

ESWATINI WATER SERVICES CORPORATION



TENDER DOCUMENT

TENDER NUMBER: EWSC 12 OF 2019/20

CONSTRUCTION OF MECHANICAL & ELECTRICAL WORKSHOP

Eswatini Water Services Corporation Headquarters,
Emtfonjeni Building
Below Gables Shopping Complex
Corner (MR 103) and Cultural Village Road
Ezulwini

ESWATINI WATER SERVICES CORPORATION

Invitation to Tender

CONSTRUCTION OF MECHANICAL & ELECTRICAL WORKSHOP (Tender Number EWSC 12 of 2019/20)

The Eswatini Water Services Corporation hereby invites sealed bids from eligible contractors for the **Construction of a Mechanical & Electrical Workshop at Matsapha**. Bidding documents shall be available and downloadable from the Eswatini Water Services Corporation's website, <http://www.swsc.co.sz/about/tenders/>, from **01 November 2019**. Bids shall be valid for a period of 90 days after bid opening. Bids must be accompanied by a bid security of **E10 000.00** and **hand** delivered in a sealed envelope marked "M&E WORKSHOP – MATSAPHA" to a designated tender box at the following address:

**Eswatini Water Services Corporation Headquarters,
Emtfonjeni Building,
Corner MR103 & Cultural Village Drive
Ezulwini**

The deadline for submission of bids is 12.00 noon on Friday the 22nd November 2019 at which time they will be opened in the presence of bidders who elect to attend. A compulsory site inspection will be conducted on Wednesday 13th November 2019. Prospective Bidders must meet the Corporation's Engineer or representative at the EWSC Matsapha Depot (street name/coordinates) at 10:00am.

A non-refundable tender fee of **E 500.00 (Five Hundred Emalangeni)**, shall be payable in cash or bank guaranteed cheque at any of the Eswatini Water Services Corporations' revenue centers upon which a receipt shall be issued. The original receipt, being proof of payment, shall be submitted together with the contractor's duly completed bid.

Late, telegraphic, emailed and faxed tenders shall not be accepted. The Corporation does not bind itself to accept the lowest or any tender. Any enquiries may be emailed to: procurement@swsc.co.sz

**J. MASHWAMA
MANAGING DIRECTOR**

CONTENTS

SECTION 1: LETTER OF INVITATION TO TENDER.....	Error! Bookmark not defined.
SECTION 2: INSTRUCTIONS TO TENDERERS	4
SECTION 3: LETTER OF TENDER.....	15
SECTION 4: ELIGIBILITY OF TENDERER.....	17
SECTION 5: AGREEMENT.....	23
SECTION 6: APPENDIX.....	26
SECTION 7: GENERAL CONDITIONS OF CONTRACT	28
SECTION 8: SPECIAL CONDITIONS OF CONTRACT	29
SECTION 9: SPECIFICATIONS	30
SECTION 10: DRAWINGS.....	47
SECTION 11: BILL OF QUANTITIES.....	48
SECTION 12: FORM: BID SECURITY (Bank Guaranteed)	52

SECTION 2: INSTRUCTIONS TO TENDERERS

2.1: Instruction to Tenderers

Eligibility of the Tenderer All Tenderers shall include the following information and documents with their tenders;

- (a) copies of original and valid Trading License, Valid Tax Clearance Certificate, Form J, Tender security, and written power of attorney of the signatory of the Tender to commit the Tenderer;
- (b) total monetary value of similar/relevant work performed for the last five years;
- (c) experience in works of a similar nature and size for each of the last five years, and details of work under way or contractually committed; and clients who may be contacted for further information on those contracts;
- (d) major equipment proposed to carry out the Contract;
- (e) qualifications and experience of key technical personnel proposed for the Contract;
- (f) reports on the financial standing of the Tenderer, such as profit and loss statements and auditor's reports for the past three years;
- (g) evidence of adequacy of working capital for this Contract (access to line(s) of credit and availability of other financial resources);
- (h) authority to seek references from the Tenderer's bankers;
- (i) information regarding any litigation, current or during the last five years, in which the Tenderer is

involved, the parties concerned, and disputed amount; and

- (j) Proposals for subcontracting components of the Works amounting to more than 10 percent of the Contract Price.

NB: A consistent history of litigation or arbitration awards against the Applicant may result in disqualification.

One Tender per Tenderer

Each Tenderer shall submit only one Tender. A Tenderer who submits or participates in more than one Tender (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Tenderer's participation to be disqualified.

Cost of Tendering

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.

Site Visit

The Tenderer, at the Tenderer's own responsibility and risk, is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Tender and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Tenderer's own expense.

Content of Tendering Documents

The set of tendering documents comprises the documents listed in below and any addenda issued:

- Instructions to Tenderers
- Form of Letter to Tender
- Conditions of Contract
- Terms of Reference

Clarification of Tendering Documents

A prospective Tenderer requiring any clarification of the tendering documents may notify the Employer in writing or by e-mail at the Employer's address indicated in the invitation to tender. The Employer will respond to any request for clarification received earlier than 5 days prior to the deadline for submission of tenders. Copies of the Employer's response will be forwarded to all short listed Tenderers of the tendering documents, including a description of the inquiry, but without identifying its source.

Amendment of Tender Documents

Before the deadline for submission of tenders, the Employer may modify the tendering documents by issuing addenda.

Any addendum thus issued shall be part of the tendering documents and shall be communicated in writing or by cable to all purchasers of the tendering documents. Prospective Tenderers shall acknowledge receipt of each addendum by electronic mail to the Employer.

To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their tenders, the Employer may extend, as necessary, the deadline for submission of tenders.

Documents Comprising the Tender

The Tender submitted by the Tenderer shall comprise the following:

- (a) The Tender
- (b) Tender Security
- (c) priced Bill of Quantities
- (d) Qualification Information Form and Documents;

and any other materials required to be completed and submitted by Tenderers, as specified in these instructions to Tenderers or as implied in the tendering document.

Tender Prices

The Contract shall be for the whole Works and is a fixed lump sum contract.

All duties, taxes, and other levies payable by the Contractor under the Contract, shall be included in the rates, prices, and total Tender price submitted by the Tenderer. This is a fixed lump-sum Contract.

The rates and prices quoted by the Tenderer shall not be subject to adjustment during the performance of the Contract.

Tender Validity

Tenders shall remain valid for a period of 90 days from date of tender opening.

In exceptional circumstances, the Employer may request that the Tenderers extend the period of validity for a specified additional period. The request and the Tenderers' responses shall be made in writing. A Tenderer may refuse the request without forfeiting the Tender Security. A Tenderer agreeing to the request will not be required or permitted to otherwise modify the Tender, but will be required to extend the validity of Tender Security for the period of the extension.

Tender Security

The Tenderer shall furnish, as part of the Tender, a Tender Security in the amount specified in the tender advertisement.

