids.

24.2 The Employer will convert the amounts in various currencies in which the bid is payable (excluding provisional sums but including Day works where priced competitively) to Kenya Shillings at the selling rates stated in clause 25.1.

## **25.0 EVALUATION AND COMPARISON OF BIDS**

25.1 The Employer will evaluate only bids determined to be substantially responsive to the requirements of the bid documents in accordance with clause 23.

25.2 In evaluating bids, the Employer will determine for each bid the evaluated bid price by adjusting the bid price as follows;

- (a). Making any correction for errors pursuant to clause 24.
- (b). Excluding Provisional Sums and provision, if any, for Contingencies in the Bills of Quantities, but including Day works where priced competitively.

25.3 The Employer reserves the right to accept any variation, deviation or alternative offer. Variations, deviations, alternative offers and other factors which are in excess of the requirements of the bid documents or otherwise result in the accrual of unsolicited benefits to the Employer, shall not be taken into account bid evaluation.

25.4 Price adjustment provisions in the Conditions of Contract applied over the period of execution of the Contract shall not be taken into account in bid evaluation.

25.5 If the lowest evaluated bid is seriously unbalanced or front loaded in relation to the Employer's estimate of the items of work to be performed under the contract, the Employer may require the bidder to produce detailed price analyses for any or all items of the Bills of Quantities, to demonstrate the relationship between those prices, proposed construction methods and schedules. After evaluation of the price analyses, the Employer may require that the amount of the Performance Security set forth in clause 29 be increased at the expense of the successful bidder to a level sufficient to protect the Employer against financial loss in the event of subsequent default of the successful bidder under the Contract.

### **AWARD OF CONTRACT**

#### **26.0 AWARD**

26.1 Subject to Sub-clause 27.2, the Employer will award the Contract to the bidder whose bid is determined to be substantially responsive to the bid documents and who has offered the lowest evaluated bid price subject to possessing the capability and resources to effectively carry out the Contract Works as required in Sub-clause 2.1 and 2.2 here above.

26.2 The Employer reserves the right to accept or reject any bid, annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidders or any obligation to inform the affected bidders of the grounds for the Employer's action.

#### **27.0 NOTIFICATION OF AWARD**

27.1 Prior to the expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder by cable, telex fax or telex and confirmed in writing by registered letter that his bid has been accepted or hand



delivered registered on a delivery note. This letter (hereinafter and in all Contract documents called “Letter of Acceptance”) shall name the Sum (hereinafter and in all Contract documents called “the Contract Price”) which the Employer will pay to the Contractor in consideration of the execution and completion of the Works as prescribed by the Contract.

27.2 Notification of award will constitute the formation of the Contract.

27.3 Upon the furnishing of a Performance Security by the successful bidder, the unsuccessful bidders will promptly be notified by the Employer in writing or by cable that their bids have been unsuccessful.

27.4 Within Fourteen [14] days of receipt of the Form of Contract Agreement from the Employer, the successful bidder shall sign the Form of Contract Agreement and return it to the Employer together with the required Performance Security.

## **28.0 PERFORMANCE GUARANTEE**

28.1 Within seven [7] days of receipt of the notification of award from the Employer, the successful bidder shall furnish the Employer with a Performance Security in the amount stated in the Appendix to Instructions to Bidders and in the format stipulated in the Conditions of Contract.

28.2 The Performance Security to be provided by the successful bidder shall be an unconditional Bank Guarantee issued at the bidder’s option by a reputable Bank approved by the Employer and located in the Republic of Kenya and shall be divided into two elements namely, a performance security payable in foreign currencies (based upon the exchange rates determined in accordance with clause 70 of the Conditions of Contract) and a Performance Security payable in Kenya Shillings. The value of the two securities shall be in the same proportions of foreign and local currencies as requested in the form of foreign currency requirement

28.3 Failure of the successful bidder to submit the required Performance Security shall constitute a breach of Contract and sufficient grounds for the annulment of the award and forfeiture of the Bid Security and any other remedy under the Contract. The Employer may award the Contract to the next ranked bidder.

## **29.0 TERMS OF PAYMENT**

### **28.1 ADVANCE PAYMENT**

No advance payment shall be granted.

**30.0 CORRUPT AND FRAUDULENT PRACTICES**

Any efforts by the bidder to influence the procurement entity in its decision on bid evaluation, bid comparison or contract award will result in the rejection of the bidder’s offer. The procurement entity therefore requires that bidders observe the highest standards of ethics during the procurement process and execution of the contract. In pursuance of policy, the procurement entity;

(a).Defines, for the purposes of this provision, the terms set forth below as follows

(i) **“Corrupt practice”** means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

(ii). **“Fraudulent practice”** means a misrepresentation of facts in order to influence a procurement process or execution of a contract to the detriment of the procurement entity and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the procurement entity of the benefits of free and open competition.

(b).Will reject a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

(c). Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded any contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing or in executing a contract.

**APPENDIX TO INSTRUCTIONS TO BIDDERS**

**CLAUSE**

**BID SURETY**

**13.1** Add to the Clause 13.1 **“Amount of Bid Surety shall be 5% of the Bid price in the form of Tender Security or a banker’s Cheque, from a reputable Commercial Bank, to wajir county revenue account.”**

**13.2 (i)**The name and address of the Employer for the purposes of submission of tenders is: WAJIR COUNTY GOVERNMENT, P.O. BOX 9-70200, WAJIR. The Bids shall be deposited in the box marked “Tender Box” situated at wajir county government office (east gate).

**(ii).**The name of the proposed Works and the Contract Number is;.....

The bid opening date and time are; on the **Date.....Months.....Year..... At**

**31. TERMS OF PAYMENT**

There will be no advance payment.

