



ADAPTATION FUND

**IN PARTNERSHIP WITH**



**DRILLING, EQUIPPING OF BOREHOLES AND ASSOCIATED WORKS IN KISUMU AND HOMABAY COUNTIES.**

**TENDER No. NEMA/T/017/2019 – 2020**

**TENDER DOCUMENT**

**ISSUE DATE : 23 JUNE 2020**

**SUBMISSION DATE : ON OR BEFORE 7<sup>TH</sup> JULY 2020, at 2:30 PM**

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### **NOTES:**

1. The transactions regarding the sample forms shall be carried out between the employer and the firm awarded the contract.
2. The whole document should be read and understood before quoting.

**SECTION I : INVITATION FOR TENDER**  
**DATE : 23 JUNE 2020**  
**TENDER REF. No.: NEMA/T/17/2019 – 2020**  
**TENDER NAME : DRILLING, EQUIPPING OF BOREHOLES AND ASSOCIATED WORKS IN , KISUMU AND HOMABAY COUNTIES.**

1. The Authority (NEMA) invites sealed tenders for the drilling, equipping of boreholes and construction of accompanying structures in Kisumu and Homabay counties. The project is being financed by the **Climate Change Adaptation Fund** through the **National Environment Management Authority (NEMA)** here-in after referred to as the **“Employer”** with **VIRED** as the **“Implementing partners”**.

- 1.1 Interested eligible candidates may obtain further information from and inspect the tender documents at NEMA headquarters, Procurement Section, during normal working hours.
- 1.2 A complete set of tender documents may be obtained by interested candidates upon payment of non-refundable fees of Ksh.1,000/= (one thousand) in bankers’ cheque OR cash deposits payable to **NEMA Revenue Account, KCB – KICC Branch, Account No. 1102298158** and submit the deposit slip at the **Cash Office** on Ground Floor, NEMA Headquarters.
- 1.3 Prospective bidders may also download the tender documents **free of charge** from the following websites:
- ❖ NEMA website [www.nema.go.ke](http://www.nema.go.ke)
  - ❖ Public Procurement Information Portal [www.tenders.go.ke](http://www.tenders.go.ke)
- 1.4 Bidders who will download the tender documents must forward their company details to this email; [procurement@nema.go.ke](mailto:procurement@nema.go.ke) to facilitate subsequent clarifications and/or addendum. The particulars should include Name of the Firm, Address, Telephone Number, Email and Tender Name
- 1.5 .The Addendum shall be posted on the respective websites.

- 1.6 Complete tender documents are to be enclosed in plain sealed envelopes and marked with tender reference number and be deposited in the Tender Box at NEMA Headquarters or to be addressed to:

**THE DIRECTOR GENERAL  
NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY  
ELLAND HOUSE, POPO ROAD, OFF MOMBASA ROAD  
P.O BOX 67839 – 00200 NAIROBI.**

**So as to be received on or before 7<sup>th</sup> July 2020 at 2:30PM.**

**Any document which shall not fit in the tender box slot shall be dropped at the procurement section Rm G16 and be entered in the tender receipt register for safe custody.**

- 1.7 Prices quoted should be net inclusive of all taxes, must be in Kenya shillings and shall remain valid for 60 days from the closing date of tender.
- 1.8 Tenders will be opened immediately thereafter in the presence of the candidates or their representatives who choose to attend at **NEMA Headquarters, Popo Road, South C.**

**CHIEF PROCUREMENT OFFICER  
FOR: DIRECTOR GENERAL**

## **1) SECTION II : LOCATION OF THE PROJECT AREA, THE SCOPE OF WORK AND BOREHOLE DATA**

### **1.1 LOCATION OF THE PROJECT AREA**

The location of the project area is as per the below data sheet;

1. HOMABAY (5 No.)
2. KISUMU (2 No.)

#### **Contact Persons;**

**1. Mr John Maniafu**

**County Director of Environment, Homabay  
NEMA  
+254724430437**

**2. Mr Tom Otieno**

**VIRED International – Kisumu  
+254713424465**

### **1.2 THE SCOPE OF WORKS**

Where, in here, the document mentions “**adaptation village**”, the scope of works per **adaptation village** shall include, but not limited to the following, in reference to the Bill of Quantities, Drawings and Designs;

- a) Drilling, casing, gravel packing and Test Pumping of the borehole.
- b) Equipping of the boreholes.
- c) Construction of Elevated Steel Pressed Water Tank.
- d) Construction of a Water Kiosk.
- e) All related civil and plumbing works
- f) Sanitation facility.
- g) Fencing of the land to secure the borehole, sanitation facility, and demonstration site.

**SECTION III : INSTRUCTIONS TO TENDERERS**

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## **SECTION II : INSTRUCTIONS TO TENDERERS**

**Note :** The tenderer must comply with the following conditions and instructions and failure to do so is liable to result in rejection of the tender.

### **GENERAL**

#### **1. Definitions**

- (a) **“Tenderer”** means any persons, partnership firm or company submitting a sum or sums in the Bills of Quantities in accordance with the Instructions to Tenderers, 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) **“Approved tenderer”** means the tenderer who is approved by the Employer
- (c) Any noun or adjective derived from the word **“tender”** shall be read and construed to mean the corresponding form of the noun or adjective **“bid”**. Any conjugation of the verb **“tender”** shall be read and construed to mean the corresponding form of the verb **“bid.”**
- (d) **“Employer”** means **National Environment Management Authority.**

#### **2. Eligibility and Qualification Requirements**

##### **2.1 Eligibility requirements**

This invitation to tender is open to all tenderers who are qualified as stated in the appendix. The tenderers shall satisfy all the relevant licensing and/or registration requirements with the appropriate statutory bodies in Kenya including, but not limited to, the Ministry of Public Works, National Construction Authority or the Energy and Petroleum Regulatory Authority.

## **2.2 Qualification Requirements**

To be qualified for award of Contract, the tenderer 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 tenderer shall be required to update the following: -

- (a) Details of experience and past performance of the tenderer on the works of a similar nature and details of current work on hand and other contractual commitments.
- (b) The qualifications and experience of key personnel proposed for administration and execution of the contract, both on and off site.
- (c) 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 tenderer 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.
- (d) 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 the Conditions of Contract, Part I and Part II.
- (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 Engineer.
- (f) Details of any current litigation or arbitration proceedings in which the tenderer is involved as one of the parties.

### **2.3 Joint Ventures**

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

- (a) The tender, and in case of a successful tender, 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 an 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 Tender and the Form of Agreement (in case of a successful tender)
- (e) A copy of the agreement entered into by the joint venture partners shall be submitted with the tender.

### **3. Cost of Tendering**

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

3.2 The price to be charged for the tender document shall not exceed Kshs.1,000/=

3.3 The procuring entity shall allow the tenderer to view the tender document free of charge before purchase.

4.1. The tenderer 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 tenderer, his personnel or agents, will release 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.

## **TENDER DOCUMENTS**

### **5. Tender Documents**

5.1 The Tender 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 tenderers;

- a) Form of Invitation for Tenders
- b) Instructions to Tenderers
- c) Form of Tender
- d) Appendix to Form of Tender
- e) Form of Tender Surety
- f) Tender and Confidential Business Questionnaires
- g) Details of Sub contractors
- h) Schedules of Supplementary Information
- i) General Conditions of Contract – Part I
- j) Conditions of Particular Application – Part II
- k) Specifications
- l) Bills of Quantities
- m) Drawings
- n) Declaration Form

5.2 The tenderer is expected to examine carefully all instructions, conditions, forms, terms, specifications and drawings in the tender documents. Failure to comply with the requirements for tender submission will be at the tenderer's own risk. **Tenders which are not substantially responsive to the requirements of the tender documents will be rejected.**

5.3 All recipients of the documents for the proposed Contract for the purpose of submitting a tender (whether they submit a tender or not) shall treat the details of the documents as "private and confidential".

## **6. Inquiries by tenderers**

6.1. A tenderer making an inquiry relating to the tender document may notify the Employer in writing through the Employer's mailing address indicated in the Invitation to Tender.

6.2. The procuring entity shall reply to any clarifications sought by the tenderer within 3 days of receiving the request to enable the tenderer to make timely submission of its tender.

## **7. Amendment of Tender Documents**

7.1. 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 tenderer, modify the tender documents by issuing Addenda.

7.2 Any Addendum will be notified in a subsequent newspaper advert and on the websites provided where the bid document was obtained.

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

## **PREPARATION OF TENDERS**

### **8. Language of Tender**

8.1 The tender and all correspondence and documents relating to the tender exchanged between the tenderer and the Employer shall be written in the English language. Supporting documents and printed literature furnished by the tenderer with the tender 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 tender, the English language shall prevail.

## **9. Documents Comprising the Tender**

9.1 The tender to be prepared by the tenderer shall comprise:

- i) The Form of Tender and Appendix thereto,
- ii) A Tender Security
- iii) The Priced Bills of Quantities and Schedules
- iv) The information on eligibility and qualification
- v) Any other materials required to be completed and submitted in accordance with the Instructions to Tenderers.
- vi) Confidential Business Questionnaire

9.2 The Forms, Bills of Quantities and Schedules provided in the tender 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 Tender Surety)

## **10. Tender Prices**

10.1 All the insertions made by the tenderer shall be made in **INK** and the tenderer shall clearly form the figures. The relevant space in the Form of Tender and Bills of Quantities shall be completed accordingly without interlineations or erasures except those necessary to correct errors made by the tenderer in which case the

erasures and interlineations shall be initialed by the person or persons signing the tender.

- 10.2 A price or rate shall be inserted by the tenderer 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 tenderer 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.**
- 10.3 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 tender is based. All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause prior to the deadline for submission of tenders, shall be included in the rates and prices and the total Tender Price submitted by the tenderer.
- 10.4 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 tenderer is advised against inserting a price or rate against any item contrary to this instruction. **A tender submitted with an adjustable price quotation will be treated as NON-RESPONSIVE and will be rejected.**
- 10.5 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 tenderer and it is the intention of the Employer to take full advantage of unbalanced low rates.
- 10.6 Unless otherwise specified the tenderer 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 tender amount.
- 10.7 The tenderer shall furnish with his tender 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 tenderer to justify such rates so obtained from the suppliers or manufacturers.

- 10.8 The rates and prices quoted by the tenderer are subject to adjustment during the performance of the Contract only in accordance with the Provisions of the Conditions of Contract. The tenderer shall complete the schedule of basic rates and shall submit with his tender such other supporting information as required under clause 70 of the Conditions of Contract Part II.
- 10.9 Contract price variations shall not be allowed within the first 12 months of the contract.
- 10.10 Where quantity contract variation is allowed, the variation shall not exceed 15% of the original contract quantity.
- 10.11 Price variation requests shall be processed by the procuring entity within 30 days of receiving the request.

## **11. Currencies of Tender and Payment**

- 11.1. Tenders shall be priced in Kenya Shillings and the tender sum shall be in Kenya Shillings.

## **12. Tender Validity**

- 12.1. The tender shall remain valid and open for acceptance for a period of ninety (90) days from the specified date of tender opening or from the extended date of tender opening (in accordance with clause 7.4 here above) whichever is the later.
- 12.2. In exceptional circumstances prior to expiry of the original tender validity period, the Employer may request the tenderer for a specified extension of the period of validity. The request and the responses thereto shall be made in writing and send by post or email. A tenderer may refuse the request without forfeiting his Tender Surety. A tenderer agreeing to the request will not be

required nor permitted to modify his tender, but will be required to extend the validity of his Tender Surety correspondingly.

### **13. Tender Security**

13.1. The tenderer shall furnish as part of his tender, a Tender Security in the amount and form stated in the Appendix to Instructions to Tenderers.

13.2. The tender security shall not exceed 2 percent (2%) of the tender price.

13.3. The Tender Security shall be valid at least thirty (30) days beyond the tender validity period.

13.4. The tender security shall be denominated in Kenya Shillings and shall be in the form of;

- a) A bank guarantee issued by a bank licensed and operating in Kenya.
- b) Insurance guarantee from an Insurance Company authorized to transact Bid Bonds by the Public Procurement Regulatory Authority of Kenya.
- c) Cash
- d) A guarantee issued by financial institution approved by Central bank

13.5. Any tender not accompanied by an acceptable Tender Security will be rejected by the Employer as non-responsive.

13.6. The tender security is required to protect the Procuring Entity against the risk of tenderer's conduct which would warrant forfeiture.

13.7. The Tender Sureties of unsuccessful tenderers will be returned as promptly as possible, but not later than twenty-eight (28) days after expiration of the tender validity period. The Tender Surety of the successful tenderer will be returned upon the tenderer executing the Contract and furnishing the required Performance Security.

13.8. The Tender Surety may be forfeited:

- a) if a tenderer withdraws his tender during the period of tender validity: or

- b) in the case of a successful tenderer, if he fails, within the specified time limit
  - i. to sign the Agreement, or
  - ii. to furnish the necessary Performance Security
- c) if a tenderer does not accept the correction of his tender price (or an error) pursuant to clause 24.

#### **14. No Alternative Offers**

- 14.1 The tenderer shall submit an offer which complies fully with the requirements of the tender documents unless otherwise provided for in the appendix. Only one tender may be submitted by each tenderer either by himself or as partner in a joint venture. A tenderer who submits or participates in more than one tender will be disqualified.
- 14.2 The tenderer shall not attach any conditions of his own to his tender. The tender price must be based on the tender documents. The tenderer 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 tender notices, if any, for the calculation of his tender price. Any tenderer who fails to comply with this clause will be disqualified.

#### **15. Pre-tender Meeting**

- 15.1 If a pre-tender meeting is convened, the tenderer's designated representative is invited to attend at the venue and time in the Invitation to Tender. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 15.2 The tenderer is requested as far as possible to submit any questions in writing or by cable, to reach the Employer not later than seven (7) 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 purchasers of the tender documents. Any modification of the tender documents listed in – Clause 9 which may become necessary as a result of the pre-tender meeting shall be made by the Employer exclusively through the issue of a tender notice pursuant to Clause 7 and not through the minutes of the pre-tender meeting.
  
- b) Non-attendance at the pre-bid meeting will not be cause for disqualification of a bidder.

## **16. Format and Signing of Tenders**

- 16.1. The tenderer shall prepare his tender as outlined in clause 9 above and mark appropriately one set “**ORIGINAL TENDER**” and the other “**COPY OF TENDER**” as appropriate. In the event of discrepancy between them, the original shall prevail.
  
- 16.2. The copy of the tender 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 tenderer. All pages of the tender where amendments have been made shall be initialed by the person or persons signing the tender.
  
- 16.3. The complete tender shall be without alterations, interlineations or erasures, except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person or persons signing the tender.

## **SUBMISSION OF TENDERS**

### **17. Sealing and Marking of Tenders**

- 17.1. The tenderer shall seal the original and copy of the tender in separate envelopes, duly marking the envelopes as **“ORIGINAL” and “COPY”**. The envelopes shall then be sealed in an outer separate envelope.
- 17.2. The inner and outer envelopes shall be addressed to the Employer at the address stated in the Appendix to Instructions to Tenderers and bear the name and identification of the Contract stated in the said Appendix with a warning **“DO NOT OPEN BEFORE 7<sup>TH</sup> JULY 2020 AT 1430HRS”**
- 17.3. The inner envelopes shall each indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared “late”, while the outer envelope shall bear no mark indicating the identity of the tenderer.
- 17.4. 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 tender. **A tender opened prematurely for this cause will be rejected by the Employer and returned to the tenderer.**
- 17.5. Tenderers shall include, but not limited to the following **Statutory/Mandatory** requirements information and documents with their tenders;
- a). Certified copies of certificate of registration, Certificate of Incorporation and Principle place of business.
  - b). Certified Copy of Tax Compliance Certificate.
  - c). Certified Copy of the current CR12 form.
  - d). Certified Copy of Valid Certificates of Registration with National Construction Authority
  - e). Certified Copy of Valid Certificates of Registration as qualified water resource contractors for the year 2019 with the Ministry of Water, Kenya, (Borehole Drilling Contractor Class B)
  - f). Correctly duly filled and signed Form of Tender
  - g). Correctly and duly filled Confidential Business Questionnaire.
  - h). Bid bond valid for 120 days.

## **18. Deadline for Submission of Tenders**

- 18.1. Tenders must be received by the Employer at the address specified in clause 17.2 and on the date and time specified in the Letter of Invitation, subject to the provisions of clause 7.4, 18.2 and 18.3. Tenders delivered by hand must be placed in the “tender box” provided in the office of the Employer. **Proof of posting will not be accepted as proof of delivery and any tender delivered after the above stipulated time, from whatever cause arising will not be considered.**
- 18.2. The Employer may, at his discretion, extend the deadline for the submission of tenders through the issue of an Addendum in accordance with clause 7, in which case all rights and obligations of the Employer and the tenderers previously subject to the original deadline shall thereafter be subject to the new deadline as extended.
- 18.3. Any tender received by the Employer after the prescribed deadline for submission of tender will be returned unopened to the tenderer.

## **19. Modification and Withdrawal of Tenders**

- 19.1. The tenderer may modify or withdraw his tender after tender submission, provided that written notice of the modification or withdrawal is received by the Employer prior to prescribed deadline for submission of tenders.
- 19.2. The tenderer’s modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions for the submission of tenders, with the inner and outer envelopes additionally marked **“MODIFICATION”** or **“WITHDRAWAL”** as appropriate.
- 19.3. No tender may be modified subsequent to the deadline for submission of tenders.
- 19.4. No tender may be withdrawn in the interval between the deadline for submission of tenders and the period of tender validity specified on the tender form.

Withdrawal of a tender during this interval will result in the forfeiture of the Tender Surety.

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

## **TENDER OPENING AND EVALUATION**

### **20. Tender Opening**

- 20.1. The Employer will open the tenders in the presence of the tenderers' representatives who choose to attend at the time and location indicated in the Letter of Invitation to Tender. The tenderers' representatives who are present shall sign a register evidencing their attendance.
- 20.2. Tenders for which an acceptable notice of withdrawal has been submitted, pursuant to clause 19, will not be opened. The Employer will examine the tenders to determine whether they are complete, whether the requisite Tender Sureties have been furnished, whether the documents have been properly signed and whether the tenders are generally in order.
- 20.3. At the tender opening, the Employer will announce the tenderer's names, total tender price, tender price modifications and tender withdrawals, if any, the presence of the requisite Tender Surety and such other details as the Employer, at his discretion, may consider appropriate. No tender shall be rejected at the tender opening except for late tenders or such which contravene any provision herein.
- 20.4. The Employer shall prepare minutes of the tender opening including the information disclosed to those present.

20.5. Tenders not opened and read out at the tender opening shall not be considered further for evaluation, irrespective of the circumstances.

## **21. Process to be Confidential**

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

21.2. Any effort by a tenderer to influence the Employer in the process of examination, evaluation and comparison of tenders and decisions concerning award of Contract may result in the rejection of the tenderer's tender.

## **22. Clarification of Tenders**

22.1. To assist in the examination, evaluation and comparison of tenders, the Employer may ask tenderers individually for clarification of their tenders, including breakdown of unit prices. The request for clarification and the response shall be in writing through or email but no change in the price or substance of the tender 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 tenders in accordance with clause 24.

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

## **23. Determination of Responsiveness**

- 23.1. Prior to the detailed evaluation of tenders, the Employer will determine whether each tender is substantially responsive to the requirements of the tender documents.
- 23.2. For the purpose of this clause, a substantially responsive tender is one which conforms to all the terms, conditions and specifications of the tender documents without material deviation or reservation. 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 tenderer under the Contract, or which limits in any substantial way, inconsistent with the tender documents, the Employer's rights or the tenderers obligations under the Contract and the rectification of which would affect unfairly the competitive position of other tenderers who have presented substantially responsive tenders.
- 23.3. 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 tender be seriously unbalanced in relation to the Employer's estimate of the works to be performed under any item or groups of items, the tender shall be deemed not responsive.
- 23.4. A tender determined to be not substantially responsive will be rejected by the Employer and may not subsequently be made responsive by the tenderer by correction of the non-conforming deviation or reservation.

## **24. Conversion to a single currency**

- 24.1 Where other currencies are used, the procuring entity will convert those currencies to Kenya Shillings using the selling exchange rate on the date of the tender closing provided by the Central Bank of Kenya.

## **25. Correction of Errors**

25.1 Tenders 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 tender amount as stated in the Form of Tender and the corrected tender figure in the main summary of the Bills of Quantities, the amount as stated in the Form of Tender shall prevail.
- d) The Error Correction Factor shall be computed by expressing the difference between the tender amount and the corrected tender sum as a percentage of the corrected builder's work (i.e. corrected tender sum less Prime Cost and Provisional Sums).
- e) The Error Correction Factor shall be applied to all builder's work (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 tender will be adjusted in accordance with the above procedure for the correction of errors and, with concurrence of the tenderer, shall be considered as binding upon the tenderer. If the tenderer does not accept the corrected amount, the tender may be rejected and the Tender Security may be forfeited in accordance with clause 13.

## **26. Evaluation and Comparison of Tenders**

- 26.1. The Employer will evaluate only tenders determined to be substantially responsive to the requirements of the tender documents in accordance with clause 23.
- 26.2. In evaluating tenders, the Employer will determine for each tender the evaluated tender price by adjusting the tender price as follows:
- a) Making any correction for errors pursuant to clause 25.
  - b) Excluding Provisional Sums and provision, if any, for Contingencies in the Bills of Quantities, but including Day works where priced competitively.
- 26.3. 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 tender documents or otherwise result in the accrual of unsolicited benefits to the Employer, shall not be taken into account in tender evaluation.
- 26.4. Price adjustment provisions in the Conditions of Contract applied over the period of execution of the Contract shall not be taken into account in tender evaluation.
- 26.5. If the lowest evaluated tender 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 tenderer 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 tenderer to a level sufficient to protect the Employer against financial loss in the event of subsequent default of the successful tenderer under the Contract.
- 26.6. Firms incorporated in Kenya where indigenous Kenyans own 51% or more of the share capital shall be allowed a 10% preferential bias provided that they do not sub-contract work valued at more than 50% of the Contract Price excluding provisional sums to a non-indigenous sub-contractor.

- 26.7. Preference where allowed in the evaluation of tenders shall not exceed 15%
- 26.8. The procuring entity may at any time terminate procurement proceedings before contract award and shall not be liable to any person for the termination.
- 26.9. The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.
- 26.10. A tenderer who gives false information in the tender document about its qualification or who refuses to enter into a contract after notification of contract award shall be considered for debarment from participating in future public procurement.
- 26.11. Poor past performance shall not be used as an evaluation criterion unless specifically provided for in the appendix.
- 26.12. In carrying out the evaluation, the following factors will be considered;
- a) Availability of the equipment and machinery.
  - b) Quality of the equipment and machinery.
  - c) Capacity and experience of the bidder.
  - d) Capacity and experience of staff.
  - e) The Contract Sum

## **AWARD OF CONTRACT**

### **27. Award Criteria**

- 27.1 Subject to Sub-clause 27.2, the Employer will award the Contract to the tenderer whose tender is determined to be substantially responsive to the tender documents and who has offered the lowest evaluated tender 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.

27.2 The Employer reserves the right to accept or reject any tender, and to annual the tendering process and reject all tenders, at any time prior to award of Contract, without thereby incurring any liability to the affected tenderers or any obligation to inform the affected tenderers of the grounds for the Employer's action.

27.3 A tenderer who gives false information in the tender document about their qualification or who refuses to enter into a contract after notification of the contract award shall be considered for debarment from participating in future public procurement.

27.4 To qualify for contract award, the tenderer shall have, but not limited to, the following;

- a) Pass the preliminary evaluation having submitted all the mandatory documentation.
- b) Score the minimum technical evaluation score as given in the evaluation criteria under the appendix to instructions.
- c) Necessary qualifications, capability experience, services and equipment and facilities to provide what is being procured.
- d) Legal capacity to enter into a contract for procurement
- e) Shall not be insolvent, in receivership, bankrupt or in the process of being wound up and is not the subject of legal proceedings relating to the foregoing.
- f) Shall not be debarred from participating in public procurement.

## **28. Notification of Award**

28.1. Prior to the expiration of the period of tender validity prescribed by the Employer, the Employer will notify the successful tenderer in writing by registered mail or email letter that his tender has been accepted. This letter (hereinafter and in all Contract documents called "**Notification of Award**") 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.

28.2. At the same time that the Employer notifies the successful tenderer that his tender has been accepted, the Employer shall notify the other tenderers that the tenders have been unsuccessful, in writing, sent by a registered mail or electronic mail.

28.3. Within fourteen [14] days of receipt of the Notification of Award from the Employer, the successful tenderer shall sign the form and return it to the Employer together with the required Performance Security.

28.4. The parties to the contract shall have it signed within 30 days from the date of notification of contract award unless there is an administrative review request.

## **29. Performance Guarantee**

29.1. Within twenty-eight [28] days of receipt of the notification of award from the Employer, the successful tenderer shall furnish the Employer with a Performance Security in the amount 5% of the bid amount.

29.2. The Performance Security to be provided by the successful tenderer shall be an unconditional Bank Guarantee issued at the tenderer's option by a reputable Bank approved by the Employer and located in the Republic of Kenya.

29.3. Failure of the successful tenderer to lodge the required Performance Security shall constitute a breach of Contract and sufficient grounds for the annulment of the award and forfeiture of the Tender Security and any other remedy under the Contract. The Employer may award the Contract to the next ranked tenderer.

## **30. Terms of Payment**

30.1 No advance payment.

30.2 First payment and subsequent certificates shall be raised for payment only after successful completion of various stages of measured works and testing of the system.

30.3 Unless otherwise stated, 10% retention money and **6% withholding tax (or as may be provided in the Public Finance Management Act)** shall be deducted from the payment.

30.4 5% of the retention money shall be released upon substantial completion of the project and the remaining 5% at the end of the Defects Liability Period (6 months).

### **31. Corrupt or fraudulent practices**

31.1. NEMA requires that tenderers observe the highest standard of ethics during the procurement process and execution of contracts. A tenderer shall sign a declaration that he has not and will not be involved in corrupt or fraudulent practices.

31.2. 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 TENDERERS**

### **Notes on the Appendix to Instructions to Tenderers**

The following appendix to instructions to tenderers shall complement or amend the provisions of the instructions to tenderers (Section II). Wherever there is a conflict between the provisions of the instructions to tenderers and the provisions of the appendix, the provisions of the appendix herein shall prevail over those of the instructions to tenderers.

Clause of Instructions to Tenderers	Particulars of Appendix to Instructions to Tenderers
1.1	This invitation to tender is open to all <b>eligible candidates from Kenya</b> as described in the Instructions to Tenderers
1.4	Prospective bidders may also download the tender documents <b>free of charge</b> from the following websites: <ul style="list-style-type: none"> <li>❖ <b>NEMA website</b> <a href="http://www.nema.go.ke">www.nema.go.ke</a></li> <li>❖ <b>Public Procurement Information Portal</b> <a href="http://www.tenders.go.ke">www.tenders.go.ke</a></li> </ul>
1.5	Bidders who will download the tender documents must forward their company details to this email; <a href="mailto:procurement@nema.go.ke">procurement@nema.go.ke</a> to facilitate subsequent clarifications and/or addendum. The particulars should include Name of the Firm, Address, Telephone Number, Email and Tender Name.