The Tender Security shall, at the Tenderer's option, be in the form of a bank guarantee or insurance bond from a reputable Guarantor acceptable to the Employer. The format of the Tender Security should be in accordance with the form of Tender Security included in this tender document

Any tender not accompanied by an acceptable Tender Security, shall be rejected by the Employer.

The Tender Security of unsuccessful Tenderers will be returned within 60 days of the end of the Tender validity period.

The Tender Security of the successful Tenderer will be discharged when the Tenderer has signed the

Agreement.

The Tender Security may be forfeited:

- (a) if the Tenderer withdraws the Tender after Tender opening during the period of Tender validity;
- (b) if the Tenderer does not accept the correction of the Tender price, or
- (c) in the case of a successful Tenderer, if the Tenderer fails within the specified time limit to sign the Agreement and provide the necessary sureties where required.

**Format and
Signing of
Tender**

The Tenderer shall prepare one original of the documents comprising the Tender as described in these Instructions to Tenderers, bound with the volume containing the Form of Tender, and clearly marked "ORIGINAL." In addition, the Tenderer shall submit 3 copies of the Tender, and clearly marked as "COPY." In the event of discrepancy between them, the original shall prevail. The copies are to be used as working documents while the Originals will be kept by the Employer for record purposes.

The original and all copies of the Tender 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 entries or amendments have been made shall be initialed by the person or persons signing the Tender.

The Tender shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or 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.

**Sealing and
Marking of
Tenders**

The Tenderer shall prepare one original of the documents comprising the Tender as described in these Instructions to Tenderers, bound with the

volume containing the Form of Bid, and clearly marked "ORIGINAL." In addition, the Tenderer shall submit 3 copies of the Bid, and clearly marked as "COPY." In the event of discrepancy between them, the original shall prevail. The copies are to be used as working documents while the Originals will be kept by the Employer for record purposes.

The original and all copies of the Tender 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 entries or amendments have been made shall be initialed by the person or persons signing the Tender.

The Tender shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the Tenderer, in which case such corrections shall be initialed by the person or persons signing the Bid.

**Deadline for
Sub-mission of
Tenders**

Tenders shall be delivered to the Employer at the address specified in the letter of invitation no later than the time and date specified in data sheet. Once delivered to submission address, withdrawals, substitutions and modifications will not be allowed. Any proposal received after the closing time for submission of proposals shall be returned unopened. Withdrawals, substitutions and modifications are however allowed before submission deadline

The Employer may extend the deadline for submission of tenders by issuing an amendment, in which case all rights and obligations of the Employer and the Tenderers previously subject to the original deadline will then be subject to the new deadline.

**Tender
Opening**

The Employer will open the tenders, in the presence of the Tenderers' representatives who choose to attend at the

time and in the place specified in the tender advertisement.

An authorized representative of the firm must initial all pages of the proposal originals. The representative's authorization is confirmed by a written power of attorney accompanying the proposal. The proposals shall also include the firm's **valid trading license, an original and valid tax compliance certificate, Power of Attorney, Form confirming Company Directorship (Form J and Form c), Labour Compliance Certificate, Directorship Police Clearance, fully completed Eligibility criteria form in terms of the procurement act 2011(Attached)** a bid security of E10, 000. 00 and an E500 submission receipt from any SWSC revenue office.

The Tenderers' names, the Tender prices and the total amount of each Tender shall be read out.

Process to Be Confidential

Information relating to the examination, clarification, evaluation, and comparison of tenders and recommendations for the award of a contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process until the award to the successful Tenderer has been announced. Any effort by a Tenderer to influence the Employer's processing of tenders or award decisions shall result in the rejection of the respective Tender.

Clarification of Bids

To assist in the examination, evaluation, and comparison of tenders, the Employer may, at the Employer's discretion, ask any Tenderer for clarification of the Tenderer's Tender, including breakdowns of unit rates.

The request for clarification and the response shall be in writing, telex, or facsimile, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids.

Correction of Errors

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

- (a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and
- (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 govern, unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted will govern, and the unit rate will be corrected.

The amount stated in the Tender will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, the Bid will be rejected, and the Bid Security may be forfeited.

Evaluation and Comparison of Bids

The Employer will evaluate and compare only the bids determined to be substantially responsive.

In evaluating the bids, the Employer will determine for each Bid the evaluated Bid price by adjusting the Bid price as follows:

- (a) making any correction for errors.
- (b) excluding provisional sums and the provision, if any, for contingencies in the Bill of Quantities.
- (a) making an appropriate adjustment for any other acceptable variations or deviations.

Award Criteria

The Employer will award the Contract to the Bidder whose Bid has been determined to be substantially

responsive to the bidding documents

**Employer's
Right to Accept
any Tender and
to Reject any
or all Tenders**

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

**Notification of
Award and
Signing of
Agreement**

The Tenderer whose Tender has been accepted will be notified of the award by the Employer prior to expiration of the Tender validity period by a letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").

The contract award decision shall be taken by the appropriate approvals authority, but the award decision does not constitute a contract. Following the contract award decision, the client will prepare a notice indicating the name of the best evaluated tenderer, the value of the proposed contract and any evaluation scores. The notice will be sent to all tenderers who submitted tenders by letter and, where appropriate, by fax or email; and will be Published on the Eswatini Public Procurement Regulatory Agency website.

The Client will allow a period of at least ten working days to elapse from the date of dispatch and publication of the notice before a contract is awarded. The contract will be awarded following negotiations. After negotiations are completed, the Client will promptly notify other consultants on the shortlist that they were unsuccessful and return the unopened Financial Proposals of those consultants who did not pass the technical evaluation.

INFORMATION TO CONTRACTORS

The name of the Client is: **Eswatini Water Services Corporation**

The assignment is phased: **No.**

The name(s) and telephone numbers of the Client's official(s) are:

Ms. Nontombi Maphanga - Technical Services Director
Tel. 2416 9180

Ms Zandile Ndlovu Mamba - Projects Engineer
Tel 2416 9000

Clarifications may be requested: **5 days before the submission date.**

Submission date: **22 November 2019**

Site visit: **At EWSC Matsapha Depo**

The address for requesting clarifications is: procurement@swsc.co.sz

Telephone **2416 9000** Facsimile: **2416 3618/20**

(i) Shortlisted firm/entity may associate with other shortlisted firms: **No**

(vii) Training is a specific component of this assignment: **No.**

Proposals must remain valid **90 days** after the submission date.

Tenderers must submit an original and **3 additional copies** of each proposal:

The submission address is:

Proposals shall be hand delivered to;

Physical address

Emftonjeni Building

Below Gables Shopping Complex
Corner (MR 103) and Cultural Village Road
Ezulwini

Information on the outer envelope should also include: **CONSTRUCTION OF MECHANICAL & ELECTRICAL WORKSHOP**

SECTION 3: LETTER OF TENDER

Name of Contract:

To:

We have examined the Conditions of Contract, Employer’s Requirements and Addenda Nos_____ for the above-named Works. We have examined, understood and checked these documents and have ascertained that they contain no errors or other defects. We accordingly offer to design, execute and complete the Works and remedy any defects therein, in conformity with such documents and our enclosed Bid (including this letter) for the prices set out in our Bid.

