

TENDERNUMBER: SK8/3/1-54/2022/23 (WISG)

TENDER DOCUMENT FOR:

TUKAKGOMO WATER INTERVENTION (PHASE 5)

CIDB CLASS GRADING: 4 CE or Higher

TENDER SUBMITTED BY:

NAME OF TENDERER	
AMOUNT OF TENDER (VAT INCLUSIVE)	
CIDB GRADE	
CSD NUMBER	
TEL (Office) No.	
FAX (Office) No.	
Cell No.	

ISSUED BY:

SEKHUKHUNE DISTRICT MUNICIPALITY

Private Bag X 8611 Groblersdal 0470

Tel: 013 262 7300 Fax: 013 262 3688

COMPILED BY:

ZUTARI (PTY) LTD

Baobab Corner, Clivicola Street Cnr Munnik & De Wet Drive Polokwane 0699

Tel: (015) 287 3800 Fax: (015) 287 3888



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TENDER NOTICE AND INVITATION TO TENDER TUKAKGOMO WATER INTERVENTION (PHASE 5)

TENDER NUMBER: SK8/3/1-54/2022/23(WSIG)

Description	Date of availability of documents	CIDB Grading	Briefing Venue and site inspection Date	Closing Date and Time	Contact Person for Technical Enquiries
Tukakgomo Water		4 CE or higher	Date: 12/12/2022	Date: 17/01/2022	Tender Enquiries to Voster
Intervention (PHASE 5)			Time: 11h00 Venue: Mapodile Depot Offices	Time: 11h00	Masemola, Manager Supply Chain Management, Tel: 013 262 7669.
					Technical Enquiries to F Mashele Director Infrastructure Tel: 013 262 7430 during office hours

Tender documents are available from the Sekhukhune District Municipality Offices, Bareki Mall, corner Van Riebeek and Chris Wild Street, Groblersdal 0470.

Specifications and other conditions are detailed the tender documents.

NO LATE/TELEPHONIC/FAXED OR EMAILED TENDERS WILL BE ACCEPTED



SEKHUKHUNE DISTRICT MUNICIPALITY

T1.2 Tender Data

The conditions of Tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of Tenderers as an Annex to this Tender Data.

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this Tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of Tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

The additional conditions of Tender are:

Clause number	Tender Data
F.1.1	The employer is: Name: Sekhukhune District Municipality Address: Private Bag X8611, GROBLERSDAL Telephone: (013) 262 7300 Fax: (013) 262 3688
F.1.2	The Tender documents issued by the employer comprise: T1.1 Tender notice and invitation to Tender T1.2 Tender data T2.1 List of returnable documents T2.2 Returnable schedules Part 1: Agreements and contract data C1.1 Form of offer and acceptance C1.2 Contract data C1.3 Form of Guarantee C1.4 Occupational Health and Safety Part 2: Special Conditions of Contract C2.1 Special Conditions of Contract Part 3: Scope of work C3.1 Scope of work C3.2 Drawing Descriptions C3.3 Procurement C3.4 Construction C3.5 Management Part 4: Project Specification Part 5: Drawings Part 6: Site information Part 7: Schedule of Quantities C7.1 Preamble to Schedule of Quantities C7.2 Schedule of Quantities
F.1.4	The Employer's Agent is: ZUTARI (PTY) LTD Baobab Corner, Clivicola Street Cnr Munnik & De Wet Drive POLOKWANE 0699 Telephone: (015) 287 3800

F.2.1	Only those tenderers who can demonstrate that they will have in their employ management and supervisory staff satisfying the requirement of the scope of work for labour-intensive competencies for supervisory and management staff during the validity of the contract are eligible to submit tenders.
F.2.1	Only those Tenderers who are registered with the CIDB or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum Tendered for a 4 CE or higher class of construction work, are eligible to submit Tenders. Joint ventures are eligible to submit Tenders provided that: 1. every member of the joint venture is registered with the CIDB; 2. the lead partner has a contractor grading designation in the 4 CE or higher class of construction work; and 3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum Tendered for a 4 CE or higher class of construction work.
F.2.1	The following Tenderers who are registered with the CIDB, or are capable of being so registered prior to the evaluation of submissions, are eligible to submit Tenders: a) contractors who have a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum Tendered for a 4 CE or higher class of construction work; and b) contractors registered as potentially emerging enterprises with the CIDB who are registered in one contractor grading designation lower than that required in terms of a) above and who satisfy the following criteria: i) The Employer, following an interview with the management of the enterprise, is satisfied that the enterprise has the potential to develop and qualify to be registered in a higher contractor grading designation; and ii) The Department, following a risk assessment, is able to provide the necessary supportive measures required to enable the enterprise to successfully execute the contract. Joint ventures are eligible to submit Tenders provided that:
	 every member of the joint venture is registered with the CIDB; the lead partner has a contractor grading designation in the 4 CE or higher class of construction work; and the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum Tendered for a 4 CE or higher class of construction work.
F.2.3	The tenderer is required to complete his/ her tender in full using a black ink. The tenderer is required to initial all pages of the tender document. Failure to complete the form of offer in full is an automatic disqualification. Other contraventions also constitute an incomplete tender and may result in the tender being disqualified.
F.2.7	The arrangements for a compulsory clarification meeting is as stated in the Tender Notice and Invitation to Tender. Tenderers must sign the attendance list in the name of the Tendering entity. Addenda will be issued to and Tenders will be received only from those Tendering entities appearing on the attendance list.
F.2.11	Do not make any alterations or additions to the tender documents, except to comply with the instructions issued by employer, or necessary to correct errors made by the Tenderer. All signatories to the tender offer shall initial all alterations. Erasure and the use of masking fluid are prohibited.

F.2.12	No alterative Tender offers will be considered				
	If a Tenderer wishes to submit an alternative Tender offer, the only criteria permitted for such alternative Tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer's Agent.				
	Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative Tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal.				
	Acceptance of an alternative Tender offer will mean acceptance in principle of the offer. It will be obligation of the contract for the Tenderer, in the event that the alternative is accepted, to accept responsibility and liability that the alternative offer complies in all respects with the Employer's standar and requirements.				
	The modified Pricing Data must include an amount equal to 5% of the amount Tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.				
F.2.13.3	Parts of each Tender offer communicated on paper shall be submitted as original.				
F.2.13.5	The employer's address for delivery of Tender offers and identification details to be shown on each Tender offer package are:				
	Location of Tender box: Tender Box Physical address: Sekhukhune District Municipality Offices, Bareki Mall, Corner Van Riebeek & Chris Wild Street, Groblersdal 0470 Postal address: Private Bag X8611, GROBLERSDAL, 0470				
	Identification details: CONTRACT No. SK8/3/1-54/2022/23(WSIG): TUKAKGOMO WATER INTERVENTION (PHASE 5)				
F.2.13 F.3.5	A two-envelope procedure will not be followed.				
F.2.15	The closing time for submission of Tender offers is as stated in the Tender Notice and Invitation to Tender. (17 January 2023 at 11h00)				
F.2.15	Telephonic, telegraphic, telex, facsimile or e-mailed Tender offers will not be accepted.				
F.2.16	The Tender offer validity period is 90 days				
F.2.18	The tenderer must submit to the Employer, names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.				
F.2.19	Access shall be provided for inspections, tests and analysis.				

F.2.23	The Tenderer is required to submit with his Tender a Certificate of Contractor Registration issued by the Construction Industry Development Board and a copy of an original valid Tax Clearance Certificate issued by the South African Revenue Services.
	Where a Tenderer satisfies CIDB contractor grading designation requirements through joint venture formation, such Tenderers must submit the Certificates of Contractor Registration in respect of each partner.
F.3.4	Tenders will be opened immediately after the closing time for Tenders at Municipal Offices, at Sekhukhune District Municipality Offices, Bareki Mall, Corner Van Riebeek & Chris Wild Street, Groblersdal 0470
	The financial offer will be scored using the criteria as per MBD6.1 where the value of W ₁ is:
	1) 80 where the financial value inclusive of VAT of all responsive tenders received have a value less than R 50 000 000.
	Up to 100 minus W ₁ Tender evaluation points will be awarded to Tenderers who complete the preference schedule and who are found to be eligible for the preference claimed.
F.3.11	A maximum of 100 minus W ₁ Tender evaluation points will be awarded for the extent to which the Tendered Contract Participation Goal exceeds the specified minimum. The basis of award of preference points is:
	$Np = \frac{(100 - W_1) \times (D - Ds)}{(X - Ds)}$
	where D = tendered Contract Participation Goal. D _s = the minimum Contract Participation Goal below which no preference will be granted, namely,% X = the maximum Contract Participation Goal above which no further Tender evaluation points are awarded, namely%
F3.13.1	Tender offers will only be accepted if:
	 a) the Tenderer has in his or her possession an original valid Tax Clearance Certificate issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations; b) the Tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation; c) the Tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; d) the Tenderer has not:
	 i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect;
	 and e) Tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the Tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the Tender process. f) the Tenderer does not have arrears on municipal rates, levies exceeding 3 months and has a
E 2 10	compliant CSD. The number of paper copies of the signed contract to be provided by the employer is one.
F.3.18	The number of paper copies of the signed contract to be provided by the employer is one.
F.3.19	The tenderer must attach original or certified copies of BBEE certificate. In the event where tenderers entered into a JV agreement, they must submit original or certified (JV) combined BBEEE certificate
F.3.20	The tenderer must attach the proof of updated municipal rates and taxes. If the tenderer resides in a non-rateable municipal area, they must attach an affidavit for the company and its directors.
ADDITION	AL CLAUSES

F.3.11 1. Subcontracting as a condition of tender for procurement above R30 million

The minimum requirement for subcontracting is 30% for targeted local enterprises, as a condition of tender; the tenderer must subcontract a minimum of 30% of the value of the contract (excluding contingencies and CPA) to:

- (a) an EME or QSE
- (b) an EME or QSE which is at least 51% owned by black people;
- (c) an EME or QSE which is at least 51% owned by black people who are youth;
- (d) an EME or QSE which is at least 51% owned by black people who are women;
- (e) an EME or QSE which is at least 51% owned by black people with disabilities;
- (f) an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;
- (g) a cooperative which is at least 51% owned by black people;
- (h) an EME or QSE which is at least 51% owned by black people who are military veterans;
- (i) more than one of the categories referred to in paragraphs (a) to (h).

2. Definitions

- 2.1 **"EME"** means an exempted micro enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act. An EME is an enterprise including a sole propriety with an annual total revenue of R10 million or less.
- 2.2 "QSE" means qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act. A QSE is an enterprise with an annual total revenue of between R10 million and R50 million.
- 2.3 **"Targeted local enterprises"** means the communities situated alongside the project, Fetakgomo/Tubatse Local Municipality and Sekhukhune District Municipality.

3. Procedure for subcontracting.

The Contractor will be responsible to identify the type of work that can be sourced out to subcontractors/suppliers in order to obtain the minimum threshold of 30%.

To obtain the 30% minimum threshold the Contractor can appoint any suitable subcontractor/supplier which resides in the targeted area.

Suitable subcontractors/suppliers must first be sourced from within the local communities alongside the project. If enough subcontractors/suppliers cannot be found in the local communities then the Contractor can source from within the Fetakgomo/Tubatse Local Municipality area and then from the Sekhukhune District Municipality area.

The subcontractors/suppliers that the Contractor intends to use must comply with any of the criteria as stipulated in paragraph 1 above.

The Contractor will be monitored throughout the project to ensure the minimum target of 30% subcontracting will be achieved at completion of the project.

Standard Conditions of Tender

F.1 General

F.1.1 Actions

The employer and each Tenderer submitting a Tender offer shall comply with these conditions of Tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently.

F.1.2 Tender Documents

The documents issued by the employer for the purpose of a Tender offer are listed in the Tender data.

F.1.3 Interpretation

- **F.1.3.1** The Tender data and additional requirements contained in the Tender schedules that are included in the returnable documents are deemed to be part of these conditions of Tender.
- **F.1.3.2** These conditions of Tender, the Tender data and Tender schedules which are only required for Tender evaluation purposes, shall not form part of any contract arising from the invitation to Tender.
- **F.1.3.3** For the purposes of these conditions for the calling for expressions of interest, the following definitions apply:
 - a) **comparative offer** means the Tenderer's financial offer after the factors of non-firm prices, all unconditional discounts and any other Tendered parameters that will affect the value of the financial offer have been taken into consideration
 - b) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the Tender process; and
 - c) **fraudulent practice** means the misrepresentation of the facts in order to influence the Tender process or the award of a contract arising from a Tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels
 - d) **quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

F.1.4 Communication and employer's agent

Each communication between the employer and a Tenderer shall be to or from the employer's agent only, and in a form that can be read, copied and recorded. Writing shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a Tenderer. The name and contact details of the employer's agent are stated in the Tender data.

F.1.5 The employer's right to accept or reject any Tender offer

- **F.1.5.1** The employer may accept or reject any variation, deviation, Tender offer, or alternative Tender offer, and may cancel the Tender process and reject all Tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a Tenderer for such cancellation and rejection but will give written reasons for such action upon written request to do so.
- **F.1.5.2** The employer may not subsequent to the cancellation or abandonment of a Tender process or the rejection of all responsive Tender offers re-issue a Tender covering substantially the same scope of work within a period of six months unless only one Tender was received, and such Tender was returned unopened to the Tenderer.

F.2 Tenderer's obligations

F.2.1 Eligibility

Submit a Tender offer only if the Tenderer complies with the criteria stated in the Tender data and the Tenderer, or any of his principals, is not under any restriction to do business with employer.

F.2.2 Cost of Tender

Accept that the employer will not compensate the Tenderer for any costs incurred in the preparation and submission of a Tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.

F.2.3 Check documents

Check the Tender documents on receipt for completeness and notify the employer of any discrepancy or omission.

F.2.4 Confidentiality and copyright of documents

Treat as confidential all matters arising in connection with the Tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a Tender offer in response to the invitation.

F.2.5 Reference documents

Obtain, as necessary for submitting a Tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the Tender documents by reference.

F.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the Tender documents, which the employer may issue, and if necessary apply for an extension to the closing time stated in the Tender data, in order to take the addenda into account.

F.2.7 Clarification meeting

Attend a compulsory clarification meeting at which Tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the Tender data.

F.2.8 Seek clarification

Request clarification of the Tender documents, if necessary, by notifying the employer at least **five working days** before the closing time stated in the Tender data.

F.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) may not be for the full cover required in terms of the conditions of contract identified in the contract data. The Tenderer is advised to seek qualified advice regarding insurance.

F.2.10 Pricing the Tender offer

- **F.2.10.1** Include in the rates, prices, and the Tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful Tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the Tender data.
- **F2.10.2** Show VAT payable by the employer separately as an addition to the Tendered total of the prices.
- **F.2.10.3** Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.
- **F.2.10.4** State the rates and prices in Rand unless instructed otherwise in the Tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

F.2.11 Alterations to documents

Not make any alterations or additions to the Tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the Tenderer. All signatories to the Tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.

F.2.12 Alternative Tender offers

- **F.2.12.1** Submit alternative Tender offers only if a main Tender offer, strictly in accordance with all the requirements of the Tender documents, is also submitted. The alternative Tender offer is to be submitted with the main Tender offer together with a schedule that compares the requirements of the Tender documents with the alternative requirements the Tenderer proposes.
- **F.2.12.2** Accept that an alternative Tender offer may be based only on the criteria stated in the Tender data or criteria otherwise acceptable to the employer.

F.2.13 Submitting a Tender offer

- **F.2.13.1** Submit a Tender offer to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the Tender data.
- **F.2.13.2** Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing in black ink.
- **F.2.13.3** Submit the parts of the Tender offer communicated on paper as an original plus the number of copies stated in the Tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.
- **F.2.13.4** Sign the original and all copies of the Tender offer where required in terms of the Tender data. The employer will hold all authorized signatories liable on behalf of the Tenderer. Signatories for Tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner, whom the employer shall hold liable for the purpose of the Tender offer.
- **F.2.13.5** Seal the original and each copy of the Tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the Tender data, as well as the Tenderer's name and contact address.
- **F.2.13.6** Where a two-envelope system is required in terms of the Tender data, place and seal the returnable documents listed in the Tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the Tender data, as well as the Tenderer's name and contact address.

- **F.2.13.7** Seal the original Tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the Tender data.
- **F.2.13.8** Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the Tender offer if the outer package is not sealed and marked as stated.
- F.2.14 Information and data to be completed in all respects

Accept that Tender offers, which do not provide all the data or information requested completely and, in the form, required, may be regarded by the employer as non-responsive.

F.2.15 Closing time

- **F.2.15.1** Ensure that the employer receives the Tender offer at the address specified in the Tender data not later than as stated in the Tender data. Proof of posting shall not be accepted as proof of delivery. The employer shall not accept Tender offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the Tender data.
- **F.2.15.2** Accept that, if the employer extends the closing time stated in the Tender data for any reason, the requirements of these conditions of Tender apply equally to the extended deadline.

F.2.16 Tender offer validity

- **F.2.16.1** Hold the Tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the Tender data after the closing time stated in the Tender data.
- **F.2.16.2** If requested by the employer, consider extending the validity period stated in the Tender data for an agreed additional period.

F.2.17 Clarification of Tender offer after submission

Provide clarification of a Tender offer in response to a request to do so from the employer during the evaluation of Tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the total of the prices or substance of the Tender offer is sought, offered, or permitted. **The total of the prices stated by the Tenderer shall be binding upon the Tenderer.**

Note: Sub-clause F.2.17 does not preclude the negotiation of the final terms of the contract with a preferred Tenderer following a competitive selection process, should the Employer elect to do so.

F.2.18 Provide other material

- **F.2.18.1** Provide, on request by the employer, any other material that has a bearing on the Tender offer, the Tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the Tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the Tender offer as non-responsive.
- F.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

F.2.19 Inspections, tests and analysis

Provide access during working hours to premises for inspections, tests and analysis as provided for in the Tender data.

F.2.20 Submit securities, bonds, policies, etc.

If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.

F.2.21 Check final draft

Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

F.2.22 Return of other Tender documents

If so instructed by the employer, return all retained Tender documents within 28 days after the expiry of the validity period stated in the Tender data.

F.2.23 Certificates

Include in the Tender submission or provide the employer with any certificates as stated in the Tender data

F.3 The employer's undertakings

F.3.1 Respond to clarification

Respond to a request for clarification received up to five working days prior to the Tender closing time stated in the Tender Data and notify all Tenderers who drew procurement documents.