	<p>The tender documents may also be obtained from <b>NEMA Headquarters Procurement Section</b> upon payment of a <b>Non-Refundable Fee</b> of <b>KSh. 1,000/=</b> in <b>Bankers Cheque</b> or <b>CASH Deposits</b> payable to <b>NEMA Revenue Account, KCB – KICC Branch, Account Number 1102298158</b>. The deposit slip should be submitted at the NEMA Headquarters' Cash Office.</p>
1.6	<p>The name and address of the employer for the purpose of submission of the tenders is;</p> <p style="text-align: center;"><b>THE DIRECTOR GENERAL NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY ELLAND HOUSE, POPO ROAD, OFF MOMBASA ROAD P.O BOX 67839 – 00200 NAIROBI.</b></p> <p>ii) The name of the proposed works and where available the contract number is;</p> <p style="text-align: center;"><b>DRILLING, EQUIPPING OF BOREHOLES AND ASSOCIATED WORKS IN KISUMU AND HOMABAY COUNTIES.</b></p> <p>iii) The tender opening date and time will be <b>7<sup>TH</sup> JULY 2020 at 2:30PM</b></p>
13	<p><b>Tender Security: Kshs 500,000</b> in form of a cash, a guarantee issued by financial institution approved by central bank of Kenya, Bank Guarantee issued by a <b>bank licensed and operating in Kenya</b>. Tender security from an Insurance Company <b>authorized to transact Bid Bonds by the Public Procurement Regulatory Authority of Kenya</b> is also acceptable. The tender security should be valid for a period of 30 days beyond the tender validity period, i.e. 90 days from the date of opening the tender.</p>

## 26. Evaluation and comparison of tenders:

After tender opening, the tenders will be evaluated in 3 stages, namely;

- a) Preliminary Examination (Mandatory requirements)
- b) Detailed Technical Examination

c) Financial Evaluation

The following evaluation criteria shall be applied notwithstanding any other requirement in the tender document:

**STAGE 1: PRELIMINARY EVALUATION**

**a) Mandatory requirements**

**The following requirements MUST be met by the tenderer (All copies must be certified)**

No	Description	Yes	No
1.	Copy of certificate of incorporation		
2	Copy of CR 12		
3	Copy of valid Tax Compliance Certificate		
4	Copy of valid Registration with NCA class 6 (Water)		
5	Registered as qualified water resource contractor and gazetted for the year 2019 with the Ministry of Water, Kenya, (Borehole Drilling Contractor Class B). NB Must appear on the Ministry's official website		
6	Original Bid Bond Valid for 90 days from the date of opening the tenders		
7.	Duly completed Confidential Business Questionnaire		
8.	Duly filled Form of Tender		

**At this stage the tenderer's submission will either be responsive or non-responsive. The non-responsive submissions will be eliminated from the entire evaluation process and will not be considered further.<sup>1</sup>**

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1

**Stage II : Technical Evaluation (PASS MARK 70%)**

**This section will be scored out of 100 points and will determine the technical score. The Pass mark is 70/100. Bidders who score below this will not progress to Financial Evaluation.**

**TABLE: 1**

**Stage II: Technical Evaluation (PASS MARK 70%)**

**Summary sheet**

			<b>Bidder's Score</b>
	<b>Description</b>	<b>Maxim Possible Score</b>	
<b>1</b>	<b>Experience / Works of similar nature</b>	<b>33</b>	
<b>2</b>	<b>Equipment for the works</b>	<b>26</b>	
<b>3</b>	<b>Staff Competence (Technical)</b>	<b>21</b>	
<b>4</b>	<b>Evidence of financial capability for</b>	<b>20</b>	
<b>TOTAL</b>		<b>100</b>	

**NB:**

***This section will be scored out of 100 points and will determine the technical score. The Pass mark is 70/100. Bidders who score below this will not progress to Financial Evaluation.***

**1.0 EXPERIENCE /WORKS OF SIMILAR NATURE (Attach Evidence e.g. Completion Certificates, Contracts) (33)**

**Schedule 1.1 (equal or higher values) max score (12)**

<b>Criteria</b>	<b>Maximum Points Possible</b>	<b>Bidder's score</b>	<b>Remarks</b>
<b>Three projects of equal or higher value in the last five years.</b>	<b>12 - (@ 4)</b>		
<b>Any three projects of value between 50-99% of value of works in the last five years</b>	<b>6 - (@ 2)</b>		
<b>Any three projects less than 50% value of the tendered works in the last five years</b>	<b>3 - (@1)</b>		
<b>No submission of project record</b>	<b>0</b>		
<b><i>MAY SUB TOTAL SCORE</i></b>	<b>12</b>		

**Note :**

- 1. Score awarded will be in line with the Bidder submitting documents which conform to the requirements above.**
- 2. Only one score will be provided as per the submissions.**
- 3. The highest score attained will be allotted as per the submissions in accordance to the above.**
- 4. The score will be prorated based on the three largest projects of the contractor within the last five years.**

**Schedule 1.2 (Similar nature) max score (15)**

<b>Criteria</b>	<b>Maximum Points Possible</b>	<b>Bidder's Score</b>	<b>Remarks</b>
<b>Three projects of similar nature and complexity combining the majority of the major elements under this tender – (bidder to detail and clearly display similarity of proposed works to their experience) in the last 5</b>	<b>15 – (@ 5)</b>		
<b>Three projects of similar nature including a number of elements under this tender (bidder to detail and clearly display similarity of proposed works to their experience) in the last 5</b>	<b>9 – (@ 3)</b>		
<b>Any Three projects of similar nature but not same complexity</b>	<b>6 – (@ 2)</b>		
<b>Any three other unrelated construction works e.g. marine works , steel works, road works etc</b>	<b>3 – (@1)</b>		
<b>No submission in details works undertaken</b>	<b>0</b>		
<b><i>MAX SUB-TOTAL SCORE</i></b>	<b><i>15</i></b>		

**Note :**

- Score awarded will be in line with the Bidder submitting requirements which conform to the requirements above.**

2. **Only one score will be provided as per the submissions.**
3. **The highest score attained will be allotted as per the submissions in accordance to the above.**
4. **The score will be prorated based on the three most similar projects of the contractor.**

**Schedule 1.3 (reference and clients) max score (6)**

<b>Criteria</b>	<b>Maximum Points Possible</b>	<b>Bidder's Score</b>	<b>Remarks</b>
<b>Three or more similar works satisfactorily completed for the National or County Governments their agencies and affiliates in the last 3 years (evidence for the same should be clearly submitted – completion cert, reference letters, proof of payment in full, etc).</b>	<b>6 – (@ 2)</b>		
<b>Works for other Clients</b>	<b>2</b>		
<b>No details and references submitted</b>	<b>0</b>		

<b>MAX SUB-TOTAL SCORE</b>	<b>6</b>		
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**Note :**

**1. Score awarded will be in line with the Bidder submitting requirements which conform to the requirements above.**

**2. Only one score will be provided as per the submissions.**

**B) The highest score attained will be allotted as per the submissions in accordance**

**to the above.**

## **2.0 CONTRACTORS EQUIPMENT (26)**

### **Schedule 2.1- Equipment, availability and ownership score (26)**

<b>Plant type required</b>		<b>Score per item</b>		<b>Bidder's Score</b>	<b>Remarks</b>
		<b>Owned</b>	<b>Leased</b>		
<b>1</b>	<b>Rig mounted on a truck with a drilling capacity of over 300 meters (1 No.)</b>	<b>5</b>	<b>2.5</b>		
<b>2</b>	<b>Air compressor: Working pressure: 140 psi (9.9 kg/cm2) (1 No.)</b>	<b>4</b>	<b>2</b>		
<b>3</b>					
<b>4</b>	<b>Welding machine (2 No.)</b>	<b>3</b>	<b>1.5</b>		

5	<b>Diesel generator of at least 25KVA (2 No.)</b>	3	1.5		
6	<b>1 No 14 ton truck</b>	3	1.5		
7					
8	<b>1 No Pickup 1 Ton</b>	3	1.5		
9					
10					
11	<b>Submersible pump with total head : 300 meters and a Pumping capacity of 10 – 30 m<sup>3</sup>/hr (2 No.) and accessories for pump testing</b>	5	2.5		
12.					
<b>MAX SUB-TOTAL SCORE</b>		<b>26</b>			
<b>NB:</b> <b>Log book and ownership documents must bear the name of the Company.</b>					

**3.0 STAFF max score (21)**

**Schedule 3.1- Availability and education score (11)**

<b>Key staff required</b>	<b>No. required</b>	<b>Maximum score for Educational qualification – Score per person</b>		<b>Bidder's score</b>	<b>Remarks</b>
		<b>Degree (civil eng/ Geology)</b>	<b>Diploma (civil eng/Geology )</b>		
<i>Management (Key personnel should be registered with relevant bodies e.g. EBK) – Doc. Should also be certified</i>					
<b>Project Manager (Civil, water Eng. Geology or equivalent) – Irrigation, etc.</b>	<b>1</b>	<b>2</b>	<b>1</b>		
<b>Ass. Project manager (Civil Eng/ Geologyany building</b>	<b>1</b>	<b>1</b>	<b>0.5</b>		
<b>MAX SUB-TOTAL SCORE</b>		<b>3</b>			

Supervisory	No. required	Maximum score for Educational qualification – Score per person			Bidder's Score	Remarks
		Degree	Diploma	Certificate		
<i>Site agent ( Civil or building any trade)</i>	1	2	1	0		
<i>Foreman 1 (Civil or building any trade)</i> <i>(NCA Accredited)</i>	1	1	1	1		
<i>Ass. Foreman (related to civil &amp; Building etc.)</i>	1	1	1	1		
<b>MAX SUB-TOTAL SCORE</b>		4				

Artisans	No. required	Maximum score for Educational qualification – Score per person		Bidder's Score	Remarks
		Diploma	Certificate/O level/ other		
<i>Masons</i>	2	1	0.25		
<i>Plumbers / Pipe fitters</i>	1	1	0.25		
<i>General fitter (Artisan metal works)</i>	1	1	1	1	
<i>Riggers/ Driller/ Rig Orperators</i>	1	0.5	0.25		
<i>Other support staff (Admin. - Storekeeper, Secretary, Accountant, etc.)</i>	5	0.5	0.25		
<b>MAX SUB-TOTAL SCORE</b>		4			

**Schedule 3.2 Experience score (10)**

Key staff required	No. required	Maximum score for experience in construction industry – Score per person						Bidder's score	Remarks
		Over 10 years		3-10 years		Up to 3 years			
		Relevant experience	General experience	Relevant experience	General experience	Relevant experience	General Experience		
<b>Project manager (Civil, water Eng. Geology or equivalent)</b>	1	3	2	2	1	1	0		
<b>Ass. Project Manager (Civil Eng, Geology any building Supervisory)</b>	1	1		0.5		0.5			
<b>Site agent (Civil or building any trade)</b>	1	3	2	2	1	1	0		
<b>Foreman 1 (Civil or building any trade)</b>	1	1		0.5		0.25			
<b>Ass. Foreman</b>	1	0.5		0.25		0.125			
<b>Artisans</b>									
<b>Masons</b>	2	0.25		0.25		0.125			
<b>Plumbers / Pipe fitters</b>	1	0.25		0.25		0.125			
<b>Riggers/Drillers/Rig operator</b>	1	0.25		0.25		0.125			

<b>General fitter (Artisan metal works)</b>	<b>1</b>	<b>0.5</b>	<b>0.25</b>	<b>0.25</b>		
<b>Other support staff</b>	<b>5</b>	<b>0.25</b>	<b>0.25</b>	<b>0.125</b>		
<b>MAX SUB- TOTAL SCORE</b>		<b>10</b>				

**Note:**

- 1. If number available is less than required prorate for the line, proof of certificates and registration with professional body must be attached.**
- 2. If no experience the line is scored zero. Proof of CV with references must be provided.**
- 3. Total for each bidder for 3.I and 3.2 transferred to summary sheet.**
- 4. If number available is less than required then prorate for the line, proof of certificates and registration with professional body must be attached.**

#### **4.0 EVIDENCE OF FINANCIAL CAPACITY (20)**

##### **Schedule 4.1 Available records score (5)**

<b>Financial Record Provided</b>	<b>Maximum score</b>	<b>Bidder's Score</b>	<b>Remarks</b>
Provide audited accounts for year – 2016	1		
Provide audited accounts for year – 2017	1		
Provide audited accounts for year – 2018	1		
Provide bank statements (6 months to date )	1		
Provide letter of credit (bank/supplier)	1		
<b>MAX SUB-TOTAL SCORE (Certified, Credible Audit firm)</b>	<b>5</b>		

##### **Schedule 4.2 Amount in 2017 record compared to value of work score (15)**

<b>Financial capability (from financial statements)</b>	<b>Maximum score for financial capacity</b>					<b>Bidder's Score</b>	<b>Remarks</b>
	<b>Equal or over</b>	<b>75% to 99%</b>	<b>50% to 74%</b>	<b>25% to 50%</b>	<b>Less than 25%</b>		
Value of gross turn over three times the value of tendered work in last three years	5	3.5	2.5	1	0.5		
Value of assets to tendered works	5	3.5	2.5	1	0.5		
Value of credit line available to tendered works value	5	3.5	2.5	1	0.5		
<b>MAX SUB-TOTAL SCORE</b>	<b>15</b>						

Note: Only Tenderers scoring 70% and above of the total technical score (stage two) shall proceed to stage three for Financial Evaluation.

**Stage III: Financial Evaluation**

The tenderer with the lowest evaluated financial price will be recommended for award of the contract.

## **SECTION IV : PART I - GENERAL CONDITIONS OF THE CONTRACT**

### **FOREWORD**

The terms of the Fourth Edition of the Conditions of Contract for Works of Civil Engineering Construction have been prepared by the Fédération Internationale des Ingénieurs Conseils (FIDIC) and are recommended for general use for the purpose of construction of such works where tenders are invited on an international basis. The Conditions, subject to minor modifications, are also suitable for use on domestic contracts. The version in English of the Conditions is considered by FIDIC as the official and authentic text for the purpose of translation.

In the preparation of the Conditions it was recognised that while there are numerous Clauses which will be generally applicable there are some Clauses which must necessarily vary to take account of the circumstances and locality of the Works. The Clauses of general application have been grouped together in this document and are referred to as Part 1 - General Conditions. They have been printed in a form which will facilitate their inclusion as printed in the contract documents normally prepared.

The General Conditions are linked with the Conditions of Particular Application, referred to as Part 11, by the corresponding numbering of the Clauses, so that Parts 1 and 11 together comprise the Conditions governing the rights and obligations of the parties. Part II must be specially drafted to suit each individual Contract. When dredging and certain types of reclamation work are involved special consideration must be given to Part II.

To assist in the preparation of Part II explanatory material and example clauses are published with the Conditions in a separately bound document entitled "Conditions of Contract for Works of Civil Engineering Construction, Part II - Conditions of Particular Application, with Guidelines for preparation of Part II Clauses, Fourth Edition".

FIDIC has published a "Guide to the Use of FIDIC Conditions of Contract for Works of Civil Engineering Construction" which includes comments on the provisions of the Fourth Edition of the Conditions. Users of the Fourth Edition may find it helpful to

refer to this Guide. It may also be helpful for users to refer to other FIDIC publications, such as:

Tendering Procedure (First Edition 1982)

Construction, Insurance and Law (1986)

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## **PART 1 - GENERAL CONDITIONS**

### **Definitions and Interpretation**

**Definitions 1.1** In the Contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires:

- (a) (i) **“Employer”** means the person named as such in Part 11 of these Conditions and the legal successors in title to such

person, but not (except with the consent of the Contractor) any assignee of such person.

(ii) “**Contractor**” means the person whose tender has been accepted by the Employer and the legal successors in title to such person, but not (except with the consent of the Employer) any assignee of such person.

(iii) “**Subcontractor**” means any person named in the Contract as a Subcontractor for a part of the Works or any person to whom a part of the Works has been subcontracted with the consent of the Engineer and the legal successors in title to such person, but not any assignee of any such person.

(iv) “**Engineer**” means the person appointed by the Employer to act as Engineer for the purposes of the Contract and named as such in Part II of these Conditions.

(v) “**Engineer’s Representative**” means a person appointed from time to time by the Engineer under Sub-Clause 2.2

(b) (i) “**Contract**” means these Conditions (Parts 1 and 11), the Specification, the Drawings, the Bill of Quantities, the Tender, the Letter of Acceptance, the Contract Agreement (if completed) and such further documents as may be expressly incorporated in the Letter of Acceptance or Contract Agreement (if completed).

(ii) “**Specification**” means the specification of the Works included in the Contract and any modification thereof or addition thereto made under Clause 51 or submitted by the Contractor and approved by the Engineer.

(iii) “**Drawings**” means all drawings, calculations and technical information of a like nature provided by the

Engineer to the Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation and maintenance manuals and other technical information of a like nature submitted by the Contractor and approved by the Engineer.

(iv) **“Bill of Quantities”** means the priced and completed bill of quantities forming part of the Tender.

(v) **“Tender”** means the Contractor’s priced offer to the Employer for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Acceptance.

(vi) **“Letter of Acceptance”** means the formal acceptance by the Employer of the Tender.

(vii) **“Contract Agreement”** means the contract agreement (if any) referred to in Sub-Clause 9. 1.

(viii) **“Appendix to Tender”** means the appendix comprised in the form of Tender annexed to these Conditions.

(c) (i) **“Commencement Date”** means the date upon which the Contractor receives the notice to commence issued by the Engineer pursuant to Clause 41.

(ii) **“Time for Completion”** means the time for completing the execution of and passing the Tests on Completion of the Works or any Section or part thereof as stated in the Contract (or as extended under Clause 44) calculated from the Commencement Date.

(d) (i) **“Tests on Completion”** means the tests specified in the Contract or otherwise agreed by the Engineer and the Contractor which are to be made by the Contractor before the

Works or any Section or part thereof are taken over by the Employer.

(ii) **“Taking-Over Certificate”** means a certificate issued pursuant to Clause 48.

(e) (i) **“Contract Price”** means the sum stated in the Letter of Acceptance as payable to the Contractor for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract.

(ii) **“Retention Money”** means the aggregate of all monies retained by the Employer pursuant to Sub-Clause 60.2(a).

(iii) **“Interim Payment Certificate”** means any certificate of payment issued by the Engineer other than the Final Payment Certificate.

(iv) **“Final Payment Certificate”** means the certificate of payment issued by the Engineer pursuant to Sub-Clause 60.8.

(f) (i) **“Works”** means the Permanent Works and the Temporary Works or either of them as appropriate.

(ii) **“Permanent Works”** means the permanent works to be executed (including Plant) in accordance with the Contract.

(iii) **“Temporary Works”** means all temporary works of every kind (other than Contractor’s Equipment) required in or about the execution and completion of the Works and the remedying of any defects therein.

(iv) **“Plant”** means machinery, apparatus and the like intended to form or forming part of the Permanent Works.

(v) “**Contractor’s Equipment**” means all appliances and things of whatsoever nature (other than Temporary Works) required for the execution and completion of the Works and the remedying of any defects therein, but does not include Plant, materials or other things intended to form or forming part of the Permanent Works.

(vi) “**Section**” means a part of the Works specifically identified in the Contract as a Section.

(vii) “**Site**” means the places provided by the Employer where the Works are to be executed and any other places as may be specifically designated in the Contract as forming part of the Site.

(g) (i) “**cost**” means all expenditure properly incurred or to be incurred, whether on or off the Site, including overhead and other charges properly allocable thereto but does not include any allowance for profit.

(ii) “**day**” means calendar day.

(iii) “**foreign currency**” means a currency of a country other than that in which the Works are to be located.

(iv) “**writing**” means any hand-written, type-written, or printed communication, including telex, cable and facsimile transmission.

<b>Headings and Marginal Notes</b>	<b>1.2</b>	The headings and marginal notes in these Conditions shall not be deemed part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.
<b>Interpretation</b>	<b>1.3</b>	Words importing persons or parties shall include firms and corporations and any organization having legal capacity.
<b>Singular and</b>	<b>1.4</b>	Words importing the singular only also include the plural and

**Plural**

vice versa where the context requires.

**Notices,  
Consents,  
Approvals,  
Certificates and  
Determinations**

1.5

Wherever in the Contract provision is made for the giving or issue of any notice, consent, approval, certificate or determination by any person, unless otherwise specified such notice, consent, approval, certificate or determination shall be in writing and the words “notify”, “certify” or “determine” shall be construed accordingly. Any such consent, approval, certificate or determination shall not unreasonably be withheld or delayed.

**Engineer and Engineer’s Representative**

**Engineer’s Duties  
and Authority**

2.1

(a) The Engineer shall carry out the duties specified in the Contract.

(b) The Engineer may exercise the authority specified in or necessarily to be implied from the Contract, provided, however, that if the Engineer is required, under, the terms of his appointment by the Employer, to obtain the specific approval of the Employer before exercising any such authority, particulars of such requirements shall be set out in Part II of these Conditions. Provided further that any requisite approval shall be deemed to have been given by the Employer for any such authority exercised by the Engineer.

(c) Except as expressly stated in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract.

**Engineer’s  
Representative**

2.2

The Engineer’s Representative shall be appointed by and be responsible to the Engineer and shall carry out such duties and exercise such authority as may be delegated to him by the Engineer under Sub-Clause 2.3.

**Engineer’s  
Authority  
Delegate**

to

2.3

The Engineer may from time to time delegate to the Engineer’s Representative any of the duties and authorities vested in the Engineer and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing and shall not take effect until a copy thereof has been delivered to the

Employer and the Contractor.

Any communication given by the Engineer's Representative to the Contractor in accordance with such delegation shall have the same effect as though it had been given by the Engineer. Provided that:

(a) any failure of the Engineer's Representative to disapprove any work, materials or Plant shall not prejudice the authority of the Engineer to disapprove such work, materials or Plant and to give instructions for the rectification thereof, and

(b) if the Contractor questions any communication of the Engineer's Representative he may refer the matter to the Engineer who shall confirm, reverse or vary the contents of such communication.

**Appointment of Assistants**      **2.4**

The Engineer or the Engineer's Representative may appoint any number of persons to assist the Engineer's Representative in the carrying out of his duties under Sub-Clause 2.2. He shall notify to the Contractor the names, duties and scope of authority of such persons. Such assistants shall have no authority to issue any instructions to the Contractor save in so far as such instructions may be necessary to enable them to carry out their duties and to secure their acceptance of materials, Plant or workmanship as being in accordance with the Contract, and any instructions given by any of them for those purposes shall be deemed to have been given by the Engineer's Representative.

**Instructions in Writing**      **2.5**

Instructions given by the Engineer shall be in writing, provided that if for any reason the Engineer considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Confirmation in writing of such oral instruction given by the Engineer, whether before or after the carrying out of the instruction, shall be deemed to be an instruction within the meaning of this Sub-Clause. Provided further that if the Contractor, within 7 days, confirms in writing

to the Engineer any oral instruction of the Engineer and such confirmation is not contradicted in writing within 7 days by the Engineer, it shall be deemed to be an instruction of the Engineer. The provisions of this Sub-Clause shall equally apply to instructions given by the Engineer's Representative and any assistants of the Engineer or the Engineer's Representative appointed pursuant to Sub-Clause 2.4.

**Engineer to Act  
Impartially**

**2.6**

Wherever, under the Contract the Engineer is required to exercise his discretion by:

- (a) giving his decision, opinion or consent,
- (b) expressing his satisfaction or approval,
- (c) determining value, or
- (d) otherwise taking action which may affect the rights and obligations of the Employer or the Contractor he shall exercise such discretion impartially within the terms of the Contract and having regard to all the circumstances. Any such decision, opinion, consent, expression of satisfaction, or approval, determination of value or action may be opened up, reviewed or revised as provided in Clause 67.

**Assignment and Subcontracting**

**Assignment of  
Contract**

**3.1**

The Contractor shall not, without the prior consent of the Employer (which consent, notwithstanding the provisions of Sub-Clause 1.5, shall be at the sole discretion of the Employer), assign the Contract or any part thereof, or any benefit or interest therein or thereunder, otherwise than by:

- (a) a charge in favour of the Contractor's bankers of any monies due or to become due under the Contract, or
- (b) assignment to the Contractor's insurers (in cases where the insurers have discharged the Contractor's loss or liability) of the Contractor's right to obtain relief against any other party liable.

**Subcontracting**

**4.1**

The Contractor shall not subcontract the whole of the Works. Except where otherwise provided by the Contract, the without

Contractor shall not subcontract any part of the Works the prior consent of the Engineer. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any Subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Provided that the Contractor shall not be required to obtain such consent for:

- (a) the provision of labour,
- (b) the purchase of materials which are in accordance with the standards specified in the Contract, or
- (c) the subcontracting of any part of the Works for which the Subcontractor is named in the Contract.

**Assignment of Subcontractors' Obligations**

4.2

In the event of a Subcontractor having undertaken towards the Contractor in respect of the work executed, or the goods, materials, Plant or services supplied by such Subcontractor, any continuing obligation extending for a period exceeding that of the Defects Liability Period under the Contract, the Contractor shall at any time, after the expiration of such Period, assign to the Employer, at the Employer's request and cost, the benefit of such obligation for the unexpired duration thereof.

**Contract Documents**

**Language/s and Law**

5.1

There is stated in Part II of these Conditions:

- (a) the language or languages in which the Contract documents shall be drawn up, and
- (b) the country or state the law of which shall apply to the Contract and according to which the Contract shall be construed.

If the said documents are written in more than one language, the language according to which the Contract shall be construed and interpreted is also stated in Part II of these Conditions, being therein designated the "Ruling Language".

**Priority of Contract Documents**      **5.2**      The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be explained and adjusted by the Engineer who shall thereupon issue to the Contractor instructions thereon and in such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows:

- (1) The Contract Agreement (if completed);
- (2) The Letter of Acceptance;
- (3) The Tender;
- (4) Part II of these Conditions;
- (5) Part I of these Conditions; and
- (6) Any other document forming part of the Contract.

**Custody and Supply of Drawings and Documents**      **6.1**      The Drawings shall remain in the sole custody of the Engineer, but two copies thereof shall be provided to the Contractor free of charge. The Contractor shall make at his own cost any further copies required by him. Unless it is strictly necessary for the purposes of the Contract, the Drawings, Specification and other documents provided by the Employer or the Engineer shall not, without the consent of the Engineer, be used or communicated to a third party by the Contractor. Upon issue of the Defects Liability Certificate, the Contractor shall return to the Engineer all Drawings, Specification and other documents provided under the Contract. The Contractor shall supply to the Engineer four copies of all Drawings, Specification and other documents submitted by the Contractor and approved by the Engineer in accordance with Clause 7, together with a reproducible copy of any material which cannot be reproduced to an equal standard by photocopying.

In addition the Contractor shall supply such further copies of such Drawings, Specification and other documents as the Engineer may

request in writing for the use of the Employer, who shall pay the cost thereof.

**One Copy of Drawings to be Kept on Site**      6.2      One copy of the Drawings, provided to or supplied by the Contractor as aforesaid, shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and by any other person authorized by the Engineer in writing.

**Disruption of Progress**      6.3      The Contractor shall give notice to the Engineer, with a copy to the Employer, whenever planning or execution of the Works is likely to be delayed or disrupted unless any further drawing or instruction is issued by the Engineer within a reasonable time. The notice shall include details of the drawing or instruction required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

**Delays and Cost of Delay of Drawings**      6.4      If, by reason of any failure or inability of the Engineer to issue, within a time reasonable in all the circumstances, any drawing or instruction for which notice has been given by the Contractor in accordance with Sub-Clause 63, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under Clause 44, and
- (b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.

**Failure by Contractor to Submit Drawings**      6.5      If the failure or inability of the Engineer to issue any drawings or instructions is caused in whole or in part by the failure of the Contractor to submit Drawings, Specification or other documents which he is required to submit under the Contract, the Engineer shall take such failure by the Contractor into account when making his determination pursuant to Sub-Clause 6.4.

**Supplementary Drawings and Instructions 7.1** The Engineer shall have authority to issue to the Contractor, from time to time, such supplementary Drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and completion of the Works and the remedying of any defects therein. The Contractor shall carry out and be bound by the same.

**Permanent Works Designed by Contractor 7.2** Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall submit to the Engineer, for approval:

(a) such drawings, specifications, calculations and other information as shall be necessary to satisfy the Engineer as to the suitability and adequacy of that design, and

(b) operation and maintenance manuals together with drawings of the Permanent Works as completed, in sufficient detail to enable the Employer to operate, maintain, dismantle, reassemble and adjust the Permanent Works incorporating that design. The Works shall not be considered to be completed for the purposes of taking over in accordance with Clause 48 until such operation and maintenance manuals, together with drawings on completion, have been submitted to and approved by the Engineer

**Responsibility Unaffected by Approval 7.3** Approval by the Engineer, in accordance with Sub-Clause 7.2, shall not relieve the Contractor of any of his responsibilities under the Contract.

#### **General Obligations**

**Contractor's General Responsibilities 8.1** The Contractor shall, with due care and diligence, design (to the extent provided for by the Contract), execute and complete the Works and remedy any defects therein in accordance with the provisions of the Contract. The Contractor shall provide all superintendence, labour, materials, Plant, Contractor's Equipment and all other things, whether of a temporary or permanent nature, required in and for such design, execution, completion and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

The Contractor shall give prompt notice to the Engineer, with a copy

to the Employer, of any error, omission, fault or other defect in the design of or Specification for the Works which he discovers when reviewing the Contract or executing the Works.

**Site Operations  
and Methods of  
Construction**

**8.2** The Contractor shall take full responsibility for the adequacy, stability and safety of all Site operations and methods of construction. Provided that the Contractor shall not be responsible (except as stated hereunder or as may be otherwise agreed) for the design or specification of Permanent Works, or for the design or specification of any Temporary Works not prepared by the Contractor. Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall be fully responsible for that part of such Works, notwithstanding any approval by the Engineer.

**Contract  
Agreement**

**9.1** The Contractor shall, if called upon so to do, enter into and execute the Contract Agreement, to be prepared and completed at the cost of the Employer, in the form annexed to these Conditions with such modification as may be necessary.

**Performance  
Security**

**10.1** If the Contract requires the Contractor to obtain security for his proper performance of the Contract, he shall obtain and provide to the Employer such security within 28 days after the receipt of the Letter of Acceptance, in the sum stated in the Appendix to Tender. When providing such security to the Employer, the Contractor shall notify the Engineer of so doing. Such security shall be in the form annexed to these Conditions or in such other form as may be agreed between the Employer and the Contractor. The institution providing such security shall be subject to the approval of the Employer. The cost of complying with the requirements of this Clause shall be borne by the Contractor, unless the Contract otherwise provides.

**Period of Validity of Performance Security**      **10.2**      The performance security shall be valid until the Contractor has executed and completed the Works and remedied any defects therein in accordance with the Contract. No claim shall be made against such security after the issue of the Defects Liability Certificate in accordance with Sub-Clause 62.1 and such security shall be returned to the Contractor within 14 days of the issue of the said Defects Liability Certificate.

**Claims under Performance Security**      **10.3**      Prior to making a claim under the performance security the Employer shall, in every case, notify the Contractor stating the nature of the default in respect of which the claim is to be made.

**Inspection of Site**      **11.1**      The Employer shall have made available to the Contractor, before the submission by the Contractor of the Tender, such data on hydrological and sub-surface conditions as have been obtained by or on behalf of the Employer from investigations undertaken relevant to the Works but the Contractor shall be responsible for his own interpretation thereof. The Contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself (so far as is practicable, having regard to considerations of cost and time) before submitting his Tender, as to:

- (a) the form and nature thereof, including the sub-surface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of work and materials necessary for the execution and completion of the Works and the remedying of any defects therein, and
- (d) the means of access to the Site and the accommodation he may require, and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his Tender.

The Contractor shall be deemed to have based his Tender on the data made available by the Employer and on his own inspection and examination, all as aforementioned.

<b>Sufficiency of Tender</b>	<b>12.1</b>	<p>The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Tender and of the rates and prices stated in the Bill of Quantities, all of which shall, except insofar as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, Plant or services or of contingencies for which there is a Provisional Sum) and all matters and things necessary for the proper execution and completion of the Works and the remedying of any defects therein.</p> <p>If, however, during the execution of the Works the Contractor encounters physical obstructions or physical conditions, other than climatic conditions on the Site, which obstructions or conditions were, in his opinion, not foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof to the Engineer, with a copy to the Employer. On receipt of such notice, the Engineer shall, if in his opinion such obstructions or conditions could not have been reasonably foreseen by an experienced contractor, after due consultation with the Employer and the Contractor, determine</p> <p>(a) any extension of time to which the Contractor is entitled under Clause 44, and</p> <p>(b) the amount of any costs which may have been incurred by the Contractor by reason of such obstructions or conditions having been encountered, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer. Such determination shall take account of any instruction which the Engineer may issue to the Contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer which the Contractor may take in the absence of specific instructions from the Engineer.</p>
<b>Not Foreseeable Physical Obstructions or Conditions</b>	<b>12.2</b>	
<b>Work to be in Accordance with Contract</b>	<b>13.1</b>	<p>Unless it is legally or physically impossible, the Contractor shall execute and complete the Works and remedy any defects therein in strict accordance with the Contract to the satisfaction of the Engineer. The Contractor shall comply with and adhere strictly to the</p>

Engineer's instructions on any matter, whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions only from the Engineer (or his delegate).

**Programme to be Submitted** 14.1 The Contractor shall, within the time stated in Part II of these Conditions after the date of the Letter of Acceptance, submit to the Engineer for his consent a programme, in such form and detail as the Engineer shall reasonably prescribe, for the execution of the Works. The Contractor shall, whenever required by the Engineer, also provide in writing for his information a general description of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works.

**Revised Programme** 14.2 If at any time it should appear to the Engineer that the actual progress of the Works does not conform to the programme to which consent has been given under Sub-Clause 14.1, the Contractor shall produce, at the request of the Engineer, a revised programme showing the modifications to such programme necessary to ensure completion of the Works within the Time for Completion.

**Cash Flow Estimate to be Submitted** 14.3 The Contractor shall, within the time stated in Part II of these Conditions after the date of the Letter of Acceptance, provide to the Engineer for his information a detailed cash flow estimate in quarterly periods, of all payments to which the Contractor will be entitled under the Contract and the Contractor shall subsequently supply revised cash flow estimates at quarterly intervals, if required to do so by the Engineer.

**Contractor not relieved of duties or responsibilities** 14.4 The submission to and consent by the Engineer of such programmes or the provision of such general descriptions or cash flow estimates shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

**Contractor's Superintendence** 15.1 The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorised representative approved of by the Engineer, which approval may at any time be withdrawn, shall give his whole time to the superintendence of the Works. Such authorised

representative shall receive, on behalf of the Contractor, instructions from the Engineer.