30.1 First payment certificate shall be presented for payment only after successful completion of at least one borehole up to and including drilling to the required depth, casing, gravel packing and development ready for test pumping. Unless

otherwise stated, 10% retention money and 16% VAT shall be deducted from the payment. Of 5% retention money shall be released after rectification of the defects noted during site meeting at which the project was declared substantially complete.

30.2 The last 5% retention money shall be released at the end of the Defects Liability Period.

## **CONTRACT DOCUMENTS**

(a) The language governing this Contract shall be English. Communication between the Contractor and Project Manager or Project Manager's Representative shall be in English.

(b) The Contract shall in all respects be construed in accordance with and subject to the Laws of Kenya.

## **GENERAL OBLIGATIONS**

### **31.0 CONTRACTOR'S GENERAL RESPONSIBILITIES**

Substitute the first sentence of the sub-clause with the following: "The Contractor shall with due care and diligence execute and complete the Works and remedy any defects therein in accordance with the provisions of the contract".

### **32.0 PROGRAMME TO BE SUBMITTED**

The Contractor shall submit to the Project Manager for approval within Seven (7) days after receiving the Project Manager's Letter to Commence Work, **4 copies** of a detailed Works Programme. The work programme shall be arranged in the form of a Time-Bar chart OR schedule.

### **33.0 FAILURE TO PROVIDE THE WORKS PROGRAMME OR REVISION THEREOF**

If the Contractor fails to submit a satisfactory works programme or revisions thereof within even (7) days after such a programme or revision thereof is due in accordance with clause 14.1, the Project Manager shall **withhold certification** of any payment until when the programme or revision thereof is submitted.

### **33.1 QUALITY OF MATERIALS, PLANT/EQUIPMENT AND WORKMANSHIP**

After the last sentence, insert the following paragraph;

" All materials, equipment, etc. to be used in the execution of the work by the Contractor in this contract shall conform to the requirements of the latest Kenya Bureau of Standard

(KEBS), International Standards Organization (ISO), British Standards Specifications (BSS), or other approved standards applicable in Kenya unless otherwise specifically stated”.

The materials and workmanship shall be of the best of their respective and shall be to the approval of the Project Manager.

Should any material/equipment which are in the judgment of the Project Manager unsound, or of inferior quality or in any way unsuited for the works in which it is proposed for use, such material/equipment shall not be used upon the works and shall forthwith be removed from the site and replaced with the proper quality items to the approval of the Project Manager, **all at the expense of the contractor**.

The contractor shall remove and reconstruct **at his own expense** any portion of the works which gives evidence of any defects or injury which may effect the strength of durability of the works or the performance of the system.

### **33.2 TAKE OVER OF THE WORKS**

The contract work shall be considered satisfactorily complete and ready for handing over to the Employer only when the contract work and supporting services have been tested and operational to the satisfaction of the Project Manager

### **33.3 DEFECTS LIABILITY PERIOD**

The Defects Liability Period shall be Six (6) months.

The Defects Liability Period shall start after issuance of Substantial Completion or Take-Over Certificate. During this period, the contractor shall make good all the defects communicated to him/her in writing by the Project Manager within Thirty (30) days after the system hand over, and thereof during this period.

### **CERTIFICATES AND PAYMENTS**

**Line 1** – replace the words “after the end of each month” with the words – “in accordance with clause 30 – TERMS OF PAYMENT as stipulated under Appendix to Instructions to Bidders”.

## **SECTION 2: TECHNICAL SPECIFICATIONS**

### **EARTHWORKS SPECIFICATIONS**

#### **GENERAL**

##### **Method Statements**

At least seven (7) days prior to the commencement of any open excavation at any section of the Works, the Contractor shall submit for the Employer’s Representative’s ( Engineer's)

approval, a statement of the excavation methods and procedures he intends to adopt on that section.

The statement shall include a description of the following, together with any other items which the Contractor considers relevant:

- Sequence of operations;
- A detailed programme of events and any consequent change in the overall programme of the Works;
- Methods and plant to be used; blasting techniques, including charge spacing, delays, etc.
- Excavation protection and support, including drainage and temporary works;
- Disposal or re-use of materials, including quantities and locations.

The methods adopted shall provide for the safe and efficient execution of the excavation work in such a way as to conform to the programme for completion of the Works and so that they do not interfere with other operations in progress of the Contractor or others.

The Employer's Representative's (Engineer's) approval of the Contractor's method of excavation shall not relieve the Contractor of any of his responsibilities or obligations under the Contract.

In the event the Contractor's methods do not provide results which satisfy requirements stated in the Specification, the Contractor will be obliged to change them and to use techniques and procedures either agreed between the engineer and the Contractor or as indicated by the Engineer. Such changes will not warrant any extra payment to the Contractor.

### **Location and Shape of Excavation**

The Contractor shall locate the excavations for structures and all other work as shown on the drawings and in accordance with the benchmarks provided to him by the Engineer.

The Contractor shall be responsible for correct location, and all extra work caused by his negligence in this matter will be at his expense and shall be corrected at the Engineer's request.

If local survey points or bench marks have been removed or are insufficient, the setting-out shall be related back to other established survey points or bench marks. Excavation shall be to the lines, grades and dimensions shown on the drawings or as established by the Engineer. During the progress of any open excavation work, it may be found necessary or desirable to vary the slopes or the dimensions of the excavations from those shown on the drawings or established by the Engineer. Such adjustment or trimming of the final excavated surface is considered to be a separate operation as defined hereafter.

Any and all over-excavation performed by the Contractor for any purpose or reason, except as may be directed by the Engineer, shall be at the expense of the Contractor. All such over-excavation shall be backfilled with approved material from excavations or concrete as

directed by the Engineer, and the cost of furnishing and placing this backfill or concrete shall be at the expense of the Contractor.