F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the Tender documents to each Tenderer during the period from the date of the Tender Notice until seven days before the Tender closing time stated in the Tender Data. If, as a result a Tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, will then notify it to all Tenderers who drew documents.

F.3.3 Return late Tender offers

Return Tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a Tender submission to obtain a forwarding address), to the Tenderer concerned.

F.3.4 Opening of Tender submissions

- **F.3.4.1** Unless the two-envelope system is to be followed, open valid Tender submissions in the presence of Tenderers' agents who choose to attend at the time and place stated in the Tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened.
- **F.3.4.2** Announce at the opening held immediately after the opening of Tender submissions, at a venue indicated in the Tender data, the name of each Tenderer whose Tender offer is opened, the total of his prices, preferences claimed and time for completion, if any, for the main Tender offer only.
- **F.3.4.3** Make available the record outlined in F.3.4.2 to all interested persons upon request.

F.3.5 Two-envelope system

A two-envelope procedure will not be followed in this contract.

F.3.6 Non-disclosure

Not disclose to Tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of Tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful Tenderer.

F.3.7 Grounds for rejection and disqualification

Determine whether there has been any effort by a Tenderer to influence the processing of Tender offers and instantly disqualify a Tenderer (and his Tender offer) if it is established that he engaged in corrupt or fraudulent practices.

F.3.8 Test for responsiveness

Determine, on opening and before detailed evaluation, whether each Tender offer properly received:

- a) meets the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the Tender documents.

A responsive Tender is one that conforms to all the terms, conditions, and specifications of the Tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- · change the Employer's or the Tenderer's risks and responsibilities under the contract, or
- affect the competitive position of other Tenderers presenting responsive Tenders, if it were to be rectified.

Reject a non-responsive Tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.

F.3.9 Arithmetical errors

Check responsive Tender offers for arithmetical errors, correcting them in the following manner:

- Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.
- If a bill of quantities (or schedule of rates) apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern, and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate will be corrected.
- Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the Tenderer's addition of prices, the total of the prices shall govern and the Tenderer will be asked to revise selected item prices (and their rates if a bills of quantities applies) to achieve the Tendered total of the prices.

Consider the rejection of a Tender offer if the Tenderer does not correct or accept the correction of his arithmetical errors in the manner described above.

F.3.10 Clarification of a Tender offer

Obtain clarification from a Tenderer on any matter that could give rise to ambiguity in a contract arising from the Tender offer.

F.3.11 Evaluation of Tender offers

F3.11.1 General

Step 1

Tenderers will firstly be evaluated on their responsiveness, and this includes the following:

- 1. Valid Tax Clearance Certificate
- 2. Attendance of Compulsory Site meeting
- 3. Authority of Signatory
- 4. Proof of Company Registration
- 5. Certified copies of Identity documents
- 6. JV agreement in case of a Joint Venture
- 7. Signing of all MBD forms
- 8. Signing of Form of Offer
- 9. BÖQ filled in using a black pen
- 10. Initial all the pages of the Tender document
- 11. Municipal Rates and Taxes
- 12. Alterations signed
- 13. CIDB grading
- 14. A Detailed list of returnable documents as indicated on T2.1

Step 2

According to the MFMA Circular No. 53 of the Municipal Finance Act No. 56 of 2003. Tenderers will firstly be evaluated on Functionality. The minimum Score for functionality is 60%.

Only the qualifying Tenderers will be evaluated on Method 2. The following is the criteria that the Tenderers will be evaluated for Functionality:

FUNCTIONALITY COMPETENCE ACHIEVEMENT SCHEDULES

TABLE_A1: REPUTATION AND REFERENCES

	TARGETED GOALS Name reference with contact details		POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	Project of similar scope (Water Projects) with minimum value R0m to R3m	10		
	Project of similar scope (Water Projects) with minimum value R3m to R5m	20		
l .	Project of similar scope (Water Projects) with minimum value R7m and above.	30		
	SUB-TOTAL: Reputation and References	30		

N.B: TENDERERS TO SUBMIT NAMES COMPLETE WITH VALID CONTACT DETAILS. NON-SUBMISSION WILL RESULT IN LOSS OF POINTS.

TABLE A2: EXPERIENCE

	TARGETED GOALS	YEARS BREAKDOWN	TENDERED POINTS	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
		0-2	3.5		
1	Site agent years of experience in Water Projects construction or related.	2-4	7.5		
	Flojects constituction of felated.	5 upwards	10		
	Sub-Total		10		
		0-2	3.5		
2	Site agent years of experience in construction of Water Projects and LIC Projects or related.	2-4	7.5		
	of Water Projects and LIC Projects of related.	5 upwards	10		
	Sub-Total		10		
	TOTAL: Experience		20		

N.B: TENDERERS TO SUBMIT PROOF (CV WITH REFERENCES INCLUDING QUALIFICATIONS & IDENTIFICATION DOCUMENTATION). NON-SUBMISSION WILL RESULT IN LOSS OF POINTS.

Tender Document - Tukakgomo Water Supply Intervention (Phase 5).docx

TABLE A3: ACADEMIC QUALIFICATIONS

	TARGETED GOALS	TENDERED GOAL	POINTS Claimed by tenderer	ALLOCATED POINTS
1	No formal education in construction and LIC NQF Level 5	0	by terruerer	CHITO
2	Diploma in Civil Engineering or Equivalent and LIC NQF Level 5	7.5		
3	NQF 7 – Degree in Civil Engineering or Equivalent and LIC NQF 5	15		
4	NQF 7-Degree in Civil Engineering or Equivalent and LIC NQF 5 with knowledge in Extended Public Works Programme	20		
	TOTAL: Academic Qualifications	20		

N.B: TENDERERS TO SUBMIT QUALIFICATIONS, CERTIFICATES & IDENTIFACTION DOCUMENT OF SITE AGENT. NON-SUBMISSION WILL RESULT IN LOSS OF POINTS.

TABLE A4: PLANT AND EQUIPMENT

	TARGETED GOALS	TENDERED GOAL	POINTS Claimed by tenderer	ALLOCATED POINTS
1	1 TLB	5		
2	1 20-ton Excavator	5		
3	2 Tipper trucks or 1 tipper truck & 1 flatbed truck	5		
4	1 Water truck (10000lt)	5		
	SUB-TOTAL: Plant and Equipment	20		

N.B: TENDERERS TO SUBMIT VEHICLE/EQUIPMENT PROOF OF OWNERSHIP OR LEASE AGGREEMENT OR LETTER OF INTENT TO LEASE. NON-SUBMISSION WILL RESULT IN LOSS OF POINTS.

TABLE A5: LOCALITY

	TARGETED GOALS	TENDERED POINTS	 ALLOCATED POINTS
1	Tenderer outside Limpopo	2	
2	Tenderer within Limpopo Province	7	
3	Tenderer within Sekhukhune District Municipality	10	
	TOTAL: Locality	10	

 $\ensuremath{\mathsf{N.B:}}$ TENDERERS TO SUBMIT PROOF OF COMPANY ADDRESS. NON-SUBMISSION WILL RESULT IN LOSS OF POINTS.

THE MINIMUM SCORE FOR FUNCTIONALITY IS 60%

Step 3

Price and BBBEE Contribution. Reduce each responsive Tender offer to a comparative offer and evaluate it using the Tender evaluation method that is indicated in the Tender Data and described below:

Method 2:	1) Score Tender evaluation points for financial offer.
Financial	2) Confirm that Tenderers are eligible for the preferences claimed, and if so, score Tender
offer, and	evaluation points for preferencing.
preferences	3) Calculate total Tender evaluation points.
	4) Rank Tender offers from the highest number of Tender evaluation points to the lowest.
	5) Recommend Tenderers with the highest number of Tender evaluation points for the award
	of the contract, unless there are compelling and justifiable reasons not to do so.

Score financial offers, preferences and quality, as relevant, to two decimal places.

F.3.11.2 Scoring Financial Offers

Score the financial offers of remaining responsive Tender offers using the following formula:

 $N_{FO} = W_1 \times A$ where:

N_{FO} = the number of Tender evaluation points awarded for the financial offer.

W₁ = the maximum possible number of Tender evaluation points awarded for the financial offer as stated in the Tender Data.

= a number calculated using either formulas 1 or 2 below as stated in the Tender Data.

Formula	Basis for comparison	Basis for comparison				
1	Highest price or discount	Highest price or discount				
2	Lowest price or commission/fee	percentage	$(1-\frac{(P-P_{\rm m})}{P_{\rm m}})$	P _m /P		

where:

Pm = the comparative offer of the most favourable Tender offer.

P = the comparative offer of Tender offer under consideration.

F.3.11.3 Scoring quality (functionality)

Score quality in each of the categories stated in the Tender Data and calculate total score for quality.

F.3.12 Insurance provided by the employer

If requested by the proposed successful Tenderer, submit for the Tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.

F.3.13 Acceptance of Tender offer

- F.3.13.1 Accept Tender offer only if the Tenderer satisfies the legal requirements stated in the Tender Data.
- **F.3.13.2** Notify the successful Tenderer of the employer's acceptance of his Tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the Tender data or agreed additional period. Providing the form of offer and acceptance does not contain any qualifying statements, it will constitute the formation of a contract between the employer and the successful Tenderer as described in the form of offer and acceptance.

F.3.14 Notice to unsuccessful Tenderers

After the successful Tenderer has acknowledged the employer's notice of acceptance, notify other Tenderers that their Tender offers have not been accepted.

F.3.15. Prepare contract documents

If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the Tender documents to take account of:

- a) addenda issued during the Tender period,
- b) inclusion of some of the returnable documents,
- c) other revisions agreed between the employer and the successful Tenderer, and
- d) the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.16 Issue final contract

Prepare and issue the final draft of contract documents to the successful Tenderer for acceptance as soon as possible after the date of the employer's signing of the form of offer and acceptance (including the schedule of deviations, if any). Only those documents that the conditions of Tender require the Tenderer to submit, after acceptance by the employer, shall be included.

F.3.17 Complete adjudicator's contract

Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.

F.3.18 Provide copies of the contracts

Provide to the successful Tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.

SEKHUKHUNE DISTRICT MUNICIPALITY

T2.1 List of Returnable Documents

Generic	Tick if completed
Authority for Signatory (Compulsory)	Compicaca
Certificate of Authority for Joint Venture (Compulsory where applicable)	
Certified copy of identity documents for directors (compulsory)	
Compulsory Enterprise Questionnaire-SCHEDULE 1A (Compulsory)	
Copy of Company Registration Documents or CK1 for Close Corporations (compulsory)	
Form of offer to be properly signed (Compulsory)	
Declaration of Interest (mbd4) (Compulsory)	
Declaration of Bidder's Past Supply Chain Management Practices (MBD8) (Compulsory)	
Certified B-BEE Status Level Certificate SANAS approved or Sworn affidavit for BBBEE Exempted Micro Enterprises as per bidder's correct turnover category(Required for evaluation)	
Municipal rates (Compulsory) - Municipal statement for both Directors and Company not in arrears for more than 90 days in accordance with regulation 38. In case where the Company or Director is from rural areas where the rates are not paid, please attach proof from Local Authority indicating that he/she does not pay municipal rates, this must also be supported by an affidavit from SAPS.	
Valid Tax Clearance Certificate Issued by the South African Revenue Service. (Compulsory)or PIN issued by SARS	
MBD 5 (required for evaluation) Documentation if Tender Exceeds R10 Million (<i>Compulsory if Applicable</i>) -If the bidder is required by law to prepare AFS for Auditing, the AFS for the past three years or since the establishment if Establishment during the past three years -A certificate signed by the bidder certifying that the bidder has no undisputed commitments for municipal services towards a Municipality or other service provider in respect of which Payment is overdue for more than 30 days	
MBD 6.2 (Declaration of Local Production and Content) and Annex C (Compulsory)	
CSD Registration/CSD Summary Report (Compulsory)	
Letter of Good Standing (COIDA) (Compulsory)	
Initial All Pages	

In case of a Joint Venture, Association or Consortium, a formal Contract agreement must be signed by both parties and be attached and the following must be adhered to: (COMPULSORY WHERE APPLICABLE).

All of the above requirements must be for both entities

Record of Addenda to Tender documents

amending the Tender documents, have been taken into account in this Tender offer: Date Title or Details	
2. 3.	
2. 3.	
3.	
3.	
A	
5.	
6.	
7.	
8.	
Attach additional pages if more space is required.	
Signed Date	
Signed Date	
Name Position	
Tenderer	

EXAMPLE FOR USE BY THE TENDERER WHEN COMPILING THE AUTHORITY CERTIFICATE

Certificate of Authority for Power of Attorney (TO BE PRINTED ON COMPANY'S LETTER HEAD)

Indicate the status of the tenderer by ticking the appropriate box hereunder. The renderer must use the formats to complete the certificate set out below for the relevant category.

A	B	C	D	E
Company	Partnership	Joint Venture	Sole Proprietor	Close Corporation

A. Certificate for compa	ny (Example Only)				
I,	, cha	airperson of	the	board of	directors of
	, hereb	y confirm that by	resolutior	n of the board	I (copy attached)
taken on	20, Mr/M	rs	actin	g in	the capacity
of	,was	authorised to si	gn all doc	uments in cor	nection with this
tender and any contract re-	sulting from it on behalf	of the company.			
As witness					
1					
		Chairman			
2					
2		Date			
B. Certificate of partners	ship (Example only)				
We, the undersigned, being	g the key partners in the	business trading	as		
hereby authorise Mr/	Mrs		,	acting in	the capacity
of	to sign a	ll documents	in conne	ection with	the tender for
Contract		and an	y contract r	resulting from i	t on our behalf.
NAME	ADDRESS	SIGNATURE		DATE	
		_			
NOTE: This certificate is to be con	mpleted and signed by all of the	key partners upon w	hom rests the	direction of the aff	airs of the Partnershin
as a whole.	Tiplotod and signed by an or the	s key partitors apon w	nom rests the	direction of the dir	
C. Certificate for Joint V	/enture (Example Only)	1			
We, the undersigned,	are submitting this t	ender offer in	Joint Ve	enture and h	nereby authorise
Mr/Mrs	_				,
acting in the capacity of	lead partner, to sign	all documents	in connec	ction with the	tender offer for
Contract	and a	ny other contract	resulting fr	om it on our be	ehalf.
This authorisation is evider	acad by the attached nov		مماليط اممس		
	iced by the attached pov	ver of attorney sig	gnea by leg	gally authorised	d signatories of all

NAME OF FIRM	ADDRESS	AUTHORISING SIGNATURE, NAME & CAPACITY
Lead partner		
	•	

D. C	ertificate	e for sole pr	oprietor (Examı	ple Only	y)					
I,					., hereb	y confir	m that I am th	ne sole	owner	of the busine	ss trading
as											
As W	itness:										
1					••••		ture: Sole owr				
2						 Date			••		
E. C	ertificate	e for Close	Corporation	on (Ex	ample (
We,	the	undersign	ed, be	ing	the	key	members	in	the	business	trading
as				nereby	authori	se Mr/N	Irs				
Actino	g in the ca	apacity of					, to	sign a	ll docum	ents in conne	ection with
the te	nder for (Contract					and any co	ntract ı	resulting	from it on ou	r behalf.
	NAN	IE	ΑD	DRES	S		SIGNATURE			DATE	

NOTE: This certificate are only Examples. Tendering Entities are requested to submit in their own company letter heads.

Schedule of Proposed Subcontractors

We notify you that it is our intention to employ the following Subcontractors for work in this contract.

If we are awarded a contract we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

	Name and address of proposed Subcontractor	Nature and extent of work	CIDB grading of the Subcontractor	Previous experience with Subcontractor.
1.				
2.				
3.				
4.				
5.				
Sig	ned		Date	
Nar	me		Position	
Ter	nderer			

Schedule of Plant and Equipment

The following ar for this contract	re lists of major items of relevant equipment that I/we presently own or lease and will have available or will acquire or hire for this contract if my/our Tender is accepted.
(a) Details of m	najor equipment that is owned by and immediately available for this contract.
Quantity	Description, size, capacity, etc.
Attack ad	ditional pages if more space is required.
(b) Details of	major equipment that will be hired or acquired for this contract if my/our Tender is acceptable.
Quantity	Description, size, capacity, etc.
Attach additional	pages if more space is required.
don additional j	sagess.e space to royalisa.
Signed	Date
Name	Position
Tenderer	

N.B: Tenderers to submit certified proof of ownership from the relevant Authority. If hiring, proof of certified ownership documents from the plant hire to be submitted with the tender.

Schedule of the Tenderer's Experience

The following is a statement of similar work successfully executed by myself/ourselves:								
Employer, contact person and telephone number.			Description of contract			Value o inclusive	f work of VAT	Ĭ
			Ti .			(Rand)		
Signed				Date				
Name				Position				
					<u>I</u>			
Tenderer								

N.B: Evaluation will be based on the first four projects only. Certificates of practical completion for completed projects. Appointment letters for projects not completed.

Proposed amendments and qualifications

The Tenderer should record any deviations or qualifications he may wish to make to the Tender documents in this Returnable Schedule. Alternatively, a Tenderer may state such deviations and qualifications in a covering letter to his Tender and reference such letter in this schedule.

The Tenderer's attention is drawn to clause F.3.8 of the Standard Conditions of Tender referenced in the Tender Data regarding the employer's handling of material deviations and qualifications.

Page	Clause or item	Proposal		ì
				1
				1
				1
				1
				1
				ı
				ı
				ı
				ı
				1
				ı
				ı
				ı
				ı
				ı
				ı
				ı
				ı
				ı
				ı
				ı
				ı
				ı
				ı
				ı
Signed			Date	
Name			Position	
Tenderer				

Schedule of Personnel and Employees

The Tenderer shall state below the number of Personnel and Employees to be employed on the Works.

PERSONNEL AND EMPLOYEES	TENDER			TENDER
	FULL TIME	PART TIME	FULL TIME	PART TIME
Technical staff				
2. Clerical staff				
3. Artisans				
4. Semi-skilled				
5. Unskilled labour				
Total				

State the name,	, qualifications (Certified proof no	ot older than three	months) and	experience of
proposed Site a	agent:				

SIGNATURE OF T	ENDERER:	

Date:

Preliminary Programme

The Tenderer shall detail below or attach a preliminary programme reflecting the proposed order and rate of progress for each portion of the work comprising this Contract. The programme shall be consistent with and in support of his time required for completion and shall be in accordance with the requirements of this tender.