If this offer is accepted, we will provide the specified Performance Security, commence the Works as soon as reasonably practicable after the Commencement date, and complete the works in accordance with the above-named documents within the Time for Completion. We guarantee that the works will then conform to the Performance Guarantees included in this Bid.

Having examined the Tender document, we offer to supply, fit and remedy any defects in the said Works in conformity with the General Conditions of Contract and Terms of Reference for the sum of:

.....
..... (in words)
E.....

In the event of there being any errors of extension or addition in the priced Schedule of Quantities, I/We offer/agree to their being corrected by you, the rates being taken as correct.

I/We undertake to complete and deliver the whole of the Works comprised in the Contract within the time to be agreed with you.

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

Signature: _____ in the capacity of _____
duly authorised to sign bids for and behalf of

Address: _____

Date: _____

SECTION 4: ELIGIBILITY OF TENDERER

Section 4.1

Each Tenderer shall submit the information listed below with the Tender. In case of a joint venture of two or more legal persons, the information shall be submitted in respect of each of these persons and in respect of the joint venture tenderer:

1. Constitution or legal status, place of registration and principal place of business of Tenderer: *[attach copy]*
2. Total annual turnover expressed as total volume of engineering work carried out in each of the last five years.
3. Financial report including profit and loss statements, balance sheets and auditor's reports for the last three years, and an estimated financial projection for the subsequent year.
4. Evidence of access to lines of credit, and availability of other financial resources.
5. Name and address of banker (s) who will (and have been authorized to) provide references upon request by the Employer.
6. Details of performance as prime/main contractor on works of a similar nature and volume over the last three years and on current works, including expected completion date in the format given in the table 1 below.
7. A list of the major items of Contractor's Equipment proposed for carrying out the contract including details of ownership (Table 1).
8. **A detailed Proposed Program (work method and schedule); Descriptions, drawings, and charts.**
9. Qualifications and experience of key staff proposed for the project as shown in "Form B"
10. Similar work completed in the past five (5) years (in format shown in Form A)

Table 1: Major items of Contractor's Equipment proposed for carrying out the Works. (List all information requested in the format below)

Item of equipment	Description, make, and age (years)	Condition (new, good, poor) and number available	Owned, leased (from whom?), or to be purchased (from whom?)
(a)			
(b)			

Table 2: Proposed subcontracts and firms involved.

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

Table 3: Information on current litigation in which the Tenderer is involved.

Other party(ies)	Cause of dispute	Amount involved
(a)		
(b)		

Form A: Similar Work Completed

Using the format below, provide information on each similar assignment for which your firm/entity, either individually as a corporate entity or as one of the major companies within an association, was legally contracted.

Assignment Name:		Country:
Location within Country:		Professional Staff Provided by Your Firm/Entity(profiles):
Name of Employer:		N ^o of Staff:
Address:		N ^o of Staff-Months; Duration of Assignment:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services (in Current Swazi Emalangen):
Name of Associated Contractors, If Any:		N ^o of Months of Professional Staff Provided by Associated Contractors:
Name of Senior Staff (Project Director/Coordinator, Team Leader) Involved and Functions Performed:		
Narrative Description of Project:		
Description of Actual Services Provided by Your Staff:		

From B: Format of Curriculum Vitae for Proposed Personal Staff

Proposed Position: _____

Name of Firm: _____

Name of Staff: _____

Profession: _____

Date of Birth: _____

Years with Firm/Entity: _____ Nationality: _____

Membership in Professional Societies: _____

Detailed Tasks Assigned: _____

Key Qualifications:

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

Education:

[Summarize college/university and other specialized education of staff member, giving names of schools, dates attended, and degrees obtained. Use about one quarter of a page.]

Employment Record:

[Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of assignments. For experience in last ten years, also give types of activities performed and Employer references, where appropriate. Use about two pages.]

Languages:

[For each language indicate proficiency: excellent, good, fair, or poor in speaking, reading, and writing.]

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

_____ Date: _____
[Signature of staff member and authorized representative of the firm]
Day/Month/Year

Full name of staff member: _____

Full name of authorized representative: _____

Section 4.2

In order for a joint venture of two or more legal persons to be accepted as eligible:

- These persons shall have nominated a leader with authority to bind the joint venture and each of these persons; and this leader shall be authorized to incur liabilities and receive instructions for and on behalf of any and all these persons.
- Evidence of this authorisation shall be submitted with the tender in the form of a power of attorney signed by legally authorised signatories of all these persons
- The contract agreement must be signed so as to be legally binding on each of these persons
- A copy of the agreement entered into by these persons shall be submitted with the Tender. This agreement shall state (i) each such person's percentage participation in this joint venture, and (ii) that these persons shall be jointly and severally liable to the Employer for the performance of the Contract.

No such person or sole Tenderer shall participate in the preparation of another Tenderer's Tender for the same Contract. If any entity is found to have participated in two or more Tenders, other than alternative Tenders from the same tenderer, all such Tenders will be rejected.

However, any entity may be proposed as a prospective sub-contractor by more than one tenderer in addition to being either a sole tenderer or a participant in one joint venture tenderer.

SECTION 5: AGREEMENT

This Agreement, made on the.....day of, 2019 between

The Eswatini Water Services Corporation

of

**Emftonjeni Building
Below Gables Shopping Complex
Corner (MR 103) and Cultural Village Road
Ezulwini**

(hereinafter called "the Employer")

and

.....

of

.....

.....

.....

.....

(Hereinafter called "the Contractor") of the other part.

The Employer desires the execution of certain works known as the Construction Of EWSC Matsapha Mechanical & Electrical Workshop

OFFER

The Contractor has examined the documents listed in the Appendix which forms part of this Agreement and offers to execute the Works in conformity with the Contract for the sum of

(amount in words).....

.....

(amount in figures).....

Or such other sum as may be ascertained under the Contract.

This offer, of which the Contractor has submitted two signed originals maybe accepted by the Employer by signing and returning one original of this document to the Contractor before

(date).....

The Contractor understands that the Employer is not bound to accept the lowest or any offer received for the Works.

Signature: Date:

Name:

Authorized to sign on behalf of (name of organization):

.....

.....

Capacity:

ACCEPTANCE

The Employer has by signing below, accepted the Contractor’s offer and agrees that in consideration for the execution of the Works by the Contractor, the Employer shall pay the Contractor in accordance with the Contract. This agreement comes into effect on the date when the Contractor receives one original of this document signed by the Employer.