The Engineer may direct alternative measures of backfilling, and the cost of such measures shall be at the expense of the Contractor.

Any other excavation performed at the option of the Contractor to secure access to required work, for disposal of material excavated, or for any other purpose, shall be at the expense of the Contractor.

### **Measurement of Excavated Volumes**

The Contractor shall submit to the Engineer for approval the proposed surveying method for the measurement of excavated volumes not less than seven (7) days before commencing any such work. The proposed method shall take one of the following forms:

a) Contour Line Method

Maps defining the ground surface before the commencement of excavation works shall be prepared. Immediately after a change of type of work or classification of material and after completion of any excavation, the Contractor shall take survey measurements to define the dimensions and elevations of the corresponding excavated surface. Measurements shall be taken with a tacheometer with a minimum density of points of one per 20m<sup>2</sup>. From these measurements, sets of contour lines shall be prepared for each successive surface, e.g. original ground, rock final and excavated surfaces, and all sets shall be presented on a single plan. From this plan, the measurement of excavated volumes shall be calculated by an analytical method and checked by means of a planimeter.

b) Average Section Method

Profiles shall be taken by the Contractor of the ground surface before commencement of excavation, immediately after a change of type of work or classification of material and after completion of any excavation. Measurements shall be taken by means of a tacheometer or leveling instrument in order that vertical sections may be prepared at intervals of 3.0m or as directed by the Engineer. The volumes of excavated material shall be calculated between adjoining sections by considering the average area of the two sections over the intermediate distance. In the case of a curvilinear area, the profiles shall be measured radially. Volumes of excavated material shall be calculated for the cross-sectional area of each profile. The distance over which this area shall be considered is the length of the arc, passing through the center of gravity of the section, subtended by the angle between the radial sections. Measurements, which are to be the basis of quantities for payment, shall be taken in the presence of the Engineer.

The Contractor shall give notice of his intention to take such measurements not less than twenty four (24) hours beforehand.

## **Classification of Excavated Materials**

Separate measurements shall be made for bulk and trench excavation classified either as "common excavation" or "rock excavation". At the commencement of any excavation operations at each location of each section of the Works, the Contractor shall establish and agree with the Engineer the separate classification and their limits.

Subsequent modifications to these limits may be made during the progress of the Works in accordance with actual conditions as encountered, but such modifications will only be agreed when the materials are exposed.

Whenever an agreement is not possible on the classification of the material exposed in a certain area, a ripping test, in the form described below, shall be performed by the Contractor at his own expense at the area considered, in the presence of the Engineer.

The ripping test shall comprise:

- (a) a survey, on a 1.0 m grid, to establish cross-sections over a test area of not less than 10 x 4 m within the area to be classified;
- (b) provision of a Caterpillar Model D8K tractor or equivalent machine, equipped with a single straight ripper tooth 60 m penetration, hydraulically operated and approved by the manufacturer for use with the D8K;
- (c) Ripping of test area with two passes per meter of width, with the full load applied to ripper tooth;
- (d) After ripping, removal of ripped material by loading machine of approved type;
- (e) Re-survey of the cross-sections and calculation of the volume and equivalent depth of excavation.

Common excavation for the purposes of measurement and payment shall be defined as:

- (a) All materials excavated without prior visual inspection and classification by the Engineer;
- (b) All material that gives an equivalent depth of excavation equal to or more than 0.25 meters in the ripping test;
- (c) All non-rippable boulders, or detached pieces of solid rock, embedded in common excavation material, but each having a volume of less than one cubic meter or a weight of less than two tonnes.

Rock excavation for the purposes of measurement and payment shall be defined as:

- (a) All material so classified by visual inspection and agreed with the Engineer.

(b) All material that gives an equivalent depth of excavation less than 0.25 meters in the ripping test;

(c) All non-rippable boulders, or detached pieces of solid rock embedded in common excavation, each having a volume of more than one cubic meter or a weight of more than two tonnes.

### **Dewatering**

The Contractor shall be responsible for the protection of all sections of the Works from effects of surface water run-off and ground water.

Such protection shall include pipes, channels, embankments and pumping arrangements to keep the Works free from any water which may damage the finished quality or impede progress or inspection during construction.

Where local streams or natural drainage channels intersect the Site of the Works, these streams and channels shall be diverted outside the limits of the Works, at the expense of the Contractor.

The Contractor shall be responsible for the design of all such temporary dewatering works, and shall on request, provide the Engineer with drawings, calculations, explanatory reports and any other evidence that their performance will be adequate for their purpose.

Where some part of the Permanent Works can be adopted for such dewatering, the Engineer will instruct the Contractor on any limitations he requires with respect to their temporary use for dewatering during the construction of the Works.

### **TYPES OF EXCAVATION**

#### **General Clearing**

General clearing comprises the removal and disposal of all trees, shrubs, buildings, fences and similar matter from the areas shown on the drawings or as directed by the Engineer.

The areas to be cleared shall include the foundation areas to all parts of the Works.

The limits of general clearing shall extend 5m beyond the toe of the fills and the limits of excavation, except where otherwise directed or indicated on the drawings.

Timber may be retained and used on Site by the Contractor. Unsuitable material shall be removed directly to an approved disposal area.



## **Stripping**

Stripping shall consist of the removal from the surface and disposal of all humus, stumps, roots, brush, rubbish, other vegetation matter, and perishable and undesirable materials generally to a depth of 0.5m or as otherwise directed by the Engineer.

Stripping work shall include the transporting and disposal of stripped material.

The limits of stripping shall extend at least 3 m beyond the toe of fills and limits of excavation, except where otherwise directed or shown on the drawings.