PROGRAMME									
ACTIVITY	WE	EKS /	MON	THS					
								-	-
									

Date:							
SIGN	ATUF	RE OF	TEND)EREI	₹:	 	

Signatories Authority (Power of Attorney)

1. INFORMATION TO BE PROVIDED

1.1 If	the Ten	derer is a COMPANY
	(a) (b) (c)	Affix a certificate copy of the Certificate of Incorporation to this page. Affix a copy of the relevant resolution of the Board of Directors, duly signed and dated List the Directors
1.2 If	the Ten	derer is a CLOSE CORPORATION
	(a) (b) (c)	Affix a certificate copy of the Founding Statement to this page Affix a copy of the relevant resolution of the Members, duly signed and dated List the Members
1.3 If	the Ten	derer is a PARTNERSHIP
	(a) (b)	Affix a copy of the relevant resolution on the Partners, duly signed and dated List the Partners
1.2 If	the Ten	derer is a ONE-MAN-CONCERN.
	Provid	led the full name, identity number and qualifications of the person
1.3 If	the Ten	derer is a JOINT VENTURE
	will fur Affix a	copy of the original document of information defining the conditions under which the joint venture nction, its period of duration and the participating persons, companies and/or firms a certificate signed for or on behalf of each participating person, company and/or firm authorizing trson who signed the tender to do so.
1.4 If	the Ten	derer is a CONCERN OTHER than these listed above
Ρ	rovide f	ull details of the CONCERN submitting the tender:

Site Inspection Certificate

This is to certify that I,
representing and duly authorized by (Tenderer)
attended the site inspection on
Having prior to this site visit carefully examined the tender document, technical information and drawings supplied, I confirm that I was given unrestricted access to inspect those sections of the Site necessary for the execution of the Works.
I further confirm that I am completely satisfied with the scope of work as explained by the Engineer; and an fully aware of all Site conditions and regulations of whatsoever nature that could influence the preparation oour tender.
I therefore append my signature below in agreement that we will not institute any claim against the Employe after submission of our tender based on lack of knowledge of site conditions or regulations appertaining to the execution of this Contract.
Signature of Tenderer's Representative Date
Signature of Engineer's Representative Date

NB: THE PERSON WHO ATTENDED THE BRIEFING SESSION TO SIGN ON THIS PAGE, INFORMATION TO BE THE SAME AS THE ONE ON THE ATTENDANCE REGISTER. ANY DEVIATION WILL LEAD TO DISQUALIFICATION.

COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2014

The tenderer shall attach to this Form evidence that he is registered and in good standing with a compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993).

The tenderer is required to disclose, by also attaching documentary evidence to this form, all inspections, investigations and their outcomes conducted by the Department of Labour into the conduct of the tenderer at any time during the 36 months preceding the date of this tender.

SIGNED ON BEHALF OF THE TENDERER:	

Note to tenderer:

Discovery that the tenderer has failed to make proper disclosure may result in the Employer terminating a contract that flows from this tender on the ground that it has been rendered invalid by the tenderer's misrepresentation.

CONSTRUCTION INDUSTRIES DEVELOPMENT BOARD REGISTRATION

The tenderer is to affix to this page either:

Written proof of his registration with the CIDB as a Category 4 CE or higher

Or

Written proof of his application to the CIDB for registration as a contractor in the category listed above.

Note:

- 1. Failure to affix such documentation as prescribed to this page shall result in this tender not being further considered for the award of the contract.
- Should this tender be considered for award of the contract, based on proof of submission of application
 for registration in the appropriate category with the CIDB, and should proof of such subsequent registration
 not be forthcoming to the employer by the time of award of the contract, then this tender will no longer be
 considered for the award of the contract.

INVITATION TO TENDER

YOU ARE HEREBY INVITED TO TENDER FOR REQUIREMENTS OF THE (NAME OF MUNICIPALITY/ENTITY)

TENDER NUMBER:CLOSING DATE: CLOSING TIME:
DESCRIPTION
The successful Tenderer will be required to fill in and sign a written Contract Form (MBD 7).
TENDER DOCUMENTS MAY BE POSTED TO:
I. OR
DEPOSITED IN THE TENDER BOX SITUATED AT (STREET ADDRESS)
Tenderers should ensure that Tenders are delivered timeously to the correct address. If the Tender is late, it will not be accepted for consideration.
The Tender box is generally open 24 hours a day, 7 days a week.
ALL TENDERS MUST BE SUBMITTED ON THE OFFICIAL FORMS – (NOT TO BE RETYPED)
THIS TENDER IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY

NB: NO TENDERS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE (as defined in Regulation 1 of the Local Government: Municipal Supply Chain Management Regulations)

FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER

SPECIAL CONDITIONS OF CONTRACT

THE FOLLOWING PARTICULARS MUST BE FURNISHED (FAILURE TO DO SO MAY RESULT IN YOUR TENDER BEING DISQUALIFIED)

•		. •.
	RDING TECHNICAL INFORMATION MAY BE DIRECTED	TO:
-		
ANY ENGLIBRES REGARD	DING THE TENDERING PROCEDURE MAY BE DIRECTE	:D TO:
TOTAL TENDER PRICE	TOTAL NUMBER OF ITEMS OFFERED	
CAPACITY UNDER WHICH THIS T	ENDER IS SIGNED	
SIGNATURE OF TENDERER	DATE	
II. ARE YOU THE ACCREDITED F WORKS OFFERED? (IF YES ENCLOSE PROOF)	REPRESENTATIVE IN SOUTH AFRICA FOR THE GOOD YES/NO	S/ SERVICES/
(A B-BBEE STATUS LEVEL VERIFIFOR PREFERENCE POINTS FOR E	CATION CERTIFICATE MUST BE SUBMITTED IN ORDER B-BBEE)	R TO QUALIFY
, trogistored additor	(Tick applicable box)	Ц
A registered auditor	222 / imaan namonal acordination cyclom (O/11/10)	
	he South African national accreditation system (SANAS)	
An accounting officer as contemplate	·	
If yes, who was the certificate issued	, ,	I LO/NO
-	ce certificate been attached? (MBD 2) on certificate been submitted? (MBD 6.1)	YES/NO YES/NO
	as cortificate been attached? (MPD 2)	
FACSIMILE NUMBER	CODENUMBER	
CELL PHONE NUMBER		
TELEPHONE NUMBER	CODENUMBER	
STREET ADDRESS		
POSTAL ADDRESS		
NAME OF TENDERER		

Tender Document - Tukakgomo Water Supply Intervention (Phase 5).docx

TAX CLEARANCE CERTIFICATE REQUIREMENTS

It is a condition of Tender that the taxes of the successful Tenderer must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the Tenderer's tax obligations.

- 1. In order to meet this requirement Tenderers are required to complete in full the attached form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign Tenderers / individuals who wish to submit Tenders.
- 2. SARS will then furnish the Tenderer with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3. The original Tax Clearance Certificate must be submitted together with the Tender. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the Tender. Certified copies of the Tax Clearance Certificate will not be acceptable.
- **4.** In Tenders where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
- **5.** Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.
- **6.** Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.



Purpose

Application for a Tax Clearance Certificate

Select the applicable	optio	n		••••																								Ten	ders	5		Go	bod	sta	ndir	ng
If "Good standing",	, ple	ase	st	ate	th	e p	uŋ	pos	e o	f ti	his	ар	plic	cat	ior	ı																				
articulars of app		nt																																		
Name/Legal name (Initials & Sumame or registered name)		=											İ	<u> </u>	<u> </u>									L	L	İ	<u> </u>	İ	İ	+	<u> </u>	<u> </u>	1	1	=	<u></u>
Trading name (if applicable)	П	<u> </u>											I	Ŧ	Ī											<u> </u>	Ţ	Ī	Ŧ	Ŧ	Ŧ	4	1	1	<u></u>	Ŧ
ID/Passport no													İ	j		Co	mp	an	y/C	los	e (Cor	p.		L	İ		İ	İ	İ						İ
Income Tax ref no		I																					PA	ΥE	ref	no	7	7	I	I	I	I	Ī			I
VAT registration no	4	I																					SI	DL	ref	no	L	-	I	I	I	I	I		I	I
Customs code		I																					U	IF	ref	no	L	J	Ι	Ι	I	I	I	I	I	I
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Par	ticulars of ten	der (If applicable)				
Ter	nder number					
	timated Tender	R				
				,		
	pected duration the tender	year(s)				
Pai	rticulars of the 3	B largest contracts prev	viously awarded			
	Date started	Date finalised	Principal	Contact person	Telephone number	Amount
Auc	dit					
Λ		numer of any Audit inv	antiantian naninat usu	/the company?		YES NO
	"YES" provide de	aware of any Audit inve etails	estigation against you	i/the company?		TES NO
	-					
H						
L						
App	pointment of re	epresentative/agent	(Power of Attorne	y)		
I ti	he undersigned	confirm that I require a	a Tax Clearance Certi	ficate in respect of	enders or Goodst	anding.
T h	ereby authorise	and instruct			to apply to a	and receive from
		le Tax Clearance Certifi	cate on my/our beha	lf.	to apply to a	nd receive from
L	Ci	t6	/t			Data.
Na	me of	ture of representative/	agent			Date
10000	presentative/					
ag	ent					
Dec	claration					
Ιd	eclare that the i	information furnished in	n this application as v	well as any supporting	documents is true a	and correct in every
	spect.					
					CCY	Y - M M - D D
	Signati	ure of applicant/Public	Officer			Date
	me of applicant,	/				
Pu	blic Officer					
Not	es:					
1.	It is a serious off	ence to make a false decla	aration.			
2.	Section 75 of the	Income Tax Act, 1962, st	ates: Any person who			
	(a) fails or neg	lects to fumish, file or sub	omit any return or docum	nent as and when requir	ed by or under this Act;	or
	(b) without just	t cause shown by him, ref	fuses or neglects to-			
	(i) furnis	sh, produce or make availa	able any information, do	cuments or things;		
	(ii) reply	to or answer truly and ful	lly, any questions put to	him		
	7.7	en required in terms of thi				
3.		er no circumstances, is			form is completed in	full.
		ce Certificate will only be i				
	as applicable.		F. 3.3.	,	,	3.2.2

PRICING SCHEDULE – FIRM PRICES (PURCHASES)

NOTE:

ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATES OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

	of Tendererg Time CI	Tender Number		
OFFER TO BE VALID FOR DAYS FROM THE CLOSING DATE OF TENDER.				
ITEM NO.	QUANTITY DESCRIPTION	TENDER PRICE IN RSA CURRENCY **(ALL APPLICABLE TAXES INCLUDED)		
	Demired by			
-	Required by:			
-	At:			
-	Brand and Model			
-	Country of Origin			
-	- Does the offer comply with the specification(s)? *YES/NO			
-	If not to specification, indicate deviation(s)			
-	Period required for delivery			
-	*Delivery:	Firm/Not firm		
-	Delivery basis			
Note:	lote: All delivery costs must be included in the Tender price, for delivery at the prescribed destinatio			

^{** &}quot;all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

^{*}Delete if not applicable

B PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS

1. Please furnish full particulars of your financial institution, state the currencies used in the conversion of the prices of the items to South African currency, which portion of the price is subject to rate of exchange variations and the amounts remitted abroad.

PARTICULARS OF FINANCIAL INSTITUTION	ITEM NO	PRICE	CURRENCY	RATE	PORTION OF PRICE SUBJECT TO ROE	AMOUNT IN FOREIGN CURRENCY REMITTED ABROAD
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		

2. Adjustments for rate of exchange variations during the contract period will be calculated by using the average monthly exchange rates as issued by your commercial bank for the periods indicated hereunder: (Proof from bank required)

AVERAGE MONTHLY EXCHANGE RATES FOR THE PERIOD:	DATE DOCUMENTATION MUST BE SUBMITTED TO THIS OFFICE	DATE FROM WHICH NEW CALCULATED PRICES WILL BECOME EFFECTIVE	DATE UNTIL WHICH NEW CALCULATED PRICE WILL BE EFFECTIVE

DECLARATION OF INTEREST

- 1. No Tender will be accepted from persons in the service of the state*.
- 2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to Tender. In view of possible allegations of favouritism, should the resulting Tender, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the Tenderer or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.

In order to give effect to the above, the following questionnaire must be completed and

	submitted with the Tender.	
3.1	Full Name:	
3.2	Identity Number:	
3.3	Company Registration Number:	
3.4	Tax Reference Number:	
3.5	VAT Registration Number:	
3.6	Are you presently in the service of the state*	YES / NO
3.6.	1 If so, furnish particulars.	
3.7	Have you been in the service of the state for the past twelve months?	YES / NO
3.7.1	If so, furnish particulars.	
3.8	Do you, have any relationship (family, friend, other) with	YES / NO

(a) a member of -

3

- (i) any municipal council;
- (ii) any provincial legislature; or
- (iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors of any municipal entity;
- (c) an official of any municipality or municipal entity;
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) an employee of Parliament or a provincial legislature.

^{*} MSCM Regulations: "in the service of the state" means to be –

persons in the service of the state and who may be involved with the evaluation and or adjudication of this Tender?

3.8.1	If so, furnish particulars.	
3.9	Are you, aware of any relationship (family, friend, other), between a Tenderer and any persons in the service of the state who may be involved with the evaluation and or adjudication of this Tender?	YES / NO
3.9.1	If so, furnish particulars	
3.10	Are any of the company's directors, managers, principal shareholders or stakeholders in service of the state?	YES / NO
3.10.	1 If so, furnish particulars.	
3.11	Are any spouse, child or parent of the company's directors, managers, principal shareholders or stakeholders in service of the state?	YES / NO
3.11.	1 If so, furnish particulars.	

CERTIFICATION

I, THE UNDERSIGNED (NAME)	
CERTIFY THAT THE INFORMATION CORRECT.	FURNISHED ON THIS DECLARATION FORM IS
I ACCEPT THAT THE STATE MAY A PROVE TO BE FALSE.	ACT AGAINST ME SHOULD THIS DECLARATION
Signature	Date
Position	Name of Tenderer

DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), Tenderers must complete the following questionnaire:

1	Are you by law required to prepare annual financial statements for auditing?	
1.1	If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.	YES / NO
	Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days?	
2.1	If no, this serves to certify that the Tenderer has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days.	
2.2	If yes, provide particulars.	
3	Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?	YES / NO
3.1	If yes, furnish particulars	
4.	Will any portion of goods or services be sourced from outside the Republic, *Y and, if so, what portion and whether any portion of payment from the municipal / municipal entity is expected to be transferred out of the Republic?	
4.1	If yes, furnish particulars	
* D	elete if not applicable	

CERTIFICATION

I, THE UNDERSIGNED (NAME)
CERTIFY THAT THE INFORM CORRECT.	MATION FURNISHED ON THIS DECLARATION FORM IS
I ACCEPT THAT THE STATE PROVE TO BE FALSE.	MAY ACT AGAINST ME SHOULD THIS DECLARATION
Signature	Date
Position	Name of Tenderer

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Municipal Bidding Document (MBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9) makes provision for the promotion of local production and content.
- 1.2. Regulation 9. (1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two-stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] *100$$

Where

- x is the imported content in Rand
- y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as required in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial development/ip.jsp at no cost.

1.6. A bid may be disqualified if -

- (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation; and
- (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.

2. Definitions

- 2.1. "bid" includes written price quotations, advertised competitive bids or proposals;
- 2.2. "bid price" price offered by the bidder, excluding value added tax (VAT);
- 2.3. "**contract**" means the agreement that results from the acceptance of a bid by an organ of state.
- 2.4. "designated sector" means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content:
- 2.5. "duly sign "means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility(close corporation, partnership or individual).
- 2.6. "imported content" means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour and intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
- 2.7. "**local content**" means that portion of the bid price, which is not included in the imported content, provided that local manufacture does take place;
- 2.8. "**stipulated minimum threshold**" means that portion of local production and content as determined by the Department of Trade and Industry; and
- 2.9. "sub-contract" means the primary contractor's assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.
- 3. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

Description of services, works or goods

Stipulated minimum threshold

50mm diameter HDPE PIPES CLASS 12 (PLASTIC)	100%
Submersible pump	70%
UPVC Plastic pipes and fittings	100%

 Does any portion of the services, works or goods offer have any imported content? (*Tick applicable box*)

YES	NO	

4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za.

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

5. Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct?