Signature: Date:

Name:

Authorized to sign on behalf of (name of organization):

.....

.....

Capacity:

SECTION 6: APPENDIX

This appendix forms part of the Agreement.

Item	Sub clause	Data
Documents forming the Contract listing in order of priority	1.1.1	<ul style="list-style-type: none"> • The Agreement and Appendix • The Conditions of Particular Application • General Conditions • The Specifications • The Drawings • The Bill of Quantities
Time for Completion	1.1.9	120 calendar days
Law of the Contract	1.4	Eswatini
Language	1.5	English
Provision of Site	2.1	On Commencement Date
Authorized Person	3.1	The Eswatini Water Services Corporation Managing Director
Name and Address of Employers Representative	3.2	<p>Eswatini Water Services Corporation Emtfonjeni Headoffice Building The Managing Director</p> <p>Eswatini Water Services Corporation Emtfonjeni Headquarters Building Cnr MR 103 and Cultural Village Road Ezulwini Eswatini headoffice@swsc.co.sz</p>
Performance Security Amount	4.4	10% of the sum stated in the Agreement
Form	4.4	As approved by the Employer
Requirements for Contractors Design	5.1	Roof (trusses and roof cover)
Programme Time for Submission	7.2	Within 7 days of the Commencement Date

Item	Sub clause	Data
Programme Form of Programme	7.2	One hard copy in A3 size and an MS Projects .MPP file.
Amount Payable due to Failure to Complete	7.4	1000 (One Thousand Emalangen) per day up to a maximum of 10 % (Ten Percent) of the sum stated in the Agreement
Period for Notifying Defects	9.1 & 11.5	365 dates from the date stated in the Notice under sub clause 8.2
Valuation of works	11.1	Remeasurement with Bills of Quantities
Percentage of value of Materials and Plant	11.2	Materials 80% Plant 90%
Percentage of Retention	11.3	5%
Currency of Payment	11.4	Eswatini Lilangeni
Rate of Interest	11.8	5%
Insurances: The Works, Materials and Plant and Fees	14.1	The Sum Stated in the Agreement
Insurances: Contractor's equipment	14.1	Full replacement cost.
Insurances; Third Party Injury to persons and damage to property	14.1	
Insurances: Workers	14.1	
Arbitration Rules	15.3	UNCITRAL Arbitration Rules.
Appointing Authority	15.3	South African Institute of Civil EMPLOYERS (SAICE)
Place of Arbitration	15.3	Any mutually agreed place in Eswatini or as determined by the Appointing Authority under sub clause 15.3

SECTION 7: GENERAL CONDITIONS OF CONTRACT

PART I: GENERAL CONDITIONS

General Conditions shall be those of the
“Conditions of Contract for SHORT FORM OF CONTRACT” first edition 1999, with
further amendments,

Prepared by the

Fédération Internationale des Ingénieurs- Conseils (FIDIC).

These conditions are subject to the variations and additions set out in Section 6
Hereof Entitled “Special Conditions of Contract.”

Copies of the FIDIC Conditions of Contract can be obtained from:

FIDIC Secretariat
P.O. Box 86
1000 Lausanne 12
Switzerland
Facsimile: 41 21 653 5432
Telephone: 41 21 653 5003

SECTION 8: SPECIAL CONDITIONS OF CONTRACT

Clause 10

Sub clause 10.1

After the first sentence as the second paragraph add the following.

Variations may be initiated by the Employer at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal. The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Employer stating (with supporting particulars) that the Contractor cannot readily obtain the Goods required for the Variation. Upon receiving this notice, the Employer shall cancel, confirm or vary the instruction. Each Variation may include:

- (a) changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation),
- (b) changes to the quality and other characteristics of any item of work,
- (c) changes to the levels, positions and/or dimensions of any part of the Works,
- (d) omission of any work unless it is to be carried out by others,
- (e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or
- (f) changes to the sequence or timing of the execution of the Works. The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Employer instructs or approves a Variation.

SECTION 9: SPECIFICATIONS

STANDARD SPECIFICATIONS

The specifications for this contract shall be the applicable sections of SABS 'Standardised Specification for Civil Engineering Construction'.

The sections listed below are applicable to this contract:

- SANS 1200 A : GENERAL
- SANS 1200 AA : GENERAL SMALL WORKS
- SANS 1200 C : SITE CLEARANCE
- SANS 1200 DA : EARTHWORKS (SMALL WORKS)
- SANS 1200 GA : CONCRETE (SMALL WORKS)
- SANS 1200 GB : CONCRETE (ORDINARY BUILDINGS)
- SANS 1024 : WELDED STEEL FABRIC FOR REINFORCEMENT OF CONCRETE
- SANS 878 : READY MIXED CONCRETE
- SANS 527 : PLASTICS-DETERMINATION OF TENSILE PROPERTIES
- SANS 952 : POLYOLETIN FILM FOR DAMP AND WATERPROOFING IN BUILDINGS
- SANS 266 : GYPSIUM PLASTERBOARD

PROJECT SPECIFICATIONS

The project specification is in two parts namely;

Portion 1 – The Works

Portion 2 – Variations and Additions

The standard specifications are not included in this tender document and it is assumed that the Bidder is well aware of the applicable Standard Specifications. Copies of the Standard Specifications are available from the South African Bureau of Standards.

PORTION 1 – THE WORKS

1. GENERAL

1.1 General description

The work to be carried out under this contract comprises of the construction of a chemotherapy unit through the extension of an existing hospital structure. The scope of work is the demolition of part of the existing structure, site clearance, and integration of the old and new structure, electrical and mechanical fittings, plumbing and other interior works.

The works **may** generally consist of the following but is not limited to;

- Site establishment and site de-establishment including removal of any debris and cleaning site.
- Setting out the works.
- Excavations for strip footings
- Backfill and compaction of trenches and under-side of slab
- Steelfixing of raft slab and concrete pour
- Blockwork
- Concrete works-columns
- Trusses and roof
- Plumbing
- Electric and mechanical work
- Ceilings

1.2 Description of the site and access.

The site of work is at the Mbabane Government Hospital.

1.3 Site facilities

Source of water supply

The contractor shall be responsible for the supply and transport of all water necessary for the due and proper performance of the contract. The contractor may apply for a water connection with the Corporation at the Central Region offices. A connection fee is applicable and is payable to any of the Corporation's revenue Offices.

Source of power supply

The contractor must make own arrangements for power supply.

Location of camp and depot

The contractor must make own arrangements for a suitable site in proximity with the works for the establishment of site Offices and for storing of equipment. The contractor shall make own arrangements

for the accommodation of his Staff. Accommodation on site will not be permitted.

1.4 Publications and Advertising

The contractor shall not publish, or cause to be published, any papers, articles or information relating to this project, nor permit any advertising mentioning the subject of this contract, nor display or permit to be displayed, any advertisement on the site or elsewhere, in connection with this contract, without the prior permission, in writing, of the Employer.