## **Bulk Excavation**

Bulk excavation comprises the open cut excavation to be performed to lines, grades and dimensions shown on drawings or as directed by the Engineer.

The method adopted shall be suitable for the types of material encountered, to provide for the work to progress in an orderly manner and to restrict over-excavation to a minimum.

Within 3 m of the levels shown on the drawings, the Engineer may direct the excavation in successive stages until a suitable foundation or surface, as determined by the Engineer, is reached.

The Contractor shall not be entitled to any additional payment above the unit prices for the excavation by reason of such successive stages in the excavation procedure. Each successive stage shall include sufficient cleaning to enable the Engineer to inspect the foundation in order to direct further excavation if required.

Loose excavated material shall be removed from the excavation as the work proceeds and shall be transported to the disposal area or stockpile as directed.

For the final preparation of slopes and foundations, the Engineer may direct that the last 20 cm of the excavation, whether in common material or rock excavation, shall be excavated without the use of explosives or ripping, and such excavation methods will not be considered for separate payment, since they shall be deemed to have been already included in the unit prices for excavation work.

For the Emergency Spillway, excavation shall be carried out by such methods that shall not in any way disturb the condition of the adjacent existing spillway and dam.

## **Trench Excavation**

Trench excavations shall be defined as those whose final width is less than 2 meters, or greater than 2 meters when depth is greater than width.

Excavation for trenches (including pits, footings, etc.) shall be performed by the use of hand tools and approved mechanical equipment in such a manner as to prevent shattering of the sides and bottom of the excavation. At the option of the Contractor, and with the approval of the Engineer, blasting may be carried out in accordance with Sub-section 3 hereafter. All planking, strutting and supports necessary to retain the sides of the excavation shall be provided, erected and maintained in a safe condition by the Contractor.

### **Slope Adjustment and Trimming**

If, during the progress or after completion of bulk or trench excavations in common material, the Engineer instructs the Contractor to modify or extend the slopes or dimensions of the excavation by a horizontal width of less than 5 m, such modifications or extensions will be considered as separate excavation operations defined as "slope adjustment" or "trimming".

Modifications or extensions of more than 5 m will be considered and paid for as bulk excavation.

- Slope adjustment shall apply where the modification or extension involves the adjustment of the limits of the bulk excavation by additional excavation of a horizontal width of more than 1 m up to 5 m.
- Trimming shall apply where the adjustment to the bulk excavation limits is required by a thickness of additional excavation of less than 1m.

### **Seams and Cavities**

The assumed lines of excavation shown on the drawings shall not be interpreted as indicating accurately the final or actual excavation lines.

There may be depressions, fissures, faults, seams and bands of soft disintegrating material running in various directions in the materials to be excavated and in the foundations, slopes and other areas.

Where defects occur they shall be made safe by supports or corrected by local excavation below the general surface of excavation to the lines, depths and dimensions directed by the Engineer.

### **DISPOSAL AND STOCKPILING AREAS**

The Contractor shall maintain appropriate disposal areas in the locations shown on the drawings, or as otherwise approved, for materials unsuitable for fill or aggregate production, surplus material from excavation and other approved waste.

All debris, bush, roots and other combustible material shall be burned or buried. All non-combustible waste shall be buried. Disposal by burying shall be done in such a manner that the material disposed of is buried with a minimum cover of 50 cm of excavation spoil or stripped material. The Contractor shall at no time leave a fire unattended and shall be responsible for any fire damage resulting from his operations.

Should the Contractor wish to form spoil dumps for his own convenience, other than those described, he shall obtain the Engineer's approval before any dumping is started.

Where excavated materials are suitable and are required for use in subsequent work, the Engineer may direct that these are separately stockpiled and will designate the location for such stockpiles within the disposal areas or in separate locations adjacent to the sites of the Works.

Adequate road access to the disposal and stockpile areas shall be established and maintained by the Contractor. Disposal and stockpile areas shall be cleared in accordance with Sub-section 2.1, and drainage channels shall be formed to remove surface water.

The tipping of materials in disposal or stockpile areas shall be controlled to provide a uniform and progressive use of the area, and tipped material shall be spread and graded to form layers of not more than 1 m thickness.

On completion of the Works, the disposal and stockpile areas shall be left in a tidy and safe condition to the satisfaction of the Engineer.

### **BACKFILL**

The Contractor shall supply, place and compact backfill or selected material in trenches and around concrete structures as shown on the drawings or as directed by the Engineer.

No backfilling shall commence until the foundation and Permanent Works have been inspected and approved by the Engineer.

Backfill shall be placed and compacted in successive layers not exceeding 25 cm in thickness.

Compaction of cohesive soils shall continue until the dry density of the material reaches a value of 90% of the AASHTO maximum dry density, as determined in accordance with BS 1377.

The compaction of granular soils shall continue until the dry density of the material reaches a value of not less than 80% of the relative density as determined in accordance with Test 12 of U.S. Bureau of Reclamation Earth Manual (Section Edition, 1974).

In the event of any damage to any structure as a result of the placing or compaction of backfill, the Contractor shall repair the structure at his own expense, to the satisfaction of the Engineer.

### **RIP-RAP**

The rock for rip-rap shall be of compact, firmly bound, uniformly grain texture and absolutely weather-resistant and shall not have cracks, holes, laminations or detrimental materials.

The materials shall be sound, un-weathered and with a low water absorption capacity in order to avoid cracking, bursting and decomposition as a result of exposure to rain, flowing water, abrasion and other elements. The rock shall mainly consist of large pieces of rock such that

when placed and compacted, the height should not exceed 300mm and smaller pieces to secure the boulders against sliding and to form a mechanically interlocked uniform surface protection against the action of flowing water, waves, heavy rainfall, washouts, etc., and to provide stability to the fill structure.