(Tick applicable box)

YES	NO	
-----	----	--

- 5.1. If yes, provide the following particulars:
 - (a) Full name of auditor:
 - (b) Practice number:
 - (c) Telephone and cell number:
 - (d) Email address:

(<u>Documentary proof regarding the declaration will, when required, be submitted to the satisfaction of the Accounting Officer / Accounting Authority</u>)

6. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the Accounting Officer / Accounting Authority provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO.	
ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Er	ntity):
NB	
1 The obligation to complete, duly sign and submit this declaration cannot an external authorized representative, auditor or any other third party at the bidder.	
Guidance on the Calculation of Local Content together with Local Contemplates (Annex C, D and E) is accessible on http://www.thedtidevelopment/ip.jsp. Bidders should first complete Declaration D. Declaration D, bidders should complete Declaration E and then consolidate on Declaration C. Declaration C should be submitted with the bid document of the bid in order to substantiate the declaration of the bid in order to substantiate the declaration of the bid in paragraph (c) below. Declarations D and E should be kept by the bidder purposes for a period of at least 5 years. The successful bidder is required update Declarations C, D and E with the actual values for the duration of the substantial of the purposes.	.gov.za/industrial After completing e the information mentation at the aration made in ers for verification d to continuously
I, the undersigned, do hereby declare, in my capacity as of(entity), the following:	
(a) The facts contained herein are within my own personal knowledge.	
(b) I have satisfied myself that	
 (i) the goods/services/works to be delivered in terms of the a bid comply with the minimum local content requirements as sp bid, and as measured in terms of SATS 1286:2011; and (ii) the declaration templates have been audited and certified to be 	pecified in the
(c)The local content percentages (%) indicated below has been calculated given in clause 3 of SATS 1286:2011, the rates of exchange indicated above and the information contained in Declaration D and E which has bein Declaration C;	in paragraph 4.1
Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE:	DATE:
WITNESS No. 1	DATE:
WITNESS No. 2	DATE:

			Local	Content D	eclaration	- Summar	y Schedule				
Tender No. Tender description: Designated product(s Tender Authority: Tendering Entity nam	e:						.		j	<u>Note:</u> VAT to be exc calculations	luded from all
Tender Exchange Rat Specified local conter		Pula	EU		GBP		L				
Specifica local contes	12.70			Calculation of I	ocal content	X 22		65:	Tend	ler summary	
Tender item no's	List of items	Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
Signature of tendere	from Annex B							Total Exem	pt imported content		

Tender No. Tender descriptio Designated Produ Tender Authority Tendering Entity	ucts: :		Imported Co	ontent Declaratio	n - Suppoi	rting Sche	dule to Anr	Note: VAT to be all calculations	excluded from			
Tender Exchange	Rate:	Pula		EU	R 9,00	GBP	R 12,00]				
A. Exempte	d imported cor	ntent					Calculation of	imported conte	nt			Summary
Tender item no's	Description of im		Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted imported value
(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
				×								5
									(D19) Total exempt i	This total m	ust correspond with nex C - C 21
B. Imported	I directly by the	Tenderer					Calculation of	imported conte	nt			Summary
Tender item no's	Description of im	ported content	Unit of measure	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported value
(D20)	(D2)	1)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)

C. Imported by a 3rd party and supplied to the Tenderer						Calculation of	imported conter	nt			Summary
Description of imported content	Unit of measure	Local supplier	Overseas Supplier	Forign currency value as per Commercial Invoice	Tender Rate of Exchange		Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity imported	Total imported valu
(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
	34	6									

(D45) Total imported value by 3rd party

ther foreign curren	cy payments	payments		
Type of payment	Local supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange
(D46)	(D47)	(D48)	(D49)	(D50)
	3		, i	
	1		100	

(D52) Total of foreign currency payments declared by tenderer and/or 3rd party

Signature of tenderer from Annex B (D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above

Date:

This total must correspond with Annex C - C 23

Summary of payments Local value of payments (D51)

Annex E

ender No.		Note: VAT to be excluded fro	m all calculations
ender description:		TO DE EXCIDUEU IIC	an calculations
esignated products:			
ender Authority:			
endering Entity name:			
Local Products (Goods, Services and Works)	Description of items purchased	Local suppliers	Value
	(E6)	(E7)	(E8)
	(E9) Total local prod	ucts (Goods, Services and Works)	
(E10) Manpower costs (Ten	derer's manpower cost)		
(E11) Factory overheads (Ren	tal, depreciation & amortisation, utility costs	, consumables etc.)	
(E12) Administration overheads	and mark-up (Marketing, insurance, fina	ncing, interest etc.)	
		(E13) Total local content	g et
		This total must correspond v	vith Annex C - C24
gnature of tenderer from Annex B			
ate:			

MBD 6.1

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

(1)

This preference form must form part of all Tenders invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to all Tenders:
 - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2

- a) The value of this Tender is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or
- b) The 80/20 preference point system will be applicable to this tender.
- 1.3 Points for this Tender shall be awarded for:
 - (a) Price; and
 - (b) B-BBEE Status Level of Contributor.
- 1.4 The maximum points for this Tender are allocated as follows:

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

- 1.5 Failure on the part of a Tenderer to submit proof of B-BBEE Status level of contributor together with the tender will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.6 The purchaser reserves the right to require of a Tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. **DEFINITIONS**

- (a) "B-BBEE" means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) "B-BBEE status level of contributor" means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) "tender" means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive Tendering processes or proposals;
- (d) "Broad-Based Black Economic Empowerment Act" means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) "EME" means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) "functionality" means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) "prices" includes all applicable taxes less all unconditional discounts;
- (h) "proof of B-BBEE status level of contributor" means:
 - 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
 - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- "QSE" means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) "rand value" means the total estimated value of a contract in Rand, calculated at the time of tender invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20

or

90/10

$$Ps = 80 \left(1 - \frac{Pt - P\min}{P\min} \right)$$
 or $Ps = 90 \left(1 - \frac{Pt - P\min}{P\min} \right)$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a Tenderer for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

5. TENDER DECLARATION

5.1 Tenderers who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

6.	B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS
	1.4 AND 4.1

6.1	B-BBEE Status Level of Contributor: . = (maximum of 10 or 20 points)
	(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected
	in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of
	contributor.

7.	SUB-CONTRACTING
7.1	Will any portion of the contract be sub-contracted?
	(Tick applicable box)
	YES NO
7.1.1	If yes, indicate:
	i) What percentage of the contract will be subcontracted
	(Tick applicable box)
	YES NO

v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

Designated Group: An EME or QSE which is at last 51% owned by:	EME	QSE √
Black people	V	V
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8.	DECLARATION WITH REGARD TO COMPANY/FIRM		
8.1	Name of company/firm:		
8.2	VAT registration number:		
8.3	Company registration number:		
8.4	TYPE OF COMPANY/ FIRM		
	 □ Partnership/Joint Venture / Consortium □ One-person business/sole propriety □ Close corporation □ Company □ (Pty) Limited [TICK APPLICABLE BOX] 		
8.5	DESCRIBE PRINCIPAL BUSINESS ACTIVITIES		
8.6	COMPANY CLASSIFICATION		
	 Manufacturer Supplier Professional service provider Other service providers, e.g. transporter, etc. [TICK APPLICABLE BOX] 		
8.7	Total number of years the company/firm has been in business:		
8.8	I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:		
	i) The information furnished is true and correct;		
	 ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form; 		
	 iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proo to the satisfaction of the purchaser that the claims are correct; 		
	iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulen basis or any of the conditions of contract have not been fulfilled, the purchaser may, ir addition to any other remedy it may have –		
	(a) disqualify the person from the Tendering process;		
	 recover costs, losses or damages it has incurred or suffered as a result of that person's conduct; 		

- (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
- (d) recommend that the Tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
- (e) forward the matter for criminal prosecution.

WITNESSES	
1	SIGNATURE(S) OF TENDERERS(S)
2	DATE: ADDRESS

CONTRACT FORM - RENDERING OF SERVICES

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SERVICE PROVIDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SERVICE PROVIDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

PART 1 (TO BE FILLED IN BY THE SERVICE PROVIDER)

1.	I hereby undertake to render services described in the attached Tendering documents to (name of
	the institution) in accordance with the requirements and task
	directives / proposals specifications stipulated in Tender Number at the price/s
	quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the
	validity period indicated and calculated from the closing date of the tender.

- 2. The following documents shall be deemed to form and be read and construed as part of this agreement:
 - (i) Tendering documents, viz
 - Invitation to tender;
 - Tax clearance certificate;
 - Pricing schedule(s);
 - Filled in task directive/proposal;
 - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2017;
 - Declaration of interest;
 - Declaration of Tenderer's past SCM practices;
 - Certificate of Independent Tender Determination;
 - Special Conditions of Contract;
 - (ii) General Conditions of Contract; and
 - (iii) Other (specify)
- 3. I confirm that I have satisfied myself as to the correctness and validity of my Tender; that the price(s) and rate(s) quoted cover all the services specified in the Tendering documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
- I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilment of this contract.
- 5. I declare that I have no participation in any collusive practices with any Tenderer or any other person regarding this or any other tender.
- 6. I confirm that I am duly authorised to sign this contract.

WITNESSES
1
2
2
DATE:
DAIL
2

CONTRACT FORM - RENDERING OF SERVICES

PART 2 (TO BE FILLED IN BY THE PURCHASER)

1.	Idatedfor the rendering of services indicated hereunder and/or further specified in the annexure(s).					
2.	An official order indicating service delivery instructions is forthcoming.					
3.	I undertake to make payment for the services rendered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice.					
	DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	B-BBEE STATUS LEVEL OF CONTRIBUTION	MINIMUM THRESHOLD FOR LOCAL PRODUCTION AND CONTENT (if applicable)	
4. I confirm that I am duly authorised to sign this contract.						
SIGNED AT ON						
NAME	NAME (PRINT)					
SIGN	SIGNATURE					
OFFIC	CIAL STAMP			WITNESSES	<u> </u>	
				1		
				2		
				DATE:		

DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Tendering Document must form part of all tenders invited.
- It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- The tender of any Tenderer may be rejected if that Tenderer, or any of its directors have:
 - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - b. been convicted for fraud or corruption during the past five years;
 - c. wilfully neglected, reneged on or failed to comply with any government, municipal or other public-sector contract during the past five years; or
 - d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- In order to give effect to the above, the following questionnaire must be completed and submitted with the tender.

Item 4.1	Question Is the Tenderer or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the audi alteram partem rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	Yes Yes	No □
4.1.1	If so, furnish particulars:		
4.2	Is the Tenderer or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes	No
4.2.1	If so, furnish particulars:		
4.3	Was the Tenderer or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes	No

4.3.1	If so, furnish particulars:		
Item	Question	Yes	No
4.4	Does the Tenderer or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes	No
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the Tenderer and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes	No
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)	
CERTIFY THAT THE INFORMATION FURNIS	SHED ON THIS DECLARATION FORM TRUE AND
I ACCEPT THAT, IN ADDITION TO CANCE AGAINST ME SHOULD THIS DECLARATION	ELLATION OF A CONTRACT, ACTION MAY BE TAKEN I PROVE TO BE FALSE.
Signature	Date
Position	Name of Tenderer

CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

- 1 This Municipal Tendering Document (MBD) must form part of all tenders¹ invited.
- Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive Tendering (or tender rigging).² Collusive Tendering is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. take all reasonable steps to prevent such abuse;
 - b. reject the tender of any Tenderer if that Tenderer or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the Tendering process or the execution of the contract.
 - This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when tenders are considered, reasonable steps are taken to prevent any form of tender-rigging.
 - In order to give effect to the above, the attached Certificate of Tender Determination (MBD 9) must be completed and submitted with the tender:

¹ Includes price quotations, advertised competitive tenders, limited tenders and proposals.

² Tender rigging (or collusive Tendering) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a Tendering process. Tender rigging is, therefore, an agreement between competitors not to compete.

CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying tender:	
(Tender Number and Description)
in response to the invitation for the tender made by:	
(Name of Municipality / Municipal Er	ntity)
do hereby make the following statements that I certify to be true a	and complete in every respect:
I certify, on behalf of:	that:
(Name of Tenderer)	

- 1. I have read, and I understand the contents of this Certificate;
- 2. I understand that the accompanying tender will be disqualified if this Certificate is found not to be true and complete in every respect;
- 3. I am authorized by the Tenderer to sign this Certificate, and to submit the accompanying tender, on behalf of the Tenderer;
- 4. Each person whose signature appears on the accompanying tender has been authorized by the Tenderer to determine the terms of, and to sign, the tender, on behalf of the Tenderer:
- 5. For the purposes of this Certificate and the accompanying tender, I understand that the word "competitor" shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:
 - (a) has been requested to submit a tender in response to this tender invitation;
 - (b) could potentially submit a tender in response to this tender invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the Tenderer and/or is in the same line of business as the Tenderer
- 6. The Tenderer has arrived at the accompanying tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive Tendering.

- 7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a tender;
 - (e) the submission of a tender which does not meet the specifications and conditions of the tender; or
 - (f) Tendering with the intention not to win the tender.
- 8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this tender invitation relates.
- 9. The terms of the accompanying tender have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or of the awarding of the contract.
- 10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signature	Date
Position	Name of Tenderer

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

FORM A16: COMPULSORY ENTERPRISE QUESTIONAIRE

The following particular questionnaires in resp					rate enterprise
Section 1: Name of	enterprise .				
Section 2: VAT reg	istration nui	mber, if any:			
Section 3: CIDB reg	gistration nu	umber, if any:			
Section 4: Particula	ars of sole p	proprietors and par	tners in partners	hips	
Name*		Identity nu	umber*	Personal inco	me tax number*
* Complete only if sole	proprietor o	r partnership and att	tach separate pag	je if more than 3 p	artners
Section 5: Particula	ars of compa	anies and close co	rporations		
Company registration					
Close corporation num					
Tax reference number					
Indicate by marking the director, manager, prinches been within the last	ncipal shareh st 12 months	holder or stakeholde in the service of an	er in a company o y of the following:	r close corporation	n is currently or
a member of any municipal council a member of any provincial legislature a member of the National Assembly or the National Council of Province a member of the board of directors of any municipal entity an official of any municipality or municipal entity			 □ an employee of any provincial departmen national or provincial public entity or constitutional institution within the meaning of the Public Financ Management Act, 1999 (Act 1 of 1999) □ a member of an accounting authority of an national or provincial public entity □ an employee of Parliament or a provincial legislature 		
If any of the above be	oxes are ma	nrked, disclose the	following:		
Name of sole prop partner, director, m principal shareho stakeholder	anager, I lder or	Name of institution, public office, board or organ of state and position held			of service priate column) Within last 12 months
		_			
*insert separate page	if necessary			1	1
Section 7: Record of	of spouses, o	children and paren	ts in the service	of the state	

Indicate by mark partner in a part corporation is cu	nership or dired	ctor, manage	er, princ	ipal sharehol	der or sta	keholder in a co	ompany or close
a member of a a member of t the National Co a member of th municipal entity	e board of direc	gislature ssembly or ce ctors of any	proving meaning of 199	cial public en ng of the Pub 9) nember of an cial public ent	ntity or co olic Finance accountin	nstitutional inst	•
Name of spo	use child or	Name o	f inetiti	ition public	office	Statue	of service
Name of spouse, child or		Name of institution, public office, board or organ of state and position			(tick appropriate column)		
part	parent		held			Current	Within last 12 months
*insert separate The undersigned i) authorizes the that my / our tax ii) confirms that other person, where we controcorruption; iv) confirms that tender offers and the scope of working iv) confirms that tender offers and the scope of working iv) confirms that of my belief both	d, who warrants e Employer to comatters are in the neither the no wholly or pa der Defaulters e t no partner, m I over the ente t I / we are not d have no othe k that could can t the contents o	s that he / shobtain a tax of order; e name of the rtly exercise established in the rember, directly exprise appears associated, or relationshipuse or be intof this questi	clearand ne enter es, or ma in terms ector or ars, ha linked of p with a terprete ionnaire	prise or the nay exercise, or the Preve other person s within the land of the tend as a conflict are within my	rom the S ame of ar control ove ntion and , who who ast five ye th any oth derers or t of interes	outh African Remy partner, maner the enterprise Combating of Colly or partly exears been convertendering er tendering er those responsilet; and	evenue Services ager, director or appears on the Corrupt Activities ercises, or may icted of fraud or ntities submitting ble for compiling
Signed				Date			
Name				Position			
Enterprise name							
SIGNED ON BE	EHALF OF TH	E TENDER	RER:				

C1.1 Form of Offer and Acceptance

Offer
The employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:
CONTRACT No. SK8/3/1-54/2022/23(WSIG): TUKAKGOMO WATER INTERVENTION (PHASE 5)
The Tenderer, identified in the offer signature block, has examined the documents listed in the Tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of Tender.
By the representative of the Tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the Tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.
THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:
R (in figures)
This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender data, whereupon the Tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data.
Signature Date
Name
Capacity for the Tenderer
(Name and address of
organization)
Name and signature
of witness

Acceptance

By signing this part of this form of offer and acceptance, the employer identified below accepts the Tenderer's offer. In consideration thereof, the employer shall pay the contractor the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the Tenderer's offer shall form an agreement between the employer and the Tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1: Agreements and contract data, (which includes this agreement)

Part C2: Pricing data
Part C3: Scope of work.
Part C4: Site information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

Deviations from and amendments to the documents listed in the Tender data and any addenda thereto as listed in the Tender schedules as well as any changes to the terms of the offer agreed by the Tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The Tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the contract data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil fill any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the Tenderer (now contractor) within five working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

Signature		Date
Name		
Capacity		
for the Employer	SEKHUKHUNE DISTRICT MUNICIPALITY Private Bag X8611 GROBLERSDAL 0470	
Name and signature of witness		Date

Schedule of Deviations
1 Subject
Details
2 Subject
Details
3 Subject
Details
4 Subject
Details
5 Subject
Details
By the duly authorised representatives signing this agreement, the employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Tender data and addenda thereto as listed in the Tender schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the employer during this process of offer and acceptance. It is expressly agreed that no other matter whether in writing, oral communication or implied during the
period between the issue of the Tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

Please include the following requirement in 73.13.1

- Replace <u>Original Valid Tax Clearance Certificate</u> with <u>Valid Tax Clearance Certificate or</u>
 <u>Pin</u> issued by the South African Revenue Services
- 2. Municipal Rates of directors not in arrears for more than three months or lease agreement in the name of the company.
- 3. Documentation if tender exceeds **R10m** (Compulsory if applicable)

If the Tenderer is required by law to prepare **AFS** (Annual Financial Statements) for auditing, the AFS for the past three years or since the establishment if established during the past three years.

- 4. Municipal Rates of the company not in arrears for more than 30 days
- 5. Form of Offer properly signed
- 6. Letter of Good Standing (COIDA)
- 7. Attach certificate of Attendance or Briefing Session Attendance Register signed
- 8. Required to Declare Interest
- 9. Certificate of Independent Tender Determination
- 10. Declaration of Tenderer's Past Supply Chain Management Practices.
- 11. Certified copy of BBBEE Certificate
 - N.B.: All MBD forms must be included in the tender document.

SEKHUKHUNE DISTRICT MUNICIPALITY

C1.2 Contract Data

The General Conditions of Contract for Construction Works, Third Edition, Second print, (2015) published by the South African Institution of Civil Engineering, are applicable to this contract and forms Volume 1 of the Contract Document. Volume 2 is the Contract Drawings Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering from www.saice.org.za.

The General Conditions of Contract for Construction Works make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the general conditions of contract.

Each item of data given below is cross-referenced to the clause in the General Conditions of Contract for Construction Works to which it mainly applies.

The additional clauses to the General Conditions of Contract are:

Payment for the labour-intensive component of the works

Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the scope of work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

Linkage of payment for labour-intensive component of works to submission of project data

The Contractor's payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the contractor chooses to delay submitting payment invoices, labour returns shall still be submitted as per frequency and timeframe stipulated by the Employer. The contractor's invoices shall not be paid until all pending labour information has been submitted.