1.5 Payment of Royalties

The cost of all Royalties for materials drawn shall be payable by the contractor. The Employer will pay no Royalties for materials obtained from burrow pits or riverbeds and imported onto the site. Contractors are required to make enquiries with the local authorities and include such Royalties as may be applicable in their rates. Alternatively contractors may directly contact Swazi Sands, a company under the Kings Office mandated to collect Royalties on behalf of the Kings Office.

1.6 Information supplied by the Employer

Certain information contained in these tender documents is being offered in good faith. However, in the circumstances pertaining to the type of information supplied, no guarantee can be given that all the information is necessarily correct or representative. More specifically this applies to all material surveys and reports, the accuracy of which is necessarily subject to the limitations of testing or sampling the natural variation of material or formations being investigated and the measure of confidence with which conclusions can be drawn any investigations carried out. This also applies to the position of existing services as may be indicated on the drawings or pointed out on site.

The Employer accepts no liability for the correctness of the information supplied or for any resulting damages, whether direct or consequential, should it prove during the course of the contract that the information supplied is either incorrect or not representative. Any reliance placed by the Bidder on this information shall be at his own Risk.

1.7 Key Personnel

The contractor shall furnish the EMPLOYER with a list of addresses and telephone numbers of key personnel within the contractor's organization who may be contacted in an emergency both during and outside office hours.

1.8 Site meetings

The EMPLOYER shall hold regular monthly or fortnightly site meetings. He shall keep and circulate the minutes of such meetings. The contractor shall attend and submit a progress report during the meeting.

1.9 Daily site diary

The contractor shall be expected to deliver to the EMPLOYER, daily, a site diary in the form to be approved by the EMPLOYER, showing all the activities on site each day. The contractor's site Agent and Corporation's Clerk of Works shall sign the site diary, as a record of the daily site activities.

(b) DEMOLITION

2.1 View Site

Before submitting his tender, the Contractor shall visit the site and satisfy himself as to the nature and extent of work to be done and the value of the materials contained in the building to be demolished.

2.2 Authorities

The Contractor shall execute all work in accordance with the regulations and requirements of the Local Authority and to their entire satisfaction, especially in respect of:

- Pre-caution against dust and noise
- Possible restrictions on the carrying out of any portion of the work on public holidays or to any specific hours of the day or night
- The erection, maintenance, alteration and removal of any boarding and/or guard railings for the site and protection of the public
- The disconnection of services, such as water supply, drains, electrical power and telephone lines and the removal of meters and telephone apparatus

The Contractor shall give all necessary notices, obtain permits or permission to act where required, pay all deposits, fees and charges, if any and make good or cause to be made good any damage arising from the works to the property of the authorities or any adjoining owners, all to their entire satisfaction.

2.3 Explosives

No explosives may be used in demolitions without the written approval of the Employer

2.4 Loss by Theft, Fire or Otherwise

The Contractor shall immediately, upon acceptance of his tender, take full risk for any loss or damage whatsoever to the buildings or parts of buildings to be demolished and the materials therein whether caused by theft, fire, storm, riot or otherwise and shall take such steps for his own protection against such loss or damage.

2.5 Demolition and Removal

The Contractor shall hack up and remove the roof, a portion of the walls, cables, windows. The contractor shall dismantle the building in such a manner as to eliminate any danger of their collapsing or becoming unsafe at any time. All materials recovered from the demolition belong to the Employer.

(c) ALTERATION & WORKS ON SITE

3.1 Old Materials

Old material, if sound, suitable and approved by the Employer in writing, may be re-used in the new structure. The old material may be handled as follows:

- Carefully take down and handover to Employer: They are to be carefully removed, handed to the Employer on site, stored if necessary, and protected from injury, made good as required and if broken or damaged through taking out, removal, to be replaced by contractor at his expense
- Carefully take-down, set aside for re-use and later re-fix position: They are to be carefully removed, stored and protected from injury, made good as required and if broken or damaged through taking out, to be replaced by Contractor at his own expense
- Break down, break out, hack off and remove: they are to be demolished in a proper workman -like manner, and the debris removed from the Site within twenty four hours, unless specifically required for re-use

3.2 Checking Levels & Dimensions

The Contractor shall be held responsible for the checking of all floor levels and dimensions in the existing building in order that the new extension or alterations may be lined up. Should any discrepancies be found in the drawings, the Employer should be asked for a decision before continuing the work.

3.3 Placing Material in Store

Where materials are to be placed in store for subsequent incorporation into the new works, prices are to include storing in a suitable place, either on or off site, all multiple handling, any necessary protection, and where necessary, labelling to enable correct identification.

3.4 Removing Existing Services

The rates for removing existing electrical, gas and plumbing installations and services are to include for removing all pipes, conduits, socket outlets, switch boxes.

3.5 Protect Mains

Where asked to allow for protecting, diverting or altering any gas, water, electric, telephone or other mains interfered with or damaged in

consequence of the execution of this contract, the contractor is to include for giving all notices, and paying all fees and charges to the various authorities and for leaving perfect upon completion.

(d) EXCAVATIONS & EARTHWORKS

4.1 Setting Out

The Contractor is responsible for the setting out of the building and open excavations from the drawings issued by the Employer. The Contractor shall be responsible for rectifying errors due to inaccurate setting out.

4.2 Excavations

The Contractor shall notify the Employer when excavations are ready to receive foundations and no work is to be commenced or covered up until the Employer has approved in writing. Any excavations made larger or deeper than indicated in drawings, or subsequent dimensions given in writing by the Employer, will not be paid for.

A portion of top soil must be kept aside for the purposes of landscaping. The remainder of excavated material, if any, is to be carted away to a suitable dumping site located by the Contractor.

The Contractor is to allow for excavating beyond the extent of the net excavations measured to provide necessary working space.

(e) CONCRETE, FORMWORK & REINFORCEMENT

5.1 General

The reinforced concrete work is to be completed in accordance with the drawings or specifications to the entire satisfaction of the Employer.

It is essential that the foreman in charge of the construction of all concrete work, whether reinforced or not, shall be skilled in this class of work and shall superintend personally the whole construction and pay special regard to:

- The quality, testing and mixing of the ingredients of concrete work and the proper proportioning of water in the mix
- The sizes and positions of the reinforcement
- The construction, easing and removal of formwork

5.2 Records

Complete records must be kept for all concrete work. The records must at all times be available to the Employer for inspection onsite during the duration of the works.

5.3 Concrete Material

Cement to be used is Afrisam or Portland cement. The cement must be stored in a dry, solidly waterproofed area and placed on a raised floor. All stone for concrete should be hard, durable, chemically inert, approved, washed, crushed stone and it is to be well graded and free from all foreign matter. The particle size shall be as shown in the Engineer's drawing.