If approval of the representative is withdrawn by the Engineer, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving notice of such withdrawal, remove the representative from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another representative approved by the Engineer.

**Contractor's  
Employees**

**16. 1** The Contractor shall provide on the Site in connection with the execution and completion of the Works and the remedying of any defects therein:

- (a) only such technical assistants as are skilled and experienced in their respective callings and such foremen and leading hands as are competent to give proper superintendence of the Works, and
- (b) such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely fulfilling of the Contractor's obligations under the Contract.

**Engineer at  
Liberty to Object**

**16.2** The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person provided by the Contractor who, in the opinion of the Engineer, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Engineer to be undesirable, and such person shall not be again allowed upon the Works without the consent of the Engineer. Any person so removed from the Works shall be replaced as soon as possible.

**Setting-out**

**17. 1** The Contractor shall be responsible for:

- (a) the accurate setting-out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing,
- (b) the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of the Works, and
- (c) the provision of all necessary instruments, appliances and labour in connection with the foregoing responsibilities.

If, at any time during the execution of the Works, any error appears

in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer, shall, at his own cost, rectify such error to the satisfaction of the Engineer, unless such error is based on incorrect data supplied in writing by the Engineer, in which case the Engineer shall determine an addition to the Contract Price in accordance with Clause 51 and shall notify the Contractor accordingly, with a copy to the Employer. The checking of any setting-out or of any line or level by the Engineer shall not in any way relieve the Contractor of his responsibility for the accuracy thereof and the Contractor shall carefully protect and preserve all bench-marks, sight-rails, pegs and other things used in setting-out the Works.

**Boreholes and  
Exploratory  
Excavation**

If, at any time during the execution of the Works, the Engineer requires the Contractor to make boreholes or to carry out exploratory excavation, such requirement shall be the subject of an instruction in accordance with Clause 51, unless an item or a Provisional Sum in respect of such work is included in the Bill of Quantities.

**Safety, Security  
and Protection of  
the Environment**

The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:

19.1 (a) have full regard for the safety of all persons entitled to be upon the Site and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons,

(b) provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any duly constituted authority, for the protection of the Works or for the safety and convenience of the public or others, and

(c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

**Employer's**

19.2 If under Clause 31 the Employer shall carry out work on the Site with

**Responsibilities**

his own workmen he shall, in respect of such work:

(a) have full regard to the safety of all persons entitled to be upon the Site, and

(b) keep the Site in an orderly state appropriate to the avoidance of danger to such persons.

If under Clause 31 the Employer shall employ other contractors on the Site he shall require them to have the same regard for safety and avoidance of danger.

**Care of Works**

**20.1** The Contractor shall take full responsibility for the care of the Works and materials and Plant for incorporation therein from the Commencement Date until the date of issue of the Taking-Over Certificate for the whole of the Works, when the responsibility for the said care shall pass to the Employer. Provided that:

(a) if the Engineer issues a Taking-Over Certificate for any Section or part of the Permanent, Works the Contractor shall cease to be liable for the care of that Section or part from the date of issue of the Taking-Over Certificate, when the responsibility for the care of that Section or part shall pass to the Employer, and

(b) the Contractor shall take full responsibility for the care of any outstanding Works and materials and Plant for incorporation therein which he undertakes to finish during the Defects Liability Period until such outstanding Works have been completed pursuant to Clause 49.

**Responsibility to Rectify Loss or Damage**

If any loss or damage happens to the Works, or any part thereof, or materials or Plant for incorporation therein, during the period for

**20.2** which the Contractor is responsible for the care thereof, from any cause whatsoever, other than the risks defined in Sub-Clause 20.4, the Contractor shall, at his own cost, rectify such loss or damage so that the Permanent Works conform in every respect with the provisions of the Contract to the satisfaction of the Engineer. The Contractor shall also be liable for any loss or damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50.

**Loss or Damage** **20.3** In the event of any such loss or damage happening from any of the

**Due to Employer's Risks**

risks defined in Sub-Clause 20.4, or in combination with other risks, the Contractor shall, if and to the extent required by the Engineer, rectify the loss or damage and the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer. In the case of a combination of risks causing loss or damage any such determination shall take into account the proportional responsibility of the Contractor and the Employer.

**Employer's Risks 20.4** The Employer's risks are:

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, revolution, insurrection, or military or usurped power, or civil war,
- (c) ionizing radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof,
- (d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- (e) riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the Works,
- (f) loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent Works, except as may be provided for in the Contract,
- (g) loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible, and
- (h) any operation of the forces of nature against which an experienced contractor could not reasonably have been expected to take precautions.

**Employer's Risks 20.4** The Employer's risks are:

- (a) war, hostilities (whether war be declared or not), invasion, act

- of foreign enemies,
- (b) rebellion, revolution, insurrection, or military or usurped power, or civil war,
- (c) ionizing radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof,
- (d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- (e) riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the Works,
- (f) loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent Works, except as may be provided for in the Contract,
- (g) loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible, and
- (h) any operation of the forces of nature against which an experienced contractor could not reasonably have been expected to take precautions.

**Insurance of Works and Contractor's Equipment**      **21.1**      The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 20, insure:

- (a) the Works, together with materials and Plant for incorporation therein, to the full replacement cost (the term "cost" in this context shall include profit),
- (b) an additional sum of 15 per cent of such replacement cost, or as may be specified in Part II of these Conditions, to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature, and
- (c) the Contractor's Equipment and other things brought onto the Site by the Contractor, for a, sum sufficient to provide for

their replacement at the Site.

**Scope of Cover 21.2** The insurance in paragraphs (a) and (b) of Sub-Clause 21.1 shall be in the joint names of the Contractor and the Employer and shall cover:

- (a) the Employer and the Contractor against all loss or damage from whatsoever cause arising, other than as provided in Sub-Clause 21.4, from the start of work at the Site until the date of issue of the relevant Taking-Over Certificate in respect of the Works or any Section or part thereof as the case may be, and
- (b) the Contractor for his liability:
  - (i) during the Defects Liability Period for loss or damage arising from a cause occurring prior to the commencement of the Defects Liability Period, and
  - (ii) for loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50

**Responsibility for amounts not recovered exclusions 21.3** Any amounts not insured or not recovered from the insurers shall be borne by the Employer or the Contractor in accordance with their responsibilities under Clause 20.

**21.4** There shall be no obligation for the insurances in Sub-Clause 21.1 to include loss or damage caused by:

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, revolution, insurrection, or military or usurped power, or civil war,
- (c) ionizing radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof, or
- (d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds.

**Damage to Persons and 22.1** The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in

**Property**

respect of:

- (a) death of or injury to any person, or
- (b) loss of or damage to any property (other than the Works), which may arise out of or in consequence of the execution and completion of the Works and the remedying of any defects therein, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, subject to the exceptions defined in Sub-Clause 22.2.

**Exceptions**

**22.2** The “exceptions” referred to in Sub-Clause 22.1 are:

- (a) the permanent use or occupation of land by the Works, or any part thereof,
- (b) the right of the Employer to execute the Works, or any part thereof, on, over, under, in or through any land,
- (c) damage to property which is the unavoidable result of the execution and completion of the Works, or the remedying of any defects therein, in accordance with the Contract, and
- (d) death of or injury to persons or loss of or damage to property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor, or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or, where the injury or damage was contributed to by the Contractor, his servants or agents, such part of the said injury or damage as may be just and equitable having regard to the extent of the responsibility of the Employer, his servants or agents or other contractors for the injury or damage.

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**Indemnity by Employer** 22.3 The Employer shall indemnify the Contractor against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the exceptions defined in Sub-Clause 22.2.

**Third Party Insurance (including Employer's Property)** 23.1 The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 22, insure, in the joint names of the Contractor and the Employer, against liabilities for death of or injury to any person (other than as provided in Clause 24) or loss of or damage to any property (other than the Works) arising out of the performance of the Contract, other than the exceptions defined in paragraphs (a), (b) and (c) of Sub-Clause 22.2.

**Minimum Amount of insurance** 23.2 Such insurance shall be for at least the amount stated in the Appendix to Tender.

**Cross Liabilities** 23.3 The insurance policy shall include a cross liability clause such that the insurance shall apply to the Contractor and to the Employer as separate insured.

**Accident Injury Workmen** 24.1 **or to** The Employer shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or any Subcontractor, other than death or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, other than those for which the Employer is liable as aforesaid, and against all claims, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

**Insurance Against Accident** 24.2 The Contractor shall insure against such liability and shall continue such insurance during the whole of the time that any persons are employed by him on the Works. Provided that, in respect of any

**to Workmen**

persons employed by any.

Subcontractor, the Contractor's obligations to insure as aforesaid under this Sub-Clause shall be satisfied if the Subcontractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy, but the Contractor shall require such Subcontractor to produce to the Employer, when required, such policy of insurance and the receipt for the payment of the current premium.

**Evidence and Terms of Insurances**

**25.1** The Contractor shall provide evidence to the Employer prior to the start of work at the Site that the insurances required under the Contract have been effected and shall, within 84 days of the commencement Date, provide the insurance policies to the Employer. When providing such evidence and such policies to the Employer, the Contractor shall notify the Engineer of so doing. Such insurance policies shall be consistent with the general terms agreed prior to the issue of the Letter of Acceptance. The Contractor shall effect all insurances for which he is responsible with insurers and in terms approved by the Employer.

**Adequacy of Insurances**

**25.2** The Contractor shall notify the insurers of changes in the nature, extent or programme for the execution of the Works and ensure the adequacy of the insurances at all times in accordance with the terms of the Contract and shall, when required, produce to the Employer the insurance policies in force and the receipts for payment of the current premiums.

**Remedy on Contractor's**

**25.3** If the Contractor fails to effect and keep in force any of the insurances required under the Contract, or fails to provide the policies to the Employer within the period required by Sub-Clause 25.1, then and in any such case the Employer may effect and keep in force any such insurances and pay any premium as may be necessary for that purpose and from time to time deduct the amount so paid from any monies due or to become due to the Contractor, or recover the same as a debt due from the Contractor.

**Failure to Insure**

**Compliance with Policy Conditions** In the event that the Contractor or the Employer fails to comply with conditions imposed by the insurance policies effected pursuant to the 25.4 Contract, each shall indemnify the other against all losses and claims arising from such failure.

**Compliance with Statutes, Regulations** The Contractor shall conform in all respects, including by the giving of 26.1 all notices and the paying of all fees, with the provisions of:

- (a) any National or State Statute, Ordinance, or other Law, or any regulation, or by-law of any local or other duly constituted authority in relation to the execution and completion of the Works and the remedying of any defects therein, and
- (b) the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works, and the Contractor shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such provisions. Provided always that the Employer shall be responsible for obtaining any planning, zoning or other similar permission required for the Works to proceed and shall indemnify the Contractor in accordance with Sub-Clause 22.3.

**Fossils** All fossils, coins, articles of value or antiquity and structures and other 27.1 remains or things of geological or archaeological interest discovered on the Site shall, as between the Employer and the Contractor, be deemed to be the absolute property of the Employer. The Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall, immediately upon discovery thereof and before removal, acquaint the Engineer of such discovery and carry out the Engineer's instructions for dealing with the same. If, by reason of such instructions, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under

Clause 44, and

(b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.

**Patent Rights**      **28.1** The Contractor shall save harmless and indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Contractor's Equipment, materials or Plant used for or in connection with or for incorporation in the Works and from and against all damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except where such infringement results from compliance with the design or Specification provided by the Engineer.

**Royalties**            **28.2** Except where otherwise stated, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works.

**Interference with Traffic and Adjoining Properties**      All operations necessary for the execution and completion of the Works and the remedying of any defects therein shall, so far as compliance with the requirements of the Contract permits, be carried

**29.1** on so as not to interfere unnecessarily or improperly with:

(a) the convenience of the public, or

(b) the access to, use and occupation of public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person.

The Contractor shall save harmless and indemnify the Employer in respect of all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of, or in relation to, any such matters in so far as the Contractor is responsible therefor.

**Avoidance of Damage**            **30.1** The Contractor shall use every reasonable means to prevent any of the roads or bridges communicating with or on the routes to the Site from

**to Roads**

being damaged or injured by any traffic of the Contractor or any of his Subcontractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of materials, Plant, Contractor's Equipment or Temporary Works from and to the Site shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be occasioned to such roads and bridges.

**Transport of Contractor's Equipment or Temporary Works**

Save insofar as the Contract otherwise provides, the Contractor shall be responsible for and shall pay the cost of strengthening any bridges or altering or improving any road communicating with or on the routes to the Site to facilitate the movement of Contractor's Equipment or

**30.2 Temporary Works and the Contractor shall indemnify**

and keep indemnified the Employer against all claims for damage to any such road or bridge caused by such movement, including such claims as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage.

**Transport of Materials or Plant**

If, notwithstanding Sub-Clause 30.1, any damage occurs to any bridge or road communicating with or on the routes to the Site arising from

**30.3 the transport of materials or Plant, the Contractor shall**

notify the Engineer with a copy to the Employer, as soon as he becomes aware of such damage or as soon as he receives any claim from the authority entitled to make such claim. Where under any law or regulation the haulier of such materials or Plant is required to indemnify the road authority against damage the Employer shall not be liable for any costs, charges or expenses in respect thereof or in relation thereto. In other cases the Employer shall negotiate the settlement of and pay all sums due in respect of such claim and shall indemnify the Contractor in respect thereof and in respect of all claims, proceedings, damages, costs, charges and expenses in relation thereto.

Provided that if and so far as any such claim or part thereof is, in the opinion of the Engineer, due to any failure on the part of the Contractor

to observe and perform his obligations under Sub-Clause 30.1, then the amount, determined by the Engineer, after due consultation with the Employer and the Contractor, to be due to such failure shall be recoverable from the Contractor by the Employer and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Provided also that the Employer shall notify the Contractor whenever a settlement is to be negotiated and, where any amount may be due from the Contractor, the Employer shall consult with the Contractor before such settlement is agreed.

**Waterborne  
Traffic**

Where the nature of the Works is such as to require the use by the Contractor of waterborne transport the foregoing provisions of this Clause shall be construed as though "road" included a lock, dock, sea wall or other structure related to a waterway and "vehicle" included craft, and shall have effect accordingly.

**Opportunities  
for Other  
Contractors**

The Contractor shall, in accordance with the requirements of the Engineer, afford all reasonable opportunities for carrying out their work to:

- (a) any other contractors employed by the Employer and their workmen,
- (b) the workmen of the Employer, and
- (c) the workmen of any duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works.

**Facilities for  
Other  
Contractors**

If however, pursuant to Sub-Clause 31.1 the Contractor shall, on the written request of the Engineer:

- 31.2 (a) make available to any such other contractor, or to the Employer or any such authority, any roads or ways for the maintenance of which the Contractor is responsible,
- (b) permit the use, by any such, of Temporary Works or Contractor's

Equipment on the Site, or

(c) provide any other service of whatsoever nature for any such, the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer.

## Labour

- Contractor to Keep Site Clear** 32.1 During the execution of the Works the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required.
- Clearance of Site on Completion** 33.1 Upon the issue of any Taking-Over Certificate the Contractor shall clear away and remove from that part of the Site to which such taking-over Certificate relates all Contractor's Equipment, surplus material, rubbish and Temporary Works of every kind, and leave such part of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer. Provided that the Contractor shall be entitled to retain on Site, until the end of the Defects Liability Period, such materials, Contractor's Equipment and Temporary Works as are required by him for the purpose of fulfilling his obligations during the Defects Liability Period.
- Engagement of Staff and Labour** 34.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
- Returns of Labour and Contractor's Equipment** 35.1 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Contractor's Equipment as the Engineer may require.

### **Materials, Plant and Workmanship**

- Quality of Materials, Plant and Workmanship** 36.1 All materials, Plant and workmanship shall be:
- (a) of the respective kinds described in the Contract and in accordance with the Engineer's instructions, and
  - (b) Subjected from time to time to such tests as the Engineer may require at the place of manufacture, fabrication or preparation, or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places.
- The Contractor shall provide such assistance. labour, electricity, fuels, stores, apparatus and instruments as are normally required for examining, measuring and testing any materials or Plant and shall supply samples of materials, before incorporation in the Works, for testing as may be selected and required by the Engineer.
- Cost of Samples** 36.1 All samples shall be supplied by the Contractor at his own cost if the supply thereof is clearly intended by or provided for in the Contract.
- Cost of Tests** 36.3 The cost of making any test shall be borne by the Contractor if such test is:
- (a) clearly intended by or provided for in the Contract, or
  - (b) particularized in the Contract (in cases only of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfil) in sufficient detail to enable the Contractor to price or allow for the same in his Tender.
- Cost of Tests not Provided for** 36.4 If any test required by the Engineer which is:
- (a) not so intended by or provided for,
  - (b) (in the cases above mentioned) not so particularized, or
  - (c) (though so intended or provided for) required by the Engineer to be carried out at any place other than the Site or the place of manufacture, fabrication or preparation of the materials or Plant tested, shows the materials, Plant or workmanship not to be in accordance with the provisions of the Contract to the satisfaction of

the Engineer, then the cost of such test shall be borne by the Contractor, but in any other case Sub-Clause 36.5 shall apply.

- Engineer's Determination where Tests not Provided for**      **36.5**      Where, pursuant to Sub-Clause 36.4, this Sub-Clause applies the Engineer shall, after due consultation with the Employer and the Contractor, determine:
- (a) any extension of time to which the Contractor is entitled under Clause 44, and
- (b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.
- Inspection of Operations**      **37.1**      The Engineer, and any person authorized by him, shall at all reasonable times have access to the Site and to all workshops and places where materials or Plant are being manufactured, fabricated or prepared for the Works and the Contractor shall afford every facility for and every assistance in obtaining the right to such access.
- Inspection and Testing**      **37.2**      The Engineer shall be entitled, during manufacture, fabrication or preparation to inspect and test the materials and Plant to be supplied under the Contract. If materials or Plant are being manufactured, fabricated or prepared in workshops or places other than those of the Contractor, the Contractor shall obtain permission for the Engineer to carry out such inspection and testing in those workshops or places. Such inspection or testing shall not release the Contractor from any obligation under the Contract.
- Dates for Inspection And Testing**      **37.3**      The Contractor shall agree with the Engineer on the time and place for the inspection or testing of any materials or Plant as provided in the Contract. The Engineer shall give the Contractor not less than 24 hours notice of his intention to carry out the inspection or to attend the tests. If the Engineer, or his duly authorised representative, does not attend on the date agreed, the Contractor may, unless otherwise instructed by the Engineer, proceed with the tests, which shall be deemed to have been made in the presence of

the Engineer. The Contractor shall forthwith forward to the Engineer duly certified copies of the test readings. If the Engineer has not attended the tests, he shall accept the said readings as accurate.

**Rejection**            **37.4** If, at the time and place agreed in accordance with Sub-Clause 37.3, the materials or Plant are not ready for inspection or testing or if, as a result of the inspection or testing referred to in this Clause, the Engineer determines that the materials or Plant are defective or otherwise not in accordance with the Contract, he may reject the materials or Plant and shall notify the Contractor thereof immediately. The notice shall state the Engineer's objections with reasons. The Contractor shall then promptly make good the defect or ensure that rejected materials or Plant comply with the Contract. If the Engineer so requests, the tests of rejected materials or Plant shall be made or repeated under the same terms and conditions. All costs incurred by the Employer by the repetition of the tests shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer and may be deducted from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

**Independent Inspection**            **37.5** The Engineer may delegate inspection and testing of materials or Plant to an independent inspector. Any such delegation shall be effected in accordance with Sub-Clause 2.4 and for this purpose such independent inspector shall be considered as an assistant of the Engineer. Notice of such appointment (not being less than 14 days) shall be given by the Engineer to the Contractor.

**Examination of Work before Covering up**            **38.1** No part of the Works shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any such part of the Works which is about to be covered up or put out of view and to examine foundations before any part of the Works is placed thereon. The Contractor shall give notice to the Engineer whenever any such part of the Works or foundations is or are ready

or about to be ready for examination and the Engineer shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such part of the Works or of examining such foundations.

**Uncovering and Making Openings**

**38.2** The Contractor shall uncover any part of the Works or make openings in or through the same as the Engineer may from time to time instruct and shall reinstate and make good such part. If any such part has been covered up or put out of view after compliance with the requirement of Sub-Clause 38.1 and is found to be executed in accordance with the Contract, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of the Contractor's costs in respect of such uncovering, making openings in or through, reinstating and making good the same, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer. In any other case all costs shall be borne by the Contractor.

**Removal of Improper Work, Materials or Plant**

The Engineer shall have authority to issue instructions from time to time, for:

**39.1** (a) the removal from the Site, within such time or times as may be specified in the instruction, of any materials or Plant which, in the opinion of the Engineer, are not in accordance with the Contract, (b) the substitution of proper and suitable materials or Plant, and (c) the removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefor, of any work which, in respect of;

(i) materials, Plant or workmanship, or

(ii) design by the Contractor or for which he is responsible, is not, in the opinion of the Engineer, in accordance with the Contract.

**Default of Contractor in Compliance**

**39.2** In case of default on the part of the Contractor in carrying out such instruction within the time specified therein or, if none, within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and all costs consequent thereon or incidental thereto shall, after due consultation with the

Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

**Suspension of Work**      **40.1**      The Contractor shall, on the instructions of the Engineer, suspend the progress of the Works or any part thereof for such time and in such manner as the Engineer may consider necessary and shall, during such suspension, properly protect and secure the Works or such part thereof so far as is necessary in the opinion of the Engineer. Unless such suspension is:

- (a) otherwise provided for in the Contract,
- (b) necessary by reason of some default of or breach of contract by the Contractor or for which he is responsible,
- (c) necessary by reason of climatic conditions on the Site, or
- (d) necessary for the proper execution of the Works or for the safety of the Works or any part thereof (save to the extent that such necessity arises from any act or default by the Engineer or the Employer or from any of the risks defined in Sub-Clause 20.4), Sub-Clause 40.2 shall apply.

**Engineer's Determination following Suspension,**      **40.2**      Where, pursuant to Sub-Clause 40.1, this Sub-Clause applies the Engineer shall after due consultation with the Employer and the Contractor, determine (a) any extension of time to which the Contractor is entitled under Clause 44, and (b) the amount, which shall be added to the Contract Price, in respect of the cost incurred by the Contractor by reason of such suspension, and shall notify the Contractor accordingly, with a copy to the Employer.

**Suspension lasting more than 84 Days**      **40.3**      If the progress of the Works or any part thereof is suspended on the instructions of the Engineer and if permission to resume work is not given by the Engineer within a period of 84 days from the date of suspension then, unless such suspension is within paragraph (a), (b), (c) or (d) of Sub-Clause 40.1, the Contractor may give notice to the

Engineer requiring permission, within 28 days from the receipt thereof, to proceed with the Works or that part thereof in regard to which progress is suspended. If, within the said time, such permission is not granted, the Contractor may, but is not bound to, elect to treat the suspension, where it affects part only of the Works, as an omission of such part under Clause 51 by giving a further notice to the Engineer to that effect, or, where it affects the whole of the Works, treat the suspension as an event of default by the Employer and terminate his employment under the Contract in accordance with the provisions of Sub-Clause 69.1, whereupon the provisions of Sub-Clauses 69.2 and 69.3 shall apply.

### **Commencement and Delays**

**Commencement of Works** 41.1 The Contractor shall commence the Works as soon as is reasonably possible after the receipt by him of a notice to this effect from the Engineer, which notice shall be issued within the time stated in the Appendix to tender after the date of the Letter of Acceptance. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay.

**Possession of site and access thereto** 42.1 Save insofar as the Contract may prescribe:

- (a) the extent of portions of the Site of which the Contractor is to be given possession from time to time
- (b) the order in which such portions shall be made available to the Contractor, and, subject to any requirement in the Contract as to the order in which the Works shall be executed, the Employer will, with the Engineer's notice to commence the Works, give to the Contractor possession of
- (c) so much of the Site, and
- (d) such access as, in accordance with the Contract, is to be provided by the Employer as may be required to enable the Contractor to commence and proceed with the execution of the Works in accordance with the programme referred to in Clause 14, if any, and otherwise in accordance with such reasonable proposals as the

Contractor ' shall, by notice to the Engineer with a copy to the Employer, make. The Employer will, from time to time as the Works proceed, give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the execution of the Works with due dispatch in accordance with such programme or proposals, as the case may be.

**Failure to Give Possession** 42.2 If the Contractor suffers delay and/or incurs costs from failure on the part of the Employer to give possession in accordance with the terms of Sub-Clause 42. 1, the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under Clause 44, and
- (b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.

**Rights of Way and Facilities** 42.3 The Contractor shall bear all costs and charges for special or temporary rights of way required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional facilities outside the Site required by him for the purposes of the Works.

**Time for Completion** 43.1 The whole of the Works and, if applicable, any Section required to be completed within a particular time as stated in the Appendix to Tender, shall be completed in accordance with the provisions of Clause 48, within the time stated in the Appendix to Tender for the whole of the Works or the Section (as the case may be), calculated from the Commencement Date, or such extended time as may be allowed under Clause 44.

**Extension of Time for Completion** 44.1 In the event of:

- (a) the amount or nature of extra or additional work,
- (b) any cause of delay referred to in these Conditions,
- (c) exceptionally adverse climatic conditions,
- (d) any delay, impediment or prevention by the Employer, or

(e) other special circumstances which may occur, other than through a default of or breach of contract by the Contractor or for which he is responsible, being such as fairly to entitle the Contractor to an extension of the Time for Completion of the Works, or any Section or part thereof, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of such extension and shall notify the Contractor accordingly, with a copy to the Employer.

**Contractor to Provide Notification and Detailed Particulars** 44.2 Provided that the Engineer is not bound to make any determination unless the Contractor has

(a) within 28 days after such event has first arisen notified the Engineer with a copy to the Employer, and

(b) within 28 days, or such other reasonable time as may be agreed by the Engineer, after such notification submitted to the Engineer detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.

**Interim Determination of Extension** 44.3 Provided also that where an event has a continuing effect such that it is not practicable for the Contractor to submit detailed particulars within the period of 28 days referred to in Sub-Clause 44.2(b), he shall nevertheless be entitled to an extension of time provided that he has submitted to the Engineer interim particulars at intervals of not more than 28 days and final particulars within 28 days of the end of the effects resulting from the event. On receipt of such interim particulars, the Engineer shall, without undue delay, make an interim determination of extension of time and, on receipt of the final particulars, the Engineer shall review all the circumstances and shall determine an overall extension of time in regard to the event. In both such cases the Engineer shall make his determination after due consultation with the Employer and the Contractor and shall notify the Contractor of the determination, with a copy to the Employer. No final review shall result in a decrease of any extension of time already determined by the Engineer.

**Restriction on Working Hours** 45.1 Subject to any provision to the contrary contained in the Contract, none of the Works shall, save as hereinafter provided, be carried on during the night or on locally recognized days of rest without the consent of the Engineer, except when work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer. Provided that the provisions of this Clause shall not be applicable in the case of any work which it is customary to carry out by multiple shifts.

**Rate of Progress** 46.1 If for any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the Works or any Section is at any time, in the opinion of the Engineer, too slow to comply with the Time for Completion, the Engineer shall so notify the Contractor who shall thereupon take such steps as are necessary, subject to the consent of the Engineer, to expedite progress so as to comply with the Time for Completion. The Contractor shall not be entitled to any additional payment for taking such steps. If, as a result of any notice given by the Engineer under this Clause, the Contractor considers that it is necessary to do any work at night or on locally recognized days of rest, he shall be entitled to seek the consent of the Engineer so to do. Provided that if any steps, taken by the Contractor in meeting his obligations under this Clause, involve the Employer in additional supervision costs, such costs shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

**Liquidated Damages for Delay** 47.1 If the Contractor fails to comply with the Time for Completion in accordance with Clause 48, for the whole of the Works or, if applicable, any Section within the relevant time prescribed by

Clause 43, then the Contractor shall pay to the Employer the relevant sum stated in the Appendix to Tender as liquidated damages for such default and not as a penalty (which sum shall be the only monies due from the Contractor for such default) for every day or part of a day which shall elapse between the relevant Time for Completion and the date stated in a Taking-Over Certificate of the whole of the Works or the relevant Section, subject to the applicable limit stated in the Appendix to Tender. The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies due or to become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works, or from any other of his obligations and liabilities under the Contract.

**Reduction of Liquidated Damages**      **47.2**      If, before the Time for Completion of the whole of the Works or, if applicable, any Section, a Taking-Over Certificate has been issued for any part of the Works or of a Section, the liquidated damages for delay in completion of the remainder of the Works or of that Section shall, for any period of delay after the date stated in such Taking-Over Certificate, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part so certified bears to the value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

**Taking-Over Certificate**      **48.1**      When the whole of the Works have been substantially completed and have satisfactorily passed any Tests on Completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer, with a copy to the Employer, accompanied by a written undertaking to finish with due expedition any outstanding work during the Defects Liability Period. Such notice and undertaking shall be deemed to be a request by the Contractor for the Engineer to issue a Taking-Over Certificate in respect of the Works. The Engineer shall, within 21 days of the date of delivery of such notice, either issue to the Contractor, with a copy to the Employer, a Taking-Over

Certificate, stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract, or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, is required to be done by the Contractor before the issue of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of -Over Certificate within 21 days of completion, to the satisfaction of the Engineer, of the Works so specified and remedying any defects so notified.

**Taking Over of Sections or Parts**      **48.2**      Similarly, in accordance with the procedure set out in Sub-Clause 48.1, the Contractor may request and the Engineer shall issue a Taking-Over Certificate in respect of:

- (a) any Section in respect of which a separate Time for Completion is provided in the Appendix to Tender,
- (b) any substantial part of the Permanent Works which has been both completed to the satisfaction of the Engineer and, otherwise than as provided for in the Contract, occupied or used by the Employer, or
- (c) any part of the Permanent Works which the Employer has elected to occupy or use prior to completion (where such prior occupation or use is not provided for in the Contract or has not been agreed by the Contractor as a temporary measure).

**Substantial Completion of Parts**      **48.3**      If any part of the Permanent Works has been substantially completed and has satisfactorily passed any Tests on Completion prescribed by the Contract, the Engineer may issue a Taking-Over Certificate in respect of that part of the Permanent Works before completion of the whole of the Works and, upon the issue of such Certificate, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work in that part of the Permanent Works during the Defects Liability Period.

**Surfaces Requiring Reinstatement**      **48.4**      Provided that a Taking-Over Certificate given in respect of any Section or part of the Permanent Works before completion of the whole of the Works shall not be deemed to certify completion of any

ground or surfaces requiring reinstatement, unless such Taking-Over Certificate shall expressly so state.