Applicable labour laws

The current Ministerial Determination (also downloadable at www.epwp.gov.za), Expanded Public Works Programmes, issued in terms of the Basic Condition of Employment Act of 1997 by the Minister of Labour in Government Notice, shall apply to works described in the scope of work as being labour-intensive and which are undertaken by unskilled workers.

1 Introduction

- 1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.
- 2.2 In this document -
 - (a) "department" means any department of the State, implementing agent or contractor;
 - (b) "employer" means any department, implementing agency or contractor that hires workers to work in elementary occupations on a SPWP;
 - (c) "worker" means any person working in an elementary occupation on a SPWP;
 - (d) "elementary occupation" means any occupation involving unskilled or semi-skilled work;
 - (e) "management" means any person employed by a department or implementing agency to administer or execute an SPWP;
 - (f) "task" means a fixed quantity of work;
 - (g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;
 - (h) "task-rated worker" means a worker paid on the basis of the number of tasks completed;
 - "time-rated worker" means a worker paid on the basis of the length of time worked.

2 Terms of Work

- 2.1 Workers on a SPWP are employed on a temporary basis.
- 2.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.
- 2.3 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

3 Normal Hours of Work

- 3.1 An employer may not set tasks or hours of work that require a worker to work-
 - (a) more than forty hours in any week
 - (b) on more than five days in any week; and
 - (c) for more than eight hours on any day.
- 3.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.
- 3.3 A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

4 Meal Breaks

- 4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes
- 4.2 An employer and worker may agree on longer meal breaks.
- 4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.
- 4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

5 Special Conditions for Security Guards

- 5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.
- 5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

6 Daily Rest Period

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

7 Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

8 Work on Sundays and Public Holidays

- 8.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.
- 8.2 Work on Sundays is paid at the ordinary rate of pay.
- 8.3 A task-rated worker who works on a public holiday must be paid -
 - (a) the worker's daily task rate, if the worker works for less than four hours;
 - (b) double the worker's daily task rate, if the worker works for more than four hours.
- 8.4 A time-rated worker who works on a public holiday must be paid -
 - (a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;
 - (b) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

9 Sick Leave

- 9.1 Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.
- 9.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.
- 9.3 A worker may accumulate a maximum of twelve days' sick leave in a year.
- 9.4 Accumulated sick-leave may not be transferred from one contract to another contract.
- 9.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
- 9.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.
- 9.7 An employer must pay a worker sick pay on the worker's usual payday.
- 9.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is
 - (a) absent from work for more than two consecutive days; or
 - (b) absent from work on more than two occasions in any eight-week period.
- 9.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.
- 9.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

10 Maternity Leave

- 10.1 A worker may take up to four consecutive months' unpaid maternity leave.
- 10.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.
- 10.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- 10.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- 10.5 A worker may begin maternity leave -
 - (a) four weeks before the expected date of birth; or
 - (b) on an earlier date -
 - if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
 - (ii) if agreed to between employer and worker; or
 - (c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.
- 10.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.
- 10.7 A worker who returns to work after maternity leave has the right to start a new cycle of twenty-four months employment, unless the SPWP on which she was employed has ended.

11 Family responsibility leave

- 11.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances -
 - (a) when the employee's child is born;
 - (b) when the employee's child is sick;
 - (c) in the event of a death of -
 - (i) the employee's spouse or life partner;
 - the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

12 Statement of Conditions

- 12.1 An employer must give a worker a statement containing the following details at the start of employment
 - (a) the employer's name and address and the name of the SPWP;
 - (b) the tasks or job that the worker is to perform; and
 - (c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
 - (d) the worker's rate of pay and how this is to be calculated;
 - (e) the training that the worker will receive during the SPWP.
- 12.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.
- 12.3 An employer must supply each worker with a copy of these conditions of employment.

13 Keeping Records

- 13.1 Every employer must keep a written record of at least the following -
 - (a) the worker's name and position;
 - (b) in the case of a task-rated worker, the number of tasks completed by the worker;
 - (c) in the case of a time-rated worker, the time worked by the worker;
 - (d) payments made to each worker.
- 13.2 The employer must keep this record for a period of at least three years after the completion of the SPWP.

14 Payment

- 14.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.
- 14.2 A task-rated worker will only be paid for tasks that have been completed.
- 14.3 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.
- 14.4 A time-rated worker will be paid at the end of each month.
- 14.5 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- 14.6 Payment in cash or by cheque must take place -
 - (a) at the workplace or at a place agreed to by the worker;
 - (b) during the worker's working hours or within fifteen minutes of the start or finish of work;
 - (c) in a sealed envelope which becomes the property of the worker.
- 14.7 An employer must give a worker the following information in writing
 - (a) the period for which payment is made;
 - (b) the numbers of tasks completed or hours worked;
 - (c) the worker's earnings;
 - (d) any money deducted from the payment;
 - (e) the actual amount paid to the worker.
- 14.8 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it
- 14.9 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

15 Deductions

- 15.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.
- 15.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.
- 15.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.
- 15.4 An employer may not require or allow a worker to -
 - (a) repay any payment except an overpayment previously made by the employer by mistake;
 - (b) state that the worker received a greater amount of money than the employer actually paid to the worker; or
 - (f) pay the employer or any other person for having been employed.

16 Health and Safety

- 16.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- 16.2 A worker must -
 - (a) work in a way that does not endanger his/her health and safety or that of any other person;
 - (b) obey any health and safety instruction;
 - (c) obey all health and safety rules of the SPWP;
 - (d) use any personal protective equipment or clothing issued by the employer;
 - (e) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

17 Compensation for Injuries and Diseases

- 17.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.
- 17.2 A worker must report any work-related injury or occupational disease to their employer or manager.
- 17.3 The employer must report the accident or disease to the Compensation Commissioner.
- 17.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

18 Termination

- 18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.
- 18.2 A worker will not receive severance pay on termination.
- 18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.
- 18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.
- 18.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

19 Certificate of Service

- 19.1 On termination of employment, a worker is entitled to a certificate stating -
 - (a) the worker's full name;
 - (b) the name and address of the employer;
 - (c) the SPWP on which the worker worked;
 - (d) the work performed by the worker;
 - (e) any training received by the worker as part of the SPWP;
 - (f) the period for which the worker worked on the SPWP;
 - (g) any other information agreed on by the employer and worker.

Part 1: Contract Data completed by the Employer

Clause	
1.1.1.13	The Defects Liability Period is 12 calendar months (365 days) after completion date.
1.1.1.14	The time for achieving Practical Completion is a maximum of 150 days (5 months) after commencement date
1.1.5	Clause 1.1.5 of the GCC is replaced by the following: The "Commencement date" shall be the date the site is handed over to the Contractor.
1.1.15	The name of the Employer is the Sekhukhune District Municipality.
1.2.1.2	The Employer is: Name: Sekhukhune District Municipality Address: Private Bag X8611, GROBLERSDAL, 0470 Telephone: (013) 262 7300 Fax: (013) 262 3688
1.1.16	The person representing the Employer's Agent is Mr Jimmy Matome (Project Leader)
1.2.1.2	The Employer's Agent address for receipt of communication is: ZUTARI (PTY) LTD Baobab Corner, Clivicola Street Cnr Munnik & De Wet Drive PO Box 3519 POLOKWANE 0700 Telephone: (015) 287 3800
1.1.1.26	The Pricing Strategy is Re-measurement Contract.
5.3.1	The documentation required before commencement with works execution are: 1.Health and Safety Plan (refer to clause 4.3) 2.Initial Programme (refer to clause 5.6) 3.Security (refer to clause 6.2) 4.Insurance (refer to clause 8.6) 5. Cash flow projection
5.3.2	The time to submit the documentation required before commencement with works execution is 14 days .
5.8.1	The special non-working days are: 1. Public holidays and 2. the days on which the contractor grants the majority of his permanent workforce leave around the 15 th December and the first Monday of the subsequent year.
5.13.1	The penalty for failing to complete the Works is R 3000.00 per day including VAT .
5.16.3	The latent defect period is Ten (10) years
6.5.1.2.3	The percentage allowance to cover overhead charges is 10%
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%
6.10.3	A Retention Money Guarantee is permitted and required. A penalty will be applied for non-delivery of the Retention Money Guarantee as required. The penalty will be 10% of the value of the completion Retention Money Amount per calendar month for late delivery of the said Retention Money Guarantee.
8.6.1.1.2	The Value of Plant and material supplied by the Employer to be included in the insurance sum is R0.00
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss included in the insurance sum is Nill.
8.6.1.3	The limit of indemnity for liability insurance is equal to the contract amount.
10.5.3	The number of adjudication Board Members to be appointed is Three (3)

3.2.3	The Employer's Agent is required in terms of his appointment with the employer to obtain the following specific approvals from the employer e.g.; 1. Approval of extension of time; 2. Approval of additional costs; 3. Approval of variation orders; 4. Approval of penalties;
3.2.3	The Employer's Agent is required to obtain the specific approval from the Employer before executing any of the following functions or duties: 1. Nominating the Employer's Agent Representative in terms of Clause 3.2.1. 2. Delegation of Employer's Agent authority in terms of Clause 3.2.4.
	3. Providing consent for subcontracting part of the contract in terms of Clause 4.4.3.
	4. The issuing of further drawings or instructions in terms of Clause 5.9.1.
	5. The issuing of instructions for dealing with fossils and the like in terms of Clause 4.7.1.
	6. Authorizing the Contractor to repair and make good excepted risks in terms of Clause 8.3.
	7. The issuing of a variation order in terms of Clause 6.3.1.
	8. Issuing of instructions to carry out work on a day work basis in terms of Clause 6.5. 9. Granting permission to work during non-working times in terms of Clause 38.1.
	10. Suspend the progress of the works in terms of Clause 5.11.1
	11. The issuing of an instruction to accelerate progress in terms of Clause 5.7.3.
	12. The reduction of a penalty for delay in terms of Clause 5.13.2.
	13. The determination of additional or reduced costs arising from changes in legislation in terms of Clause 6.8.2.
	14. The giving of a ruling on a contractor's claim in terms of Clause 10.1.5.
	15. The agreeing of an extension to the 28 period in terms of Clause 10.1.5.
504	16. The inclusion of credits in the next payment certificate in terms of Clause 5.12.3.
5.3.1	The time to deliver the Form of Guarantee within 14 day.
	The Form of Guarantee is to contain the wording of the document included in C1.3 or as supplied by the Employer.
	The liability for the guarantee shall be for 10% of the Contract Price.
8.6.1.1	The amount to be included in the sum insured to cover the value of the Contract Price.
8.6.1.2	The Contractor must provide ALL RISK insurance within 14 days of the Commencement Date.
6.8.2	Contract Price Adjustment: is not applicable
	The value of "x" is 0,15
	The values of the coefficients are:
	a = Labour = 0.25
	b = Contractor's equipment = 30
	c = Material = 35
	d = Fuel = 10
	The urban area nearest to the Site is Burgersfort
	The base month is the month prior to the closing of the Tender
6.10.3	The percentage retention on amounts due to the Contractor is 10% of the Contract Sum.
6.10.1	Minimum amount of interim payment certificate is R 200 000.00
10.5.1	Dispute resolution is to be my means of adjudication
10.7.1	Disputes are to be referred for final settlement to arbitration.

Part 2: Data provided by the Contractor

Clause						
1.1.1.9	The contractor is					
1.2.1.2	The contractor's address for receipt of communication is:					
	Telephone:					
	Mobile phone:					
	Facsimile:					
	e-mail:					
	Address:					
1.1.1.14	The time for achieving Practical Co	ompletion shall be fiv	e (5) months from the	e date of commen	cement	
6.2.1		•	. ,			
0.2.1		Type of Security	,		Contactor's Choice.	
	(The Value Added Tax is include Calculating the percentage)	ed in the Contract Su	um and is the Value	of the Works for	Indicate "Yes or No"	
	Cash deposits of 10 % of the cor	tract Sum.				
	Performance guarantee of 10 %	of the contract Sum.				
	Retention of 10% of the value of the works					
	Cash Deposits of 10 of the contract Sum plus retention of 10 % of the value of the works					
	Performance guarantee of 10 % the works	of the contract Sum p	olus retention of 10%	of the value of		
6.5.1.2.3	The percentage allowances to cove clerical work, insurance, establish					
6.8.3	The variation in cost of special ma	terials is:				
	On a sink weater time	lluis an ambiah		Deine familiana		
	Special material Unit on which variation will be determined determined Price for base month exfactory, excluding transport, labour or any					
		Containers	Delivered in bulk	other costs.		
	*State unit in appropriate column	l	<u>I</u>	<u>I</u>		

SEKHUKHUNE DISTRICT MUNICIPALITY

C1.3 Form of Guarantee

Contract No. SK8/3/1-54/2022/23(WSIG)

WHEREAS SEKHUKHUNE DISTRICT MUNICIPALITY (hereinafter referred to as the Employer") entered into, a Contract with:	∍d
(hereinafter called "the Contactor") on the day of	
for the construction of:	
TUKAKGOMO WATER INTERVENTION (PHASE 5)	
AND WHEREAS it is provided by such Contract that the Contractor shall provide the Employer with securiby way of a guarantee for the due and faithful fulfilment of such Contract by the Contractor;	ity
AND WHEREAS	
request of the Contractor, agreed to give such guarantee;	
NOW THEREFORE WE	
1. The Employer shall, without reference and / or notice to us, have complete liberty of action to act in ar manner authorized and/or contemplated by the terms of the said Contract, and/or to agree to ar modifications, variations, alterations, directions or extensions of the completion date of the works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor our liability hereunder be affected by reason of any steps which the Employer may take under such Contract, or of an modification, variation, alterations of the completion date which the Employer may make, give, concede agree to under the said Contract.	ny he ity ny
2. This guarantee shall be limited to the payment of a sum of money.	
The Employer shall be entitled, without reference to us, to release any guarantee held by it, and to give time to or compound or make any other arrangement with the Contractor.	ve
4. This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in term of the Contract, unless we are advised in writing by the Employer before the issue of the said Certificate his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain full force and effect until all such claims have been paid or liquidated.	of
5. Our total hereunder shall not exceed the Guaranteed Sum of	
The Guarantor reserves the right to withdraw from this guarantee by depositing the Guaranteed Sum wi the beneficiary, whereupon our liability hereunder shall cease.	th

7.	We hereby choose our address for the serving of all notices for all purposes arising here from as
IN on	WITNESS WHEREOF this guarantee has been executed by us at
Si	gnature
Dι	uly authorized to sign on behalf of
Ac	ddress
As	s witnesses:
1.	
2 .	

SEKHUKHUNE DISTRICT MUNICIPALITY

C1.4 Occupational Health and Safety

AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

THIS AGREEMENT IS made at
on the in the year
Between SEKHUKHUNE DISTRICT MUNICIPALITY (hereinafter called "the Employer") of the one part, herein represented by
In his capacity as
and delegate of the Employer in terms of the Employer's standard powers of delegation pursuant to the provisions of Act No 7 of 1998,
and
(hereinafter called "the Mandatory") of the other part, herein represented by
in his capacity as
and being duly authorized by virtue of a resolution appended hereto as Annexure A;

WHEREAS the Employer requires certain works be constructed, viz <u>TUKAKGOMO WATER INTERVENTION</u> (PHASE 5) CONTRACT No. SK8/3/1-54/2022/23(WSIG)

and has accepted a Tender by the Mandatory for the construction, completion and maintenance of such Works and whereas the Employer and the Mandatory have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Mandatory with the provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

NOW THEREFORE THIS AGREEMENT WITNESSES AS FOLLOWS:

- The Mandatary shall execute the work in accordance with the Contract Documents pertaining to this Contract.
- This Agreement shall hold good from its Commencement Date, which shall be the date of a written notice from the Employer or engineer requiring him to commence the execution of the Works, to either -
 - (a) the date of the Final Certificate issued in terms of the GCC, as contained in Volume 1 of the Contract Documents pertaining to this Contract, or
 - (b) The date of termination of the Contract in terms of the GCC.

- The Mandatory declares himself to be conversant with the following:
 - (a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act:

(i) Section 8 : General duties of Employers to their employees

(ii) Section 9 : General duties of Employers and self-employed persons to persons

other than employees

(iii) Section 37: Acts or omissions by employees or mandataries

- (iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement
- (b) The procedures and safety rules of the Employer as pertaining to the Mandatory and to all his subcontractors.
- In addition to the requirements of the GCC (as amended by Special Condition of Contract contained in the Contract Documents pertaining to this Contract) and all relevant requirements of the above-mentioned, the Mandatory agrees to execute all the Works forming part of this Contract and to operate and utilize all machinery, Plant and equipment in accordance with the Act.
- The Mandatory is responsible for the compliance with the Act by all his subcontractors, whether or not selected and/or approved by the Employer.
- 6. The Mandatory warrants that all his and his subcontractors' workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No 130 of 1993), which cover, shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.
- 7. The Mandatary undertakes to ensure that he and/or subcontractors and/or their respective employers will at all times comply with the following conditions:
 - a) The Mandatary shall assume the responsibility in terms of Section 16.1 of the Act. The Mandatary shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Mandatary obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
 - b) All incidents referred to in the Act shall be reported by the Mandatary to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
 - c) The Employer hereby obtains an interest in the issue of any formal enquiry conducted in terms of section 32 of the Act into any incident involving the Mandatary and/or his employees and/or his subcontractors.

In witness thereof the parties hereto have set their signatures hereon in the presence of the subscribing witnesses:

SIGNED FOR	AND ON BEHALF OF THE EMPLOYER	:	
Witness		Witness	
(Name) (Print)		(Name) (Print)	
SIGNED FOR	AND ON BEHALF OF THE MANDATORY	:	
Witness (Name) (Print)		Witness (Name) (Print)	

ANNEXURE A

CERTIFICATE OF AUTHORITY FOR SIGNATORY TO AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO 85 OF 1993)

The signatory for the company that is the Contractor in terms of the above-mentioned Contract and the Mandatory in terms of the above-mentioned Act shall confirm his or her authority thereto by attaching to this page a duly signed and dated copy of the relevant resolution of the board of directors.