The rock blocks shall be of natural irregular shape and of the size as specified hereunder. Thin-sliced blocks shall not be accepted. Any blocks covered by impurities shall be cleaned thoroughly before being used.

Unless it is indicated otherwise, the Contractor shall submit rock samples to be used in the slopes to the approval of the Engineer. Furthermore he shall send the samples at his own cost to the place assigned by the Engineer for the performance of all required tests and at least 60 days before the beginning of the riprap placement.

Unless otherwise specified in the Bill of Quantities and Rates, the following grading shall apply for riprap:

- The largest individual block shall not exceed 500 mm all directions.
- The smallest individual block shall not be less than 150 mm all directions.

### **Placing of Rip-Rap**

The rock blocks in rip-rap as specified in sub-Clause 5 shall be dumped and graded in a manner to ensure that the larger blocks are uniformly distributed and the smaller rock blocks serve to fill the interstices between the larger rocks in a manner that will result in compact uniform layers of rip-rap of the specified thickness.

No pockets of small rocks or clusters of large blocks will be permitted.

## **EMBANKMENT SPECIFICATIONS**

### **GENERAL**

The embankment works shall be executed generally in accordance with the drawings and this Specification or as the Engineer may direct.

The Engineer reserves the right to modify, during the progress of the Works, any other features as he may consider necessary for the proper performance of the Works.

### **FOUNDATION PREPARATION**

#### **General**

The foundation for the embankments shall be excavated generally in accordance with the requirements of Section 2 - Excavation;

All overhanging rock shall be detached by barring or wedging and all loose or semi-detached blocks shall be removed from foundation surfaces.

Preparation of foundations shall include adequate drainage and dewatering systems to obtain sufficiently dry working conditions.

The placing of fill to form the embankments may proceed only with the approval of the Engineer, based on the conditions of the foundations determined by inspection after completion of all foundation preparation works.

The Contractor shall be responsible for maintaining foundation surfaces in the approved condition until they have been covered by fill material.

Where erodible material is exposed in the foundations, specially selected and graded stone shall be placed over the area as directed by the Engineer to provide inverse filler.

### **Placing**

Thickness of compacted layers shall not exceed 25 cm; optimum placing thickness shall be determined by trial embankments, to the approval of the Engineer.

Material which is too dry shall be spread in a layer, sprinkled with water and re-mixed with equipment approved by the Engineer. On the other hand, material brought to Site which is too moist shall be removed and taken away, or, subject to specific approval by the Engineer and provided such material has not already been compacted, it may be left to dry out to the required moisture content level prior to being compacted.

Emplacement of materials shall be carried out using all means necessary to obtain maximum homogeneity in each zone of the embankment; lenses, pockets, bands and layers of material markedly different from that surrounding it shall not be allowed.

Where an emplacement surface is too moist, it shall be left to dry out sufficiently, to the Engineer's approval, prior to emplacement of the next layer.

Where, in the opinion of the Engineer, a surface is too dry or too smooth, it shall be appropriately moistened and harrowed prior to emplacement of the next layer.

Emplacement operations shall be suspended in the event of threat or actual occurrence of rain. In the latter instance, work shall not be resumed until all excess moisture in the soil has evaporated. Where moisture levels are too high, the Engineer may require removal of emplaced material to an appropriate depth.

Whereas placing of core materials during the rainy season is not envisaged in the construction program approved by the Engineer, the Contractor may construct the embankment dam and place such core materials during the rainy season, provided however that any extra cost arising therefrom as may be necessary to meet the requirements of the Specification shall be borne exclusively by the Contractor.

Emplacement surfaces shall at all times be flat and slightly inclined to upstream and downstream, in order to avoid the possibility of stagnant water collecting (even in small pockets).

Prior to any suspension of work, emplacement surfaces shall be leveled and rolled to eliminate subsequent stagnation of water; upon resumption of laying operations, they shall be re-set and harrowed.

## **Compaction**

Compaction of materials shall be carried out in layers, using suitable plant, machinery and equipment.

In general, the use of static sheep-foot or vibrating rollers shall be preferred.

In the event that excessively smooth surfaces are obtained from the use of rubber-tyred rollers, the Engineer may require harrowing of the lower layer prior to emplacement of the upper layer.

Based on trial embankment results, the Engineer shall be entitled to reject the type of plant, machinery and equipment proposed by the Contractor if specified results cannot be obtained by the use of same and, at particular locations or zones, establish moisture content, number of passes, and speed and time of vibration, even if these vary from those applied to trial embankment.

All parts of the embankment which rests on or are in contact with steep or irregular lateral surfaces, or zones of difficult contact, or areas where compaction equipment is difficult to access, as well as those parts of the embankment in contact with concrete structures or measurement and control equipment built into the embankment, shall be compacted in layers of not more than 15 cm, suitable means, such that their degree of compaction shall not be lower than that of other embankment zones.

The thickness of the Embankment material layer shall have a tolerance of  $\pm 15$  cm at any specified level.

## **FINE FILTERS**

### **General**

Materials to be utilized for the construction of fine filters shall have the following characteristics:

$$C_u = D_{60}/D_{10} < 12$$

$D_{max} < 20$ mm not more than 5% of the material shall be finer than 0.074 mm (200 mesh); the granulometric curve shall be comprised within the zone defined by gradings G and H of Table A; the grading curve shall be continuous; Permeability  $K > 5 \times 10^{-3}$  cm/sec; In-situ dry density: 90%  $\pm$  3% of maximum density Obtainable by the Standard AASHTO test.