### **Defects Liability**

#### **Defects Liability Period**

In these Conditions the expression “Defects Liability Period” shall mean the defects liability period named in the Appendix to Tender, calculated from:

**49.1**

- (a) the date of completion of the Works certified by the Engineer in accordance with Clause 48, or
- (b) in the event of more than one certificate having been issued by the Engineer under Clause 48, the respective dates so certified, and in relation to the Defects Liability Period the expression “the Works” shall be construed accordingly.

#### **Completion of Outstanding Work and Remedying Defects**

To the intent that the Works shall, at or as soon as practicable after the expiration of the Defects Liability Period, be delivered to the Employer in the condition required by the Contract, fair wear and tear excepted, to the satisfaction of the Engineer, the Contractor shall:

**49.2**

- (a) complete the work, if any, outstanding on the date stated in the taking-Over Certificate as soon as practicable after such date, and
- (b) execute all such work of amendment, reconstruction, and remedying defects, shrinkages or other faults as the Engineer may, during the Defects Liability Period or within 14 days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to its expiration, instruct the Contractor to execute.

#### **Cost of Remedying Defects**

All work referred to in Sub-Clause 49.2 (b) shall be executed by the Contractor at his own cost if the necessity thereof is, in the opinion of the Engineer, due to:

**49.3**

- (a) the use of materials, Plant or workmanship not in accordance with the Contract,
- (b) where the Contractor is responsible for the design of part of the Permanent Works, any fault in such design, or
- (c) he neglect or failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor’s part under

the Contract.

If, in the opinion of the Engineer, such necessity is due to any other cause, he shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer.

**Contractor's Failure to Carry Out Instructions** 49.4 In case of default on the part of the Contractor in carrying out such instruction within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and if such work is work which, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

**Contractor to Search** 50.1 If any defect, shrinkage or other fault in the Works appears at any time prior to the end of the Defects Liability Period, the Engineer may instruct the Contractor, with copy to the Employer, to search under the directions of the Engineer for the cause thereof. Unless such defect, shrinkage or other fault is one for which the Contractor is liable under the Contract, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount in respect of the costs of such search incurred by the Contractor, which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Employer. If such defect, shrinkage or other fault is one for which the Contractor is liable, the cost of the work carried out in searching as aforesaid shall be borne by the Contractor and he shall in such case remedy such defect, shrinkage or other fault at his own cost in accordance with the provisions of Clause 49.

### **Alterations, Additions and Omissions**

- Variations**      **51.1** The Engineer shall make any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion, be appropriate, he shall have the authority to instruct the Contractor to do and the Contractor shall do any of the following:
- (a) increase or decrease the quantity of any work included in the Contract,
  - (b) omit any such work (but not if the omitted work is to be carried out by the Employer or by another contractor),
  - (c) change the character or quality or kind of any such work,
  - (d) change the levels, lines, position and dimensions of any part of the Works,
  - (e) execute additional work of any kind necessary for the completion of the Works, or
  - (f) change any specified sequence or timing of construction of any part of the Works.
- No such variation shall in any way vitiate or invalidate the Contract, but the effect, if any, of all such variations shall be valued in accordance with Clause 52. Provided that where the issue of an instruction to vary the Works is necessitated by some default of or breach of contract by the Contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the Contractor.
- Instructions for Variations**      **51.2** The Contractor shall not make any such variation without an instruction of the Engineer. Provided that no instruction shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an instruction given under this Clause, but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities.
- Valuation of Variations**      **52.1** All variations referred to in Clause 51 and any additions to the Contract Price which are required to be determined in accordance with Clause 52 (for the purposes of this Clause referred to as “varied work”), shall be valued at the rates and prices set out in the Contract if,

in the opinion of the Engineer, the same shall be applicable. If the Contract does not contain any rates or prices applicable to the varied work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable, failing which, after due consultation by the Engineer with the Employer and the Contractor, suitable rates or prices shall be agreed upon between the Engineer and the Contractor. In the event of disagreement the Engineer shall fix such rates or prices as are, in his opinion, appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with Clause 60.

**Power of Engineer to Fix Rates**

**52.2** Provided that if the nature or amount of any varied work relative to the nature or amount of the whole of the Works or to any part thereof, is such that, in the opinion of the Engineer, the rate or price contained in the Contract for any item of the Works is, by reason of such varied work, rendered inappropriate or inapplicable, then, after due consultation by the Engineer with the Employer and the Contractor, a suitable rate or price shall be agreed upon between the Engineer and the Contractor. In the event of disagreement the Engineer shall fix such other rate or price as is, in his opinion, appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with Clause 60.

Provided also that no varied work instructed to be done by the Engineer pursuant to Clause 51 shall be valued under Sub-Clause 52.1 or under this Sub-Clause unless, within 14 days of the date of such instruction and, other than in the case of omitted work, before the commencement of the varied work, notice shall have been given either: (a) by the Contractor to the Engineer of his intention to claim extra payment or a varied rate or price, or

(b) by the Engineer to the Contractor of his intention to vary a rate or a price

**Variations  
Exceeding 15  
per cent**

If, on the issue of the Taking-Over Certificate for the whole of the Works, it is found that as a result of:

- 52.3** (a) all varied work valued under Sub-Clauses 52.1 and 52.2, and  
(b) all adjustments upon measurement of the estimated quantities set out in the Bill of Quantities, excluding Provisional Sums, day works and adjustments of price made under Clause 70, but not from any other cause, there have been additions to or deductions from the Contract Price which taken together are in excess of 15 per cent of the “Effective Contract Price” (which for the purposes of this Sub-Clause shall mean the Contract Price, excluding Provisional Sums and allowance for day works, if any) then and in such event (subject to any action already taken under any other Sub-Clause of this Clause), after due consultation by the Engineer with the Employer and the Contractor, there shall be added to or deducted from the Contract Price such further sum as may be agreed between the Contractor and the Engineer or, failing agreement, determined by the Engineer having regard to the Contractor’s Site and general overhead costs of the Contract. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer. Such sum shall be based only on the amount by which such additions or deductions shall be in excess of 15 per cent of the Effective Contract Price.

**Day work**

- 52.4** The Engineer may, if in his opinion it is necessary or desirable, issue an instruction that any varied work shall be executed on a day work basis. The Contractor shall then be paid for such varied work under the terms set out in the daywork schedule included in the Contract and at the rates and prices affixed thereto by him in the Tender. The Contractor shall furnish to the Engineer such receipts or other vouchers as may be necessary to prove the amounts paid and, before ordering materials, shall submit to the Engineer quotations for the same for his approval.

In respect of such of the Works executed on a daywork basis, the

Contractor shall, during the continuance of such work, deliver each day to the Engineer an exact list in duplicate of the names, occupation and time of all workmen employed on such work and a statement, also in duplicate, showing the description and quantity of all materials and Contractor's Equipment used thereon or therefor other than Contractor's Equipment which is included in the percentage addition in accordance with such daywork schedule. One copy of each list and statement will, if correct, or when agreed, be signed by the Engineer and returned to the Contractor.

At the end of each month the Contractor shall deliver to the Engineer a priced statement of the labour, materials and Contractor's Equipment, except as aforesaid, used and the Contractor shall not be entitled to any payment unless such lists and statements have been fully and punctually rendered. Provided always that if the Engineer considers that for any reason the sending of such lists or statements by the Contractor, in accordance with the foregoing provision, was impracticable he shall nevertheless be entitled to authorize payment for such work, either as daywork, on being satisfied as to the time employed and the labour, materials and Contractor's Equipment used on such work, or at such value therefor as shall, in his opinion, be fair and reasonable.

#### **Procedure for Claims**

**Notice of Claims**            **53.1** Notwithstanding any other provision of the Contract, if the Contractor intends to claim any additional payment pursuant to any Clause of these Conditions or otherwise, he shall give notice of his intention to the Engineer, with a copy to the Employer, within 28 days after the event giving rise to the claim has first arisen.

**Contemporary Records**            **53.2** Upon the happening of the event referred to in Sub-Clause 53.1, the Contractor shall keep such contemporary records as may reasonably be necessary to support any claim he may subsequently wish to make. Without necessarily admitting the Employer's liability, the Engineer shall, on receipt of a notice under Sub-Clause 53.1, inspect such contemporary records and may instruct the Contractor to keep any further contemporary records as are reasonable and may be material

to the claim of which notice has been given. The Contractor shall permit the Engineer to inspect all records kept pursuant to this Sub-Clause and shall supply him with copies thereof as and when the Engineer so instructs.

**Substantiation of Claims**      **53.3** Within 28 days, or such other reasonable time as may be agreed by the Engineer, of giving notice under Sub-Clause 53.1, the Contractor shall send to the Engineer an account giving detailed particulars of the amount claimed and the grounds upon which the claim is based. Where the event giving rise to the claim has a continuing effect, such account shall be considered to be an interim account and the Contractor shall, at such intervals as the Engineer may reasonably require, send further interim accounts giving the accumulated amount of the claim and any further grounds upon which it is based. In cases where interim accounts are sent to the Engineer, the Contractor shall send a final account within 28 days of the end of the effects resulting from the event. The Contractor shall, if required by the Engineer so to do, copy to the Employer all accounts sent to the Engineer pursuant to this Sub-Clause.

**Failure to Comply**      **53.4** If the Contractor fails to comply with any of the provisions of this Clause in respect of any claim which he seeks to make, his entitlement to payment in respect thereof shall not exceed such amount as the Engineer or any arbitrator or arbitrators appointed pursuant to Sub-Clause 67.3 assessing the claim considers to be verified by contemporary records (whether or not such records were brought to the Engineer's notice as required under Sub-Clauses 53.2 and 53.3).

**Payment of Claims**      **53.5** The Contractor shall be entitled to have included in any interim payment certified by the Engineer pursuant to Clause 60 such amount in respect of any claim as the Engineer, after due consultation with the Employer and the Contractor, may consider due to the Contractor provided that the Contractor has supplied sufficient particulars to enable the Engineer to determine the amount due. If such particulars are insufficient to substantiate the whole of the claim, the Contractor shall be entitled to payment in respect of such part of the claim as such particulars may substantiate to the satisfaction of the Engineer. The

Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer.

**Contractor's Equipment, Temporary Works and Materials**

**Contractor's Equipment, Temporary Works and Materials; Exclusive Use for the Works**      **54.1** All Contractor's Equipment, Temporary Works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the Site to another, without the consent of the Engineer. Provided that consent shall not be required for vehicles engaged in transporting any staff, labour, Contractor's Equipment, Temporary Works, Plant or materials to or from the Site.

**Employer not Liable for Damage**      **54.2** The Employer shall not at any time be liable, save as mentioned in Clauses 20 and 65, for the loss of or damage to any of the said Contractor's Equipment, Temporary Works or materials.

**Customs Clearance**      **54.3** The Employer will use his best endeavours in assisting the Contractor, where required, in obtaining clearance through the Customs of Contractor's Equipment, materials and other things required for the Works.

**Re-export of Contractor's Equipment**      **54.4** In respect of any Contractor's Equipment which the Contractor has imported for the purposes of the Works, the Employer will use his best endeavours to assist the Contractor, where required, in procuring any necessary Government consent to the re-export of such Contractor's Equipment by the Contractor upon the removal thereof pursuant to the terms of the Contract.

**Conditions of Hire of Contractor's Equipment**      **54.5** With a view to securing, in the event of termination under Clause 63, the continued availability, for the purpose of executing the Works, of any hired Contractor's Equipment, the Contractor shall not bring on to the Site any hired Contractor's Equipment unless there is an agreement for the hire thereof (which agreement shall be deemed not to include an agreement for hire purchase) which contains a provision that the owner thereof will, on request in writing made by the Employer within

7 days after the date on which any termination has become effective, and on the Employer undertaking to pay all hire charges in respect thereof from such date, hire such Contractor's Equipment to the Employer on the same terms in all respects as the same was hired to the Contractor save that the Employer shall be entitled to permit the use thereof by any other contractor employed by him for the purpose of executing and completing the Works and remedying any defects therein, under the terms of the said Clause 63.

**Costs for the Purpose of Clause 63**      **54.6** In the event of the Employer entering into any agreement for the hire of Contractor's Equipment pursuant to Sub-Clause 54.5, all sums properly paid by the Employer under the provisions of any such agreement and completing the Works and the remedying of any defects therein.

**Incorporation of Clause in Subcontracts**      **54.7** The Contractor shall, where entering into any subcontract for the execution of any part of the Works, incorporate in such subcontract (by reference or otherwise) the provisions of this Clause in relation to Contractor's Equipment, Temporary Works or materials brought on to the Site by the Subcontractor.

**Approval of Materials Implied**      **54.8** The operation of this Clause shall not be deemed to imply any approval by the Engineer of the materials or other matters referred to therein nor shall it prevent the rejection of any such materials at any time by the Engineer.

#### **Measurement**

**Quantities**      **55.1** The quantities set out in the Bill of Quantities are the estimated quantities for the Works, and they are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfilment of his obligations under the Contract.

**Work to be Measured**      **56.1** The Engineer, shall except as otherwise stated, ascertain and determine by measurement the value of the Works in accordance with the Contract and the Contractor shall be paid that value in accordance with Clause 60. The Engineer shall, when he requires any

part of the Works to be measured, give reasonable notice to the Contractor's authorised agent, who shall:

(a) forthwith attend or send a qualified representative to assist the Engineer in making such measurement, and

(b) supply all particulars required by the Engineer should the Contractor not attend, or neglect or omit to send such representative, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of such part of the Works. For the purpose of measuring such Permanent Works as are to be measured by records and drawings, the Engineer shall prepare records and drawings as the work proceeds and the Contractor, as and when called upon to do so in writing, shall, within 14 days, attend to examine and agree such records and drawings with the Engineer and shall sign the same when so agreed. If the Contractor does not attend to examine and agree such records and drawings, they shall be taken to be correct. If, after examination of such records and drawings, the Contractor does not agree the same or does not sign the same as agreed, they shall nevertheless be taken to be correct, unless the Contractor, within 14 days of such examination, lodges with the Engineer notice of the respects in which such records and drawings are claimed by him to be incorrect. On receipt of such notice, the Engineer shall review the records and drawings and either confirm or vary them.

**Method of Measurement** 57.1 The Works shall be measured net, notwithstanding any general or local custom, except where otherwise provided for in the Contract.

**Breakdown of Lump Sum Items** 57.2 For the purposes of statements submitted in accordance with Sub-Clause 60.1 the Contractor shall submit to the Engineer, within 28 days after the receipt of the Letter of Acceptance, a breakdown for each of the lump sum items contained in the Tender. Such breakdowns shall be subject to the approval of the Engineer.

#### **Provisional Sums**

**Definition of "Provisional** 58.1 "Provisional Sum" means a sum included in the Contract and so designated in the Bill of Quantities for the execution of any part of the

**Sum”** Works or for the supply of goods, materials, Plant or services, or for contingencies, which sum may be used, in whole or in part, or not at all, on the instructions of the Engineer. The Contractor shall be entitled to only such amounts in respect of the work, supply or contingencies to which such Provisional Sums relate as the Engineer shall determine in accordance with this Clause. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer.

**Use of Provisional Sums** 58.2 In respect of every Provisional Sum the Engineer shall have authority to issue instructions for the execution of work or for the supply of goods, materials, Plant or services by:

- (a) the Contractor, in which case the Contractor shall be entitled to an amount equal to the value thereof determined in accordance with Clause 52, and
- (b) a nominated Subcontractor, as hereinafter defined, in which case the sum to be paid to the Contractor therefor shall be determined and paid in accordance with Sub-Clause 59.4.

**Production of Vouchers** 58.3 The Contractor shall produce to the Engineer all quotations, invoices, vouchers and accounts or receipts in connection with expenditure in respect of Provisional Sums, except where work is valued in accordance with rates or prices set out in the Tender.

#### **Nominated Subcontractors**

**Definition of “Nominated Subcontractors”** 59.1 All specialists, merchants, tradesmen and others executing any work or supplying any goods, materials, Plant or services for which Provisional Sums are included in the Contract, who may have been or be nominated or selected or approved by the Employer or the Engineer, and all persons to whom by virtue of the provisions of the Contract the Contractor is required to subcontract shall, in the execution of such work or the supply of such goods, materials, Plant or services, be deemed to be subcontractors to the Contractor and are referred to in this Contract as “nominated Subcontractors”.

**Nominated Subcontractors; 59.2**  
**Objection to Nomination**

The Contractor shall not be required by the Employer or the Engineer, or be deemed to be under any obligation, to employ any nominated Subcontractor against whom the Contractor may raise reasonable objection, or who declines to enter into a subcontract with the Contractor containing provisions:

(a) that in respect of the work, goods, materials, Plant or services the subject of the subcontract, the nominated Subcontractor will undertake towards the Contractor such obligations and liabilities as will enable the Contractor to discharge his own obligations and liabilities towards the Employer under the terms of the Contract and will save harmless and indemnify the Contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection therewith, or arising out of or in connection with any failure to perform such obligations or to fulfil such liabilities, and

(b) that the nominated Subcontractor will save harmless and indemnify the Contractor from and against any negligence by the nominated Subcontractor, his agents, workmen and servants and from and against any misuse by him or them of any Temporary Works provided by the Contractor for the purposes of the Contract and from all claims as aforesaid.

**Design Requirements to be Expressly Stated 59.3**

If in connection with any Provisional Sum the services to be provided include any matter of design or specification of any part of the Permanent Works or of any Plant to be incorporated therein, such requirement shall be expressly stated in the Contract and shall be included in any nominated Subcontract. The nominated Subcontract shall specify that the nominated Subcontractor providing such services will save harmless and indemnify the Contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection with any failure to perform such obligations or to fulfil such liabilities.

**Payments to 59.4** For all work executed or goods, materials, Plant or services supplied

**Nominated  
Subcontractors**

by any nominated Subcontractor, the Contractor shall be entitled to:

- (a) the actual price paid or due to be paid by the Contractor, on the instructions of the Engineer, and in accordance with the subcontract;
- (b) in respect of labour supplied by the Contractor, the sum, if any, entered in the Bill of Quantities or, if instructed by the Engineer pursuant to paragraph (a) of Sub-Clause 58.2, as may be determined in accordance with Clause 52; and
- (c) in respect of all other charges and profit, a sum being a percentage rate of the actual price paid or due to be paid calculated, where provision has been made in the Bill of Quantities for a rate to be set against the relevant Provisional Sum, at the rate inserted by the Contractor against that item or, where no such provision has been made, at the rate inserted by the Contractor in the Appendix to Tender and repeated where provision for such is made in a special item provided in the Bill of Quantities for such purpose.

**Certification of  
Payments to  
Nominated  
Subcontractors**

Before issuing, under Clause 60, any certificate, which includes any payment in respect of work done or goods, materials, Plant or services supplied by any nominated Subcontractor, the Engineer shall be entitled to demand from the Contractor reasonable proof that all payments, less retentions, included in previous certificates in respect of the work or goods, materials, Plant or services of such nominated Subcontractor have been paid or discharged by the Contractor. If the Contractor fails to supply such proof then, unless the Contractor:

- (a) satisfies the Engineer in writing that he has reasonable cause for withholding or refusing to make such payments, and
- (b) produces to the Engineer reasonable proof that he has so informed such nominated Subcontractor in writing, the Employer shall be entitled to pay to such nominated Subcontractor direct, upon the certificate of the Engineer, all payments, less retentions, provided for in the nominated Subcontract, which the Contractor has failed to make to such nominated Subcontractor and to deduct by way of set-off the amount so paid by the Employer from any sums due or to become due from the Employer to the Contractor. Provided that, where the

Engineer has certified and the Employer has paid direct as aforesaid, the Engineer shall, in issuing any further certificate in favour of the Contractor, deduct from the amount thereof the amount so paid, direct as aforesaid, but shall not withhold or delay the issue of the certificate itself when due to be issued under the terms of the Contract.

### **Certificates and Payment**

#### **Monthly Statements**

**60.1** The Contractor shall submit to the Engineer after the end of each month six copies, each signed by the Contractor's representative approved by the Engineer in accordance with Sub-Clause 15.1, of a statement, in such form as the Engineer may from time to time prescribe, showing the amounts to which the Contractor considers himself to be entitled up to the end of the month in respect of:

- a) the value of the Permanent Works executed,
- b) any other items in the Bill of Quantities including those for Contractor's Equipment, Temporary Works, dayworks and the like,
- c) the percentage of the invoice value of listed materials, all as stated in the Appendix to Tender, and Plant delivered by the Contractor on the Site for incorporation in the Permanent Works but not incorporated in such Works,
- d) adjustments under Clause 70, and
- e) any other sum to which the Contractor may be entitled under the Contract or otherwise.

#### **Monthly Payments**

**60.2** The Engineer shall, within 28 days of receiving such statement, deliver to the Employer an Interim Payment Certificate stating the amount of payment to the Contractor which the Engineer considers due and payable in respect of such statement, subject:

- (a) firstly, to the retention of the amount calculated by applying the Percentage of Retention stated in the Appendix to Tender, to the amount to which the Contractor is entitled under paragraphs (a), (b), (c) and (e) of Sub-Clause 60.1 until the amount so retained reaches the Limit of Retention Money stated in the Appendix to Tender, and

(b) Secondly, to the deduction, other than pursuant to Clause 47, of any sums which may have become due and payable by the Contractor to the Employer.

Provided that the Engineer shall not be bound to certify any payment under this Sub-Clause if the net amount thereof, after all retentions and deductions, would be less than the Minimum Amount of Interim Payment Certificates stated in the Appendix to Tender.

Notwithstanding the terms of this Clause or any other Clause of the Contract no amount will be certified by the Engineer for payment until the performance security, if required under the Contract, has been provided by the Contractor and approved by the Employer.

**Payment of Retention Money**

60.3 (a) Upon the issue of the Taking-Over Certificate with respect to the whole of the Works, one half of the Retention Money, or upon the issue of a Taking-Over Certificate with respect to a Section or part of the Permanent Works only such proportion thereof as the Engineer determines having regard to the relative value of such Section or part of the Permanent Works, shall be certified by the Engineer for payment to the Contractor.

b) Upon the expiration of the Defects Liability Period for the Works the other half of the Retention Money shall be certified by the Engineer for payment to the Contractor. Provided that, in the event of different Defects Liability Periods having become applicable to different Sections or parts of the Permanent Works pursuant to Clause 48, the expression "expiration of the Defects Liability Period" shall, for the purposes of this Sub-Clause, be deemed to mean the expiration of the latest of such periods. Provided also that if at such time there shall remain to be executed by the Contractor any work instructed, pursuant to Clauses 49 and 50, in respect of the Works, the Engineer shall be entitled to withhold certification until completion of such work of so much of the balance of the Retention Money as shall, in the opinion of the Engineer, represent the cost of the work remaining to be executed.

**Correction of the Certificates**

60.4 Engineer may by any Interim Payment Certificate make any correction or modification in any previous Interim Payment Certificate which shall have been issued by him and shall have

authority, if any work is not being carried out to his satisfaction, to omit or reduce the value of such work in any Interim Payment Certificate.

**Statement at Completion**      **60.5**      Not later than 84 days after the issue of the Taking-Over Certificate in respect of the whole of the Works, the Contractor shall submit to the Engineer six copies of Statement at Completion with supporting documents showing in detail, in the form approved by the Engineer:

- (a) the final value of all work done in accordance with the Contract up to the date stated in such Taking-Over Certificate,
- (b) any further sums which the Contractor considers to be due, and
- (c) an estimate of amounts which the Contractor considers will become due to him under the Contract.

The estimated amounts shall be shown separately in such Statement at Completion. The Engineer shall certify payment in accordance with Sub-Clause 60.2

**Final Statement**      **60.6**      Not later than 56 days after the issue of the Defects Liability Certificate pursuant to Sub-Clause 62. 1, the Contractor shall submit to the Engineer for consideration six copies of a draft final statement with supporting documents showing in detail, in the form approved by the Engineer:

- (a) the value of all work done in accordance with the Contract, and
- (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed (for the purposes of these Conditions referred to as the "Final Statement").

If, following discussions between the Engineer and the Contractor and any changes to the draft final statement which may be agreed between them, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer an Interim Payment Certificate for those parts of the draft final statement, if any, which are not in dispute. The

dispute may then be settled in accordance with Clause 67.

- Discharge**      **60.7** Upon submission of the Final Statement, the Contractor shall give to the Employer, with a copy to the Engineer, a written discharge confirming that the total of the Final Statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment due under the Final Payment Certificate issued pursuant to Sub-Clause 60.8 has been made and the performance security referred to in Sub-Clause 10.1, if any, has been returned to the Contractor.
- Final Payment Certificate**      **60.8** Within 28 days after receipt of the Final Statement, and the written discharge, the Engineer shall issue to the Employer (with a copy to the Contractor) a Final Payment Certificate stating:  
(a) the amount which, in the opinion of the Engineer, is finally due under the Contract or otherwise, and  
(b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled other than under Clause 47, the balance, if any, due from the Employer to the Contractor or from the Contractor to the Employer as the case may be.
- Cessation of Employer's Liability**      **60.9** The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or execution of the Works, unless the Contractor shall have included a claim in respect thereof in his Final Statement and (except in respect of matters or things arising after the issue of the Taking-Over Certificate in respect of the whole of the Works) in the Statement at Completion referred to in Sub-Clause 60.5.
- Time for Payment**      **60.10** The amount due to the Contractor under any Interim Payment Certificate issued by the Engineer pursuant to this Clause, or to any other term of the Contract, shall, subject to Clause 47, be paid by the Employer to the Contractor within 28 days after such Interim Payment

Certificate has been delivered to the Employer, or, in the case of the Final Payment Certificate referred to in Sub-Clause 60.8, within 56 days, after such Final Payment Certificate has been delivered to the Employer. In the event of the failure of the Employer to make payment within the times stated, the Employer shall pay to the Contractor interest at the rate stated in the Appendix to Tender upon all sums unpaid from the date by which the same should have been paid. The provisions of this Sub-Clause are without prejudice to the Contractor's entitlement under Clause 69 or otherwise

**Approval only  
by Defects  
Liability  
Certificate**      **61.1**      Only the Defects Liability Certificate, referred to in Clause 62, shall be deemed to constitute approval of the Works.

**Defects  
Liability  
Certificate**      **62.1**      The Contract shall not be considered as completed until a Defects Liability Certificate shall have been signed by the Engineer and delivered to the Employer, with a copy to, the Contractor, stating the date on which the Contractor shall have completed his obligations to execute and complete the Works and remedy any defects therein to the Engineer's satisfaction. The Defects Liability Certificate shall be given by the Engineer within 28 days after the expiration of the Defects Liability Period, or, if different defects liability periods shall become applicable to different Sections or parts of the Permanent Works, the expiration of the latest such period, or as soon thereafter as any works instructed, pursuant to Clauses 49 and 50, have been completed to the satisfaction of the Engineer. Provided that the issue of the Defects Liability Certificate shall not be a condition precedent to payment to the Contractor of the second portion of the Retention Money in accordance with the conditions set out in Sub-Clause 60.3.

**Unfulfilled  
Obligations**      **62.2**      Notwithstanding the issue of the Defects Liability Certificate the Contractor and the Employer shall remain liable for the fulfilment of any obligation incurred under the provisions of the Contract prior to the issue of the Defects Liability Certificate which remains unperformed at the time such Defects Liability Certificate is issued

and, for the purposes of determining the nature and extent of any such obligation, the Contract shall be deemed to remain in force between the parties to the Contract.

### **Remedies**

- Default of Contractor**      **63.1**      If the Contractor is deemed by law unable to pay his debts as they fall due, or enters into voluntary or involuntary bankruptcy, liquidation or dissolution (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or becomes insolvent, or makes an arrangement with, or assignment in favour of, his creditors, or agrees to carry out the Contract under a committee of inspection of his creditors, or if a receiver, administrator, trustee or liquidator is appointed over any substantial part of his assets, or if, under any law or regulation relating to reorganization, arrangement or readjustment of debts, proceedings are commenced against the Contractor or resolutions passed in connection with dissolution or liquidation or if any steps are taken to enforce any security interest over a substantial part of the assets of the Contractor, or if any act is done or event occurs with respect to the Contractor or his assets which, under any applicable law has a substantially similar effect to any of the foregoing acts or events, or if the Contractor has contravened Sub-Clause 3.1, or has an execution levied on his goods, or if the Engineer certifies to the Employer, with a copy to the Contractor, that, in his opinion, the Contractor:
- a) has repudiated the Contract,
  - b) without reasonable excuse has failed;
    - (i) to commence the Works in accordance with Sub-Clause 4.1.1, or
    - (ii) to proceed with the Works, or any Section thereof, within 28 days after receiving notice pursuant to Sub-Clause 46.1,
  - c) has failed to comply with a notice issued pursuant to Sub-Clause 37.4 or an instruction issued pursuant to Sub-Clause 39.1 within 28 days after having received it,
  - d) despite previous warning from the Engineer, in writing, is otherwise persistently or flagrantly neglecting to comply

with any of his obligations under the Contract, or

e) has contravened Sub-Clause 4.1,

then the Employer may, after giving 14 days' notice to the Contractor, enter upon the Site and the Works and terminate the employment of the Contractor without thereby releasing the Contractor from any of his obligations or liabilities under the Contract, or affecting the rights and authorities conferred on the Employer or the Engineer by the Contract, and may himself complete the Works or may employ any other contractor to complete the Works. The Employer or such other contractor may use for such completion so much of the Contractor's Equipment, Temporary Works and materials as he or they may think proper.

**Valuation at Date of Termination** 63.2 The Engineer shall, as soon as may be practicable after any such entry and termination by the Employer, fix and determine ex parte, or by or after reference to the parties or after such investigation or enquiries as he may think fit to make or institute, and shall certify:

- a) what amount (if any) had, at the time of such entry and termination, been reasonably earned by or would reasonably accrue to the Contractor in respect of work then actually done by him under the Contract, and
- (b) the value of any of the said unused or partially used materials, any Contracto's Equipment and any Temporary Works.

**Payment after Termination** 63.3 If the Employer terminates the Contractor's employment under this Clause, he shall not be liable to pay to the Contractor any further amount (including damages) in respect of the Contract until the expiration of the Defects Liability Period and there after until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any) and all other expenses incurred by the Employer have been ascertained and the amount thereof certified by the Engineer. The Contractor shall then be entitled to receive only such sum (if any) as the Engineer may certify would have been payable to him upon due completion by him after deducting the said amount. If such amount exceeds the sum which would have been payable to the

Contractor on due completion by him, then the Contractor shall, upon demand, pay to the Employer the amount of such excess and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly.

**Assignment of Benefit Agreement** 63.4 Unless prohibited by law, the Contractor shall, if so instructed by the Engineer within 14 days of such entry and termination referred to in Sub-Clause 63.1, assign to the Employer the benefit of any agreement for the supply of any goods or materials or services and/or for the execution of any work for the purposes of the Contract, which the Contractor may have entered into.