By resolution of the board of directors passed at a r	meeting held or	າ	20	,
Mr//Ms			whose signatu	re
appears below, has been duly authorised	to sign the	e AGREEMENT	IN TERMS	OF THE
OCCUPATIONAL HEALTH AND SAFETY ACT, 19	•	•		
SIGNED ON BEHALF OF THE COMPANY :				
IN HIS/HER CAPACITY AS :				
DATE :				
SIGNATURE OF SIGNATORY :				
WITNESS :	WITNESS :	:		
NAME (in capitals):	NAME :			

SEKHUKHUNE DISTRICT MUNICIPALITY

C2.1 Special Conditions of Contract

The following special conditions of contract, which include amendments to, omissions of or additions to certain clauses of the "General Conditions of Contract for Construction Works, Third Edition, Second print (2015)", shall be applicable to the works. In the case of conflict with the mentioned general conditions of contract, these special conditions of contract shall be binding and applicable to the contract.

Each clause with the prefix SCC shall refer to the concurrent clause in the general conditions of contract. Such clause shall substitute, supplement or amend the clause with the same number in the general conditions of contract. Where there is no such concurrent clause in the general conditions of contract the SCC clause shall be numbered as a new clause in the special conditions of contract.

SCC 1.1 DEFINITIONS

SCC 1.1.1.15 EMPLOYER

Add the following to GCC 1.1.1.15:

The employer is the **Sekhukhune District Municipality**, and includes any persons appointed by the Employer. The official address is:

Sekhukhune District Municipality Private Bag X8611 GROBLERSDAL 0470

SCC 1.1.1.16 EMPLOYERS AGENT

Add the following to GCC 1.1.1.16:

The Employers Agent means **Zutari** (**Pty**) **Ltd**, and includes any persons appointed by the Employers Agent. The official address is:

Zutari (Pty) Ltd.
Baobab Corner, Clivicola Street
Cnr Munnik De Wet Drive
PO Box 3519
Polokwane
0700

Tel: 015 287 3800

SCC 2.4 AMBIGUITY OR DISCREPANCY

Add the following clause to GCC 2.4:

- 2.4.3 The several documents forming the contract shall rank in the following order of precedence:
 - a) contract agreement;
 - b) tender form;
 - c) special conditions of contract;
 - d) project specifications;
 - e) general conditions of contract;
 - f) drawings;
 - g) standardised specifications (SANS 1200) and particular specifications;
 - h) schedule of quantities and summary;
 - i) statutory regulations and requirements:
 - j) standard SANS specifications (not SANS 1200);
 - k) other standard specifications.

If the requirements of any part of the tender document contradict any other part, the document in the highest position on the above order of precedence, shall have preference and apply.

SCC 4.3 LEGAL PROVISIONS

SCC 4.3.1 COMPLIANCE WITH APPLICABLE LAWS

The Contractor shall be conversant with all the requirements, regulations, and standards of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as "the Act" and undertakes to execute all the works forming part of this Contract and to operate and utilise all machinery, plant, and equipment in accordance with the Act.

The Contractor shall, from the commencement date of the Contract up to completion or termination thereof, be the Employer's mandatory regarding occupational health and safety for all activities on the site but without derogating from his status in his own right as an employer or a user in accordance with the Act.

The Contractor is responsible for the compliance with the Act by all his subcontractors, whether or not nominated and/or approved by the Employer.

The Contractor shall, when called upon to do so, enter into and execute an Agreement, as provided for under Section 37(2) of the Act, with the Employer. The Agreement in the relevant form shall be prepared at the expense of the Employer.

SCC 4.10 CONTRACTOR'S EMPLOYEES

SCC 4.10.1 ENGAGEMENT OF EMPLOYEES

Add the following to clause 4.10.1:

In the event that the Contractor does not pay local labour or any outside agency employed on a monthly basis, the Employer has the automatic right to deduct such wages from the Contractor's next payment certificate. This will be deducted from either monies due to the Contractor or from retention already retained on the project. Payments to the local labour or outside agency will be made by cession.

SCC 5.5 TIME FOR PRACTICAL COMPLETION

SCC 5.5.2 BUILDER'S HOLIDAYS

The time for achieving practical completion shall exclude the period of builder's holidays from 16 December 2022 till 09 January 2023 (both days inclusive), as well as other special non-working days and public holidays.

SCC 5.6 PROGRAMME

SCC 5.6.1 PROGRAMME OF THE WORKS

Add the following to GCC 5.6.1

The critical path of the works shall also be stipulated clearly in the programme.

SCC 5.9 INSTRUCTIONS

SCC 5.9.1 DRAWINGS AND INSTRUCTIONS

Add the following to GCC 5.9.1

The Contractor is entitled to three (3) free sets of paper plans for normal use and one (1) free set of paper plans on which to enter "as built" information. He shall also be supplied with one (1) free copy of the contract document. These drawings and contract document shall be issued to the Contractor, at the time of commencement of the contract, by the Employer's Agent.

SCC 5.9.7 EMPLOYER'S AGENT TO APPROVE CONTRACTOR'S DESIGNS AND DRAWINGS

Add the following to GCC 5.9.7:

Although the Employer's Agent may approve plans and designs of the Contractor, this does not exempt the Contractor from his responsibility. The professional responsibility for such designs shall be that of the Contractor and his engineer.

SCC 5.11 SUSPENSION OF THE WORKS

SCC 5.11.7 CONSTRUCTION PROGRAMME

Add the following clause to GCC 5.11:

No payment shall be made for costs incurred by recompiling a construction programme. In the case of suspension of work, either for a change in sequence or as a result of GCC 5.11.2 to 5.11.3, no payment shall be made for such costs resulting from this.

SCC 5.12 EXTENSION OF TIME FOR PRACTICAL COMPLETION

SCC 5.12.1 EXTENSION OF TIME FOR PRACTICAL COMPLETION

Add the following to GCC 5.12.1:

Extension of the time for completion as a result of extra or additional work and unfavourable physical conditions shall only be granted if such work or conditions influence work on the critical path of the programme. If no definitive method for extension of time due to weather conditions and rain is specified, extension of time as a result of this shall also only be applicable if it influences the critical path of activities.

SCC 5.12.2 SOME REASONS FOR EXTENSIONS OF TIME

Add the following to GCC 5.12.2:

Abnormal climatic conditions.

No extension of the time for completion shall be granted on the grounds of normal rainfall conditions, but extension of time in terms of relevant clause of the general conditions of contract on the grounds of abnormal rainfall or wet conditions shall be calculated separately for each calendar month or part thereof, according to the following formula. It shall be calculated as follows for the time for completion, including any extension thereof:

$$V = (Nw - Nn) + \left(\frac{Rw + Rn}{X}\right)$$

Where Y = 10 and X = 20

V = Extension of time for calendar days of the calendar month concerned. If the value of V is negative and the absolute value thereof is greater than Nn, V is taken as negative Nn.

Nw = Actual number of days during calendar month on which a rainfall of Y mm or more is recorded.

Nn = Average number of days in the calendar month concerned on which a rainfall of Y mm or more is recorded in terms of existing rainfall data.

Rw = Actual rainfall for the calendar month concerned in mm.

Rn = Average rainfall for the calendar month in mm deduced from existing rainfall data.

The total extension of time is the algebraic sum of the monthly totals for the period concerned. Extension of time for parts of a month shall be calculated by using pro rata values of Nn and Rn. If the algebraic sum of the monthly totals is negative, no reduction of the time for completion as a result of rainfall shall be applicable.

This formula does not take any delays as a result of flood damage, which may cause further or simultaneous delays; into consideration and flood damage shall be treated separately for purposes of extension of time for completion.

The factor (Nw - Nn) is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall exceeds Y mm. The factor (Rw - Rn)/X is considered as a fair allowance for deviation from the normal for the number of days on which the rainfall does not exceed Y mm, but on which wet conditions will hamper or disrupt work.

For the purpose of this contract the values of Nn and Rn will be the relevant values of the nearest weather station to the site as supplied by the South African Weather Buro. It is the sole responsibility of the Tenderer to acquaint himself with the relevant values. These values shall, at the start of the contract be submitted to the Employer's Agent for scrutiny and approval.

SCC 5.12.2.5 AVAILABILITY OF PETROLEUM PRODUCTS

Add the following to GCC 5.12.2:

The tender shall be based on the available supply of petroleum products required for the completion of the works. If, during the contract period, for reasons outside the control of the Contractor, a restriction or breakdown in the supply of petroleum products may occur, which has an actual influence on the execution of the works for a period of at least thirty (30) days, the Contractor shall make all reasonable efforts to complete the works and he shall be entitled to an extension of the time for completion and he shall also be entitled to such an adjustment of the contract price as deemed reasonable by the Employer's Agent, with consideration of all materials and relevant factors directly responsible or having a direct effect on such restriction or breakdown, with the inclusion of the Contractor's site and overhead costs relevant to the contract.

SCC 5.12.2.6 EXTENSION OF TIME DUE TO SHORTAGE OF MATERIAL

Add the following to GCC 5.12.2:

If, during the preparation of his tender or during construction, the Contractor bases his unit prices on prices obtained from specific material or specific suppliers, it will be accepted that the Contractor has ascertained that such material shall be available on a continuous basis for the execution of the contract.

No extension of time shall be granted if material cannot be obtained locally, but is available from other sources in the country, and no additional remuneration shall be granted for increased costs due to obtaining material from sources in other parts of the country.

If suppliers cannot adhere to the quoted delivery dates, any delays resulting from this shall be considered as a matter between the supplier and the Contractor. Extension of time could be granted under such conditions after complete proofs have been submitted to and accepted by the Employer's Agent, but without any financial implications for the Employer.

SCC 5.15 CLEARANCE OF SITE

SCC 5.15.1 CLEARANCE OF SITE ON COMPLETION

Add the following to GCC 5.15.1:

After completion of the works, the Contractor shall obtain certificates from all concerned land owners on whose property works have been executed, stating that they are satisfied with the condition of their property, which will normally include finishing of pipe trenches and structures, clearance and finishing of all stone quarries, borrow pits, diversions, private or tertiary or haulage roads that have been used for the transport of material, waste material, fencing, gates, etc. on their properties. These certificates shall all be handed to the Employer's Agent before he issues the certificate of completion. Notwithstanding a certificate of completion will not be issued if the work is not to the satisfaction of the Employer's Agent.

SCC 5.16 APPROVAL

SCC 5.16.3 LATENT DEFECT PERIOD

The latent defect period is 10 years.

SCC 6.5 DAYWORKS

Add the following to GCC 6.5.1.2.1:

"Gross remuneration" shall include the following:

Basic wage Holiday fund stamp Unemployment insurance Employee's compensation Service bonus

Add the following to SCC 6.5.4:

The percentage allowance stated in the appendix shall also include travelling cost or travelling allowance (transport of workmen with the Contractor's transport vehicles or transport vehicles hired by the Contractor or for which the Contractor paid), and residence allowance and other wages that are payable to the workmen on the date for submission of tenders.

SCC 6.10 PAYMENTS

SCC 6.10.1.9 VALUE ADDED TAX

Add the following clause to GCC 6.10.1:

Value added tax (VAT) shall be calculated on each payment certificate, but it shall remain the responsibility of the Contractor to issue a tax invoice for the certified amount. The Contractor is responsible for the payment of VAT.

SCC 6.10.2 VALUATION OF MATERIAL BROUGHT ONTO SITE

Add the following to GCC 6.10.2:

Material or goods for which payment is made in terms of this clause, shall be identified uniquely and be stored in a space approved by the Employer's Agent, and which will only be used for the purposes of the Employer.

SCC 6.10.3 RETENTION MONEY

Add the following to GCC 6.10.3:

No limit of retention money will be applicable, only the % as stated in the Contract Data will be applicable on the contract.

SCC 6.10.5 PAYMENT OF RETENTION MONEY

Replace the first paragraph of GCC 6.10.5 with the following:

One half of the retention money shall become due when the Employer's Agents has issued a Certificate of Completion in terms of clause 5.14.4. The other half of the retention money shall become due and shall be paid to the Contractor on the expiration of the Defects Liability Period.

The Employer's Agent shall deliver to the Employer and the Contractor the payment certificate referred to in clause 6.10.3 within 07 (seven) days after the receipt by the Employers Agent of the Contractor's said statement, and the Employer shall pay the amount due to the Contractor within 65 (sixty five) days after receipt by the Employer of the payment certificate signed by the Employer's Agent.

The Defects Liability Period may be extended in terms of clauses 5.14.4 or 7.8.1, if necessary;

SCC 6.11 VARIATIONS EXCEEDING 15 PER CENT

Replace the title with the following: "VARIATIONS EXCEEDING 50 PER CENT".

Replace paragraph 6.11.1.3 with the following:

"The adjustment upon measurement of the estimated quantities set out in the Bill of Quantities for a Re-measurement Contract, results in an increase or decrease in the Contract Price, determined before adjustment in terms of this Clause, greater than 50 per cent of the prices provided for in the Contract Sum, excluding any allowance for contingencies therein and excluding from both Contract Price and Contract Sum, all payments or allowances for:"

SCC 7 QUALITY AND RELATED MATTERS

SCC 7.1 QUALITY OF PLANT, WORKMANSHIP AND MATERIALS

Add the following to GCC 7.2.1:

No second-hand or reject material shall be used without written permission from the Employer's Agent.

SCC 7.4.4 COST OF TEST SPECIMENS AND TESTS

Substitute GCC 7.4.4 with the following:

It is deemed that the Contractor has made provision in his tender for all such services and tests that are required from him. It is the duty of the Contractor to, at his own cost and by means of the necessary tests, prove to the Employer's Agent that the works and compaction prescribed, comply with the specification.

SCC 7.5 EXAMINATION OF THE WORKS

SCC 7.5.1 EXAMINATION OF WORK BEFORE COVERING UP

Add the following to GCC 7.5.1:

The Contractor shall give the Employer's Agent a reasonable time to accommodate examinations in his programme, in which case a time for inspection can be agreed upon.

SCC 7.5.3 NOTICE TO BE GIVEN WHEN READY FOR TESTING

Add the following to paragraph 2 of GCC 7.5.3:

If the Employer's Agent attends with the purpose of examining any part or materials of the works at any time and date as agreed upon with the Contractor, and it is found that the works or materials are not yet ready for inspection, the Contractor shall be responsible for the costs of such a visit by the Employer's Agent.

SCC 7.8 DEFECTS

SCC 7.8.1 MAKING GOOD OF DEFECTS IN THE DEFECTS LIABILITY PERIOD

Add the following to GCC 7.8.1:

If it is deemed necessary in the opinion of the Employer's Agent, the defects liability period after repairs can be extended for a further period of twelve months or for a period to the discretion of the Employer's Agent, as regards the relevant part of the works that is made good.

SCC 8.4 INDEMNIFICATIONS

SCC 8.4.2 INDEMNITY BY EMPLOYER

Add the following to GCC 8.4.2:

The Contractor indemnifies the Employer against any liability in respect of damage to or physical loss of the property of any person or injury to or death of any person due to not complying with the Occupational Health and Safety Act No 85 of 1993.

Attached in the tender document is the form "Contract between Employer and Contractor" to be completed by the successful Contractor.

SCC 8.6 INSURANCES

SCC 8.6.1 INSURANCES TO BE EFFECTED

Add the following to GCC 8.6.1:

The amount shall be per occurrence. The number of occurrences is unlimited.

Add the following to GCC 8.6.6:

Within 14 days of receipt of the letter of acceptance of his tender, the Contractor shall submit proof of payment to the Employer's Agent.

SCC 10.5 AD.	JUDICATION
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SCC 10.5.3 RULES FOR ADJUDICATION

The number of Adjudication Board Members to be appointed is three.

SEKHUKHUNE DISTRICT MUNICIPALITY

C3. Schedule of Quantities

C3.1 Preamble to Schedule of Quantities

- 1. The general conditions of contract, the special conditions of contract (if any), the specifications (including the project specification) and the drawings are to be read in conjunction with the schedule of quantities.
- 2. a) The schedule comprises items covering the Contractor's profit and costs of general liabilities and of the construction of temporary and permanent works.
 - b) The Contractor is at liberty to insert a rate of his own choosing for each item in the schedule and his attention is drawn to the fact that the Contractor has the right, under various circumstances, to payment for additional works carried out and that the Engineer is obliged to base his assessment of the rates to be paid for such additional work on the rates inserted in the schedule by the Contractor.
 - c) Clause 8 of each standardised specification and the measurement and payment clause of each particular specification, read together with the relevant clauses of the project specification, set out what ancillary or associated activities are included in the rates for the operations specified.
- 3. Descriptions in the schedule of quantities are abbreviated and the schedule has been drawn up generally in accordance with the latest issue of Civil Engineering Quantities¹. Should any requirement of the measurement and payment clause of the applicable standardised specification², or the project specification², or the particular specification(s)² conflict with the terms of the schedule or, when relevant, Civil Engineering Quantities¹, the requirement of the standardised, project or particular specification, as applicable, shall prevail.
- 4. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made for waste.
- 5. The prices and rates to be inserted in the schedule of quantities are to be the full inclusive prices to the Employer for the work described under the several items, value added tax excluded. Such prices shall cover all costs and expenses that may be required in and for the construction of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the quotation is based.
- 6. A price or rate is to be entered against each item in the schedule of quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the schedule.
- 7. The Contractor must price each item in the schedule of quantities in **BLACK INK**.
- 8. **All prices and rates shall exclude value added tax (VAT)**. The Contractor shall calculate value added tax and enter it at the end of the summary of the schedule of quantities.

For the purposes of this Schedule of Quantities, the following words shall have the meanings hereby assigned to them:

The unit of measurement for each item of work as defined in the Specifications. Unit

The number of units of work for each item Quantity

Rate The payment per unit of measurement at which the Tenderer tenders to do the work.

Amount The product of the quantity and the rate tendered for an item

Sum : An amount tendered for an item, the extent of which is described in the Schedule of

Quantities, the specifications or elsewhere but the quantity of work of which is not

measured in any units.