All sand for concrete is to be clean, sharp, approved river sand, entirely free from organic matter, dust clay and other impurities. Water to be used for concrete must be clean and free from clay, silt, oil, alkali, organic other materials which will possibly adversely affect the required strength and durability of the concrete.

5.4 Mesh Reinforcement

Mesh reinforcement shall conform to SABS 1024 standards.

5.5 Ready Mix Concrete

Ready mixed concrete may be used at the approval of the Employer. The application for use of ready mix concrete must include details of the design mixture, test results of the provisional strength tests. The supply and delivery is to comply with the recommendations of SABS 878. The delivery notes must indicate the mixing period, the mixture's composition, as well as the design strength. Re-tempering of ready-mixed concrete shall take place only with the permission of the Employer.

5.6 Casting of Concrete

The Contractor must notify the Employer at least 48hrs before commencing concreting. Before the concrete is cast, the excavations or formwork must be thoroughly cleaned and all rubbish removed. The excavations must first be checked and approved by the Employer before casting. All connected concrete is to be placed in one continuous operation. Where this is impractical, the position or shape of the break should be approved by the Employer. Before depositing fresh concrete against that which has already set, remove laitance, hack the old surface, wire brush, clean and cover with a neat cement slurry of the consistency of cream, well crabbled into the surface. This shall be followed immediately by a thin layer of mortar composed of cement and sand in the same ratio as the cement and sand in the concrete mix. All surfaces of concrete shall be smooth and free of voids. The tops of beds, slabs shall be levelled off to receive screeds or finishes.

The interval between adding the water to the dry material and the completion of placing of the concrete in its final position should not exceed 30 minutes. Concrete in columns is not to be poured from a height exceeding 2.5m.

Unless otherwise stated, all reinforced concrete shall be compacted using mechanical vibrators. Only skilled persons may operate the vibrators. The depth of each concrete layer to be vibrated shall not exceed 300mm.

Precautionary measures shall be taken to ensure that excessive amount of mortar is not brought to the surface.

The contractor shall ensure that concrete has a minimum temperature of 5°C and that no concrete is poured at temperatures beyond 32°C.

Where new concrete is joined to concrete which is three days or older is to be brushed with a wire brush or sandblasted to expose the coarse aggregate. Where concrete is atleast 28days old and Portland cement has been used, or atleast 14 days old and rapid hardening Portland cement has been used, masonry hammers may be used for this purpose. Approximately 24hours before new concrete is scheduled to be cast, the older concrete is to be washed and cleaned. Thereafter it must be kept continually moist and free from foreign material.

Concrete beds shall be cast in areas that do not exceed 21m². Concrete should be cast in a 'checker board' fashion and the adjoining bays shall not be laid until, in the Employer's opinion, the concrete is sufficiently mature.

5.7 Construction of Formwork

All formwork must be approved before concreting is commenced. Formwork to sides of inverted beams and balustrade walls must be firmly connected at the top and rigidly supported. Joints in formwork will be limited to a minimum. The positioning of joints must be discussed with the Employer.

5.8 Blockwork

Blocks are to be made in approved block making machines under sheds elected by the contractor at the Employer's approval. Blocks shall comply in all respects with SABS No 527-1972 as specified and when tested in accordance with SABS 987 shall comply with the Standard Building Regulations Chapter 8 Clause 5 (ii). Hollow blocks shall have a minimum side wall thickness of 38mm, have clean sharp edges, be free from cracks or other imperfections and be properly matured for atleast 21 days before use.

5.9 Brick Reinforcement

Brick reinforcement to be "Wireweld brick mesh", or other approved hard drawn wire mesh reinforcement and shall be straight and continuous along the length of blockwork and spread across thickness of wall.

Cement mortar is to be composed of one part cement and four parts sand unless otherwise described, thoroughly mixed in a dry state in an approved mechanical batch mixer or on a mixing platform and thereafter watered through a rose and turned over until the ingredients are thoroughly mixed. Mortar that has begun to set may not be used.

(f) WATERPROOFING

6.1 Damp Proof Courses

Damp proof courses, unless otherwise described, are to consist of waterproof fabric complying with SABS 952. The membranes shall be laid in widest practical widths to minimise joints and shall be turned up, dressed to walls and lapped with the damp proof course. All joints shall be lapped 150mm and executed in strict accordance with the manufactures recommendations. Prices are to include for laps and all cutting and dressings.

(g) CARPENTRY & JOINERY

7.1 Timber

Timber is to be well seasoned and of good sound quality and free from sap, warp or waney edges, large, loose or dead knots, splits, shakes or other defects and to be sawn die square. The scantlings of all timbers are to hold full size when sawn. Timber must not be or have been infected with borer or any other beetles and termites. Any infected timber shall be immediately removed and replaced at the Contractor's expense.

All timber delivered to site must be stacked under cover, clear of the ground on rough bearers or platforms and protected against extreme weather.

Prices for all roofing material, ceiling material, floor material, plywood, hardboard, softboard, composition board, woodwork, must include for square cutting. Prices for all timber, asbestos cement, plasterboard, etc are to include splay cut ends.

7.2 Roofs

Wall plates, purlins, etc are to be in as long lengths as possible. Except where lapping is possible, timbers up to 76mm in length are to be halved at junctions and angles above 76mm are to be splay scarved at junctions. In all cases, the joints are to be arranged over the points of support well spiked. Prices for roofing timbers are to include for all cutting to lengths, notching and shaping, splay cut ends, jointing, nailing, clinching, etc.

The Contractors attention is drawn to the fact that roof coverings, ridging, filler pieces, flashings, are measured net and prices must include for laps, screws, washers, hook bolts, clamps, etc. The whole of the roof is to be examined and left water tight at completion.

All latent roof coverings, ridging, filler pieces, flashings, etc must be of the quality material, fixed with all necessary laps to edges and ends all in accordance with all necessary laps to edges and ends all in accordance with the manufacturer's instructions. Roofing sheets are to be the standard widths and in long lengths to suit the spacing of the purlins. Where possible, single length sheets are to be used with end laps. Sheets are to be laid with

corrugations in straight lines. Drive screws or hooks are to be of galvanised mild steel fitted with washers as described.

7.3 Ceilings

Branding for ceilings, eaves lining, etc are to be sawn Swazi or South African or other approved pine, symmetrically arranged with narrow panels against side walls to suit rooms and unless otherwise described, spiked to room timbers with 76mm galvanised standard wire nails driven in or skew alternatively in opposite directions.

Gypsum plasterboard is to comply with SABS No. 266 and amendment No.1 thereof.

7.4 Floor Coverings

Floors are to be swept regularly and finally left thoroughly clean. Concrete slabs, cement screeds must be dry before any paving or floor coverings are laid and the surface to receive the covering must be clean of dust and debris prior to the laying of the flooring material.