Filter material may be obtained from crushing rock on Site, or, preferably, washed, sieved, natural sand from the nearby Areas where they are available; if mixed, particular attention shall be given to obtaining uniformity. Utmost care shall be taken to avoid mixing of materials along their limiting planes and any filter material contaminated by other material shall be removed in its entirety. The Contractor shall propose and test a method of placement, which avoids any penetration of adjacent materials. If each penetration exceeds the permitted maximum of 10 cm, the Engineer shall require the use of appropriate separators, which shall be removed after emplacement but before compaction of the material.

No. 100 grading tests, 10 Standard AASHTO, 10 permeability and 10 transmissibility tests shall be carried out by the Contractor for the purpose of determining suitability of quarries or borrow pits, mixes, coarse and fine filters and for control purposes.

### **DRAINAGE**

Materials for drains shall be sound clean rock or stone, Dmax 80 mm, Dmin 10 mm, with not more than 5% of the material smaller than 10 mm; maximum size of the material may be varied at the discretion of the Engineer.

Drain material shall be placed using light compaction and ensuring that the drainage zone is filled entirely.

### **CONCRETE SPECIFICATIONS**

#### **Composition and types of concrete**

The characteristics of the designated concrete types are given in Table 1.

TABLE 2

#### **TYPES OF CONCRETE**

Type of Concrete	Characteristic Strength		Max. Size of Aggregates (D max; mm.)
	MPa	Kg/sq.cm	
A1 (blinding)	10	100	40
A2 (porous, no fines)	10	100	40
B1	20	200	40
BS	20	200	20
C1	25	250	40
C2	25	250	20
D1	30	300	40
D2	30	300	20

The suffix "An" added after the concrete type in the Bill of Quantities denotes the addition of an approved plastifier.

Table 3 – Minimum Cement Content

Class of Concrete	Minimum Cement Content – Kg/m <sup>3</sup> of compacted concrete		
	Moderate Exposure	Intermediate Exposure	Severe Exposure
10/75; 15/75	200	220	270
15/40, 20/40, 25/40, 30/40	240	270	290

15/20, 20/20, 25/20, 30/20	260	300	330
40/20	300	320	330
20/10, 25/10, 30/10, 40/10	300	340	390
	310	340	390

Note: The minimum cement contents shown in the above table are required in order to achieve impermeability and durability. In order to meet the strength requirements in the Specification higher contents may be required.

**a) Cement**

General

Cement shall be ordinary Portland cement, conforming to the requirements of BS 12 or similar approved standard, and shall be supplied by reputable manufacturers approved by the Engineer.

**b) Aggregates**

General

Aggregates for all types of concrete shall comply in all respects with BS 882, and the Contractor shall test samples, as described therein and in BS 812, as required by the Engineer.

Fine aggregate shall be naturally occurring sand.

Coarse aggregate shall consist of crushed rock or, if approved by the Engineer, alluvial gravel.

Aggregates shall be hard, durable and clean and shall not contain materials that may affect adversely the strength and durability of plain or reinforced concrete.

**c) Water**

Water for mixing concrete shall be fresh, clean and free from oils, acids, alkali, sewage, deleterious minerals or organic matter.



**SECTION 3:****BILL OF QUANTITIES****BILL OF QUANTITIES FOR CONSTRUCTION OF 60,000M<sup>3</sup> WATER PAN AT SHIMBIREY CENTRE-WAJIR SOUTH.**

<b>ITEM NO.</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE KSH</b>	<b>AMOUNT KSH</b>
1.0	<b>PRELIMINARIES</b>				
1.1	Mobilization and demobilization of plants, equipment, staff and set up a camp at the project site.	L/S	-	-	
1.2	Allow for works to deal with flow of water during construction.	L/S	-	-	
1.3	Provide, install and maintain for the entire contract period sign boards as directed by the project engineer.	L/S	-	-	
1.4	Allow for provision of water, electricity, sanitary facilities and other necessary amenities for the camp.	L/S	-	-	
1.5	Allow for transport costs for the whole project period	L/S	-	-	
	<b>Total Bill 1 carried to summary Ksh.</b>				

## BILL OF QUANTITIES

### BILL OF QUANTITIES FOR CONSTRUCTION OF 20,000M<sup>3</sup> WATER PAN AT BIYAAD CENTRE-ELDAS

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSH	AMOUNT KSH
1.0	<b>PRELIMINARIES</b>				
1.1	Mobilization and demobilization of plants, equipment, staff and set up a camp at the project site.	L/S	-	-	
1.2	Allow for works to deal with flow of water during construction.	L/S	-	-	
1.3	Provide, install and maintain for the entire contract period sign boards as directed by the project engineer.	L/S	-	-	
1.4	Allow for provision of water, electricity, sanitary facilities and other necessary amenities for the camp.	L/S	-	-	
1.5	Allow for transport costs for the whole project period	L/S	-	-	
	<b>Total Bill 1 carried to summary Ksh.</b>				

**BILL OF QUANTITIES FOR CONSTRUCTION OF 20,000M<sup>3</sup> WATER PAN AT BIYAAD CENTRE-ELDAS**

ITEM NO.	DESCRIPTION	UNIT	QTY	RATE KSH	AMOUNT KSH
2.0	<b>Pan excavation/ construction</b>				
2.1	Set out pan dimensions, peg properly and clear area of all obstacles and deposit away as directed by the engineer.	L/S	-		
2.2	Set out the pan with dimensions measuring 90MX60MX4M. Excavate in normal soil to create the pan reservoir of 4M depth with side slopes 1:2.5	M <sup>3</sup>	20,000		
2.3	place, spread and compact the excavated materials in layers of 0.3M to form embankments of height 3M, length 200M, crest width 10M and 30M base at a minimum distance of 20M from the main pan	M <sup>3</sup>	20,000		
2.4	Excavate in normal soil to create silt trap 20MX20MX2	M <sup>3</sup>	800		
2.5	Excavate in normal soil to create inflow channel 200Mx2Mx1M	M <sup>3</sup>	400		
2.6	Provide rip rap protection for silt trap and spill way	LS	1		
2.7	Excavate in normal soil a spill way and out let channel 100MX3MX1M.	M <sup>3</sup>	300		
2.8	Provide material and construct weighted gabions mattress of 6MX1MX0.3Mat inlet and outlet (spill way)	LS	-		
2.8	Construct concrete sill(mixer1:2:4) At inlet and overflow 1MX0.3MX20	M <sup>2</sup>	6		
2.9	<b>Total Bill 2 carried to summary Ksh.</b>				