Prime Cost (or :

PC item)

A sum fixed by the Engineer and entered in the Schedule of Quantities as the net sum provided to cover the cost of specific goods or materials to be supplied under the contract, or the net sum to be paid by the Contractor to merchants or others for

such articles or materials.1

Provisional

Sum

A sum of money fixed by the Engineer and entered in the Schedule of Quantities to provide for work not defined at the tender stage and includes any allowance

specifically made for unforeseen contingencies.1

Extra Over (or :

EO)

Qualifies an operation (or combination of operations) which is common in a varying degree to a number of other operations and which is scheduled once as "extra over" those other operations in order to avoid a multiplicity of items each reflecting the degree to which the common operations apply. The term "extra over" invariably denoted double measurement, no deduction being made from one on account of the

other.1

10. The units of measurements indicated in the Schedule of Quantities are metric units.

The following abbreviations are used in the Schedule of Quantities:

millimetre mm m = metre km = kilometre km-pass = kilometre-pass m² = square metre m²-pass= square metre-pass = hectare ha

m³ cubic metre

m³-km = cubic metre-kilometre

= litre 1 kilolitre kΙ kilogram kg ton (1 000 kg) t = no number % percentage kW kilowatt PC Sum = prime cost sum

Prov. Sum = provisional sum kPa = kilopascal R/only = Rate only Work day W/day

11. Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letters LI in a separate column or as a prefix or suffix against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of works, is a deviation from the contract. The items marked with the letters 'Ll' are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour-intensive specification in the Scope of Works.

- 12. Where minimum labour intensity is specified by the design the contractor is expected to use their initiative to identify additional activities that can be done labour-intensively in order to comply with the set minimum labour intensity target.
- 13. Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the scope of works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work, which was to be done labour-intensively will not be condoned, and any works so constructed will not be certified for payment.

¹⁾ The standard system of measurement of Civil Engineering Quantities of South Africa published by the South African Institution of Civil Engineers.

²⁾ See definition in sub clause 2.1 of Part 1 of SABS 0120: Format and Contents.

ITEM NO.	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
Α	SABS 1200A	PRELIMINARY AND GENERAL				
		NOTE: Items A.1 and A.2 totals cannot exceed 10% of the total tender amount.				
A.1	8.3	FIXED-CHARGE ITEMS				
	8.3.1	Contractual Requirements				
	8.3.2	Establish Facilities on the Site :	Sum	-		
	8.3.2.1	Facilities for Engineer (SABS 1200AB)				
A.1.1	PSAB8.2.2(a)	a) Office building/s	Sum	-		
	PSAB8.2.2(b)	b) Telephone and Fax	Sum	-		
	PSAB8.2.2(c)	c) Nameboard (1 off)	Sum	-		
	PSAB8.2.2(d)	d) Survey assistants and equipment	Sum	-		
	8.3.2.2	<u>Facilities for Contractor</u>				
A.1.2	PS 8(a)	a) Offices and storage sheds	Sum	-		
A.1.3	PS 8(b)	b) Workshops	Sum	-		
A.1.4	PS 8(c)	c) Site laboratories	Sum	-		
A.1.5	PS 8(f)	d) Living accommodation	Sum	-		
A.1.6	PS 8(d)	e) Ablution and latrine facilities	Sum	-		
A.1.7	PS 8(g)	f) Tools and equipment	Sum	-		
A.1.8	PS 7	g) Water supplies, electric power and communication	Sum	-		
A.1.9	PS 2	h) Access (Subclause 5.8)	Sum	-		
	PS 14	Features Requiring Special Attention				
A.1.10	PS 15.11	Health, Safety and Security	Sum	-		
A.1.11	PS 8(c)	Samples and Certification of Materials	Sum	-		
A.1.12	PSA 8.3.3	Other fixed-charge obligations	Sum	-		
A.1.13	8.3.4	Removal of site establishment	Sum	-		
TOTAL	CARRIED FOR	WARD TO NEXT PAGE				-

SEKHUKHUNE DISTRICT MUNICIPALITY THUKAGOMO EXTENSION WATER SUPPLY INTERVENTION PHASE 5

ITEM NO.	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
A.2	8.4	TIME-RELATED ITEMS				
A.2.1	8.4.1	Contractual Requirements	Sum	-		
	8.4.2	Operate and maintain facilities on the Site:				
	8.4.2.1	Facilities for Engineer (SABS 1200AB)				
A.2.2	PSAB8.2.2(a)	a) Office building/s	Sum	-		
A.2.3	PSAB8.2.2(b)	b) Telephone and Fax	Sum	-		
A.2.4	PSAB8.2.2(c)	c) Nameboards	Sum	-		
A.2.5	PSAB8.2.2(d)	d) Survey assistants and equipment	Sum	-		
	8.3.2.2	Facilities for Contractor				
A.2.6	PS 8(a)	a) Offices and storage sheds	Sum	-		
A.2.7	PS 8(b)	b) Workshops	Sum	-		
A.2.8	PS 8(c)	c) Site laboratories	Sum	-		
A.2.9	PS 8(f)	d) Living accommodation	Sum	-		
A.2.10	PS 8(d)	e) Ablution and latrine facilities	Sum	-		
A.2.11	PS 8(g)	f) Tools and equipment	Sum	-		
A.2.12	PS 7	g) Water supplies, electric power and communication	Sum	-		
A.2.13	PS 2	h) Access (Subclause 5.8)	Sum	-		
	PS 14	Features Requiring Special Attention				
A.2.14	PS 15.11	Health, Safety and Security	Sum	-		
A.2.15	PS 8(c)	Samples and Certification of Materials	Sum	-		
A.2.16	PSA 8.3.3	Other fixed-charge obligations	Sum	-		
A.2.17	8.3.4	Removal of site establishment	Sum	-		
A.2.18	8.4.3	Supervision for duration of Construction	Months	5.00		
TOTAL	CARRIED FOR	WARD TO NEXT PAGE				-

SEKHUKHUNE DISTRICT MUNICIPALITY THUKAGOMO EXTENSION WATER SUPPLY INTERVENTION PHASE 5

ITEM NO.	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
TOTAL E	BROUGHT FO	RWARD		•		
A.2.19	8.4.4.	Company and head office overhead costs for duration of construction	Sum	-		
	8.4.5	Other obligations (Tenderer must specify :)				
A.2.20		a)	Sum	-		
A.2.21		b)	Sum	-		
A.2.22		c)	Sum	-		
A.2.23		d)	Sum	-		
A.3	8.5	PROVISIONAL SUMS				
A.3.1	PSA 8.5(a)1	Community Liaison Officer	P.Sum	5	4,500	22,500
A.3.2	PSA 8.5(a)2	Handling cost and profit in respect of A.3.1	%	22,500		-
A.3.3	PSA 8.5(b)1	Training (CETA Accredited), provision made for Technical skills training & or Life skills/generic skills training as would be identified during construction	P.Sum	1.00	75000.00	75,000
A.3.4	PSA 8.5(b)2	Handling cost and profit in respect of A.3.3	%	75,000		-
A3.5	PSA 8.5(c)1	Refurbishment of sump submersible Pumps at Tukakgomo Ext low lift pump station (Pump house) by a specialist sub-contractor / supplier approved by client.	P.Sum	1.00	85,000	85,000.00
A3.6	PSA 8.5(c)2	Handling cost and profit in respect of A.3.5	%	85,000		-
A3.9	PSA 8.5(d)1	Refurbishment of pumps at Tukakgomo Ext high lift pump station by a specialist sub-contractor / supplier approved by client.	P.Sum	1.00	95,000	95,000.00
A3.10	PSA 8.5(d)2	Handling cost and profit in respect of A.3.9	%	95,000		-
A3.11	PSA 8.5(e)1	Ground investigation for high-yield borehole/odex, drill, test, equip and install Control and Instrumentation atTukakgomo Ext low lift pump station for abstraction supplementation by a specialist sub-contractor / supplier approved by client.	P.Sum	1.00	210,000	210,000
A3.12	PSA 8.5(e)2	Handling cost and profit in respect of A.3.11	%	210,000		-
TOTAL	CARRIED FOR	RWARD TO NEXT PAGE				

ITEM NO.	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
TOTAL E	BROUGHT FO	RWARD				-
A.3 (continu	8.5	PROVISIONAL SUMS (continued)				
A3.13	PSA 8.5(f)1	Repairs on existing rising main to Mapodile reservoir and ground investigation for high-yield borehole, drill, test, equip and install Control and Instrumentation for supply to reservoir by a specialist sub-contractor / supplier approved by client	P.Sum	1.00	300,000	300,000.00
A3.14	PSA 8.5(f)2	Handling cost and profit in respect of A.3.11	%	300,000		-
A.5	8.7	DAY WORKS (Provisional)				
		Dayworks - Labour				
A.5.1		a) Contractor's Representative	hr	-	120.00	Rate Only
A.5.2		b) Qualified Artisan				
		(hr/workday)	hr	-	50.00	Rate Only
A.5.3		c) Foreman, Team-leader (hr/workday)	hr	-	80.00	Rate Only
A.5.4		d) Semi-skilled labourer (hr/workday)	hr	-	30.00	Rate Only
A.5.5		e) Labourer				
		(hr/workday)	hr	-	29.00	Rate Only
		Dayworks - Plant				
A.5.6		Water Tanker (Specify capacity)				
		a)m³ (small)		-	350.00	Rate Only
		b)m³ (large)	hr	-	450.00	Rate Only
A.5.7		Tipper Truck (Specify capacity)				
		c)m³ (small)	hr	-	550.00	Rate Only
		d)m³ (large)	hr	-	650.00	Rate Only
A.5.8		Flat bed truck (Specify capacity)				
		e)Ton (small)	hr	-	550.00	Rate Only
A.5.9		f) LDV	hr	-	200.00	Rate Only
A.5.10		g) 4X4 T.L.B (Tractor Loader Backactor)	hr	-	650.00	Rate Only
A.5.11		h) Compactor: (Specify size)	hr	-	450.00	Rate Only
A.5.12		i) Concrete mixer (Specify dry/wet capacity)	hr	-	450.00	Rate Only
		(m³/)				
A.6 A.6.1	8.8 PS A 8.8.2	TEMPORARY WORKS Accommodation of traffic	Sum	1.00		-
TOTAL	CARRIED FOR	RWARD TO SUMMARY PAGE	l			

SABS 1200 C: SITE CLEARANCE

	1			T			SITE CLEARANCE
ITEM NO.	LI	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
C.1			SITE CLEARANCE				
C.1.1	LI	PSC 8.2.1	Clear and grub (2 m wide strip)	ha	1.0		-
C.1.2	LI	8.2.2	Remove & grub large trees & tree stumps of girth				
C.1.2.1			over 1 m and up to and including 2 m	No.	-		Rate Only
C.1.2.2			over 2 m and up to and including 3 m	No.	-		Rate Only
C.1.2.3	LI	8.2.4	Reclear surfaces (only on instruction from the Engineer)	m	-		Rate Only
C.1.2.4	LI	8.2.5	Take down existing fences	m	-		Rate Only
C.1.2.5		8.2.9	Transport materials and debris to unspecified sites and dump (Provisional)	m³.km	1245		-
C.1.2.6	LI	8.2.10	Removal of topsoil to nominal depth of 150mm, stockpile and maintain	m³	-		Rate Only
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SCHEDULE LB SABS 1200 LB : BEDDING

	-			L			
ITEM NO.	LI	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
LB		SABS 1200LB	BEDDING				
LB.1	LI	8.2.1	Provision of bedding from trench excavation				
		8.2.1	Available from trench excavations				
LB.1.1			a) Selected granular material	m³	250		
LB.1.1			b) Selected fill material	m³	155		
LB.2		8.2.2	Imported from				
	LI	8.2.2.1	Other necessary excavations				
LB.2.1			a) Selected granular material	m³	25		Rate Only
LB.2.2			b) Selected fill blanket	m³	100		Rate Only
	LI	8.2.2.2	Borrow pits (provisional)				
LB.2.3			a) Selected granular material	m³			Rate Only
LB.2.4			b) Selected fill material	m³	-		Rate Only
		8.2.2.3	Commercial sources (provisional)				
LB.2.5			a) Selected granular material	m³	50		
LB.2.6			b) Selected fill material	m³	147		
LB.3	LI	8.2.3	Concrete bedding Class 20/19 (Provisional)	m³	-		Rate Only
LB.4		PSLB 8.2.5	Overhaul of material for bedding, cradle & selected fill blanket in excess of 5km free haul				
LB.4.1			a) Selected granular material	m³.km	-		Rate Only
LB.4.2			b) Selected fill material	m³.km	-		Rate Only
LB.5	LI	8.2.8	Compaction of trench bottom	m²	2230		
LB.6	LI		Stabilized bedding				
			Extra over LB.1 & 2 for material stabilized with 4% cement where directed by the Engineer	m³	-		Rate Only
TOTAL CARR	EIED I	FORWARE	O TO SUMMARY PAGE				

SCHEDULE DK SABS 1200 DK : GABIONS AND PITCHING

ITEM NO.	LI	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
DK		SABS 1200DK	GABIONS AND PITCHING				
DK.1	LI	8.2.1	Surface preparation for bedding of gabions:				
		8.2.1	.01 Cavities filled with approved excavated material or rock	m²	180		
LB.2		8.2.2	Gabions:				
DK.2.1	LI	8.2.2.1	.01 Gabion boxes of galvanized wire:				
			.01 50 mm x 50 mm mesh, 3,0 mm dia wire, 2,0 m x 1,0 m x 1,0 m boxes	m³	25		
			.02 50 mm x 50 mm mesh, 3,0 mm dia wire, 3,0 m x 1,0 m x 1,0 m boxes	m³	25		
DK.2.2	LI	8.2.2.2	.01 Gabion mattresses of galvanized wire, up to 0,3 m deep:				
			.01 50 mm x 50 mm mesh, 3,0 mm dia wire, 3,0 m x 3,0 m x 0,3 m mattress	m³	25		
DK.2.3	LI	PSDK 8.2.5	Pitching:				
			.02 Grouted pitching				
			.01 Light pitching, 150 mm thick	m³	110		
DK.2.4		8.2.8	Armorflex 180 lining and edge beams:				
			.01 Lining including soil preparation	m²	100		
	LI	8.2.8	.02 Edge beams, size 400 mm wide x 250 mm deep including excavation, formwork, finishing, etc.	m²	24		

SEKHUKHUNE DISTRICT MUNICIPALITY THUKAGOMO EXTENSION WATER SUPPLY INTERVENTION PHASE 5

SABS 1200 DB : EARTHWORKS (PIPE TRENCHES)

ITEM NO.	LI	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
DB		SABS 1200DB	EARTHWORKS : PIPE TRENCHES				
DB.1		DB 8.3.2	Excavation				
		PSDB 8.3.2(a)	Excavation in all materials for trenches on specified sites, backfill, compact and dispose of surplus materials within 5 km free haul distance for pipes:				
DB.1.1			Up to 500mm ø in 1050mm trench width for depths:				
	LI		a) Exceeding 0,0m up to 1,5m	m	2475		
	LI		b) Exceeding 1,5m up to 3,0m (Provisional)	m	-		Rate Only
DB.1.2		PSDB 8.3.2(b)	Extra-over item DB.1.1 & DB.1.2 for:				
			a) Hard rock excavation	m³	670		
DB.1.3	LI	PSDB 8.3.2(c)	Excavate and dispose unsuitable material from trench bottom	m³	670		
DB.1.4	LI	PSDB 8.3.2(d)	Excavate by hand to expose existing services	m³	70		
DB.2		8.3.3	Excavation Ancillaries				
DB.2.1		8.3.3.1	Make up deficiency in backfill material				
	LI		a) from other necessary excavations on site	m³	520		
	LI		b) by importation from designated borrow pits	m³	-		Rate Only
	LI		c) by importation from commercial or off site sources selected by the contractor	m³	150		
DB.2.2		PSDB 8.3.3.3	Compaction in Road Reserve	m³	-		Rate Only
DB.2.3	LI		Extra over Item DB.2.1 and DB.2.2 for backfill stabilised with 4 % cement where instructed	m³	60		
DB.3			Compaction tests				
DB.3.1	LI		Test compaction density for each layer placed and compacted as requested by Engineer	No.	-		Rate Only
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SEKHUKHUNE DISTRICT MUNICIPALITY THUKAGOMO EXTENSION WATER SUPPLY INTERVENTION PHASE 5

SABS 1200 DB : EARTHWORKS (PIPE TRENCHES)

ITEM NO.	LI	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
TOTAL BR	OUG		ARD				
DB.4		8.3.4	Particular Items				
DB.4.1	LI	PSDB 8.3.4(a)	Shore trench opposite structure or services	m	-		Rate Only
DB.4.2	LI	PSDB 8.3.4(b)	Temporary works: Control water inflow	m	-		Rate Only
DB.5		8.3.5	Existing Services				
		PSDB 8.3.5(a)	Services that intersect the trench (PROVISIONAL)				
DB.5.1	LI		Water mains up to 400 mm diam.	No.	2		
DB.5.2	LI		Telephone cables / Low voltage cables	No.	2		
DB.5.3	LI		Escom electricity over-head cables	No.	2		
		PSDB 8.3.5(b)	Services that adjoin a trench				
DB.5.4	LI		Water mains up to 400 mm diam.	m	-		Rate Only
DB.5.5	LI		Telephone cables / Low voltage cables	m	-		Rate Only
DB.5.6	LI		Escom electricity over-head cables	m	-		Rate Only
DB.6		8.3.6	Finishings				
DB.6.1	LI	PSDB 8.3.6.1	Reinstate road surfaces complete with all courses	m²	-		Rate Only
DB.6.2	LI	8.3.6.1(c)	Asphalt of thickness 50mm in road way	m²	-		Rate Only
			ARD TO SUMMARY PAGE				

SCHEDULE L SABS 1200 L : MEDIUM PRESSURE PIPELINES

ITEM	LI	PMT.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
NO.		SABS 1200L	MEDIUM PRESSURE PIPELINES				
L.1	LI	8.2.1	uPVC Pipes Supply, handle, lay, & bed, complete with couplings, test, and disinfect pipes as follows:				
L.1.1			75 mm uPVC, Class 9	m	212.5		
L.1.2			110 mm uPVC, Class 9	m	52.5		
L.1.3			160 mm uPVC, Class 9	m	900		
L.1.4			200 mm uPVC, Class 16	m	1310		
L.2			Couplings, Fittings and Specials				
		8.2.2	Extra over 8.2.1 for the supply, laying & bedding of specials complete with couplings (Class 16)				
L.2.1			uPVC PRESSURE BENDS				
L.2.1.5			90mm 11¼°	No.	1		
L.2.1.6			90mm 22½°	No.	1		
L.2.1.7			90mm 45°	No.	1		
L.2.1.8			90mm 90°	No.	2		
L.2.1.9			110mm 11¼°	No.	1		
L.2.1.10			110mm 22½°	No.	1		
L.2.1.11			110mm 45°	No.	1		
L.2.1.12			110mm 90°	No.	1		
L.2.1.13			160mm 11¼°	No.	2		
L.2.1.14			160mm 22½°	No.	2		
L.2.1.15			160mm 45°	No.	1		
L.2.1.16			160mm 90°	No.	1		
L.2.1.17			200mm 11¼°	No.	1		
L.2.1.18			200mm 22½°	No.	1		
L.2.1.19			200mm 45°	No.	2		
L.2.1.20			200mm 90°	No.	2		
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SCHEDULE L SABS 1200 L : MEDIUM PRESSURE PIPELINES