**Urgent Remedial Work** 64.1 If, by reason of any accident, or failure, or other event occurring to, in, or in connection with the Works, or any part thereof, either during the execution of the Works, or during the Defects Liability Period, any remedial or other work is, in the opinion of the Engineer, urgently necessary for the safety of the Works and the Contractor is unable or unwilling at once to do such work, the Employer shall be entitled to employ and pay other persons to carry out such work as the Engineer may consider necessary. If the work or repair so done by the Employer is work which, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Provided that the Engineer shall, as soon after the occurrence of any such emergency as may be reasonably practicable, notify the Contractor thereof.

#### **Special Risks**

**No Liability for Special Risks** 65.1 The Contractor shall be under no liability whatsoever in consequence of any of the special risks referred to in Sub-Clause 65.2, whether by way of indemnity or otherwise, for or in respect of:

- (a) destruction of or damage to the Works, save to work condemned under the provisions of Clause 39 prior to the occurrence of any of the said special risks,
- (b) destruction of or damage to property, whether of the Employer or third parties, or
- (c) injury or loss of life.

**Special Risks 65.2** The special risks are:

- (a) the risks defined under paragraphs (a), (c), (d) and (e) of Sub-Clause 20.4, and
- (b) the risks defined under paragraph (b) of Sub-Clause 20.4 insofar as these relate to the country in which the Works are to be executed.

**Damage to Works by Special Risks 65.3** If the Works or any materials or Plant on or near or in transit to the Site, or any of the Contractor's Equipment, sustain destruction or damage by reason of any of the said special risks, the Contractor shall be entitled to payment in accordance with the Contract for any Permanent Works duly executed and for any materials or Plant so destroyed or damaged and, so far as may be required by the Engineer or as may be necessary for the completion of the Works, to payment for:

- (a) rectifying any such destruction or damage to the Works, and
- (b) replacing or rectifying such materials or Contractor's Equipment, and the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 (which shall in the case of the cost of replacement of Contractor's Equipment include the fair market value thereof as determined by the Engineer) and shall notify the Contractor accordingly, with a copy to the Employer.

**Projectile, Missile 65.4** Destruction, damage, injury or loss of life caused by the explosion or impact, whenever and wherever occurring, of any mine, bomb, shell, grenade, or other projectile, missile, munition, or explosive of war, shall be deemed to be a consequence of the said special risks.

**Increased 65.5** Save to the extent that the Contractor is entitled to payment under any

**Costs arising from Special Risks** other provision of the Contract, the Employer shall repay to the Contractor any costs of the execution of the Works (other than such as may be attributable to the cost of reconstructing work condemned under the provisions of Clause 39 prior to the occurrence of any special risk) which are howsoever attributable to or consequent on or the result of or in any way whatsoever connected with the said special risks, subject however to the provisions in this Clause hereinafter contained in regard to outbreak of war, but the Contractor shall, as soon as any such cost comes to his knowledge, forthwith notify the Engineer thereof. The Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of the Contractor's costs in respect thereof which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Employer.

**Outbreak of War** **65.6** If, during the currency of the Contract, there is an outbreak of war, whether war is declared or not, in any part of the world which, whether financially or otherwise, materially affects the execution of the Works, the Contractor shall, unless and until the Contract is terminated under the provisions of this Clause, continue to use his best endeavours to complete the execution of the Works. Provided that the Employer shall be entitled, at any time after such outbreak of war, to terminate the Contract by giving notice to the Contractor and, upon such notice being given, the Contract shall, except as to the rights of the parties under this Clause and Clause 67, terminate, but without prejudice to the rights of either party in respect of any antecedent breach thereof.

**Removal of Contractor's Equipment on Termination** **65.7** If the Contract is terminated under the provisions of Sub-Clause 65.6, the Contractor shall, with all reasonable dispatch, remove from the Site all Contractor's Equipment and shall give similar facilities to his Subcontractors to do so.

**Payment if Contract Terminated** **65.8** If the Contract is terminated as aforesaid, the Contractor shall be paid by the Employer, insofar as such amounts or items have not already been covered by payments on account made to the

Contractor, for all work executed prior to the date of termination at the rates and prices provided in the Contract and in addition:

(a) the amounts payable in respect of any preliminary items referred to in the Bill of Quantities, so far as the work or service comprised therein has been carried out or performed, and a proper proportion of any such items which have been partially carried out or performed;

(b) the cost of materials, Plant or goods reasonably ordered for the Works which have been delivered to the Contractor or of which the Contractor is legally liable to accept delivery, such materials, Plant or goods becoming the property of the Employer upon such payments being made by him;

(c) a sum being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the Works insofar as such expenditure has not been covered by any other payments referred to in this Sub-Clause;

(d) any additional sum payable under the provisions of Sub-Clauses 65.3 and 65.5;

(e) such proportion of the cost as may be reasonable, taking into account payments made or to be made for work executed, of removal of Contractor's Equipment under Sub-Clause 65.7 and, if required by the Contractor, return thereof to the Contractor's main plant yard in his country of registration or to other destination, at no greater cost; and

(f) the reasonable cost of repatriation of all the Contractor's staff and workmen employed on or in connection with the Works at the time of such termination.

Provided that against any payment due from the Employer under this Sub-Clause, the Employer shall be entitled to be credited with any outstanding balances due from the Contractor for advances in respect of Contractor's Equipment, materials and Plant and any other sums which, at the date of termination, were recoverable by the Employer from the Contractor under the terms of the Contract. Any sums payable under this Sub-Clause shall, after due consultation with the Employer and the Contractor, be determined by the Engineer who

shall notify the Contractor accordingly, with a copy to the Employer.

### **Release from Performance**

**Payment in Event of Release from Performance** 66.1 If any circumstance outside the control of both parties arises after the issue of the Letter of Acceptance which renders it impossible or unlawful for either or both parties to fulfil his or their contractual obligations, or under the law governing the Contract the parties are released from further performance, then the parties shall be discharged from the Contract, except as to their rights under this Clause and Clause 67 and without prejudice to the rights of either party in respect of any antecedent breach of the Contract, and the sum payable by the Employer to the Contractor in respect of the work executed shall be the same as that which would have been payable under Clause 65 if the Contract had been terminated under the provisions of Clause 65.

### **Settlement of Disputes**

**Engineer's Decision** 67.1 If a dispute of any kind whatsoever arises between the Employer and the Contractor in connection with, or arising out of, the Contract or the execution of the Works, whether during the execution of the Works or after their completion and whether before or after repudiation or other termination of the Contract, including any dispute as to any opinion, instruction, determination, certificate or valuation of the Engineer, the matter in dispute shall, in the first place, be referred in writing to the Engineer, with a copy to the other party. Such reference shall state that it is made pursuant to this Clause. No later than the eighty-fourth day after the day on which he received such reference the Engineer shall give notice of his decision to the Employer and the Contractor. Such decision shall state that it is made pursuant to this Clause.

Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence and the Contractor and the Employer shall give effect forthwith to every such decision of the Engineer unless and until the same shall be revised, as hereinafter provided, in an amicable

settlement or an arbitral award.

If either the Employer or the Contractor be dissatisfied with any decision of the Engineer, or if the Engineer fails to give notice of his decision on or before the Eighty-fourth day after the day on which he received the reference, then either the Employer or the Contractor may, on or before the seventieth day after the day on which he received notice of such decision, or on or before the seventieth day after the day on which the said period of 84 days expired, as the case may be, give notice to the other party, with a copy for information to the Engineer, of his intention to commence arbitration, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Sub-Clause 67.4, no arbitration in respect thereof may be commenced unless such notice is given.

If the Engineer has given notice of his decision as to a matter in dispute to the Employer and the Contractor and no notice of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor on or before the seventieth day after the day on which the parties received notice as to such decision from the Engineer, the said decision shall become final and binding upon the Employer and the Contractor.

**Amicable  
Settlement**

**67.2** Where notice of intention to commence arbitration as to a dispute has been given in accordance with Sub-Clause 67.1, the parties shall attempt to settle such dispute amicably before the commencement of arbitration. Provided that, unless the parties otherwise agree, arbitration may be commenced on or after the fifty-sixth day after the day on which notice of intention to commence arbitration of such dispute was given, even if no attempt at amicable settlement thereof has been made.

**Arbitration**

**67.3** Any dispute in respect of which:  
(a) the decision, if any, of the Engineer has not become final and binding pursuant to Sub-Clause 67.1, and

(b) amicable settlement has not been reached within the period stated in Sub-Clause 67.2, shall be finally settled, unless otherwise specified in the Contract, under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed under such Rules. The said arbitrator/s shall have full power to open up, review and revise any decision, opinion, instruction, determination, certificate or valuation of the Engineer related to the dispute. Neither party shall be limited in the proceedings before such arbitrator/s to the evidence or arguments put before the Engineer for the purpose of obtaining his said decision pursuant to Sub-Clause 67.1. No such decision shall disqualify the Engineer from being called as a witness and giving evidence before the arbitrator/s on any matter whatsoever relevant to the dispute.

**Failure to  
Comply with  
Engineer's  
Decision**

**67.4** Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the Employer, the Engineer and the Contractor shall not be altered by reason of the arbitration being conducted during the progress of the Works. Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated in Sub-Clause 67.1 and the related decision has become final and binding, either party may, if the other party fails to comply with such decision, and without prejudice to any other rights it may have, refer the failure to arbitration in accordance with Sub-Clause 67.3. The provisions of Sub-Clauses 67.1 and 67.2 shall not apply to any such reference.

### **Notices**

**Notice to Contractor**      **68.1**      All certificates, notices or instructions to be given to the Contractor by the Employer or the Engineer under the terms of the Contract shall be sent by post, cable, telex or facsimile transmission to or left at the Contractor's principal place of business or such other address as the Contractor shall nominate for that purpose.

**Notice to Employer and Engineer**      **68.2**      Any notice to be given to the Employer or to the Engineer under the terms of the Contract shall be sent by post, cable, telex or facsimile transmission to or left at the respective addresses nominated for that purpose in Part 11 of these Conditions.

**Change of Address**      **68.3**      Either party may change a nominated address to another address in the country where the Works are being executed by prior notice to the other party, with a copy to the Engineer, and the Engineer may do so by prior notice to both parties

### **Default of Employer**

**Default of Employer**      **69.1**      In the event of the Employer:  
(a) failing to pay to the Contractor the amount due under any certificate of the Engineer within 28 days after the expiry of the time stated in Sub-Clause 60.10, within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract,  
(b) interfering with or obstructing or refusing any required approval to the issue of any such certificate,  
(c) becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation, or  
(d) giving notice to the Contractor that for unforeseen economic reasons it is impossible for him to continue to meet his contractual obligations, the Contractor shall be entitled to terminate his employment under the Contract by giving notice to the Employer, with a copy to the Engineer.

Such termination shall take effect 14 days after the giving of the notice.

**Removal of Contractor's Equipment**      **69.2**      Upon the expiry of the 14 days' notice referred to in Sub-Clause 69.1, the Contractor shall, notwithstanding the provisions of Sub-Clause 54.1, with all reasonable despatch, remove from the Site all Contractor's Equipment brought by him thereon.

**Payment on Termination**      **69.3**      In the event of such termination the Employer shall be under the same obligations to the Contractor in regard to payment as if the Contract had been terminated under the provisions of Clause 65, but, in addition to the payments specified in Sub-Clause 65.8, the Employer shall pay to the Contractor the amount of any loss or damage to the Contractor arising out of or in connection with or by consequence of such termination.

**Contractor's Entitlement to Suspend Work**      **69.4**      Without prejudice to the Contractor's entitlement to interest under Sub-Clause 60.10 and to terminate under Sub-Clause 69.1, the Contractor may, if the Employer fails to pay the Contractor the amount due under any certificate of the Engineer within 28 days after the expiry of the time stated in Sub-Clause 60.10 within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract, after giving 28 days' prior notice to the Employer, with a copy to the Engineer, suspend work or reduce the rate of work. If the Contractor suspends work or reduces the rate of work in accordance with the provisions of this Sub-Clause and thereby suffers delay or incurs costs the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under Clause 44, and
- (b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.

**Resumption of Work**      69.5      Where the Contractor suspends work or reduces the rate of work. having given notice in accordance with Sub-Clause 69.4, and the Employer subsequently pays the amount due, including interest pursuant to Sub-Clause 60.10, the Contractor's entitlement under Sub-Clause 69.1 shall, if notice of termination has not been given, lapse and the Contractor shall resume normal working as soon as is reasonably possible.

#### **Changes in Cost and Legislation**

**Increase or Decrease of Cost**      70.1      There shall be added to or deducted from the Contract Price such sums in respect of rise or fall in the cost of labour and/or materials or any other matters affecting the cost of the execution of the Works as may be determined in accordance with Part II of these Conditions.

**Subsequent Legislation**      70.2      If, after the date 28 days prior to the latest date for submission of tenders for the Contract there occur in the country in which the Works are being or are to be executed changes to any National or State Statute, Ordinance, Decree or other Law or any regulation or bye-law of any local or other duly constituted authority, or the introduction of any such State Statute, Ordinance, Decree, Law, regulation or bye-law which causes additional or reduced cost to the Contractor, other than under Sub-Clause 70.1, in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be added to or deducted from the Contract Price and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

#### **Currency and Rates of Exchange**

**Currency Restrictions**      71.1      If, after the date 28 days prior to the latest date for submission of tenders for the Contract, the Government or authorized agency of the Government of the country in which the Works are being or are to be

executed imposes currency restrictions and/or transfer of currency restrictions in relation to the currency or currencies in which the Contract Price is to be paid, the Employer shall reimburse any loss or damage to the Contractor arising therefrom, without prejudice to the right of the Contractor to exercise any other rights or remedies to which he is entitled in such event.

- Rates of Exchange**      **72.1**      Where the Contract provides for payment in whole or in part to be made to the Contractor in foreign currency or currencies, such payment shall not be subject to variations in the rate or rates of exchange between such specified foreign currency or currencies and the currency of the country in which the Works are to be executed.
- Currency Proportions**      **72.2**      Where the Employer has required the Tender to be expressed in a single currency but with payment to be made in more than one currency and the Contractor has stated the proportions or amounts of other currency or currencies in which he requires payment to be made, the rate or rates of exchange applicable for calculating the payment of such proportions or amounts shall, unless otherwise stated in Part II of these Conditions, be those prevailing, as determined by the Central Bank of the country in which the Works are to be executed, on the date 28 days prior to the latest date for the submission of tenders for the Contract, as has been notified to the Contractor by the Employer prior to the submission of tenders or as provided for in the Tender.
- Currencies of Payment Provisional Sums**      **72.3**      Where the Contract provides for payment in more than one currency, the proportions or amounts to be paid in foreign currencies in respect of Provisional Sums shall be determined in accordance with the principles set forth in Sub-Clauses 72.1 and 72.2 as and when these sums are utilized in whole or in part in accordance with the provisions of Clauses 58 and 59.

## **SECTION V**

### **CONDITIONS OF CONTRACT PART II**

#### **(CONDITIONS OF PARTICULAR APPLICATION)**

##### **GENERAL**

The Conditions of Contract Part II – Conditions of Particular Application, modify and compliment like-numbered clauses in the Conditions of Contract Part I – General Conditions. Both Parts shall be read together, with the Conditions of Particular Application prevailing in case of conflict or discrepancy. Clauses of the General Conditions not specifically modified and supplemented shall remain in effect.

##### **Clause No.**

##### **Definitions and Interpretation**

- 1.1 (a) (i) The said “Employer” shall be **National Environment Management Authority** represented by **VIRED**
- (iv) The said “Engineer” shall be **Mr. Martin M. Nderi** or any other competent person appointed by the Employer, and notified to the Contractor, to act in replacement of the Engineer.
- (b) (i) Insert in line 2 after “the Bills of Quantities”, the following, “the rates entered by the Contractor (whether or not such rate be employed in computation of the Contract Price)”.

Add the following sub-clause;

##### **Engineer’s Duties and Authority**

- 2.1 (b) The Engineer shall obtain specific approval of the Employer before taking any of the following actions specified in Part I:
- (i) Consenting to the sub-letting of any part of the Works under clause 4.
  - (ii) Certifying additional cost determined under Clause 12
  - (iii) Determining an extension of time under Clause 44

- (iv) Issuing a variation under Clause 51 except in an emergency situation as reasonably determined by the Engineer.
- (v) Fixing rates or prices under clause 52

#### **4 Assignment and Subcontracting**

##### 4.1 Delete the second and third sentence and substitute:

No single subcontract may be for more than 10 percent of the Contract Price nor shall the sum of all subcontracts exceed 25 percent of the Contract price. No one subcontractor may be awarded subcontracts to a total value greater than 10 percent of the Contract Price. All subcontracts greater than 2 percent of the Contract Price are to have the prior consent of the Engineer. The Contractor shall however, not required such consent for purchases of materials or to place contracts for minor details or for any part of the Works of which the manufacturer of supplier is named in the Contract. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen.

#### **5 Contract Documents**

##### 5.1 (a) The language governing this Contract shall be English.

The “Ruling Language” which shall be used to interpret this Contract shall be English. Communication between the Contractor and Engineer or Engineer’s representative shall be in English.

##### (b) The law applicable to this Contract shall be the laws of the Republic of Kenya.

Except to the extent otherwise provided by the Contract, the Kenyan courts shall have exclusive jurisdiction to hear and to determine all actions and proceedings in connection with and arising out of the Contract, and the Contractor shall submit to the jurisdiction of Kenyan courts for the purpose of any such actions and proceedings.

##### 5.2 Delete the documents listed 1-6 and substitute:

- (1) The Contract Agreement;
- (2) The Notification of Award;
- (3) Tender and Appendix to Form of Tender;
- (4) The Conditions of Contract Part II;
- (5) The Conditions of Contract Part I (FIDIC);
- (6) The Special Specifications;
- (7) The Standard Specifications for Road and Bridge Construction, MOTC – 1986;
- (8) Clarifications and rectifications accepted by the Employer; and
- (9) The Drawings;
- (10) The priced Bills of Quantities; and
- (11) Schedules and other documents forming part of the Contract.

8.1 Add to sub clause 8.1 the following:

- (a) Within 28 days after receipt of the Engineer's order to commence the Works, the Contractor shall establish an office at the Site duly equipped for the Contractor's representative and his supervisory personnel.  
The Contractor shall maintain this office throughout the Contract period. The said office shall be the legal domicile of the Contractor, and all correspondence sent to this office shall be deemed to have been sent to the Contractor's head office.
- (b) A foreign Contractor or a Kenya-foreign joint venture, if not registered in Kenya under the applicable laws of Kenya, shall undertake registration upon receipt of the letter of acceptance and prior to signing of the Contract.

#### **10.1 Performance Security**

In lines 1, 2 and 3 delete the words "If the Contract... within 28 days" and substitute "The Contractor shall obtain a Performance Security within 28 days ....."

Add the following at the end of this Sub-Clause:-

The Performance Security shall be issued by a Bank incorporated in Kenya. The amount of guarantee shall be as stated in the Appendix to Form of Tender.

The bank guarantee, shall be issued either (a) by an established and reputable bank approved by the Employer and located in Kenya or a foreign bank through a correspondent established and reputable bank located in Kenya and approved by the Employer or (b) directly by a foreign bank acceptable to the Employer. The performance security shall normally be in the currency or currencies requested for payment by the Contractor and in the same proportions as those requested for payment in the Contract.

The performance security may, subject to the approval of the Engineer, be adjusted at the end of each period of 12 months to reflect the residual value of the Contract Works.

10.2 The performance guarantee shall be valid until a date 28 days after the date of issue of the Taking-Over Certificate. The security shall be returned to the Contractor within 28 days of the expiry.

10.3 Delete sub-clause 10.3

### **11.1 Inspection of Site**

Add the words “and the Contractor shall be deemed to have based his tender on all the aforementioned” after the words “affect his tender”.

Delete the last paragraph completely and replace with the following:

“The Employer in no way guarantees completeness nor accuracy of the soil, materials, subsurface and hydrological information made available to the

Contractor at the time of tendering or at any other time during the period of the Contract, and the Contractor shall be responsible for ascertaining for himself all information as aforesaid for the execution of Works and his tender shall be deemed to have been priced accordingly.

14.1 **Programme to be Submitted**

The time within which the Programme shall be submitted shall be twenty eight (28) days. This detailed Programme shall be based upon the programme submitted by the Contractor as part of his tender and shall, in no material manner, deviate from the said programme.

The Contractor shall allow in his Programme for the following 11 public holidays per calendar year in Kenya upon which the Contractor shall not be permitted to work

New Year's Day	(1st January)
Good Friday	
Easter Monday	
Labour Day	(1 <sup>st</sup> May)
Madaraka Day	(1 <sup>st</sup> June)
Idd-UI-Fitr	
Moi Day	(10 <sup>th</sup> October)
Mashujaa Day	(20 <sup>th</sup> October)
Jamhuri Day	(12 <sup>th</sup> December)
Christmas Day	(25 <sup>th</sup> December)
Boxing Day	(26 <sup>th</sup> December)

The Contractor should also allow per calendar year for a further 2 unspecified public holidays which may be announced by the Government of Kenya with no prior notification, and upon which he shall not be permitted to work.

14.2 Add the following at the end of this sub clause:-

The Employer shall have the right to withhold payment at any time if the Contractor fails to submit the contractual construction programmes in accordance with sub clause 14.1 above or revise construction programmes due to his negligence, failure or omission.

#### **14.3 Cash Flow Estimate to be Submitted**

The time limit within which a detailed cash flow estimate is to be submitted shall be twenty eight (28) days.

In preparing the estimates, the Contractor shall make provision for Advance payment, repayment of advance, retention, payment for services provided by the Employer and timing implications of sub clause 60 – Certificates and Payments.

#### **15 Contractor's Superintendence**

Add the following at the end of the first paragraph of sub-clause 15.1:

- 15.1 The Contractor shall, within seven (7) days of receipt of the Engineer's order to commence the Works, inform the Engineer in writing, the name of the Contractor's representative and the anticipated date of his arrival on Site.

Add the following sub-clause 15.2:

- 15.2 The Contractor's agent or representative on the Site shall be an Engineer registered by the Engineer's Registration Board of Kenya in accordance with the Laws of Kenya cap. 530 or have equivalent status approved by the Engineer and shall be able to read, write and speak English fluently.

#### **16.2 Engineer at Liberty to object**

At the end of this clause add "by a competent substitute approved by the Engineer at the Contractor's own expense".

The Contractor is encouraged to the extent practicable and reasonable, to employ staff and labour with appropriate qualifications who are Kenyan citizens.

### **Safety, Security and Protection of the Environment**

19.1 Add at the end of sub clause 19.1 the following: -

The formulation and enforcement of an adequate safety program shall be the obligation of the Contractor with respect to all the Works under this Contract, regardless of whether performed by the Contractor or his subcontractors. The Contractor shall, within 14 days after commencement of the Works, meet the Engineer to present and discuss his plan for the establishment of such safety measures as may be necessary to provide against accidents, unsafe acts and so forth. Within 28 days after commencement of the Works, the Contractor shall submit a written safety program to the Engineer covering the overall Works and based on the laws and regulations of Kenya. In addition, he shall prepare special safety programs for blasting and handling of explosives as stipulated in the General and Special Specifications.

Notwithstanding the foregoing, the Contractor shall observe the following measures with a view to reducing or eliminating adverse environmental effects by the Site Works:

- (i) All queries and borrow pits shall be filled and landscaped to their original state after extraction of construction material
- (ii) Soil erosion due to surface runoff or water from culverts or other drainage structures should be avoided by putting in place proper erosion control measures that shall include, but not limited to grassing , planting of trees, gabions etc.

- (iii) Long traffic diversion roads shall be avoided so as to minimize the effect of dust on the surrounding environment. In any case all diversions shall be kept damp and dust free at the Contractor's expense.
- (iv) Spillage of oils, fuels and lubricants shall be avoided and if spilt, shall be collected and disposed off in such a way as not to adversely affect the environment.
- (v) Rock blasting near settlement areas shall be properly coordinated with the relevant officers of the Government so as to minimize noise pollution and community interference.
- (vi) Dumping shall be done only at designated dumping areas and not haphazardly on surroundings.

### **Insurance of Works & Contractor's Equipment**

21.1 (a) Delete the first sentence of this clause and replace with the following:

"Prior to commencement of the Works the Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 20, insure to the satisfaction of the Employer."

(b) Add the following words at the end of sub - paragraph (a) and immediately before the last word in (b)

"it being understood the insurance shall provide for compensation to be payable in the types and proportions of the currencies required to rectify the loss or damage incurred."

In sub clause 21.1(b), delete the words "or as may be specified in Part II of these Conditions".

21.2 (a) Delete the words “from the start of Work at the Site” and substitute with the words “from the first working day after the commencement date”

(c) Add the following sub-clause: “It shall be the responsibility of the Contractor to notify the insurance company of any change in the nature and extent of the Works and to ensure the adequacy of the insurance coverage at all times during the period of the Contract”.

**23.1 Third Party Insurance**

Add the following at the beginning of this sub-clause:-

“Prior to commencement of the Works .....

**23.2 Minimum Amount of Insurance**

Add the following at the end of this sub-clause:-

“..... with no limits to the number of occurrences.”

25.1 Insert the words “as soon as practicable after the respective insurances have been taken out but in any case” before the words “Prior to the start of Work at the Site”

Add the following sub-clauses 25.5 to 25.7

**25.5 Insurance Notices**

Each policy of insurance effected by the Contractor for the purpose of the Contract shall include a provision to the effect that the Insurer shall have a duty to give notice in writing to the Contractor and Employer of the date when a premium becomes payable not more than thirty (30) days after the giving of such notice.

**25.6 Re-insurance in Kenya**

The risks against which the Contractor is obliged to insure under the Contract shall be insured through established and reputable companies approved by the

Employer and located in Kenya and any cover against risks which the Contractor may enjoy shall be reinsured in Kenya by an approved Kenyan Insurance Company In respect of the Contractor's obligations under the Contract.

25.7 It shall be the responsibility of the Contractor to notify the insurers under any of the insurances referred or event which by the terms of such insurances are required to be so notified and the Contractor shall indemnify and keep indemnified the Employer against all losses, claims, demands, proceedings, costs, charges and expenses whatsoever arising out of or in consequence of any default by the Contractor in complying with the requirements of this sub clause whether as a result of avoidance of such insurance or otherwise.

## 26. **Compliance with Statutes, Regulations**

Add the following sub-clause 26.2:-

The Employer will repay or allow to the Contractor all such sums as the Engineer shall certify to have been properly payable and paid by the Contractor in respect of such fees. Provided always that, without prejudice to sub clause, nothing contained in this clause shall be deemed to render the Employer liable to all claims which may be considered to fall within the provisions of clause 22.1.

## **Royalties**

28.2 Add the following at the end of this sub-clause;

“The Contractor shall also be liable for all payments or compensation, if any, that are levied in connection with the dumping of part or all of any such material.”

## **Interference with Traffic and Adjoining Properties**

29.2 Add new sub-clause 29.2;

The Contractor shall reinstate all properties whether public or private which are damaged in consequence of the construction and maintenance of the Works to a condition at least equal to that prevailing before his first entry on them.

If in the opinion of the Engineer the Contractor shall have failed to take reasonable and prompt action to discharge his obligations in the matter of reinstatement, the Engineer will inform the Contractor in writing of his opinion, in which circumstances the Employer reserves the right to employ others to do the necessary work of reinstatement and to deduct the cost thereof from any money due or to become due to the Contractor.

The Contractor shall promptly refer to the Employer all claims, which may be considered to fall within the provisions of Clause 22.1.

## **LABOUR**

### **34.2 Conditions of Employment of Labour**

The Contractor shall be responsible for making all arrangements for and shall bear all costs relating to recruitment, obtaining of all necessary visas, permits or other official permission for movements of staff and labour.

### **34.3 Fair Wages**

The Contractor shall, in respect of all persons employed anywhere by him in the execution of the Contract, observe and fulfill the following conditions:

- (a) The Contractor shall pay the rates of wages, observe hours of labour and provide conditions, housing amenities and facilities not less favorable than those required by the Regulation of wages (Building and Construction Industry) Order 1998, and any subsequent amendments thereto, or in any ministry of labour or other government department in consultation with the district whose general circumstances in the trade or industry in which the Contractor is engaged are similar. The Contractor shall at all times during the continuation of the Contract display, for the information of his

employees, a notice setting out the general rates of wages, hours and conditions of labour of his employees and a copy of this clause.

- (b) In the absence of any rates for wages, hours or conditions of labour so established, the Contractor shall pay rates or wages and observe hours and conditions for labour which are not less favorable than the general circumstances in the trade or industry in which the Contractor is engaged.
- (c) Where the absence of established rates of wages, hours and conditions of labour or the dissimilarity of the general circumstances in the trade or industry in which the Contractor is engaged prevent the Contractor from observing rates of wages, hours and conditions of labour ascertained under sub-paragraph (a) or (b) above, the Contractor in fixing the rates of wages, hours and conditions of labour of his employees shall be guided by the advice of the labour department.
- (d) The Contractor shall recognize the freedom of his employees to be members of trade unions.
- (e) The Contractor shall maintain records of the times worked by, and the wages paid to his employees. The Contractor shall furnish to the Employer, if called upon so to do, particulars of the rates of wages, hours and conditions of labour as the employer may direct.
- (f) The Contractor shall be responsible for observance by his sub-Contractors of the foregoing provisions.

#### **34.4 Breach of Fair Wages Clause**

Should a claim be made to the Employer alleging the Contractor's default in payment of fair wages to any workman employed on the Contract and if proof thereof satisfactory to the Employer is furnished by the labour department, the Employer may, failing payment by the Contractor, pay the claims out of any monies due or which may become due to the Contractor under the Contract.

**34.5 Recruitment of Unskilled Labour**

Any additional unskilled labour which may be required by the Contractor for the Works and which is not in his employ at the time of the acceptance of the tender shall be recruited by the Contractor from the labour office nearest to the Site of the Works.

**34.6 Compensation for injury**

The Contractor shall, in accordance with the Workman's Compensation Act Chapter 236 of the laws of Kenya and any other regulations in force from time to time in Kenya, pay compensation for loss or damage suffered in consequence of any accident or injury or disease resulting from his work to any workman or other person in the employment of the Contractor or any sub-contractor.

**34.7 Labour Standards**

- a) The Contractor shall comply with the existing local labour laws, regulations and labour standards.
- b) The Contractor shall formulate and enforce an adequate safety program with respect to all Work under this Contract, whether performed by the Contractor or his sub-contractors. The Contractor has assurance from the Employer of cooperation where the implementation of these safety measures requires joint cooperation.
- c) Upon written request of the Employer the Contractor will remove or replace any of his employees employed under this Contract.

**34.8 Recruitment**

The Contractor shall not induce personnel of the employer or the Engineer to leave their regular employment and shall not, without the prior consent in writing of the Employer, employ personnel who have resigned from such service within the preceding twelve months.

35 Add the following sub clauses 35.2 and 35.3:-

35.2 The Contractor shall maintain such records and make such reports concerning safety, health and welfare of persons and damage to property as the Engineer may from time to time prescribe.

35.3 The Contractor shall report to the Engineer details of any accident as soon as possible after its occurrence. In the case of any fatality or serious accident, the Contractor shall, in addition, notify the Engineer immediately by the quickest available means. The Contractor shall also notify the relevant authority(s) whenever such report is required by the law.