(h) IRONMONGERY

Ironmongery is to be approved by the Employer before fixing. Prices for ironmongery are to include for screws or bolts of corresponding metal and finish, fixing, oiling and easing on completion, preparing metal, wood or brickwork.

Prices for respective locks, barrel bolts, etc are to include for striking plates, keeps, etc. Prices for curtain tracks must unless otherwise described to allow for fourteen runners per metre length. Prices for continuous hinges, curtain tracks, water bands, channels, wall bands and other similar items of linear measurement must include for cutting into lengths. Ironmongery is to be screwed to wood unless otherwise stated.

No locks may have interchangeable keys. Each lock is to be distinctly numbered with consecutive numbers and have two keys.

(i) PLASTER

Cement plaster shall be used fresh and no plaster shall be less than 12mm or more than 20mm in thickness. This thickness is approximate and the actual thickness must be as required to form level and true surface. Cement plaster to walls is to be in the proportion of four parts to one part for external work and five parts sand to one part cement for internal work, unless otherwise described. Cement plaster to concrete ceilings, beams and columns shall be a rendering coat in the portion of three parts sand to one part cement.

(j) PLUMBING & DRAINAGE

All material, piping, traps, shall be capable of withstanding the tests of the B.S.S. and shall comply with the current S.A.B.S. specification and Codes of Practices. The plumbing and drainage work shall comply with the latest by-laws and the regulations of the local authority. Where drawings do not comply with local authority by-laws and regulations, the Contractor shall notify the Employer.

Work is to be done registered plumbers and drain layers.

1.11 GLAZING

All glass is to be selected glass of approved manufacture, complying with the latest British Standard Specification No.952 and any revision thereto. Glass is to be free from bubbles, flaws, cracks, waviness and scratches. Glass is to be cut into panes to suit openings and sufficient clearance all round to prevent cracking. Putty (especially that used for glazing steel windows and doors) which does not harden satisfactorily or cracks or wrinkles within three months of the completion of the job, shall be replaced at the contractor's expense.

12 PAINTING

Paint will be supplied by a supplier approved by the Employer. In all cases paints must be used and the work carried out strictly in accordance with the manufacturer's instructions. Where a particular proprietary brand of paint is used, all coats of paint applied are to be of that particular brand.

All materials for paintwork must be brought onto the site in unopened tins or drums and no adulteration will be allowed. Paints, enamels, varnishes, etc are to be free from ribs, skins, or other coarse particles and must be strained before use where necessary.

All surfaces are to be painted, oiled, oil stained, distempered, or otherwise decorated are to be perfectly clean, free from dust and dirt, grease etc before any painting is done.

He Contractor shall be held responsible for ensuring that finished paint is smooth and uniform, free from brush marks. He also has to ensure that the correct number of coats are applied irrespective of unfavourable weather or other circumstances. No exterior painting is to be executed in damp or frosty weather. Finished surfaces in the building such as windows, doors, electrical fittings, wood panelling, and applied finishing are to be protected by a suitable covering

13 PROVISIONAL SUMS

Builders work for which a provisional sum is allowed will be measured on completion, adjusted at schedule rates contained in the Bills of Quantities, and deducted in whole or in part of it required.

**PORTION 2 – VARIATIONS AND ADDITIONS TO STANDARDIZED
SPECIFICATION SABS 1200**

SABS 1200 A GENERAL

Clause 3 MATERIALS

Clause 3.1 Quality

Substitute the second paragraph with the following:-

The contractor shall arrange for all necessary process control tests for soil properties, density etc and concrete cube tests and is responsible for the cost of all testing to ascertain that the materials do comply with the relevant minimum requirements and all such costs shall be deemed to be included in the tendered rates. The cost of acceptance control test done by the EMPLOYER the results of which do not comply with the minimum requirements shall be for the contractor's account. An independent laboratory approved by the EMPLOYER must carry out the tests.

The contractor shall present all results from any tests carried out onsite.

Add the following sub-clause:-

'PSA 3.3 Ordering of Materials

The quantities set out in the Schedule of Quantities should be considered to be only approximate quantities. The liability shall rest entirely and solely with the contractor to determine before ordering, the required types and quantities of the various materials required for the completion of the works in accordance with the specifications and the drawings issued to the contractor for construction purposes.

Any reliance placed by the contractor on the estimated quantities stated in the Schedule of Quantities issued for tendering purposes or measurements made by the contractor from the drawings issued for tendering purposes, shall be entirely at the contractor's risk, and the Employer accepts no liability whatever in respect of materials ordered by the contractor on the basis of the tender documents.

Clause 4 PLANT

Clause 4.1 Silencing Plant

Substitute the Occupational Health and Safety Act no 85 of 1993 for the Machinery and Occupational Safety Act 1983

Clause 5 CONSTRUCTION

Clause 5.1 Survey

Clause 5.1.1 Setting out the works

Setting out the works is the responsibility of the contractor. The contractor will set out the works from information given to him by the EMPLOYER. The Contractor is required to set out the building within his defined working area prior to commencement of any construction activity. The cost thereof should be included in the Schedule of Quantities.

Clause 5.2 Watching, barricading, lighting and traffic crossings

Add to clause 5.2:-

The contractor is responsible for all statutory aspects on site and for restricting access of the works by either pedestrians or vehicles.

All the signs and barricades necessary during construction are to be maintained by the contractor i.e. if barricades are moved or disturbed during the contract then the contractor is to reposition/make safe the signs or barricades immediately. Payment for compliance with all the requirements of this clause will be deemed to be included for in tendered rates.

Clause 5.3 Protection of structures

Substitute the Occupational Health and Safety Act No 85 of 1993 for the Machinery and Occupational Safety Act 1983.

Clause 5.4 Protection of overhead, underground structures

The contractor shall maintain adequate pedestrian and vehicular access to all properties during construction. All temporary accesses and crossings shall be provided with adequate barricading, warning signs and lighting to the satisfaction of the EMPLOYER.

Clause 8.3.2 Establishment of Facilities on the site

Insert the following:-

The contractor shall provide an Office on site for his own use. Provision shall be made for the safe keeping of contract documents.

The contractor shall supply and retain on site for the duration of construction:

- A copy of the General Conditions of Contract 1990
- A copy of the applicable specifications of SABS 1200
- A copy of the Occupational Health and Safety Act No 85 of 1993, section 1 to 50
- A site record book of the duplicate type with carbon paper having alternate pages perforated for removal of one copy.

CONCRETE (STRUCTURAL)

Clause 5 CONSTRUCTION

Clause 5.1 Reinforcement

Clause 5.1.2 Fixing

This additional clause shall be read in conjunction with the standard specification

Welding of reinforcement is not allowed.

Clause 5.1.2.1 The contractor shall notify the EMPLOYER when the steel has been placed in position ready for concrete, and no concrete shall be placed until the EMPLOYER has inspected the steel and signified his approval. Approval shall not relieve the contractor of his obligations under this project, and it shall be the responsibility of the contractor to maintain the steel in position during the concreting operations.