**BILL OF QUANTITIES FOR CONSTRUCTION OF 20,000M<sup>3</sup> WATER PAN AT BIYAAD CENTRE-ELDAS**

<b>ITEM NO.</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE KSH</b>	<b>AMOUNT KSH</b>
3.0	<b>FENCING</b>				
3.1	Provide for the labour for digging of 350 No. of holes	NO.	350		
3.2	Purchase, supply, deliver, store and fit cedar posts. The post size 112mmX112mmX3550mm long fencing poles should be fixed with concrete in a hole of 450mmX450mmX850mm deep hole, the concrete mix 1:2:4. The inter distance between poles should be 3m provide supporter at 12m		400		
3.3	Provide and install, fix by tensioning 5 rounds of G12 barbed wire of 200m long at spacing of 700mm round the perimeter of water pan 1500m. Total length 3750m	NO	10		
3.4	Provide and install a metallic field gate 4mx2m. (Double opening) supported by concrete columns.	NO	1		
	<b>Total Bill 3 carried to summary Ksh.</b>				

## SUMMARY PAGE

<b>ITEM NO.</b>	<b>DESCRIPTION</b>	<b>AMOUNT KSH</b>
1	<b>Total Bill 1 carried to summary Ksh.</b>	
2	<b>Total Bill 2 carried to summary Ksh.</b>	
3	<b>Total Bill 3 carried to summary Ksh.</b>	
4	<b>Sub Total</b>	
5	<b>Contingency 5%</b>	
6	<b>VAT 16%</b>	
7	<b>Grand Total</b>	

**EVALUATION CRITERIA**

**MANDATORY REQUIREMENTS**

<b>s/no</b>	<b>Required Documents</b>	<b>YES</b>	<b>NO</b>
1	<b>Certified Copy</b> of Certificate of incorporation		
2	Valid Tax Compliance ( will be checked with TCC)		
3	Current Business Permit		
4	2% Bid Bond		
5	NCA 5 and Above for Water works		
6	<b>Certified Copy</b> of CR 12 Form (for last 12 months)		
7	Serialized pages		

**TECHNICAL REQUIREMENT**

<b>S/No</b>	<b>Required Documents</b>	<b>Score/Rate</b>	<b>Give score/Rate</b>
1	Dully filled Business Questionnaire	15	
2	Original and Copy of the BQ properly binded	10	
3	Dully filled tender form	10	
4	Updated Company Profile	10	
5	Cr12 Form	10	
6	Proof of at least three similar work done	15	
7	Key Personnel	10	
	<b>Total Score</b>	<b>80</b>	

NB: Only tenderers with 65 score proceed to Financial Requirement Criteria

**FINANCIAL REQUIREMENT**

<b>S/no</b>	<b>Required Documents</b>	<b>Score/ Rate</b>	<b>Give score/Rate</b>
1	Audited Financial Report 2014/2015 and 2015/2016	20	

Total Pass Mark = T ( 80 ) + F ( 20 ) = 100%

**FORM OF TENDER**

Date \_\_\_\_\_

Tender No. \_\_\_\_\_ To: \_\_\_\_\_

*[Name and address of procuring entity]*

Gentlemen and/or Ladies:

1. Having examined the tender documents including Addenda Nos. .... *[Insert numbers]*.the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply deliver, install and commission (..... *(Insert equipment description)*) in conformity with the said tender documents for the sum of ..... *(total tender amount in words and figures)* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Tender.

2. We undertake, if our Tender is accepted, to deliver install and commission the equipment in accordance with the delivery schedule specified in the Schedule of Requirements.

3. If our Tender is accepted, we will obtain the guarantee of a bank in a sum of equivalent to \_\_\_\_\_ percent of the Contract Price for the due performance of the Contract , in the form prescribed by ..... *( Procuring entity)*.

4. We agree to abide by this Tender for a period of ..... *[Number]* days from the date fixed for tender opening of the Instructions to tenderers, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

5. This Tender, together with your written acceptance thereof and your notification of award, shall constitute a Contract, between us. Subject to signing of the Contract by the parties.

6. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
[Signature]

\_\_\_\_\_  
[in the capacity of]

Duly authorized to sign tender for an on behalf of \_\_\_\_\_

**CONFIDENTIAL BUSINESS QUESTIONNAIRE FORM**

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

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

*Part 1 – General:*

Business Name  
 .....  
 Location of business premises.  
 .....  
 Plot No..... Street/Road  
 .....  
 Postal Address ..... Tel No. .... Fax ..... E  
 mail .....

Nature of Business  
 .....  
 Registration Certificate No.  
 .....  
 Maximum value of business which you can handle at any one time – Kshs.  
 Name of your bankers ..... Branch  
 .....

<b>Part 2 (a) – Sole Proprietor</b>			
Your name in full ..... Age			
.....			
Nationality ..... Country of origin			
.....			
• Citizenship details			
.....			
.....			
•			
<b>Part 2 (b) Partnership</b>			
Given details of partners as follows:			
Name	Nationality	Citizenship	
Details	Shares		
1.	.....		
	.....		
2.	.....		