#### 41.1 **Commencement and Delays**

Insert immediately after the word Works----- “on Site within 28 days” and before the word -----after

#### 41.2 **Definition of Commencement**

For the purposes of this clause, the Works shall be deemed to have commenced when all of the following conditions are satisfied;

- a) The approved competent and authorized agent or representative of the Contractor is resident in the project area and is giving his whole time to the superintendence of the Works.
- b) The provision by the Contractor of evidence that all insurances required by the Contract are in force.
- c) The Contractor has an established office in the project area with postal address for receipt of correspondence.
- d) The principal items of constructional plant have been brought to Site and put to work in the execution of the permanent Works.

#### **42.4 Possession of Site and Access Thereto**

Add the following to this clause 42.4;

The Contractor shall not enter any part of the Site until he has requested and received permission to do so from the Employer or the Engineer.

The Contractor shall not use any portion of the Site for any purpose not connected with the Works.

#### **44.1 Add at the end of sub-clause 44.1 the following:**

Neither rains falling between 1<sup>st</sup> November and 31<sup>st</sup> December (inclusive) and between 1<sup>st</sup> February and 31<sup>st</sup> May (inclusive) nor floods caused by such rains shall be deemed exceptional weather conditions such as may fairly entitle the Contractor to an extension of time for the completion of the Work.

#### **45 Working Hours**

Delete sub-clause 45.1 and substitute:

“Subject to any provision to the contrary contained in the Contract, the Contractor shall have the option to work continuously by day and by night and on locally recognized days of rest.

If the Contractor requests for permission to work by day and night and if the Engineer shall grant such permission, the Contractor shall not be entitled to any additional payment for so doing. All such work at night shall be carried out without unreasonable noise or other disturbance and the Contractor shall indemnify the Employer from and against any liability for damages on account of noise or other disturbance created while or in carrying out night work and from and against all claims, demands, proceedings, costs, charges and expenses whatsoever in regard or in relation to such liability. In addition, the Contractor shall be required to provide, for any work carried out by night or

recognized days of rest, adequate lighting and other facilities so that the Work is carried out safely and properly. In the event of the Engineer granting permission to the Contractor to work double or rotary shifts or on Sundays, the Contractor shall be required to meet any additional costs to the Employer in the administration and supervision of the Contract arising from the granting of this permission.

#### **47.2 Reduction of Liquidated Damages**

There shall be no reduction in the amount of liquidated damages in the event that a part or a section of the Works within the Contract is certified as completed before the whole of the Works comprising that Contract.

No bonus for early completion of the Works shall be paid to the Contractor by the Employer.

The sum stated in the Appendix to Form of Tender as liquidated damages shall be increased by a sum equivalent to any amount payable by the Employer to the Contractor under clause 70.1 in respect of an increase in costs in such period that would not have been incurred by the Contractor if the Works had been completed by the due date for completion prescribed by clause 43.

#### **Defects Liability**

#### **49.2 Add at the end of this sub-clause the following sentence:-**

Any work ordered to be executed under this clause shall be done at a time and in a manner as directed by the Engineer so as to interfere as little as possible with the operations of the Employer or of other contractors and no extension(s) of the defects liability period will be allowed for the execution of this Work.

Add the following sub-clause 49.5 to this Clause:-

52 **Variations**

52.1 Add the following final sentence to this sub-clause:-

The agreement, fixing or determination of any rates or prices as aforesaid shall include any foreign currency and the proportion thereof.

52.4 **Daywork**

Add the following at the end of this sub-clause:

The Work so ordered shall immediately become part of the Works under the Contract. The Contractor shall, as soon as practicable after receiving the Daywork Order from the Engineer undertake the necessary steps for due execution of such Work. Prior to commencement of any work to be done on a Daywork basis, the Contractor shall give a notice to the Engineer stating the exact time of such commencement.

54 **Plant, Temporary Works and Materials**

Delete Sub-Clauses 54.3 to 54.4 entirely.

For the purpose of these Clauses, the term "Equipment" shall be read as "Contractor's Equipment" where the context so requires.

54.1 Line 5: - Add "written" between "the" and "consent".

**Quantities**

55.1 Delete sub-clause 55.1 and substitute with the following;

The quality and quantity of the Work included in the Contract Price shall be deemed to be that which is set out in the Contract Bills. The Bills, unless otherwise expressly stated therein, shall be deemed to have been prepared in

accordance with the principles of the latest edition of the Civil Engineering Standard Method of Measurement.

Any error in description or in quantity or any omission of items from the Contract Bills or Specifications shall not vitiate this Contract but shall be corrected and deemed to be a variation required by the Engineer. Subject to the foregoing, any error whether arithmetical or not in the computation of the Contract Price shall be deemed to have been accepted by the parties hereto.

The Contract Price shall not be adjusted or altered in any way whatsoever otherwise than in accordance with the express provisions of these Conditions.

55.2 Add as a new sub-clause:

“Items of Work described in the Bills of Quantities for which no rate or price has been entered in the Contract shall be considered as included in other rates and prices in the Contract and will not be paid for separately by the Employer.

### **Measurement**

56.1 Delete sub clause 56.1 and replace with the following:-

The Contractor shall prepare and submit to the Engineer all necessary field notes and other records taken and computations made for the purpose of quantity measurements, of which the forms shall be approved by the Engineer, for the monthly progress payment under clause 60. The measurement of work quantities made by the Contractor shall be verified and certified by the Engineer based on the above-mentioned documents.

The Contractor shall furnish all personnel, equipment and materials to make such surveys and computations as necessary to determine the quantities of work performed. Unless otherwise prescribed in the specifications or the drawings, all measurements for payment shall be made by the dimensions, lines and grades as

shown on the drawings or by direct survey of which the methods shall be approved by the Engineer.

The documents submitted for measurement and payment shall become the property of the Employer and shall be used to the extent necessary to determine the monthly progress payment to be made to the Contractor under the Contract. Direct survey, if done, shall be subject to checking and verification by the Engineer and all errors in the said survey work and related computations as found during such checking shall be immediately corrected by the Contractor.

57.1 Delete sub clause 57.1 and substitute with the following:-

The Works shall be measured net with deductions made in accordance with the principles of the latest edition of the Civil Engineering Standard Method of Measurement. All measurements shall be given in metric (SI) units.

### **Provisional Sums**

58.4 **Prime Cost sum**

Wherever an item in the Bills of Quantities has been referred to as a "P.C. Sum" (Prime Cost Sum), that item shall be construed as a Provisional sum and the provisions of Sub-clauses 58.1 to 58.3 will apply.

59.5 Add the following paragraph at the end of sub clause 59.5:-

If the Engineer desires to secure final payment to any nominated sub-contractor before final payment is due to the Contractor and if such sub-contractor has satisfactorily indemnified the Contractor against any latent defects, the Engineer may, in an interim certificate, include an amount to cover the said final payment, and thereupon the Contractor shall pay to such nominated sub-contractor the amount so certified. Upon such final payment, the amount named in the Appendix to Form of Tender as Limit of Retention Money shall be reduced by the sum which bears the same ratio to the amount as does the subcontract and sub-

contractor shall be discharged from all liability for the Work, materials or goods executed or supplied by such subcontractor under the Contract to which the payment relates.

### **Certificates and Payment**

Delete Sub-clauses 60.1 to 60.10 entirely and substitute with the following:-

#### **60.1 Advance Payment**

In the event that an advance payment is granted, the following shall apply:-

- a) On signature of the Contract, the Contractor shall at his request, and without furnishing proof of expenditure, be entitled to an advance of 10% (ten percent) of the original amount of the Contract. The advance shall not be subject to retention money.
- b) No advance payment may be made before the Contractor has submitted proof of the establishment of deposit or of a directly liable guarantee satisfactory to the Employer in the amount of the advance payment. The guarantee shall be in the same currency as the advance.
- c) Reimbursement of the advance shall be effected by deductions from monthly interim payments.
- d) Reimbursement of the lump sum advance shall be made by deductions from the Interim payments and where applicable from the balance owing to the Contractor. Reimbursement shall begin when the amount of the sums due under the Contract reaches 20% of the original amount of the Contract. It shall have been completed by the time 80% of this amount is reached.

The amount to be repaid by way of successive deductions shall be calculated by means of the formula:

$$R = \frac{A(x^1 - x^{11})}{80 - 20}$$

Where:

R = the amount to be reimbursed

A = the amount of the advance which has been granted

X<sup>1</sup> = the amount of proposed cumulative payments as a percentage of the original amount of the Contract. This figure will exceed 20% but not exceed 80%.

X<sup>11</sup> = The amount of the previous cumulative payments as a percentage of the original amount of the Contract. This figure will be below 80% but not less than 20%.

(e) with each reimbursement the counterpart of the directly liable guarantee may be reduced accordingly.

## 60.2 Interim Payment Certificate

The Contractor shall submit to the Engineer, in the manner required by the Engineer after the end of each month a statement showing the estimated total value of permanent Work properly executed and materials or goods for permanent works brought to Site up to the end of the previous month (if the value shall justify the issue of an interim certificate) together with any adjustments under clause 70 and any outstanding claims and sums the Contractor considers may be due to him. The Contractor shall amend or correct his estimate as directed by the Engineer and the latter shall not accept it until he is satisfied that it is fair and reasonable. With respect to the said materials and goods, no payment for them shall be made unless;-

- (i) The materials are in accordance with the specifications for the Works;
- (ii) The materials have been delivered to Site and are properly stored and protected against loss, damage or deterioration;
- (iii) The Contractor's record of the requirements, orders, receipts and use of materials are kept in a form approved by the Engineer, and such records are available for inspection by the Engineer;
- (iv) The Contractor has submitted a statement of his cost of acquiring and delivering the materials and goods to the Site, together with such documents as may be required for the purpose of evidencing such cost;
- (v) The materials are to be used within a reasonable time.

The Contractor will be paid on the certificate of the Engineer the amount due to him on account of the estimated total value of the permanent Work executed up to the end of the previous month together with such amount (not exceeding 75% of the value) as the Engineer may consider proper on account of materials and goods for permanent Work delivered by the Contractor on Site and in addition, such amount as the Engineer may consider fair and reasonable for any Temporary Works for which separate amounts are provided in the Bill of Quantities, all of which shall be subject to a retention of the percentage named in the Appendix to Form of Tender until the amount retained (hereinafter and in all Contract documents called the "Retention Money") shall reach the "Limit of Retention Money" named in the said Appendix. Provided always that no interim certificate shall be issued for a sum [such sum always being the net amount thereof after all deductions for retention etc) less than that named in the Appendix to Form of Tender as "Minimum Amount of Interim Certificate" at one time.

Within 14 days after receiving a statement from the Contractor as aforesaid, and subject to the Contractor having made such further amendments and corrections as the Engineer may require, the Engineer shall issue a Certificate of Payment to the Employer showing the amount due, with a copy to the Contractor.

The Engineer shall not unreasonably withhold certifying an Interim Payment Certificate and where there is a dispute regarding an item for payment, the Engineer may delete this disputed item from the Interim Payment Certificate and certify the remainder for payment provided the said payment is in accordance with the preceding paragraph. In cases of difference in opinion as to the value of any item, the Engineer's view shall prevail.

### **60.3 Final Account and Final Payment Certificate**

As soon as possible after the issue of Taking - Over Certificate or the termination of the Contract and not later than the time of issue of Defects Liability Certificate, the Contractor shall prepare and submit to the Engineer (with a copy to the Employer), a Statement of Final Account showing in detail the total value of work done in accordance with the Contract together with all sums paid in previous payments. Within thirty(30) after receipt of such further information as may be reasonably required from the Contractor for its verification, the Engineer shall check the said statement, prepare and submit a Final Payment Certificate to the Employer (with a copy to the Contractor).

The Final Payment Certificate shall state;

- (a) The (final) total value of all Work done in accordance with the Contract;
- (b) After giving credit to the Employer for all amounts previously paid to the Contractor, the balance, if any, due from the Employer to the Contractor or the Contractor to the Employer, as the case may be.

Unless the Contractor notifies the Engineer of his objection to the Final Payment Certificate within twenty eight [28] days of delivery thereof, he shall be deemed to have agreed that he accepts the total Contract Price as set out in the Final Payment Certificate as full settlement for all work done under the Contract including any claims, variations and omissions thereof.

However, a Final Certificate of Payment shall not be conclusive:

- a) to the extent that fraud or dishonesty relates to or affects any matter dealt with in the Certificate, or
- b) if any arbitration or court proceedings under the Contract have been commenced by either party before the expiry of 84 days after the issue of the Final Certificate of Payment.

#### **60.4 Payment of Certificates**

Payment upon each of the Engineer's Certificates for Interim Payments shall be made by the Employer within the time stated in the Appendix to Form of Tender from the date of issue of each Certificate of Payment.

Payment upon the Engineer's Final Payment Certificate shall be made by the Employer within the time stated in the Appendix to Form of Tender from the date of issue of the Final Certificate of Payment signed by the Engineer and countersigned by the Contractor or his authorized agent or representative.

Making of a payment by the Employer shall be considered to have been duly executed on the day that the Employer has issued a cheque.

#### **60.5 Payment of Retention Money**

One half of the retention money shall become due upon the issue of a Taking – Over Certificate and shall be paid to the Contractor when the Engineer shall certify in writing that the last section of the whole of the Works has been substantially completed and the other half shall be paid to the Contractor after the expiration of the Defects Liability Period and the issue of a Certificate under Clause 62. Provided always that if such time there shall remain to be executed by the Contractor any Works ordered during such period pursuant to Clauses 49 and 50 thereof, the Employer shall be entitled to withhold payment [until the completion of such Works] of so much of the second half of the Retention Money

as shall in the opinion of the Engineer represent the Costs of the Works so remaining to be executed. Provided further that in the event of different Defects Liability Periods having become applicable to different parts of the Works pursuant to clause 48 hereof the expression “expiration of the Defect Liability Period” shall for the purpose of this Sub-clause be deemed to mean the expiration of the latest of such periods.

#### **60.6 Currency of Payment**

The Contract price shall be stated in Kenya Shillings. All payments to the Contractor shall be made in Kenya shillings and foreign currency(s) in the proportion indicated in the tender, or agreed prior to the execution of the Contract Agreement and indicated therein. The rate[s] of exchange for the calculation of the amount of foreign currency payment[s] shall be the rate of exchange indicated in the Tender. If the Contractor indicated foreign currencies for payment other than the currencies of the countries of origin of related goods and services, the Employer reserves the right to pay the equivalent at the time of payment in the currencies of the countries of such goods and services. The Employer and the Engineer shall be notified promptly by the Contractor of any changes in the expected foreign currency requirements of the Contractor during the execution of the Works as indicated in the Statement of Foreign Currency Requirements and the foreign and local currency portions of the balance of the Contract Price shall then be amended by agreement between Employer and the Contractor in order to reflect appropriately such changes.

#### **60.7 Overdue Payments**

Unless otherwise stated in the appendix interest shall be paid on the overdue amounts and the interest to be paid shall be in accordance with prevailing commercial bank rates.

#### **60.8 Correcting and With-holding**

The Engineer may by any interim certificate or through the final account make any correction or modification to any previous certified sum and shall have authority, if any work or part thereof is not being carried out to his satisfaction, to omit or reduce the value of such work in any Interim Payment Certificate.

#### **60.9 Completion by Sections.**

If a Taking-Over Certificate shall be issued for any section or part of the Works separately, the payments herein provided for on or after issue of such a Certificate shall be made in respect of such section or part and references to the Contract Price shall mean such part of the Contract Price as shall in the absence of agreement be apportioned thereto by the Engineer.

#### **60.10 Proportion of Foreign Currency**

Subject to the provision of sub clause 60.5 the proportion of foreign currency in any amount due to the Contractor or Employer shall be determined in the following manner:-

- i. For all measured Work, the percentages of foreign currency for the appropriate section of the Bill of Quantities as stated in the schedule of foreign currency requirements shall be applied.
- ii. Variations in the cost of imported materials shall be paid in foreign currency.
- iii. Variations in the cost of locally purchased materials and those due to changes of legislation shall be paid in local currency.
- iv. For Day works labour and plant, the respective percentages of foreign currency stated in the schedule shall be applied.
- v. For Day works materials and materials on site, payment in foreign currency will only be made for imported materials.

- vi. The provisions for the deduction and release of Retention Money and the payment of interest shall be applied similarly to both the local and foreign portions.
- vii. The advance mobilization loan, its repayment thereof and liquidated damages shall all be apportioned on the basis of the ration between local and foreign currency indicated in the Contract Price.
- viii. In the event that the payment is for an item not covered in the foregoing paragraphs, the Engineer shall determine the proportion of foreign and local currency based on the information given in the Schedule of Foreign Currency Requirements, together with any additional information he may request the Contractor to provide.

#### **60.11 Statement at Completion**

Not later than 14 days after the issue of the Taking-Over Certificate in respect of the whole of the works, the Contractor shall submit to the Engineer a statement at completion showing in detail, in a form approved by the Engineer;

- (a) The final value of all work done in accordance with the Contract up to the date stated in such Taking-Over Certificate.
- (b) Any further sums which the Contractor considers to be due; and
- (c) An estimate of amounts, which the Contractor considers, will become due to him under the Contract.

Estimate amounts shall be shown separately in the Statement at Completion. The Contractor shall amend and correct the Statement as directed by the Engineer who shall issue a Certificate at Completion to be processed in accordance with sub-clause 60.4.

#### **60.12 Final Statement**

Not later than 56 days after the issue of the Defects Liability Certificate, the Contractor shall submit to the Engineer for consideration a draft final statement with supporting documents showing in detail, in the form approved by the Engineer;

- (a) The final value of all work done in accordance with the Contract;
- (b) Any further sums which the Contractor considers to be due to him.

If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonable require and shall make such changes in the draft as may be required.

#### **60.13 Discharge**

Upon submission of the Final Statement, the Contractor shall give to the Employer, with a copy to the Engineer, a written discharge confirming that the total of the Final Statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment under the Final Payment Certificate issued pursuant to Sub-clause 60.14 has been made and the Performance Security referred to in Sub-clause 10.1 has been returned to the Contractor.

#### **60.14 Final Payment Certificate**

Upon acceptance of the Final Statement as given in Sub-clause 60.12, the Engineer shall prepare a Final Payment Certificate which shall be delivered to the Contractor's authorized agent or representative for his signature. The Final Payment Certificate shall state:

- (a) The final value of all work done in accordance with the Contract;
- (b) After giving credit to the Employer for all amounts previously paid by the Employer, the balance, if any, due from the Employer to the Contractor or the Contractor to the Employer as the case may be Final Certificate shall be issued for any sum due to the Contractor even if such is less than the sum said named in the Appendix to the Form of Tender.

#### **60.15 Cessation of Employer's Liability**

Unless the Contractor notifies the Engineer of his objection to the Final Certificate within fourteen days of delivery thereof he shall be deemed to have agreed that he accepts the total Contract Price as set out in the Final Certificate as full

settlement for all work done under the Contract including any variations and omissions thereof.

#### **62.1 Defects Liability Certificate**

Delete the last sentence of this Sub-Clause beginning "Provided that the issue.....in Sub-Clause 60.3".

#### **Remedies**

#### **63.4 Assignment of Benefit of Agreement**

Add the following at the end of this sub-clause:-

"But on the terms that a supplier or sub-contractor shall be entitled to make any reasonable objection to any further assignment thereof by the Employer and the Employer may pay the supplier or sub-contractor for any such materials supplied or Works executed under such agreement, whether the same be assigned as aforesaid or not, before or after the said determination, the amount due by such arrangement in so far as it has not already been paid by the Contractor".

#### **65 Special Risks**

Add sub clause 65.9 as follows:

- a) In the event of the Employer unilaterally ordering the final cessation of performance of the Contract for reasons not specified elsewhere in the Conditions of Contract the Contract shall be considered to be frustrated and the Contractor shall be indemnified as provided for under clause 65.1.
- b) In the event of the Employer ordering the adjournment of the Contract before or after commencement of the Works for reasons not specified elsewhere in the Conditions of Contract, the Contractor shall be entitled to indemnity for any injury which he may have suffered as a consequence of such

adjournment. The Engineer shall award the Contractor payment of such sum as in his opinion shall be reasonable giving regard to all material and relevant factors including the Contractor's on costs and overheads, and the nature of the instruction to adjourn the Contract.

## **Settlement of Disputes**

### **67.3 Arbitration**

For the purposes of this Clause, the Arbitrator shall be a person to be agreed between the parties or failing agreement, the Arbitrator shall be appointed by the appointer designated in the Appendix to the Form of Tender.

Add the following paragraph after the last paragraph of sub-clause 67.3:

Arbitration shall take place in Nairobi, Kenya. The language of all arbitration proceedings shall be in English. The cost of arbitration shall be apportioned by the Arbitrator according to his findings.

## **Notices**

68.1 Add the following at the end of this subclause:-

Notwithstanding the foregoing, the Contractor shall either maintain an address close to the Works or appoint an agent residing close to the Works for the purpose of receiving notices to be given to the Contractor under the terms of the Contract. This obligation shall be terminated upon the issue of the Certificate of Completion.

68.2 Delete the words "nominated for that purpose in Part II of these Conditions" in this sub-clause.

## **Default of Employer**

### **69.1 Default of Employer**

In paragraph (a) of this Sub-Clause, delete the words “within 28 days of expiry of the time stated in Sub-clause 60.10” and insert “within 56 days after the expiry of the time stated in Sub-Clause 60.4”.

### **69.4 Contractor’s Entitlement to Suspend Work**

Delete the first four lines of this Sub-Clause and replace with the following:-

“Without prejudice to the Contractor’s entitlement to interest under Sub-clause 60.7 and to terminate his employment under Sub-Clause 69.1, the Contractor may, if the Employer fails to pay the Contractor the amount due under any certificate of the Engineer within 56 days after the expiry of the time stated in Sub-Clause 60.4.....”

Delete sub-clause 69.4 (b) and substitute with the following----“the amount of such cost, which shall be added to the Contract Price. However, the costs due to idle time for plant, equipment and labour shall not be included in the said costs and shall be borne by the Contractor.

### **69.5 Resumption of Work**

In line 3 of this Sub-Clause delete the Words “Sub-Clause 60.10” and replace with “Sub-Clause 60.7”

## **Changes in Cost and Legislation**

### **70.1 Delete the sub-clause 70.1 in its entirety and substitute with the following:-**

“The Contract Price shall be deemed to have been calculated in the matter set below and shall be subject to the adjustment in the event specified hereunder:

- (a) The rates contained in the priced Bill of Quantities are based upon the rates of wages and other emoluments and expenses applicable at the site and the date of tender pricing (as defined in sub-clause 70.4 hereinafter);
- (b) If the said rates of wages and other emoluments and expenses shall be increased or decreased by act, statute, decree, regulation and the like after the said date of tender pricing then the net amount of increase the emoluments and expenses shall, as the case may be, be paid to or allowed by Contractor;
- (c) The rates contained in the price Bill of Quantities are based upon the rates of the Contractor's compulsory contributions payable at the date of tender under or by virtue of any Act, Statute, Regulations and the like applicable at the site;
- (d) If any of the said rates of contribution becomes payable after that date then the net amount of new statutory contribution becomes payable after that date then the net amount of increase or decrease of the emoluments and expenses shall, as the case may be, be paid to or allowed by the Contractor. Difference between what the Contractor actually pays in respect of work people engaged upon or in connection with the works and what he would have paid in respect of such person had any of the said rates not been increased or decreased or had a new contribution not become payable as aforesaid, shall as the case may be, be paid to or allowed by the Contractor. Provided always that the Engineer and the Contractor may agree a sum, which shall be deemed to be the net amount of the aforesaid difference, and such sum shall be deemed for the purpose of this Contract to be, that which is to be paid to or allowed by the Contractor by the virtue of this sub-paragraph;
- (e) If the market price or any materials or goods specified as aforesaid shall be increased or decreased after the said Date of Tender Pricing, then the net amount of difference between the basic price and the market price

payable by the Contractor and current when any such goods and materials are bought shall, as the case may be, be paid to or allowed by the Contractor. Orders for materials and goods listed as aforesaid shall have been placed within a reasonable time after the date at which sufficient information is available for the placing of such orders, and the placing of orders at that time shall be a condition precedent to any payments being made to the Contractor in respect of increased market prices.”

Substitute and add the following sub-clauses:

70.2 (a) If the Contractor shall decide subject to Clause 4 thereof to sub-let any portion of the work he shall incorporate in the sub-contract provisions to the like effect as those contained in sub-clause (1) of this Clause;

(c) If the price payable under a sub-contract as aforesaid is increased above or decreased below the price in such sub-contract by reason of the operation of the incorporated provisions of sub-clause (1) of this clause then the net amount of such increase or decrease shall as the case may be, be paid to or allowed by the Contractor under this Contract.

70.3 The expression “the date of tender pricing” as used in this Clause means the date 28 days prior to the final date for submission of Tenders as determined by the Employer in the Tender documents.

70.4 For imported materials, the supplier’s/manufacturer’s Prime costs shall be C.I.F. cost at point of entry by the same means of transport as determined by the Contractor’s Basic Rate.

For locally produced materials, the supplier’s or manufacturer’s prime costs shall be at their nearest depot or the nearest railway station relevant to the works.

For materials, which are subject to Government Price Control, payments for price variations will be determined from the difference between the control price in

force at a date 28 days prior to date for submission of Tenders and the price in force on the date of purchase.

70.5 The materials to which this Variation Clause applies are:

- ◆ All bitumen material
- ◆ Fuels, oils and lubricant
- ◆ Cement
- ◆ Lime
- ◆ Flex beam guardrail
- ◆ Explosives
- ◆ Gabion mesh
- ◆ Reinforcing steel

70.6 The Contractor shall not change the supplier or manufacturer during the Contract without the approval of the Engineer.

70.7 No payments will be made for price variation related to expenses incurred by the Contractor in his Head Office in Kenya, or overseas.

70.8 All payments made pursuant to Clause 70 shall be in Kenya Shillings.

70.9 No payments will be made for the cost of preparing V.O.P. claims.

70.10 Add the following at the end of this clause.

“Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited as aforesaid if the same shall already have been taken into account in accordance with the provisions of sub-clause 70.1”.

## **ADDITIONAL CLAUSES**

### **Clause 73 Declaration against Waiver**

The condoning by the Employer of any breach or breaches by the Contractor or any authorized sub-contractor of any of the stipulations and Conditions contained in the Contract shall in no way prejudice or affect or be construed as a waiver of the Employer's rights, powers and remedies under the Contract in respect of any breach or breaches as aforesaid.

### **Clause 74 Bribery and Collusion**

The Employer shall be entitled to determine the Contract and recover from the Contractor the amount of any loss resulting from such determination if the Contractor shall have offered or given or agreed to give any person any gift or consideration of any kind as an inducement of regard for doing or fore bearing to do or for having done or fore borne to do any action in relation to obtaining or the execution of the Contract or any other contract with the Employer or if any of the like acts shall have been done by any person employed by the Contractor or acting on his behalf (whether with or without the knowledge of the Contractor) or if the Contractor shall have come to any agreement with another contractor or number of contractors whereby an agreed quotation or estimate shall be tendered to the Employer by one or more contractors.

### **Clause 75 Contract Confidential**

The Contractor shall treat the Contract and everything in connection there with as private and confidential. In particular, the Contractor shall not publish any information, drawings or photographs concerning the Works in any trade or technical paper etc, and shall not use the Site for the purpose of advertising except with the written consent of the Engineer and subject to such conditions as the Engineer may prescribe.

**Clause 76 Employer's Officials etc., Not Personally Liable**

No official of the Employer or the Engineer or the Engineer's Representative or anyone of their respective staffs or their employees shall be in any way personally bound or liable for the acts or obligations of the Employer under the Contract or answerable for default or omission in the observance or performance of any of the acts, matters or things which are herein contained.

**Clause 77 Taxes and Duties**

- (1) The Contractor shall list in his tender the plant and vehicles which he intends to import for the execution of the Works. The Engineer will consider the list in the context of the program of the Works and will give his approval subject to any modifications that he may see fit to make. No appeal against the Engineer's decision shall be permitted.

The Contractor will be permitted to import approved plant and vehicles required for the execution of the Works on the basis of temporary admission into Kenya and re-export thereafter upon completion of the Contract without payment of customs duties and Value Added Tax for them. If the plant and equipment shall not be re-exported, duties and taxes shall then be paid based upon their residual value at the date of completion of the Contract, or the date of withdrawal from the Works, if earlier. Plant and vehicles so imported shall not be utilized on other works not associated with the Contract unless specifically authorized by the Engineer.

- (2) The Contractor will be permitted to import approved spare parts, tires and tubes without payment of customs duty and Value Added Tax for maintenance of any imported vehicles and plant as provided in sub-clause 77.1 above, within a financial limit indicated by himself.

However, this limit will not exceed 15% of the Contract Price excluding Contingencies.

All materials approved by the Engineer to be incorporated into the Works or temporary works, and whose importation into Kenya is agreed to be essential shall be free of customs duties and Value Added Tax. The Contractor shall submit a list of such materials required with the tender. The Contractor shall be required to satisfy the Engineer that such materials have actually been incorporated into the Works.

Items produced in Kenya will not be permitted to be imported without payment of customs duty and Value Added Tax.

Items produced in Kenya shall mean commercially recognized goods or products that are either mined, grown, manufactured, processed or assembled (whether the components are imported or not) in Kenya.

## **Clause 78 Joint Ventures**

- 78.1 If the Contractor is a joint venture, all partners of the joint venture shall be jointly and severally liable to the Employer for the execution of the entire Contract in accordance with its terms and Conditions.

## **VI) SPECIFICATIONS**

### **TECHNICAL SPECIFICATIONS**

#### **1. BOREHOLE DRILLING**

##### **1.1 GENERAL**

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Project Manager's prior review and written consent. This contract comprises the drilling, construction, development; test pumping, water quality analysis and erection of a gantry. The drill sites are indicated in the zone allocation list.

##### **Regulations and Standards**

The borehole shall be drilled at the site to be identified by the Project Manager. Each borehole shall be drilled to a depth specified in the hydro-geological survey report. It shall be drilled through all strata encountered. The Employer will acquire the relevant permits and Government authorizations.

##### **1.2 MOBILIZATION, DEMOBILIZATION AND RESTITUTION**

1.2.1 The Contractor shall mobilize to the site in accordance with the Agreed Program. The sum for mobilization/demobilization shall include transportation of machinery, erection, dismantling and preparation of temporary camps as the Contractor deems necessary, provision of drilling and development fluids (bentonite, foam, and water), water for camping, personnel sanitary facilities.

1.2.2 The Contractor shall minimize disturbance to neighbouring plots. This shall particularly include ensuring that bailed fines and pumped test water are discharged in a manner that does not create a nuisance either to the public or private property.