Clause 5.1.3 Cover

This additional clause shall be read in conjunction with the standard specification.

Clause 5.1.3.1 Precast mortar spacer blocks to be used to maintain the specified cover shall be made of 2:1 sand/cement mortar mixed with just sufficient water to ensure an impermeable block and to allow adequate compaction without bleeding. The block shall be cast in a suitable mould designed to allow compaction by external vibration. The wire loops inserted into the wet mortar for the purpose of binding to the reinforcement shall be adequately located in position so as to ensure that the cover to the wire from the exposed face is nowhere less than 15mm

Clause 5.5 Concrete

Clause 5.5.5 Placing

Clause 5.5.5.1 is amended to include the following:

Concrete may not be placed before the EMPLOYER's approval has been given in writing and minimum written notice of 24 hours from the contractor to the EMPLOYER prior to pouring is required for each part of the works.

SECTION 10: DRAWINGS

SECTION 11: BILL OF QUANTITIES

PRICING INSTRUCTIONS

- (1) For the purpose of this Bill of Quantities the following words shall have the meanings hereby assigned to them:

- Unit : The unit of measurement of each item of work as defined in the Standard Specifications or the Project Specifications of the Contract.
- Quantity : The number of units of work for each item.
- Rate : The payment per unit of work at which the Contractor tenders to do the work.
- Amount : The product of the Quantity and the Rate tendered for an item.
- Lump sum : An amount tendered for an item of which the extent is described in the Schedule of Quantities, the Specifications or elsewhere but the quantity of work is not measured in any units.

- (2) The Bill of Quantities forms part of the Contract Documents and shall be read in conjunction with all the other documents comprising the Contract Documents. Prices in the Bill of Quantities shall be entered in ink, and all corrections shall be initiated by the person signing the Form of Tender.
- (3) The quantities set out in the Bill of Quantities are approximate only and the quantities of work finally accepted and certified for payment, and not the quantities given in the Bill of Quantities shall be used for determining payments to the Contractor.

The validity of the Contract shall in no way be affected by differences between the quantities in the Bill of Quantities and the quantities finally certified for payment. Work shall be valued at the rates or lump sum amounts tendered, subject only to the provisions of the General Conditions of Contract and the provisions of paragraphs 11 and 12 of these instructions.

- (4) Rates and lump sum amounts shall be inclusive of overheads, profits, incidentals, etc. and shall include full compensation for the completed items of work as specified. Full compensation for completing all the work shown on the Drawings and specified in the Specifications and Project Specifications and for all the risks, obligations and responsibilities specified in the General Conditions of Contract.

Standard Specifications and Project Specifications shall be considered as provided for collectively in the items of payment given in the Bill of Quantities, except in so far as the quantities given in the Bill of Quantities are only approximate.

- (5) The Tenderer shall fill in a rate or lump sum to each item where provision is made therefore even where no quantities are given. Items against which no rate or lump sum is entered in the Tender will not be paid for when executed but payment for such work will be regarded as covered by other rates in the Bill of Quantities.
- (6) The Works as executed will be measured for payment in accordance with the methods described in the Contract under the various pay items notwithstanding any custom to the contrary.
- (7) The quantities of work or material stated in the Bill of Quantities shall not be considered as binding or extending the amount of work to be done or quantity of material to be supplied by Contractor.
- (8) The quantities of material or work stated in the Bill of Quantities shall not be regarded as constituting authorization to the Contractor to order material or execute work. The Contractor shall obtain the EMPLOYER's detailed instructions for all work before ordering any materials for or executing work or making arrangements therefrom.
- (9) The short description given of pay items in the Bill of Quantities are only for the purposes of identifying the items and providing specific details. Reference shall be made inter alia to the Drawings, Standard Specifications, Project Specifications and General Conditions of Contract for more detailed information regarding the extent of the work entailed under each item.
- (10) **ERRORS IN TENDERS:** The rates filled in by the Tenderer in the Form for the submission of Tenders shall be final and binding for purposes of tendering and errors resulting from incorrect extensions or additions shall be corrected in such a way that the rates remain unaltered.
- (11) Unbalanced rates or amounts

A Tender may be rejected if the unit rates or amounts for some of the items in the Bill of Quantities are in the opinion of the Employer unreasonable or out of proportion, and the Tenderer fails, within a period of fourteen (14) days after having been notified in writing by the Employer to adjust the unit rates or amounts of such items, to make such adjustments.

(12) Units of measurement

The units of measurement described in the Bill of Quantities are metric units.

Abbreviations used in the Bill of Quantities are as follows:

m	= metre	ha	= hectare
m ²	= square metre	kg	= kilogram
m ³	= cubic metre	kl	= kiloliter
km	= kilometre	t	= ton (1 000kg)
hr	= hour	l	= litre
L.S.	= Lump Sum	per cent	= percentage
No.	= Number	MN	= meganewton
mth	= month	MNm	= Meganewton - metre
Prov. sum	= Provisional sum		
P.C.	= Prime Cost	m ³ -km	= cubic metre kilometre
E.O.	= Extra Over		
N/A	= Not Applicable		

(13) All rates and sums of money quoted in the Bill of Quantities shall be in Emalangeni.

(14) Item numbers

The item numbers appearing in the Bill of Quantities refer to the corresponding item numbers in the Standard Specifications. Item numbers prefixed by a letter B refer to pay items described under Part B of the Project Specifications.

(15) "Rate only" items

The Tenderer shall fill in a rate opposite all items where the words "rate only" appear in the "Quantity" Column. The intention is that although no work is

foreseen under such an item, and no quantities are accordingly given in the "quantity" column, the tendered rate shall apply in the event of work under this item being actually required. Tenderers' attention is directed to the provisions of Clause 12 of this preamble.

SECTION 12: FORM: BID SECURITY (Bank Guaranteed)

Whereas, *[name of Bidder]* (hereinafter called "the Bidder") has submitted his Bid dated *[date]* for the construction of *[name of Contract]* (hereinafter called "the Bid").

Know all people by these presents that We *[name of Bank]* of *[name of country]* having our registered office at *[address]* (hereinafter called "the Bank") are bound unto name of Employer] (hereinafter called "the Employer") in the sum of *[amount]* 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]* day of *[month]*, *[year]*.

The conditions of this obligation are:

- (1) If, after Bid opening, the Bidder withdraws his Bid during the period of Bid validity specified in the Form of Bid; or
- (2) If the Bidder having been notified of the acceptance of his Bid by the Employer during the period of Bid validity:
 - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders; or
 - (c) does not accept the correction (from Employer) of the Bid price,

we undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer's 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 any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date *[number]* days after the deadline for submission of bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

Date _____ Signature of the Bank _____

Witness _____ Seal _____

[signature, name, and address]