	<p style="text-align: center;">.....</p> <p>3. ....</p> <p style="text-align: center;">.....</p> <p>4. ....</p> <p style="text-align: center;">.....</p>																																																
<b>Part 2 (c) – Registered Company</b>																																																	
<p>Private or Public .....</p> <p>State the nominal and issued capital of company-</p> <p style="padding-left: 40px;">Nominal Kshs.</p> <p style="padding-left: 40px;">Issued Kshs.</p> <p>Given details of all directors as follows</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 40%; text-align: center;">Name</th> <th style="width: 30%; text-align: center;">Nationality</th> <th style="width: 20%; text-align: center;">Citizenship Details</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Shares</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">1.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td></td> <td>.....</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">2.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td></td> <td>.....</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">3.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td></td> <td>.....</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">4.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td></td> <td>.....</td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">5</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td></td> <td>.....</td> <td></td> <td></td> </tr> </tbody> </table>			Name	Nationality	Citizenship Details	Shares				1.	.....	.....	.....		.....			2.	.....	.....	.....		.....			3.	.....	.....	.....		.....			4.	.....	.....	.....		.....			5	.....	.....	.....		.....		
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<p>Date ..... Signature of Candidate</p> <p>.....</p>																																																	

## TENDER SECURITY FORM

Whereas ..... [*Name of the tenderer*]  
(Hereinafter called “the tenderer”) has submitted its tender dated ..... [*Date of submission of tender*] for the supply, installation and commissioning of ..... [*name and/or description of the equipment*] (hereinafter called “the Tender”) ..... KNOW ALL PEOPLE by these presents that WE ..... of ..... having our registered office at ..... (Hereinafter called “the Bank”), are bound unto ..... [*Name of procuring entity*] (Hereinafter called “the Procuring entity”) in the sum of ..... for which payment well and truly to be made to the said Procuring entity, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_.

THE CONDITIONS of this obligation are:-

1. If the tenderer withdraws its Tender during the period of tender validity specified by the tenderer on the Tender Form; or
2. If the tenderer, having been notified of the acceptance of its Tender by the Procuring entity during the period of tender validity:
  - (a) fails or refuses to execute the Contract Form, if required; or
  - (b) fails or refuses to furnish the performance security in accordance with the Instructions to tenderers;

We undertake to pay to the Procuring entity up to the above amount upon receipt of its first written demand, without the Procuring entity having to substantiate its demand, provided that in its demand the Procuring entity will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This tender guarantee will remain in force up to and including thirty (30) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the above date.

## CONTRACT FORM

THIS AGREEMENT made the \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_ between ..... [*name of Procurement entity*] of ..... [*Country of Procurement entity*] (Hereinafter called “the Procuring entity) of the one part and ..... [*Name of tenderer*] of ..... [*city and country of tenderer*] (Hereinafter called “the tenderer”) of the other part;

WHEREAS the Procuring entity invited tenders for certain goods] and has accepted a tender by the tenderer for the supply of those goods in the sum of ..... [*Contract price in words and figures*] (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 Conditions of 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 Tender Form and the Price Schedule submitted by the tenderer
- (b) the Schedule of Requirements
- (c) the Technical Specifications
- (d) the General Conditions of Contract
- (e) the Special Conditions of contract; and
- (f) the Procuring entity’s Notification of Award

3. In consideration of the payments to be made by the Procuring entity to the tenderer as hereinafter mentioned, the tender hereby covenants with the Procuring entity to provide the goods and to remedy defects therein in conformity in all respects with the provisions of the Contract

4. The Procuring entity hereby covenants to pay the tenderer in consideration of the provisions of the goods 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.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_ (for the Procuring entity

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_ (for the tenderer in the presence of \_

\_\_\_\_\_

*(Amend accordingly if provided by Insurance Company)*

**LETTER OF NOTIFICATION OF AWARD**

Address of Procuring Entity

\_\_\_\_\_  
\_\_\_\_\_

To: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RE: Tender No. \_\_\_\_\_

Tender Name \_\_\_\_\_

This is to notify that the contract/s stated below under the above mentioned tender have been awarded to you.

\_\_\_\_\_  
\_\_\_\_\_

1. Please acknowledge receipt of this letter of notification signifying your acceptance.
2. The contract/contracts shall be signed by the parties within 30 days of the date of this letter but not earlier than 14 days from the date of the letter.
3. You may contact the officer(s) whose particulars appear below on the subject matter of this letter of notification of award.

*(FULL PARTICULARS)* \_\_\_\_\_  
\_\_\_\_\_

SIGNED FOR ACCOUNTING OFFICER

**FORM RB 1**  
**REPUBLIC OF KENYA**  
**PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD**

APPLICATION NO.....OF.....20.....

BETWEEN

.....APPLICANT

AND

.....RESPONDENT (*Procuring Entity*)

Request for review of the decision of the..... (*Name of the Procuring Entity*) of  
.....dated the...day of .....20.....in the matter of Tender No.....of  
.....20...

**REQUEST FOR REVIEW**

I/We.....,the above named Applicant(s), of address: Physical  
address.....Fax No.....Tel. No.....Email ....., hereby request the Public  
Procurement Administrative Review Board to review the whole/part of the above mentioned  
decision on the following grounds , namely:-

- 1.
  - 2.
- etc.

By this memorandum, the Applicant requests the Board for an order/orders that: -

- 1.
  - 2.
- etc

SIGNED ..... (Applicant)

Dated on.....day of ...../...20...

---

**FOR OFFICIAL USE ONLY**

Lodged with the Secretary Public Procurement Administrative Review Board on ..... day  
of .....20.....

SIGNED  
Board Secretary