1.2.3 Site re-instatement under the conditions of contract shall include the removal of all hydrocarbons spilled, leaked or otherwise released and associated packaging and cotton waste. Site re-instatement is deemed an integral part of mobilization. This activity shall be costed taking into account the items above and expressed as a lump sum.

**1.3. DRILLING**

1.3.1 Unless otherwise approved by the Project Manager, drilling shall be by the air hammer method, by flush rotary drilling or by the percussion method. Drilling shall continue through all strata encountered. Drilling fluids and additives used must be approved by the Project Manager prior to use. The Contractor shall provide the appropriate tools and equipment and maintain them in good condition capable of operating to the manufacturer's rating to ensure a smooth, a smooth, straight hole

- 1.32** Drilling shall continue to the stipulated total depth at a minimum diameter of 250mm to provide for a finished borehole of a cased internal diameter of 152mm after allowing for gravel pack and temporary casings as found necessary. The Project Manager reserves the right to stop drilling operation if he considers that further drilling is unlikely to be advantageous. In this event payment shall only be made for the amount of work actually executed.
- 1.33** All materials used in the borehole construction other than temporary works shall comply with the relevant standard specifications. A tolerance in dimensions will be permitted provided that the material quality is not inferior to specification and work is in no way impaired.
- 1.34** The boreholes shall be drilled straight and vertical.

#### **1.4 SAMPLE COLLECTION, STORAGE AND RECORD KEEPING**

- 1.4.1** **Samples** of the drill cuttings returned to the surface shall be collected at two (2) meter intervals, dried and bagged. Each bag shall be clearly marked with the sample depth interval and borehole number. The Contractor shall record the depth and any zone of lost circulation for which no sample was taken.
- 1.4.2** The Contractor shall maintain a log of the penetration rate on a meter by meter basis, in minutes per meter drilled. A stopwatch shall be used for this purpose so that only the net drilling time is recorded, excluding any time taken in drilling disruptions.
- 1.4.3** The depth of any voids, or of particular rapid penetration, or significant changes in rig noise shall also be noted.
- 1.4.4** Water level shall be measured and recorded at the start and end of every shift, after significant breaks in activity (such as meal breaks), and during periods of plant downtime (as appropriate). The water levels shall be measured using a sounding and/or lighting dipper approved for use by the Project Manager.

## **1.5 SUPPLY AND INSTALLATION OF CASINGS AND SCREENS**

### **1.5.1 CASING AND SCREENS SPECIFICATIONS**

- a). Casings shall be new, 152mm (6 inches) internal diameter, black pipe class B, with a minimum wall thickness of 4.0mm in 6 meter lengths.
- b). Mill slotted screens shall be constructed from new 152mm internal diameter black pipe class B with a minimum wall thickness of 4.0mm. Slots shall not exceed 1.0 mm in width, and should constitute not less than 6.0% open space area. Gas slotted casing screens are not acceptable.

### **1.5.2 CASINGS AND SCREEN INSTALLATION**

- a). Before installation of the casings and screens, the Contractor shall ensure that the hole is clear to the total depth and shall flush out any backfilled materials present. The Project Manager shall provide the design of the casings and screens string prior to installation by the Contractor.
- b). Casing jointing shall be by either flush square-section threading or tree pass electric arc welding. Screens may be welded to casing, or screw-jointed by means of flush square-section threads. Externally socket joints may be welded to the casing, or screw-jointed by means of flush square-section threads. Externally socket joints will not be accepted. Where screwed joints are deemed by the Project Manager to be below standard, joint shoulders shall be spot welded at 900mm interval around the casing circumference at no extra cost. If screens and casing are to be welded, the appropriate welding electrode must be used.

- c). during welding, casing and screen lengths must be held absolutely vertical in order to ensure a plumb installation. All joints to be welded must be bevelled at the butt end; three continuous weld passes must be made to ensure a sound joint and the oxide coating be removed before the second and third passes.
- d). Burn-through and subsequent deposition of metal on the inside of the casings and screens must be avoided. The base of the casing shall be sealed, unless otherwise directed by the Project Manager, with a circular plate of black pipe class B of thickness not less than 4.0mm (1/4 inch) fixed with a continuous weld to the casing strip. The appropriate welding electrode shall be used. The weld passes will be made, with oxide coating removed prior to the second and third passes. The top of the casing straight shall terminate not less than 600mm above the highest recorded level of ground at the site.
- e). the contractor shall be responsible for the provision of temporary casings as necessary, including the insertion and removal. Where the Project Manager deems it necessary to have temporary casings left in the borehole as a measure of securing the borehole, this will be indicated in the item for other works in the bill of quantity.

### **1.5.3 ADMISSIBLE RATES**

- a) Rates shall be expressed as supply and installation of casing or screen per Unit Linear Meter and installation of gravel pack per Unit Cubic Meter.

## **1.6 SUPPLY AND INSTALLATION OF GRAVEL PACK**

### **1.6.1 SPECIFICATIONS**

- a). The Contractor shall supply and install filter pack/formation stabilizer. The material shall be 2-4 mm diameter, clean well rounded riverbed siliceous gravel with no more than 5.0% non-siliceous materials. The pack must be approved by the Project Manager prior to installation. Granular calcium hypochlorite will be introduced into the annular

space along the pack material at a concentration of 500 grams per cubic meter of pack the gravel pack shall be placed in the production boreholes to a thickness of 50mm around the casing up-to where all screen zones are covered with the gravel as per the Project Manager's satisfaction. This will initiate the process of sterilizing the wellbore. The Contractor shall provide the Project Manager with the bulk density of the pack material (Kg/M<sup>3</sup>).

- b). Installation of the filter pack/formation stabilizer may be water wash down or reverse circulation methods. In the latter case a pump set or airlift string shall be installed in the bore so as to encourage material settlement. The filter pack shall terminate not less than 3.0 meters above the uppermost screen when stabilized, or as otherwise directed by the Project Manager. The Contractor shall provide a means by which this level shall be measured.

## **1.7 INSTALLATION OF BACKFILL**

### **1.7.1 SPECIFICATIONS**

- a). Backfill material shall comprise of fine clayey drill cuttings and shall be installed from the top of the filter pack to 3.0 meters below ground level unless otherwise directed by the Project Manager. The installation method must ensure that no bridging occurs within the annular space.
- b). The Contractor shall measure the depth to the top of the backfill and provide the means by which this level may be measured.

### **1.7.2 ADMISSIBLE RATES**

Rates shall be expressed as installation of backfill per Unit Linear Metre.

## **1.8 DEVELOPMENT**

Development shall comprise both Physical and Chemical development, and shall include the following operations:-

### **1.8.1 BOREHOLE CLEANING**

- a). The Contractor shall clean the borehole to its “completed depth” using any of the methods listed below or as otherwise authorized by the Project Manager:-
  - ❖ By bailer with percussion drilling rig
  - ❖ By means of airlift, which may use light or stable foam to assist in the removal of materials from the borehole.
  - ❖ By means of educator airlift, with or without light or stable foam.
- b). Bailers and other down hole plant shall adopt diameter limits of half a normal size or smaller (12.5mm or ½ inch) than the smallest casing or screen diameter.
- c). Water levels shall be measured and recorded at the start and end of every shift, at significant breaks in activity (such as meal breaks), and during periods of plant downtime (as appropriate). Water levels be measured using a sounding and/or lighting dipper previously approved by the

Project Manager.

- d). The borehole shall be deemed clean when measured drilled depth has been reached and when insignificant or no materials is removed from the base of the borehole. Cleaning costs shall be expressed as a rate Per Hour.

### **1.8.2 CHEMICAL DEVELOPMENT**

- a). When the Project Manager has deemed the borehole clean; he may instruct the Contractor to commence with Chemical development. Chemical development shall comprise of an approved Polyphosphate as a des-aggregate that shall break down the silty concentrations, any build up clay or silts, or other fine materials within and adjacent to the borehole. The decision as whether chemical development shall be adopted and what dosage rates shall be made by the Project Manager.
- b). Typical dosage shall comprise of powdered Sodium Hex-ametaphosphate dissolve in hot water. The polyphosphate shall be dosed at 10 to 15 Kg/m<sup>3</sup> of water depending on the concentration of clays in the aquifer matrix. This shall be mixed with calcium hypochlorite at a dose of 180grammes per cubic meter to inhibit bacteria activity. The volume of polyphosphate dosed water shall be one and a half times the Volume of water within the screen section.
- c). Both polyphosphate and added water shall be introduced by means of a pipe, the bottom end of that shall be located in the middle of the screen section of the borehole. The Contractor may get the liquids into the screened section using a jetting head if he wishes.
- d). After dosing, the borehole shall be left overnight to allow disaggregation to occur. The borehole shall then be subject to physical development.

Chemical development costs shall be expressed as an Hour rate, and include all labour and materials (including clean water) required for the operation. Chemical development undertaken by a Contractor familiar with the technique shall take no longer than three (3) hours.

### **1.8.3 PHYSICAL DEVELOPMENT**

- a). Physical development may adopt any of the commonly used methods, including but not necessarily restricted to the following:-
- ❖ Surging
  - ❖ Bailing
  - ❖ High Velocity Water Jetting
  - ❖ Airlift raw hiding and Airlift raw hiding with educator pipe.
- b). Development shall be considered complete when the water discharged is clear and contains no more than an estimated 5 parts per million of suspended solids and the borehole has been restored to the cleaned total depth or as otherwise directed by the Project Manager.
- c). The Contractor shall describe the method he proposes to adopt and the plant required for physical development in his method statement. **Over pumping** shall not be considered a development method. The rate submitted by the Contractor for physical development is deemed to include installation and removal of necessary plant. The quantities given in the bills of quantities only apply to actual development time. Costs for physical development shall be expressed as an Hour Rate.

### **1.9 AQUIFER TESTING**

Borehole testing will be conducted according to British Standard BS 6274 (1792) (Code of Practice for Test Pumping of Water Wells). The following elements are required.

- ❖ A pre-test
- ❖ A step drawdown test
- ❖ A constant discharge test
- ❖ A recovery test

#### **1.9.1 INSTALLATION, PLANT AND METHODOLOGY**

Pumping plant and dipping tube shall be installed in the borehole to be tested. The Contractor shall investigate and agree with the Project Manager the anticipated

discharge and pump intake depth.

**a) PUMPING PLANT**

- i) Pumps used for test pumping may be electrical submersible or surface-mounted turbine pumps or reciprocating pumps.
- ii) Any pump used in tests must have a fully functioning **non-return valve** either in the pump itself or in the rising main immediately above the top of the pump.
- iii) The Contractor must have pumps covering the anticipated discharge range.
- iv) The water pumped from the borehole shall be discharged to waste at a distance and in such a manner that it does not pond or flow back towards the borehole.
- v) The Contractor must provide a generator or other prime mover for powering the pump, as power is not necessarily available at the sites.

**b) DISCHARGE MEASUREMENT AND CONTROL**

Discharge measurements shall be by an approved accurate method, such as an Orifice Plate, calibrated flow meter or a V-notch weir. If volumetric methods are proposed, the Contractor will ensure the container to be used has been calibrated. When time to fill measurements is made, each discharge measurement shall be calculated from the average of three time measurements. Discharge shall vary by no more than 15% across each step of step drawdown test, and across the constant discharge test.

**c) WATER LEVEL MEASUREMENT**

Water level measurements shall be by electric sounding and/or lighting dipper, and shall be made in a dipper tube installed alongside the test pump rising main and tied securely to it. The Project Manager will check the dipper for stretch and any other inaccuracies prior to accepting its use. Accuracy measurements must not be less than

1.0 cm. Water level measurements using an air line will not be acceptable on the grounds of poor precision.

**d) TIME MEASUREMENT**

All times shall be measured by means of a stopwatch. The Contractor shall ensure that spare batteries etc.... for all equipment are available prior to commencing tests.

**i) PRE-TEST**

The pre-test will check all equipment, determine the range of discharge for the step drawdown test and set the globe values for the first step discharge rate. Pre-test shall not exceed three (3).

**ii) STEP DRAWDOWN TEST**

- ❖ The step drawdown test will comprise five (5) steps tests of sixty (60) minutes each, with no recovery phase between successive steps. The step drawdown test shall not start until water level has returned to the true static water level, unless otherwise directed

by the Project Manager.

- ❖ Typically, individual step discharges would comprise 25%, 50%, 75%, 100% and 125% of the anticipated production discharge rate.
- ❖ Discharge increments shall be effected as nearly instantaneously as possible and once set shall not be changed except by instruction of the Project Manager.
- ❖ Discharge variations and measurement shall be effected by means of the globe valve and manometer gauge as follows;

A globe valve of suitable diameter shall control the discharge and on the upstream side of this, not closer than six (6) pipe diameters from the valve, a manometer tapping and gauge will be installed such that it can be clearly seen by any person using the valve. This will be used during the step drawdown tests for the flow control purposes.

**iii) CONSTANT DISCHARGE TEST**

Constant discharge test shall typically last not less than twenty four (24) hours, or as otherwise determined by the Project Manager. A water sample will be procured towards the end of the test for subsequent analysis by a competent laboratory.

**iv) RECOVERY TEST AND REMOVAL OF PLANT**

Recovery tests shall not continue for more than twenty four (24) hours, or as otherwise directed by the Project Manager. Only after the completion of recovery data collection may pumping and ancillary plant be removed from the borehole, though above ground components may be dismantled during the recovering phase.

**v) ADMISSIBLE RATES**

Rates of pumping and recovery are deemed to include the cost of plant installation and removal. The rates are deemed inclusive of installation, removal, plant use, testing and data collection.

**1.10 WATER SAMPLING AND ANALYSIS**

In the closing hour of the constant discharge test a water sample shall be collected for chemical and bacteriological analysis by a competent laboratory. The water samples shall be collected in containers supplied by the laboratory, in the manner conventionally used by the laboratory.

The Contractor's unit rate of sampling and analysis will include the cost of analysis and transportation to and from the laboratory for the sampling exercise.

### **1.11 BOREHOLE DISINFECTION**

After removal of test equipment, the borehole shall be disinfected with Chlorine/water solution at a concentration of 50 mg/l or greater of free chlorine. This will be sprayed into the borehole so as to ensure that all exposed borehole wall surfaces are coated. In preparing their Bids, Contractors should allow for 1 m<sup>3</sup> of solution per borehole. This item shall be costed as a unit Lump Sum.

### **1.12 BOREHOLE HEAD WORKS**

#### **a) SANITARY SEAL CASING**

A sanitary seal shall be constructed at the wellhead. This shall comprise the following elements:

- ❖ A 3.2 meter length of internal diameter 185 mm (8 inch) plain black pipe class B sanitary steel casing installed around the permanent casing string.
- ❖ A grout seal between the 254mm sanitary seal casing and the 152 mm permanent casing string.
- ❖ A 1.0x1.0x1.0 meter reinforced concrete block (Y8/1:2:4) cast around the Sanitary seal casings c/w lockable steel cap.

#### **b) GROUT SEAL**

A sanitary ground seal shall be installed between the 152 mm (6 inch) and 185 mm (8 inch) casings and grouted into place. Grout shall be a cement slurry, or cement and fine sand and shall have a density of at least 1155 Kg/lt. This shall be introduced into the annular space from the top of the inert backfill to the ground level, using a method that must be approved by the Project Manager.

c) **CONCRETE PLINTH**

The ground surface at the wellhead shall be excavated to a depth of one (1) meter, and be one meter square, to allow s Concrete Plinth to be cast. The 1.0x1.0x1.0 meter pit will be filled with concrete, to be finished flush with the ground surface. Concrete shall be 1:2:4 OPC: sand: half-inch ballast. This must be cast with two 0.8 meter lengths of 12 mm reinforcing steel bar welded to the 185 mm (8 inch) casing, 0.7 meter below ground level.

d) **TEMPORARY CAP**

The top of the borehole shall be sealed with a cap that shall comprise a round plate of mild steel, of thickness not less than 3.0mm. This will be continuously welded in single pass to the mild steel borehole casing or should be lockable.

### 1.13 **RECORDS**

After completion of all works at the borehole, the Contractor shall submit to the Project Manager within four (4) days a complete document with the following additions:-

- ❖ Drilling penetration Log and Geological Log
- ❖ WAB 24 Borehole Completion Record ( Three Complete Sets)

### 1.14 **TECHNICAL LITERATURE**

- a) A Bidder **must** submit the following information together with the Bid documents to assist in fair evaluation:-
- ✓ Technical specifications on drilling rig and other ancillary equipment (make, model, rated capacity etc.)
  - ✓ Particulars and specifications of materials used in the construction of the borehole. Any other information the Bidder may deem is important in evaluation as well as BOOSTING his/her chances of winning the Bid.

## **ELECTRO – MECHANICAL WORKS SPECIFICATIONS**

### **1. ELECTRICAL WORKS**

#### **1.1. REGULATIONS AND STANDARDS**

The complete electrical installation shall be carried out by a competent Contractor and in accordance with the specifications and compliance with the following;

- (a). Kenya Bureau of Standards
- (b). Regulations for the Electrical Equipment of Buildings (Latest Edition) issued by the Institution of Electrical Engineers of Great Britain.
- (c). IEC standards and Electric Power Act and the Rules made there under.
- (d). Kenya Power & Lighting Co. Ltd Regulations and Bye-Laws.
- (e). Government Electric Specifications GES 1 and 2 which can be viewed at the office of the Chief Electrical Engineer, Ministry of Roads, Public Works and Housing.
- (f). Industrial Safety Regulations currently in force.

#### **SWITCH GEAR, STARTER PANELS AND OTHER ENCLOSURES**

Unless otherwise specified, all shall be surface mounting, water tight, corrosion resistant, vermin-proof, termite-proof, dust-proof and resistant to attack by oils and grease. They shall be fabricated from heavy gauge 16 swg, folded, spangled, galvanized and rust protected sheet steel of minimum thickness 1.5mm. They shall be finished in a two tone, heat resistant, non-peeling-off stoved gray enamel paint or epoxy powder coating.

## 1.2. **ELECTRIC CABLES**

Unless otherwise specified, all cables shall be made of copper material and conform to BSS 6004, 600/1000 volts grade.

- (i). **UNARMoured CABLES:** They shall be PVC insulated.
- (ii). **ARMoured CABLES:** They shall be PVC SWA PVC copper cables.
- (iii). **BOREHOLE CABLES**

They shall be made from tough flexible rubber material that will not allow water to seep through when submerged in the borehole water.

## 1.3 **GS CABLE TRUNKING**

The trunking shall be manufactured from heavy duty hot dip galvanized mild steel sheet of minimum thickness 1.25 mm with screw-in and twist-to lock top lid.

## 1.4 **PUMP SET STARTER**

It shall be 3 phase, 415 vac, 50/60 Hz Direct-On line. It shall be in a water tight, front access, hinged door, lockable enclosure, comprising of the following components among others fully wired and labelled. The starter shall be fully wired and 3 No. sets of schematic and control wiring drawings MUST be supplied along with the starter.

- ♦ Appropriate rating contactors / appropriate rating thermal overload.
- ♦ Push buttons (green marked "START", black marked "STOP/RESET").
- ♦ Integral TPN (MCB) type 2.
- ♦ 1 No. 50x50mm AC ammeter of appropriate range.
- ♦ 1 No. 50x50mm AC voltmeter of range 0-500 vac.c/w protection MCB/fuse.
- ♦ Over/Under voltage and phase failure protection relay set at 380 and 440 vac.
- ♦ 2 No. Water level control relays.
- ♦ Pilot indicator lights (green marked "PUMP RUN", red marked "OVER LOAD TRIPPED", yellow marked 'BOREHOLE LOW', etc.....)

- ◆ Hours run counter range 0-99999 hours.
- ◆ Cable terminal blocks of appropriate rating.

## **1.5 BOREHOLE MOTOR (AS GRUNDFOS)**

The motor shall be the two pole canned asynchronous, 3 phase, 415 vac, squirrel cage, induction type, continuously rated and of minimum CLASS "B" insulation. The entire body including the shaft shall be made of heavy duty stainless steel material. The motor shall be supplied complete with 3 lead copper tail cable.

## **1.15 BOREHOLE PUMP (AS GRUNDFOS)**

The pumps shall be the high pressure, vertical mounting, multi-stage, centrifugal type running at a full load speed of not less than 2800 rpm. The entire pump body including the strainer, cable guard, non- return valve, impellers, shaft, locking nuts and washers shall be made of heavy duty stainless steel material. The bearings shall be the water lubricated type, wear resistant. The impeller(s) shall be hydraulically and dynamically balanced.

## **1.16 WATER LEVEL CONTROL ELECTRODES**

All the electrodes shall be made of stainless steel material **AISI 304 as Omron F03-01, Londex, Asco** or similar approved quality made of stainless steel. The borehole electrodes shall be of size 6.0 mm diameter and 120mm length (D6x120mm) and in their tough moulded shrouds.

## **1.9 BOREHOLE COMBINED PIPE AND CASING CLAMP**

The clamp shall be the heavy duty type. It shall comprise of 3 pieces; the bottom half clamps to the borehole casing, while the top portion which rests on the top of the casing clamps to the pipe column and holds it centrally in the casing bore.

## **1.10 BOREHOLE SUNDRIES**

Unless otherwise specified, the words "BOREHOLE SUNDRIES" shall mean the following items to be used in the installation, support and inter-connection of the borehole pump and drop pipes to the rising mains. Unless otherwise specified, the

GI fittings shall be of the same diameter as the drop pipes.

- ◆ Rolls of 6 water proof adhesive rubber tape and cable ties.
- ◆ Tee, sockets, nipples, 90° slow bends and plug.
- ◆ 2 Litres of Boss black type COLAS RC.

#### **1.11 RC CABLE AND PIPE ROUTE MARKERS**

They shall be of size 1100mmLx200mmWx80mmT with the words “POWER CABLE” OR “WATER PIPE” in 40mm height letters mould cast in black indelible color in the concrete. They shall be cast using Y8 RC concrete of mix ratio (mix ratio 1:3:6).

#### **1.12 HATARI TILES**

The tiles shall be used to cover the underground armoured cables for protection against mechanical damage. They shall be of size 300mmLx150mmWx30mmT with the word “HATARI” in 40mm height letters mould cast in the concrete. They shall be pre-cast using concrete of mix ratio (mix ratio 1:3:6).

#### **1.13 GS BOREHOLE PROTECTION COVER**

The cover shall be all weather-proof, rectangular in shape with pitched top (3°). The cover shall be fabricated from hot dip galvanized heavy gauge (16 swg) sheet steel plate of minimum thickness 1.75mm. It shall have GS solid handles and pad locking facilities on the opposite sides. The cover shall be in an L-SHAPED steel frame (25x25x2.5mm thick).

#### **1.14 WIRING METHODS OF ELECTRICAL INSTALLATIONS AT MEDIUM AND LOW VOLTAGE**

##### **(i). SYSTEM “A”**

Plastic insulated cables enclosed in screwed steel conduit or trunking on the surface of walls and ceilings or in the roof space.

(ii). **SYSTEM “B”**

Plastic insulated wires armoured cables laid on the surface of walls, cable trays, in cable trenches or ducts.

(iii). **SYSTEM “C”**

Plastic insulated cables clipped to the roof members and run in metal or plastic conduit drops concealed in walls or ducts formed in the fabric of the building.

1.18 **SYSTEM BONDING**

All non-conducting metallic parts which form part of the electrical system or are within the vicinity/route of the electrical system shall be effectively bonded to the main earthing system.

1.19 **EARTHING SYSTEM**

All the electrical installation earthing conductors shall be connected to the earth electrode through an earth lead. The earth lead shall be firmly connected to the electrode by means of the clamp, after which a thin film of grease or Vaseline shall be applied at the clamp area for protection against corrosion.

2 **TECHNICAL LITERATURE**

(a). The bidder **MUST** submit adequate technical literature to assist in evaluation. The literature information shall **INCLUDE**; Performance curves for the pump set, Make, type model and country of origin of the generator, pump, motor, pump starter etc.

(b). **THE WINNER OF THE BID MUST SUBMIT THE FOLLOWING;**

- i) 1 No. set of the **User manual** for the pump set.
- ii) Written Warranty document of minimum 12 months for the pump set, starter etc.
- iii) 1 No. SET of original film and 3 No. SETS each of as-fitted electrical

schematic drawings, control wiring drawings for main switch gear, pump starter, cabling and water pipe lay out between borehole and tank.

## **SECTION VII**

### **DRAWINGS**

**See Appendix I**

**Actual Drawings have been provided separately and are to be downloaded together with this tender document.**

1. layout
2. Sanitation facility
3. Water kiosk
4. Fence and gate details

## **SECTION VII – BILLS OF QUANTITIES**

### **See Appendix II**

#### **1. Preamble to Bill of Quantities**

- a) The Bill of Quantities shall form part of the Contract Documents and is to be read in conjunction with the Instructions to Tenderers, Conditions of Contract Parts I and II, Specifications and Drawings.
- b) The brief description of the items in the Bill of Quantities is purely for the purpose of identification, and in no way modifies or supersedes the detailed descriptions given in the conditions of Contract and Specifications for the full direction and description of work and materials.
- c) The Quantities set forth in the Bill of Quantities are estimated and provisional, representing substantially the work to be carried out, and are given to provide a common basis for tendering and comparing of Tenders. There is no guarantee to the Contractor that he will be required to carry out all the quantities of work indicated under any one particular item or group of items in the Bill of Quantities. The basis of payment shall be the Contractor's rates and the quantities of work actually done in fulfillment of his obligation under the Contract.
- d) The prices and rates inserted in the Bills of Quantities will be used for valuing work executed, and the Engineer will measure the whole of the works executed in accordance with this Contract.
- e) A price or rate shall be entered in ink against every item in the Bill of Quantities with the exception of items, which already have provisional sums, affixed thereto. The Tenderers are reminded that no "nil" or "included" rates or "lump-

sum” discounts will be accepted. The rates for various items should include discounts if any. Tenderers who fail to comply will be disqualified.

- f) Provisional sums (including Day works) in the Bill of Quantities shall be expended in whole or in part at the discretion of the Engineer in accordance with Sub-clause 52.4 and Clause 58 of part of the Conditions of Contract.
- g) The price and rates entered in the Bill of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional plant to be used, labour, insurance, supervision, compliance, testing, materials, erection, maintenance or works, overheads and profits, taxes and duties together with all general risks, liabilities and obligations set out or implied in the Contract, transport, electricity and telephones, water, use and replenishment of all consumables, including those required under the Contract by the Engineer and his staff.
- h) Errors will be corrected by the Employer for any arithmetic errors in computation or summation as follows:
  - (a) Where there is a discrepancy between amount in words and figures, the amount in words will govern; and
  - (b) 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, unless in the opinion of the Employer, there is an obviously gross misplacement of the decimal point in the unit price, in which event the total amount as quoted will govern and the unit rate will be corrected.
  - (c) If a Tenderer does not accept the correction of errors as outlined above, his Tender will be rejected.

- i) The Bills of Quantities, unless otherwise expressly stated therein, shall be deemed to have been prepared in accordance with the principles of the latest edition of the Civil Engineering Standard Method of Measurement (CESMM).
- j) “Authorized” “Directed” or “Approved” shall mean the authority, direction or approval of the Engineer.
- k) Unless otherwise stated, all measurements shall be net taken on the finished work carried out in accordance with the details shown on the drawings or instructed, with no allowance for extra cuts or fills, waste or additional thickness necessary to obtain the minimum finished thickness or dimensions required in this Contract. Any work performed in excess of the requirements of the plans and specifications will not be paid for, unless ordered in writing by the Engineer.
- l)
  - (a) Hard material, in this Contract, shall be defined as the material which, in the opinion of the Engineer, require blasting, or the use of metal wedges and sledgehammers, or the use of compressed air drilling for their removal, and which cannot be extracted by ripping with a dozer tractor of at least 150 brake horse power (112 kilowatt) with a single, rear-mounted, hydraulic ripper. Boulders of more than 0.2m<sup>3</sup> occurring in soft material shall be classified as hard material.
  - (b) Soft material shall be all material other than hard material.

2. The objectives of the Bills of Quantities are;

- (a) to provide sufficient information on the quantities of Works to be performed to enable tenders to be prepared efficiently and accurately; and
- (b) when a Contract has been entered into, to provide a priced Bills of Quantities for use in the periodic valuation of Works executed.

In order to attain these objectives, Works should be itemized in the Bills of Quantities in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and content of the Bills of Quantities should be as simple and brief as possible.

3. The Bills of Quantities should be divided generally into the following sections:

**(a) Preliminaries.**

The preliminaries should indicate the inclusiveness of the unit prices, and should state the methods of measurement which have been adopted in the preparation of the Bills of Quantities and which are to be used for the measurement of any part of the Works.

The number of preliminary items to be priced by the tenderer should be limited to tangible items such as site office and other temporary works, otherwise items such as security for the Works which are primarily part of the Contractor's obligations should be included in the Contractor's rates.

**(b) Work Items**

- (i) The items in the Bills of Quantities should be grouped into sections to distinguish between those parts of the Works which by nature, location, access, timing or any other special characteristics may give rise to different methods of construction or phasing of the Works or considerations of cost. General items common to all parts of the Works may be grouped as a separate section in the Bills of Quantities.

- (ii) The brief description of the items in the Bill of Quantities should in no way modify or supersede the detailed descriptions given in the Contract drawings, Conditions of Contract and Specifications.
- (iii) Quantities should be computed net from the Drawings, unless directed otherwise in the Contract, and no allowance should be made for bulking, shrinkage or waste. Quantities should be rounded up or down where appropriate.
- (iv) The following units of measurement and abbreviations are recommended for use.

<i>Unit</i>	<i>Abbreviation</i>	<i>Unit</i>	<i>Abbreviation</i>
cubic meter	m <sup>3</sup> or cu m	millimeter	mm
hectare	ha	month	mon
hour	h	number	nr
kilogram	kg	square meter	m <sup>2</sup> or sq m
lump sum	sum	square millimeter	mm <sup>2</sup> or sq mm
meter	m	week	wk
metric ton (1,000 kg)	t		

- (v) The commencing surface should be identified in the description of each item for Work involving excavation, boring or drilling, for which the commencing surface is not also the original surface. The excavated surface should be identified in the description of each item for Work involving excavation for which the excavated surface is not also the final surface. The depths of Work should be measured from the commencing surface to the excavated surface, as defined.

**(c) Daywork Schedule**

A Daywork Schedule should be included if the probability of unforeseen work, outside the items included in the Bills of Quantities is relatively high. To facilitate checking by the Employer of the realism of rates quoted by the tenderers, the Daywork Schedule should normally comprise:

- (i) a list of the various classes of labour, and materials for which basic Daywork rates or prices are to be inserted by the tenderer, together with a statement of the conditions under which the Contractor will be paid for Work executed on a Daywork basis;

and

- (ii) a percentage to be entered by the tenderer against each basic Daywork Subtotal amount for labour, materials and plant representing the Contractor's profit, overheads, supervision and other charges.

**(d) Provisional Quantities and Provisional Sums**

- (i) Provision for quantity contingencies in any particular item or class of Work with a high expectation of quantity overrun should be made by entering specific "Provisional Quantities" or "Provisional Items" in the Bills of Quantities, and *not* by increasing the quantities for that item or class of Work beyond those of the Work normally expected to be required. To the extent not covered above, a general provision for physical contingencies (quantity overruns) should be made by including a "Provisional Sum" in the Summary of the Bills of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a "Provisional Sum" in the Summary of the Bills of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises.

(ii) Provisional Sums to cover specialized works normally carried out by Nominated Sub Contractors should be avoided and instead Bills of Quantities of the specialized Works should be included as a section of the main Bill of Quantities to be priced by the Main Contractor. The Main Contractor should be required to indicate the name (s) of the specialized firms he proposes to engage to carry out the specialized Works as his approved domestic sub-contractors. Only Provisional Sums to cover specialized Works by statutory authorities should be included in the Bills of Quantities.

(iii) Unless otherwise provided in the Contract, the Provisional Sums included in the Bills of Quantities should always be expended in whole or in part at the discretion of the Engineer after full consultation with the Employer.

**(e) Summary**

The Summary should contain a tabulation of the separate parts of the Bills of Quantities carried forward, with Provisional Sums for Dayworks, physical (quantity) contingencies, and price contingencies (upward price adjustment) where applicable.

**PREAMBLE TO BILLS OF QUANTITIES**

1. The Bills of Quantities are an integral part of the Contract documents and must be read in conjunction with the conditions of contracts, instruction to Bidders, specifications and drawings.
2. The brief descriptions of works under the items in the Bill of Quantities are purely for the purpose of establishing a standard to which a Contractor shall adhere. Otherwise alternative brands of equal and approved quality will be accepted.
3. The rates and prices inserted by the Bidder in the Bill of Quantities shall be deemed to include all obligations under the Contract

including but not limited to supply of materials, labour, delivery to site, storage on site, installation, testing, commissioning, overhead charges, incidentals, contingency expenses and profits and all taxes In accordance with Government policy.

4. All prices omitted from any item, section, part of the Bills of Quantities shall be deemed to have been include to another item, section or part thereof. Should the Contractor install any material not specified herein before receiving **written approval** from the Project Manager, the Contractor shall remove the material in question and , **at his/her own cost**, install the proper material.
5. The words "**TAKE CUSTODY**" shall be taken to mean delivery, unloading, stocking, getting from the store, transporting, unloading, getting into position for fixing all the materials concerned and all other contingency expenses.
6. The grand total of prices in the price summary page must be carried forward to the Form of Tender **for the tender to be valid.**
7. Where dimensions are entered:-
  - mm - means millimetres, LM - means, Linear meter L - means Length
  - W - means Width, D - means Depth, DN - means Diameter Nominal, PN - means Pressure Nominal LS - means Lump sum.
8. Tenderers **MUST** enclose, together with their submitted tender, manufacturer's brochures detailing technical literature and specifications of the equipment that they intend to offer. Where the brochures contain different models and sizes of the equipment, the bidders **MUST** clearly mark out the model and size of equipment they intend to offer by using a '**mark pen**'.

**Where brochures are to be used for tender evaluation and the tenderers have not enclosed them in their tenders, then the same shall be sought from the tenderers to assist in the evaluation process.**

**9. STATEMENT OF COMPLIANCE**

- a) I confirm compliance of all clauses of the General Conditions,
- b) Particular Conditions, General Specifications and Particular Specifications in this Tender.
- c) I confirm that, I have not made and will not make any payments to any person, who can be perceived as an inducement to win this tender.

**Signed:..... Date.....**

.....

**FOR: and on behalf of the Tenderer**

**(OFFICIAL**

**RUBBER STAMP)**

**ADAPTATION VILLAGE BILL OF QUANTITIES****BILL NO. 1 PRELIMINARY ITEMS**

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE</b>	<b>AMOUNT</b>
1.1	Allow provision for insurance in accordance with contract conditions	L.s	1		
1.2	Water Resources Authority abstraction permit	L.s	1		
1.3	Provide for performance bond as per contract conditions (5%	L.s	1		
1.4	County government fee (where applicable)	P.s	1	20,000	
1.5	Provide, erect and maintain sign boards at locations by the Engineer	No.	1		
1.6	Establish, maintain and remove contractors camps, offices, facilities at the end of contract	L.s	1		
1.7	Allow for the Resident Engineer's office (include for all site meetings, stationery, fuel, rent, airtime and allowances)	P.S	1	200,000	
1.8	Allow for production of as built drawings	L.s	1		
1.9	Allow for profits for item 1.4 and 1.7	%			
<b>TOTAL CARRIED TO THE SUMMARY PAGE</b>					

**DRILLING****ADAPTATION VILLAGE BILL OF QUANTITIES****BILL 2: DRILLING OF BOREHOLE**

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>	<b>RATE</b>	<b>AMOUNT</b>
2.1	Allow for site clearance (approx. 10mX10m) at the borehole site where applicable)	M <sup>2</sup>	100		
2.2	Mobilization of drilling unit, test pumping equipment, erect at position of bore hole, dismantle and demobilize on completion	L.s	1		
2.3	Allow for provision of water for all requirements at the site	L.s	1		

2.4	Drilling of a 355mm diameter borehole from 0-200 M depth.	M	200		
2.5	Supply and installation of plain steel 152mm class B steel casing- 4.5mm thickness	No.	25		
2.6	Supply and installation of slotted steel casings 152mm class B diameter -4.5mm thickness	No.	10		
2.7	Installation of approved gravel pack and grouting at 3M to the top	M <sup>3</sup>	20		
2.8	Construct a class 20 concrete slab at the top(1.5X1.5X0.15)	M <sup>3</sup>	0.5		
2.9	Weld and secure in place a steel cap	L.s	1		
2.10	Borehole development by airlifting and /or surging for minimum of 4 hrs	Hr	4		
2.11	Test pumping continuously for 24 hours.	Hr	24		
2.12	Collect water samples and carry out full water quality analysis by an accredited laboratory	Ls	1		
<b>TOTAL CARRIED TO SUMMARY PAGE</b>					

## THE PUMP

<b>ADAPTATION VILLAGE BILL OF QUANTITIES</b>					
<b>BILL 3: BOREHOLE EQUIPING</b>					
<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount Ksh.</b>
3.1	Supply and install Submersible solar powered water pump complete with motor as directed by the Engineer.	Pcs	1		
3.2	Cable interconnection and Inverter	Pcs	1		
3.3	6mm <sup>2</sup> x four core submersible cable	Mtrs	175		
3.4	Supply, install and commission 260 Watts Solar Panels including connections	Pcs	20		
3.5	2.5" Borehole Upvc Pipes – Heavy duty	pcs	60		
3.6	2.5" Adaptor sets- Bottom and top	Set	1		
3.7	Provide and install Solar Support Structure 3.5 Meters high Galvanized steel	Lot	1		
3.8	Solar DC main Circuit breaker	Pcs	2		
3.9	Solar DC enclosure	Pcs	2		
3.10	Solar MC 4 connectors	Pcs	4		
3.11	Electrode cable for probes – Black	M	175		
3.12	Electrode cable for probes – Brown	M	175		
3.13	Electrode probes	Set	1		
3.14	6mm <sup>2</sup> x3 armored U. G. cable between solar unit and junction box	M	20		
3.15	1.5 mm x two core cable for float switch	M	20		
3.16	2.5" master Water meter	Pcs	1		

3.17	2.5'' Borehole cover sundries, composed of gate valve, NRV, unions, nipples, borehole cover plate and accessories	Lot	1		
3.18	Earth rod complete with earth clamp and earth cable	Lot	1		
3.19	3/4'' Pvc Airline pipe	Pcs	28		
3.20	Cooling Sleeve	Pcs	1		
3.21	Automatic voltage switcher(AVS 30)	PCS	1		
3.22	Float switch	Pcs	1		
3.23	Lowering of the pump into the borehole, electrical connections testing and commissioning	Lot	1		
3.24	Supply, transport to site, construct foundations and erect a 10 M <sup>3</sup> Plastic tank on 5M GI braced tower include for all piping (inlet, outlet and Scour) from bore hole and to water kiosk and all fittings and valves (NRV, Sluice valves, float valve etc) as directed by the Engineer	No.	1		
<b>TOTAL CARRIED TO SUMMARY PAGE</b>					

## THE FENCE

<b>ADAPTATION VILLAGE BOQ</b>					
<b>BILL 4: FENCING</b>					
<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount (Kshs.)</b>
7.1	Provide and install 100mmX100mm pre cast concrete struts 2600mm long as per	No.	120		

	drawing				
7.2	Supply and install 2.4M high by 14 guage chain link complete with 12.5 guage X 6 strand galvanized barbed wire fencing with cranked precast concrete posts at 3m centers in mass concrete surround as per drawing	M	360		
7.3	Supply and install complete pre painted steel gate as shown on drawings	No.	1		
<b>TOTAL</b>					

## WATER KIOSK

<b>ADAPTATION VILLAGE BOQ</b>					
<b>BILL 5: Water Kiosk</b>					
<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount Ksh.</b>
5.1	<b>Site clearance.</b> Clear all vegetation, tree stumps etc in readiness for construction	M <sup>2</sup>	10		
5.2	<b>Top soil stripping</b> strip all soil up to 300mm deep	M <sup>2</sup>	7		
5.3	<b>Excavation</b> Excavate soil other than top soil to firm ground to the satisfaction of the Engineer	M <sup>3</sup>	8		
5.4	provide and place compacted hardcore	M <sup>2</sup>	8		
5.5	Place 50mm quarry dust on top of hardcore	M <sup>2</sup>	8		
5.6	Provide and fix in place 1000 gauge polythene sheet damp proofing	M <sup>2</sup>	7		
5.7	Provide and fix in place A142 B.R.C mesh reinforcement	M <sup>2</sup>	8		

5.8	Provide mix place and cure class 20 concrete for floor,	M <sup>3</sup>	1.2		
5.9	Provide and fix formwork to side of floor slab	M	11		
5.10	Place mortar and screed finish on floor.	M <sup>2</sup>	8		
	<b>Superstructure</b>				
5.11	Walling in 150 mm Natural stone and 1:3 Motar	M <sup>2</sup>	21		
5.12	Apply 1:3 25mm mortar for plaster on the inner wall, top of wall and beams	M <sup>2</sup>	21		
5.13	Finish the outside wall with pointiny (KEY)	M <sup>2</sup>	21		
5.14	Apply 3 coats (1 plastic emulsion and 2 super gross to interior walls)	M <sup>2</sup>	21		
5.15	Provide all materials and fix 900X2000 steel door	No.	1		
5.16	Provide all materials and fix 1 100X500 mm steel window as in drawings	No.	1		
5.17	Provide and fix prepaintesd corrugated G,I sheet roof Gauge 28. Include for all timber as per drawings	lot	1		
5.18	Provide and fix all pipework as shown on drawings	Lot	1		
	<b>TOTAL</b>				

**ADAPTATION VILLAGE BOQ**

**BILL 6: Sanitation Block**

<b>Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount Ksh.</b>
	<b>Site clearance.</b>				
7.1	Clear all vegetation, tree stumps etc in readiness for construction	M <sup>2</sup>	20		
	<b>Top soil stripping</b>				
7.2	Strip all soil up to 300mm deep	M <sup>2</sup>	15		
	<b>Excavation</b>				
7.3	Excavate soil other than top soil to firm ground to the satisfaction of the Engineer	M <sup>3</sup>	60		
7.4	Provide and fix in place 1000 guage polythene sheet damp proofing	M <sup>2</sup>	15		
7.5	Provide and fix in place deformed 12mm steel reinforcement on both axis	Kg	106.8		
7.6	Provide mix place and cure class 20 concrete for floor,	M <sup>3</sup>	2.25		
7.7	Provide and fix formwork to side and bottom of floor slab	M	16		
7.8	Place Mortar and screed finish on floor.	M <sup>2</sup>	15		
7.9	Provide all materials and install ceramic tiles on floor and half wall of the urinal	M <sup>2</sup>	10		
	<b>Superstructure</b>				
7.10	Walling in 150 mm Natural stone and 1:3 Mortar	M <sup>2</sup>	42		
7.11	Apply 1:3 25mm mortar for plaster on the inner wall, top of wall and beams	M <sup>2</sup>	56		
7.12	Finish the outside wall with pointing (KLT)	M <sup>2</sup>	26		

7.13	Apply 3 coats (1 plastic emulsion and 2 super gross to interior walls)	M <sup>2</sup>	56		
7.14	Provide and fix flash doors to toilets including frames	No.	3		
7.15	Provide and fix prepainted corrugated iron sheet roof. Include for all timber as instructed	lot	1		
<b>TOTAL</b>					

		<b>ADAPTATION VILLAGE BILL OF QUANTITIES</b>
		<b>SUMMERY PAGE</b>
<b>HOMABAY 5</b>		
<b>No.</b>	BILL 1: Preliminary Items	
	BILL 2: Drilling	
	BILL 3: Equipping	
	BILL 4: Fencing	
	BILL 5: Kiosk	
	BILL 6 : Sanitation Block	
	<b>Sub-Total</b>	
	10% Contingencies	
	<b>Total</b>	
<b>KISUMU 2</b>		
<b>No.</b>	BILL 1: Preliminary Items	
	BILL 2: Drilling	
	BILL 3: Equipping	
	BILL 4: Fencing	

	BILL 5: Kiosk	
	BILL 6 : Sanitation Block	
	<b>Total</b>	
	10% Contingencies	
	<b>Total</b>	
	<b>GRAND TOTAL ( 7 ADAPTATION VILLAGES)</b>	



## **SECTION VIII – STANDARD FORMS**

### *LIST OF STANDARD FORMS*

- i. Form of Invitation for Tenders
- ii) Form of Tender
- iii) Appendix to Form of Tender
- iv) Letter of Acceptance
- v) Form of Agreement
- vi) Form of Tender Security
- vii) Performance Bank Guarantee (unconditional)
- viii) Bank Guarantee for Advance Payment
- ix) Tender Questionnaire
- x) Confidential Business Questionnaire
- xi) Statement of Foreign Currency Requirement
- xii) Schedule of Materials;- Basic Prices
- xiii) Schedule of Labour;- Basic Prices
- xiv) Schedule of Plant and Equipment
- xv) Details of Sub-Contractors
- xvi) Form of Written Power of Attorney
- xvii) Key Personnel
- xviii) Completed Civil Works
- xix) Schedule of Ongoing Projects
- xx) Other Supplementary Information
- xxi) Declaration Form
- xxii) Request for Review

## FORM OF INVITATION FOR TENDERS

\_\_\_\_\_ [date]

To: \_\_\_\_\_ [name of Contractor]  
\_\_\_\_\_ [address]  
\_\_\_\_\_  
\_\_\_\_\_

Dear Sirs:

Reference: \_\_\_\_\_ [Contract Name]

You have been prequalified to tender for the above project.

We hereby invite you and other prequalified tenderers to submit a tender for the execution and completion of the above Contract.

A complete set of tender documents may be purchased by you from **NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY, ELLAND HOUSE, POPO ROAD, OFF MOMBASA ROAD P.O BOX 67839 – 00200 NAIROBI.**

Upon payment of a non-refundable fee of **Ksh.1,000/=** (one thousand) in bankers' cheque OR cash deposits payable to **NEMA Revenue Account, KCB – KICC Branch, Account No. 1102298158** and submit the deposit slip at the Cash Office on Ground Floor, NEMA Headquarters.

All tenders must be accompanied by two (2 No.) number of copies of the same and a security in the form and amount specified in the tendering documents, and must be delivered to;

**THE DIRECTOR GENERAL  
NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY,  
ELLAND HOUSE, POPO ROAD, OFF MOMBASA ROAD  
P.O BOX 67839 – 00200 NAIROBI.**

at or before \_\_\_\_\_ *(time and date)*. Tenders will be opened immediately thereafter, in the presence of tenderers' representatives who choose to attend.

Please confirm receipt of this letter immediately in writing by cable/facsimile or telex.

Yours faithfully,

\_\_\_\_\_ Authorised Signature

\_\_\_\_\_ Name and Title

## FORM OF TENDER

TO: \_\_\_\_\_ [Name of Employer] \_\_\_\_\_ [Date]  
\_\_\_\_\_ [Name of Contract]

Dear Sir,

1. In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to construct, install and complete such Works and remedy any defects therein for the sum of Kshs. \_\_\_\_\_ [Amount in figures] Kenya Shillings \_\_\_\_\_ [Amount in words]
2. We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Project Manager's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix to Conditions of Contract.
3. We agree to abide by this tender until \_\_\_\_\_ [Insert date], and it shall remain binding upon us and may be accepted at any time before that date.
4. Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us.
5. 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 tenders for and on behalf of

\_\_\_\_\_ [Name of Employer]

of \_\_\_\_\_ [Address of Employer]

Witness; Name \_\_\_\_\_

Address \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

**APPENDIX TO FORM OF TENDER**  
**(This appendix forms part of the tender)**

<b>CONDITIONS OF CONTRACT</b>	<b>CLAUSE</b>	<b>AMOUNT</b>
Tender Security		<b>Kshs 500,000</b>
Amount of Performance Security (Unconditional Bank Guarantee)	10.1	<b>5% percent of Tender Sum in the form of Unconditional Bank Guarantee</b>
Revised Program to be submitted	14.1	<b>Not later than 21 days after issuance of Order to Commence</b>
Cash flow estimate to be submitted	14.3	<b>Not later than 21 days after issuance of Order to Commence</b>
Minimum amount of Third Party Insurance	23.2	<b>Kshs.10,000,000.00</b>
Period for commencement, from the Engineer's order to commence	41.1	<b>21 days</b>
Time for completion	43.1	<b>150 Days</b>
Amount of liquidated damages	47.1	<b>Kshs. 10,000.00 per day</b>
Limit of liquidated damages	47.1	<b>Cost of works not completed</b>
Defect Liability period	49.1	<b>6 Months</b>
Percentage of Retention	60.5	<b>10% of Interim Payment Certificate</b>
Limit of Retention Money	60.5	<b>10 % of Contract Price</b>
Minimum amount of interim certificates	60.2	<b>Contract value/Time for completion in months</b>
Time within which payment to be made after Interim Payment Certificate signed by Engineer	60.8	<b>30 days</b>
Time within which payment to be made after Final Payment Certificate signed by Engineer	60.8	<b>45 days</b>
Appointer of Arbitrator	67(3)	<b>Chief Justice of The Republic of Kenya</b>
Notice to Employer and Engineer	68.2	The Employers address is: <b>DIRECTOR GENERAL,  NATIONAL ENVIRONMENT  MANAGEMENT AUTHORITY, P.O. BOX  67839-00200,  NAIROBI.</b> The engineer's address is: <b>CHIEF ENGINEER  NATIONAL ENVIRONMENT  MANAGEMENT AUTHORITY,  P.O. BOX 67839-00200,  NAIROBI.</b>

Signature of Tender..... Date.....

**LETTER OF ACCEPTANCE**  
**[letterhead paper of the Employer]**

\_\_\_\_\_ [date]

To: \_\_\_\_\_  
[name of the Contractor]

\_\_\_\_\_  
[address of the Contractor]

Dear Sir,

This is to notify you that your Tender dated \_\_\_\_\_  
for the execution of \_\_\_\_\_  
*[name of the Contract and identification number, as given in the Tender documents]*  
for the Contract Price of Kshs. \_\_\_\_\_ *[amount in*  
*figures]* [Kenya Shillings \_\_\_\_\_ *(amount in words)* ] in  
accordance with the Instructions to Tenderers is hereby accepted.

You are hereby instructed to proceed with the execution of the said Works in  
accordance with the Contract documents.

Authorized Signature .....

Name and Title of Signatory .....

Attachment : Agreement

## FORM OF AGREEMENT

THIS AGREEMENT, made the \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_ between \_\_\_\_\_ of [or whose registered office is situated at] \_\_\_\_\_ (hereinafter called "the Employer") of the one part AND \_\_\_\_\_ of [or whose registered office is situated at] \_\_\_\_\_ (hereinafter called "the Contractor") of the other part.

WHEREAS THE Employer is desirous that the Contractor executes

\_\_\_\_\_ (*name and identification number of Contract* ) (hereinafter called "the Works") located at \_\_\_\_\_ [*Place/location of the Works*] and the Employer has accepted the tender submitted by the Contractor for the execution and completion of such Works and the remedying of any defects therein for the Contract Price of Kshs \_\_\_\_\_ [*Amount in figures*], Kenya Shillings \_\_\_\_\_ [*Amount in words*].

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 hereinafter referred to.
2. The following documents shall be deemed to form and shall be read and construed as part of this Agreement i.e.
  - (i) Letter of Acceptance
  - (ii) Form of Tender
  - (iii) Conditions of Contract Part I
  - (iv) Conditions of Contract Part II and Appendix to Conditions of Contract
  - (v) Specifications
  - (vi) Drawings
  - (vii) Priced Bills of Quantities
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.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The common Seal of \_\_\_\_\_

Was hereunto affixed in the presence of \_\_\_\_\_

Signed Sealed, and Delivered by the said \_\_\_\_\_

Binding Signature of Employer \_\_\_\_\_

Binding Signature of Contractor \_\_\_\_\_

In the presence of (i) Name \_\_\_\_\_

Address \_\_\_\_\_

Signature \_\_\_\_\_

[ii] Name \_\_\_\_\_

Address \_\_\_\_\_

Signature \_\_\_\_\_

**FORM OF TENDER SECURITY**

WHEREAS .....(hereinafter called “the Tenderer”) has submitted his tender dated ..... for the construction of .....  
..... (name of Contract)

KNOW ALL PEOPLE by these presents that WE ..... having our registered office at .....(hereinafter called “the Bank”), are bound unto .....(hereinafter called “the Employer”) in the sum of Kshs..... for which payment well and truly to be made to the said Employer, 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 after tender opening the tenderer withdraws his tender during the period of tender validity specified in the instructions to tenderers  
Or
- 2. If the tenderer, having been notified of the acceptance of his tender by the Employer during the period of tender validity:
  - (a) fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or
  - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;
  - (c) Rejects a correction or an arithmetic error in the tender.

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

This 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 said date.

\_\_\_\_\_

[date]

\_\_\_\_\_

[signature of the Bank]

\_\_\_\_\_

[witness]

\_\_\_\_\_

[seal]

*(Amend accordingly if provided by the Insurance Company)*

**PERFORMANCE BANK GUARANTEE (UNCONDITIONAL)**

To: \_\_\_\_\_(Name of Employer) \_\_\_\_\_(Date)  
\_\_\_\_\_ (Address of Employer)

Dear Sir,

WHEREAS \_\_\_\_\_(hereinafter called “the Contractor”) has undertaken, in pursuance of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ to execute \_\_\_\_\_ (hereinafter called “the Works”);

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 Kshs. \_\_\_\_\_ (amount of Guarantee in figures) Kenya Shillings \_\_\_\_\_ (amount of Guarantee in words), and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of Kenya Shillings \_\_\_\_\_ (amount of Guarantee in words) 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, addition or other modification of the terms of the Contract or of the Works to be performed there under 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 change, addition, or modification.

This guarantee shall be valid until the date of issue of the Certificate of Completion.

SIGNATURE AND SEAL OF THE GUARANTOR \_\_\_\_\_

Name of Bank \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

(Amend accordingly if provided by Insurance Company)

**BANK GUARANTEE FOR ADVANCE PAYMENT**

To: \_\_\_\_\_ [name of Employer] \_\_\_\_\_ (Date)  
\_\_\_\_\_ [address of Employer]

Gentlemen,

Ref: \_\_\_\_\_ [name of Contract]

In accordance with the provisions of the Conditions of Contract of the above-mentioned Contract, We, \_\_\_\_\_ [name and Address of Contractor] (hereinafter called "the Contractor") shall deposit with \_\_\_\_\_ [name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Contract in an amount of Kshs. \_\_\_\_\_ [amount of Guarantee in figures] Kenya Shillings \_\_\_\_\_ [amount of Guarantee in words].

We, \_\_\_\_\_ [bank or financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to \_\_\_\_\_ [name of Employer] on his first demand without whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding Kshs \_\_\_\_\_ [amount of Guarantee in figures] Kenya Shillings \_\_\_\_\_ [amount of Guarantee in words], such amount to be reduced periodically by the amounts recovered by you from the proceeds of the Contract.

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 there under or of any of the Contract documents which may be made between \_\_\_\_\_ [name of Employer] 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.

No drawing may be made by you under this guarantee until we have received notice in writing from you that an advance payment of the amount listed above has been paid to the Contractor pursuant to the Contract.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until \_\_\_\_\_ (name of Employer) receives full payment of the same amount from the Contract.

Yours faithfully,

Signature and Seal \_\_\_\_\_

Name of the Bank or financial institution \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

Witness: Name: \_\_\_\_\_

Address: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**1. TENDER QUESTIONNAIRE**

Please fill in block letters.

1. Full names of tenderer.....

2. Full address of tenderer to which tender correspondence is to be sent  
(unless an agent has been appointed below)

.....

3. Telephone number (s) of tenderer.....

4. Telex address of tenderer.....

5. Name of tenderer's representative to be contacted on matters of the tender  
during the tender period

.....

6. Details of tenderer's nominated agent (if any) to receive tender notices.  
This is essential if the tenderer does not have his registered address in  
Kenya (name, address, telephone, telex)

.....

Signature of Tenderer

Make copy and deliver to : \_\_\_\_\_ ( *Name of Employer* )

**CONFIDENTIAL BUSINESS QUESTIONNAIRE**

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

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

*Part 1 – General*

Business Name .....

Location of business premises; Country/Town.....

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

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

Nature of Business.....

Current Trade Licence No..... Expiring date.....

Maximum value of business which you can handle at any time: K.  
pound.....

Name of your bankers.....

Branch.....

*Part 2 (a) – Sole Proprietor*

Your name in full..... Age.....

Nationality..... Country of Origin.....

\*Citizenship details .....

*Part 2 (b) – Partnership*

*Give details of partners as follows:*

	<i>Name in full</i>	<i>Nationality</i>	<i>Citizenship Details</i>	<i>Shares</i>
1.....				
2.....				
3.....				

***Part 2(c) – Registered Company:***



**STATEMENT OF FOREIGN CURRENCY REQUIREMENTS**

(See Clause 60[5] of the Conditions of Contract)

In the event of our Tender for the execution of.....  
*name of Contract*) being accepted, we would require in accordance with Clause 21 of the Conditions of Contract, which is attached hereto, the following percentage:

(Figures).....

(Words).....

of the Contract Sum, (Less Fluctuations) to be paid in foreign currency.

Currency in which foreign exchange element is required:

.....

Date: The ..... Day of ..... 20.....

Enter 0% (zero percent) if no payment will be made in foreign currency.

Maximum foreign currency requirement shall be \_\_\_\_\_ (percent) of the Contract Sum, less Fluctuations.

\_\_\_\_\_

(Signature of Tenderer)



Prices of imported materials to be quoted CIF Mombasa or Nairobi as appropriate depending on whether materials are imported by the tenderer directly or through a local agent.

Transportation costs for imported materials to be quoted from Mombasa or Nairobi as appropriate to \_\_\_\_\_ (Contract Site) depending on whether materials are imported directly by the tenderer or through a local agent.

**SCHEDULE OF LABOUR:- BASIC RATES**

**(Reference: Clause 70 of Conditions of Contract)**

LABOUR CATEGORY	UNIT (MONTH/SHIFT/HOUR)	RATES

Categories to be generally in accordance with those used by the Kenya Building Construction and Engineering and Allied Trades Workers' Union.

**DETAILS OF SUB-CONTRACTORS**

If the Tenderer wishes to sublet any portions of the Works under any heading, he must give below details of the sub-contractors he intends to employ for each portion.

Failure to comply with this requirement may invalidate the tender.

1. Portion of Works to be sublet:

h) Full name of Sub-contractor and address of head office:

.....  
.....  
.

(ii) Sub-contractor's experience of similar works carried out in the last 3 years with Contract value:

.....  
.....

2. Portion of Works to be sublet:

i) Full name of Sub-contractor and address of head office:

.....  
.....  
.

ii) Sub-contractor's experience of similar works carried out in the last 3 years with Contract value:

.....  
.....

\_\_\_\_\_  
[Signature of Tenderer]

\_\_\_\_\_  
Date



**FORM OF WRITTEN POWER-OF-ATTORNEY**

The Tenderer consisting of a joint venture shall state here below the name and address of his representative who is authorized to receive on his behalf correspondence in connection with the Tender.

.....

*(Name of Tenderer's Representative in block letters)*

.....

*(Address of Tenderer's Representative)*

.....

*(Signature of Tenderer's Representative)*

**KEY PERSONNEL**

DESIGNATION	NAME	NATIONALITY	SUMMARY OF QUALIFICATIONS AND EXPERIENCE
Headquarters: 1. Director 2. 3. 4. 5. etc.			
Site Office: 1. Site Superintendent 2. 3. 4. 5. etc.			

I certify that the above information is correct.

.....  
(Title)

.....  
(Signature)

.....  
(Date)

**SCHEDULE OF COMPLETED CIVIL WORKS CARRIED OUT BY THE  
TENDERER IN THE LAST EIGHT YEARS**

DESCRIPTION OF WORKS AND CLIENT	TOTAL VALUE OF WORKS (KSHS)	CONTRACT PERIOD (YEARS)	YEAR COMPLETED

I certify that the above Civil Works were successfully carried out and completed by ourselves.

.....  
(Title)

.....  
(Signature)

.....  
(Date)

\*Value in Kshs using Central Bank of Kenya mean exchange rate at a reference date 30 days before date of tender opening.



**SCHEDULE OF COMPLETED CIVIL WORKS CARRIED OUT BY  
THE TENDERER IN THE LAST FIVE YEARS**

DESCRIPTION OF WORK AND CLIENT	CONTRACT PERIOD	TOTAL VALUE OF WORKS (KSHS.)	YEAR COMPLETED

I certify that the above Civil Works are being carried out by ourselves and that the above information is correct.

.....

*(Title)*

.....

*(Signature)*

.....

*(Date)*

\*Value in Kshs using Central Bank of Kenya mean exchange rate at a reference date 30 days before date of tender opening.

## SCHEDULE OF ONGOING PROJECTS

DESCRIPTION OF WORK AND CLIENT	CONTRACT PERIOD	DATE OF COMMENCEMENT	DATE OF COMPLETION	TOTAL VALUE OF WORKS (KSHS.)	PERCENTAGE COMPLETED TO DATE

I certify that the above Civil Works are being carried out by ourselves and that the above information is correct.

.....

*(Title)*

.....

*(Signature)*

.....

*(Date)*

\*Value in Kshs using Central Bank of Kenya mean exchange rate at a reference date 30 days before date of tender opening.





**DECLARATION FORM**

Date \_\_\_\_\_

To \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The tenderer i.e. (name and address) \_\_\_\_\_  
\_\_\_\_\_ declare the following:

- a) Has not been debarred from participating in public procurement.
- b) Has not been involved in and will not be involved in corrupt and fraudulent practices regarding public procurement.

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

(To be signed by authorized representative and officially stamped)

**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