ITEM NO.	LI	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
TOTAL BROU	GHT		D	•			
L.2.2			uPVC CROSSES				
L.2.2.1			75 x 75mm	No.	1		
L.2.2.2			90 x 75mm	No.	-		Rate Only
L.2.2.3			110 x 75mm	No.	1		
L.2.3			uPVC REDUCERS FOR uPVC PIPES				
L.2.3.1			90 x 75mm	No.	1		
L.2.3.2			160 x 90mm	No.	1		Rate Only
L.2.3.3			160 x 110mm	No.	1		
L.2.4			uPVC EQUAL TEE				
L.2.4.1			75mm	No.	1		
L.2.4.2			90mm	No.	1		
L.2.4.3			110mm	No.	1		
L.2.5			uPVC REDUCING TEE				
L.2.5.1			90 x 75mm branch	No.	3		
L.2.5.2			110 x 90mm branch	No.	2		
L.2.5.3			160 x 75mm branch	No.	1		
L.2.6			Air Valves (on 200mm Upvc raising main pipeline)				
L.2.6.1			DN50 variant air valve type 050lx16 complete with flanged 80MM flanged galvanised steel air valve chamber	No.	6		
L.2.6.2			200mm Cast iron hydrant tee socketed to suit pvc pressure pipe	No.	6		
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SCHEDULE L SABS 1200 L : MEDIUM PRESSURE PIPELINES

ITEM NO.	LI	PMT. REFER.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
TOTAL BROU	JGHT		D				
L.3			Ancillaries				
L.3.1		PSL8.2.16	Cut into and connect to existing mains Cut into and connect to existing mains as shown on the layout drawings or identified on site	No.	3		
L.3.2		PSL8.2.17	Soilcrete encasing Supply and install soilcrete as per detail drawing	m³	-		Rate Only
L.3.3			Pipeline markers and survey benchmarks Supply and install pre-cast pipeline markers and survey benchmarks as per detail drawing:				
L.3.3.1			Pipeline markers	No.	-		Rate Only
L.3.4	LI		Protection of flexible couplings and flanges				
		PG 9.7	Extra over item 8.2.1 above for protection of underground flanged couplings with petroleum mastic and tape wrapping	No.	34		
L.3.5	LI		Anchor / Thrust Blocks, Pedestals and base slabs / aprons				
		8.2.11	20/19MPa concrete to thrust blocks and the like, including shuttering. Excavation measured elsewhere.	m³	55		
L.3.6	LI		Concrete casing				
			25MPa concrete bedding and encasing to all diameter of pipes, including shuttering and blinding. Excavation, straps and reinforcing measured elsewhere.	m³	-		Rate Only
L.3.7	LI		Metered House Connections				
L.3.7.1	LI		Single House Connections complete with fittings, water meter,couplings, joints and tap	No.	50		
L.3.7.2	LI		Double House Connections complete with fittings, water meter, couplings, joints and tap	No.	135		
L.3.8			Supply and install steel manifold for connection at the				
			the steel tank (to convert the outlet pipe into two parts)	No.	1		
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SEKHUKHUNE DISTRICT MUNICIPALITY THUKAGOMO EXTENSION WATER SUPPLY INTERVENTION PHASE 5

SUMMARY OF SCHEDULES

<u>DESCRIPTION</u>	<u>AMOUNT</u>
SABS 1200 A: PRELIMINARY AND GENERAL	
SABS 1200 C: SITE CLEARANCE	
SABS 1200 DB : EARTHWORKS (PIPE TRENCHES)	
SABS 1200 L : MEDIUM PRESSURE PIPELINES	
SABS 1200 LB : BEDDING	
SABS 1200 DK : GABIONS AND PITCHING	
(Schedule A+C+DB+L+LB)	-
ICE: Total "A" for contingencies to be used at the discretion n whole or in part if not required. (Sub Total "A" * 10%)	
(Sub Total "A" + Contingency Allowance)	-
(Sub Total "B" * 15%)	-
(Sub Total "B" + 15% VAT, Carried forward to Form of Tender)	-
 FNDERER	DATE
	SABS 1200 A: PRELIMINARY AND GENERAL SABS 1200 C: SITE CLEARANCE SABS 1200 DB: EARTHWORKS (PIPE TRENCHES) SABS 1200 L: MEDIUM PRESSURE PIPELINES SABS 1200 LB: BEDDING SABS 1200 DK: GABIONS AND PITCHING (Schedule A+C+DB+L+LB) ICE: Total "A" for contingencies to be used at the discretion in whole or in part if not required. (Sub Total "A" * 10%) (Sub Total "A" + Contingency Allowance) (Sub Total "B" * 15%) (Sub Total "B" * 15%)

DAY WORK LIST

GENERAL

Contractors must complete this list, which will be used to assess the value of work that the Employer's Agent instructs in writing to be done on a day work basis, all in agreement with clause 6.5 of the General Conditions of Contract for Construction Works, Third Edition, Second Print, 2015 and coupled Special Conditions of Contract. All the rates are fixed and shall be binding till the issuing of the final certificate, except for statutory increases that are announced from time to time.

LABOUR COSTS

Rates for labour as listed below shall include all the allowances as specified in the General Conditions of Contract for Construction Works, Third Edition, Second Print, 2015 and Special Conditions of Contract. The extra allowance, applicable on Labour costs listed below, is given in the Contract Data and must not be taken into account in this list.

Overtime costs incurred by this contract shall be paid in the same proportion as the amounts actually paid to the employees.

DESCRIPTION	UNIT	RATE	
Unschooled labour	Hour	R	
Half- Schooled labour	Hour	R	
Pipe layer	Hour	R	
Ganger	Hour	R	
Foreman / Section leader	Hour	R	
Brick layer	Hour	R	
Plumber	Hour	R	

EQUIPMENT COSTS

Full comprehensive hourly rates, which also include the cost of operators, must be listed below. Rates must also include all the costs of consumable items, maintenance, depreciation, tools, and all other coincidences that shall be necessary to operate the equipment for the purpose it is designed for. The rates must also include all the overhead costs, profits, site supervision, insurance, holidays with payment, travelling costs (or travelling allowances) and residence allowances of operators and any other allowances that are applicable on equipment. The Tenderer must list under each heading the make and specification of the equipment available.

	DESCRIPTION	UNIT	RATE
1.	TLB		
		Hour	
		Hour	
		Hour	
2.	Bakkies (LDV)		
		Hour	
		Hour	
		Hour	
		Hour	
3.	Trucks (m³ specified)		
		Hour	
		Hour	
		Hour	
		Hour	
4.	Tractor & Trailer		
		Hour	
		Hour	
		Hour	
5.	Compressor		
		Hour	
		Hour	
		Hour	
		Hour	

	DESCRIPTION	UNIT	RATE
6.	Water pumps		
	75mm	Hour	
	100mm	Hour	
	150mm	Hour	
7.	Compactors		
	Plate	Hour	
		Hour	
		Hour	
		Hour	
8.	Other equipment		
		Hour	
		Hour	
		Hour	
		Hour	
		Hour	
		Hour	
		Hour	
		Hour	
		Hour	
		Hour	

C4.1 Scope of Work

4.1.1 Employer's objectives

The employer's objectives are to deliver public infrastructure using labour intensive method in accordance with EPWP Guidelines, whereby the local community benefit throughout the entire project and also in doing so provide work place training opportunities to learners who have a Learnership Agreement with the Construction Education and Training Authority.

- (1) Labour-Intensive works
 Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of the scope of works
- (2) Contractors shall engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/Supervisors at NQF "National Certificate: Supervision of Civil Engineering Construction Processes" and Site Agent/Manager at NQF level 5 "Manage labour-intensive Construction Processes" or equivalent QCTO qualifications.

The employer's objective is to improve the existing services, socio economic development of the community, satisfy the needs of the community, and upgrading the system based on future socio-economic developments.

4.1.2 Overview of the works

On this Contract the aim is to provide a basic level of services, with regards to improve aspects of the current conditions. The Contract will entail a provision of the services as listed in the Project Specification. Also with regards to EPWP requirements, labour-intensive works comprise the activities described in SANS 1921-5, Earthworks activities which are to be performed by hand, and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this Scope of Work. Time is of the essence for this contract. The Tenderer shall state the time in calendar months required by him/her to complete the Works. Tenderers offering early completion dates will generally be more favourably received, other things being equal.

The following main items measured in the schedule of quantities:

Pipe network

<u>Material</u>	<u>Diameter</u>	<u>Class</u>	Length (m)
uPVC to SANS 966	<u>200</u>	<u>16</u>	<u>1310</u>
uPVC to SANS 966	<u>160</u>	9	900
uPVC to SANS 966	110	9	52.5
uPVC to SANS 966	75	9	212.5
Total			2475

Air valves - 6 No.
 Double House Connections - 50 No.
 Single House Connections - 135 No.
 Steel manifold for steel tank - 1 No

The 200mm uPVC class 16 pipeline will be installed on the rising main to Mapodile and the 160mm uPVC class 9 will be installed from Tukakgomo Ext steel tank to supply the north-western households of the village. The balance is intended for over and above reticulation sections within Tukakgomo Ext.

The following items will form part of the scope of works and will be performed by specialist subcontractors:

- Ground investigation for high-yield borehole/odex, drill, test, equip and install control and instrumentation at Tukakgomo Ext low lift pump station for abstraction supplementation,
- Refurbishment of sump submersible Pumps at Tukakgomo Ext low lift pump station,
- Refurbishment of Pumps at Tukakgomo Ext high lift pump station (Booster pump house)

• Repairs on the existing rising main to Mapodile reservoir and ground investigation for high-yield borehole, drill, test, equip and install control and instrumentation for supply to reservoir.

4.1.3 Labour-Intensive Works

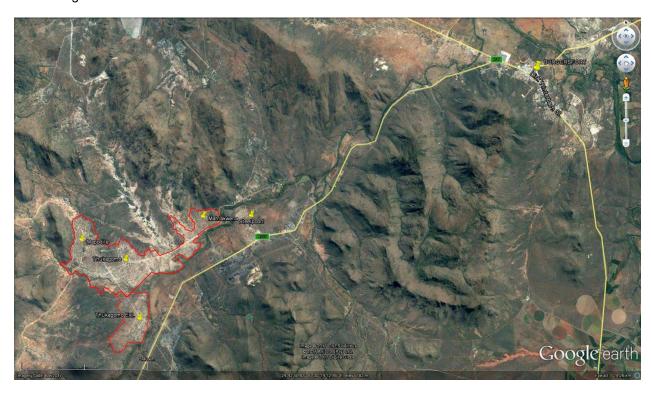
All the relevant tasks / works shall be constructed using Labour-Intensive Construction Methods only. This shall also include intermediate tasks / works within the above-mentioned items which could be done using Labour-Intensive Construction Method, **NB** although not indicated in the BOQ it will be required.

4.1.4 Location of the works

The project area is situated within the boundaries of Tukakgomo Extension village.

Coordinates are as follows:

Latitude : 24° 45′ 52.53″ Longitude : 30° 09′ 20.80″



4.1.5 Temporary works

The Contractor shall provide, erect, maintain and remove on completion of the Contract, ample temporary offices and sheds for the proper storage of perishable materials and for the use of his workmen.

C4.2 Drawing Descriptions

The following drawings are applicable to the contract:

4.2.1 Key plans

All key plans for this type of project are included in the tender document as "Part C.8 Drawings".

4.2.2 Typical details

All typical details for this type of project are included in the tender document as "Part C.8 Drawings".

4.2.3 Civil engineering drawings

The drawings used for setting up the Bills of Quantities are as indicated above in paragraph 4.2.1 and 4.2.2.

C4.3 Procurement

3.4.1 Preferential procurement procedures

The works shall be executed in accordance with the conditions attached to preferences granted in accordance with the referencing schedule.

3.4.2 Scope of mandatory subcontract work

The following portions of the works shall be subcontracted to CIDB registered contractors in accordance with the subcontracting procedures described hereunder:

- Ground investigation for high-yield borehole/odex, drill, test, equip and install control and instrumentation at Tukakgomo Ext low lift pump station for abstraction supplementation,
- Refurbishment of sump submersible Pumps at Tukakgomo Ext low lift pump station,
- Refurbishment of Pumps at Tukakgomo Ext high lift pump station (Booster pump house)
- Repairs on the existing rising main to Mapodile reservoir and ground investigation for high-yield borehole, drill, test, equip and install control and instrumentation for supply to reservoir

Competitive Tenders shall be invited in respect of each of the above portions of the works in accordance with the relevant provisions of the latest edition of the CIDB Standard for Uniformity in Construction Procurement. The Contract Data in the associated procurement documents shall be based on the use of General Conditions of Contract 2015 third edition.

The Employer or Employer's Agent together with the Contractor shall evaluate the Tenders received in accordance with the provisions of the Standard Conditions of Tender contained in Annex C of Standard for Uniformity in Construction Procurement. The evaluation panel shall comprise equal representatives from the Employer and from the Contractor.

The Contractor shall without delay enter into contract with the successful Tendering subcontractor based on their accepted Tender submission. The Contractor shall remain responsible for providing the subcontracted portion of the works as if the work had not been subcontracted.

C4.4 Construction

4.4.1 Setting out of Works (Sub clause 5.1.1)

The Employer shall arrange for the Contractor to be given sufficient reference pegs from which to work. The value of all bench marks shall be given in writing. The Contractor shall bear the cost of any re-survey and the cost of re-establishment or checking of any pegs, bench marks, etc. disturbed, destroyed or interfered with in any way and the cost of any survey to prove the accuracy of the setting out after any disturbance of or interference with any peg or bench mark. All surveys or resurvey shall be by Surveyors appointed by the Employer."

4.4.2 Applicable national and international standards

SANS 1200

4.4.3 Particular / generic specifications

The relevant provisions of the SANS 1200 (1981edition) shall apply to the contract with the following amendments:

1115 Replace clause with the following:

The general conditions of contract are the General Conditions of Contract for Construction Works as published by the South African Institution of Civil Engineering read in conjunction with the Contract Data.

1202 Replace "Clause 15" with "Clause 12".

1206 Replace the first sentence with the following:

The contractor shall comply with all legal provisions in regard to surveying and setting out work.

4.4.4 EPWP labour intensive specification

GENERIC LABOUR-INTENSIVE SPECIFICATION

The Generic Labour-intensive specification below is the same as SANS 1921-5, Construction and management requirement for works contracts- Part 5: Earth works activities which are to be performed by hand and should be included in the scope of works without amendment or modification as set out below.

SCOPE

This specification establishes general requirements for activities which are to be executed by hand involving the following:

- a) trenches having a depth of less than 1.5 metres (in soft workable materials using hand tools)
- b) Bedding, pipelaying, blanket and backfilling for pipelines
- c) House connections complete from excavation, bedding, pipelaying, blanket, connection to pipelines installation of all equipment and backfilling
- d) Intermediate works of the following items where Labour component can be used (Engineer to advice accordingly):
 - Upgrading of the Water extraction point(s) at the low lift pump station,
 - Installation of Odex Borehole system, control and telemetry for the low lift pump station
 - Repairs works on the existing rising main to Mapodile reservoir

PRECEDENCE

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail.

HAND EXCAVATEABLE MATERIAL

Hand excavateable material is material:

- a) Granular materials:
 - i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dense, or dense; or
 - ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;
- b) cohesive materials:
 - i) whose consistency when profiled may in terms of table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
 - ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note:

- 1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.
- A dynamic cone penetrometer is an instrument used to measure the insitu shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of 60° with respect to the horizontal) into the material being used.

Table 1: Consistency of materials when profiled

GRANULAR MA	TERIALS	COHESIVE MATERIALS		
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION	
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.	
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure.	
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.	
Dense	Very high resistance to penetration by the sharp end of geological pick; requires many blows for excavation.	Stiff	Can be indented by thumbnail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.	
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumbnail with difficulty; slight indentation produced by blow of a geological pick point.	

TRENCH EXCAVATION

All hand excavateable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

COMPACTION OF BACKFILLING TO TRENCHES (AREAS NOT SUBJECT TO TRAFFIC)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers

- a) to 90% Proctor density;
- b) such that in excess of 5 blows of a dynamic come penetrometer (DCP) is required to penetrate 100 mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or
- c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

EXCAVATION

All hand excavateable material including topsoil classified as hand excavateable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand.

The excavation of any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

CLEARING AND GRUBBING

Grass and small bushes shall be cleared by hand.

SHAPING

All shaping shall be undertaken by hand.

LOADING

All loading shall be done by hand, regardless of the method of haulage.

HAUL

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150 m.

Table 1: Skills programme for supervisory and management staff

Personnel	NQF	Unit standard titles	Skills programme
	level		description
Team leader /	2	Apply Labour Intensive Construction Systems and	This unit standard must
supervisor		Techniques to Work Activities	be completed, and
		Use Labour Intensive Construction Methods to	
		Construct and Maintain the Pump Station	
		Use Labour Intensive Construction Methods to	any one of these 3 unit
		Construct and Maintain Water and Sanitation	├ standards
		Services	
		Use Labour Intensive Construction Methods to	
		Construct, Repair and Maintain Structures	P
Foreman/	4	Implement labour Intensive Construction Systems	This unit standard must
supervisor		and Techniques	be completed, and
		Use Labour Intensive Construction Methods to	
		Construct and Maintain the Pump Station	
		Use Labour Intensive Construction Methods to	any one of these 3 unit
		Construct and Maintain Water and Sanitation	│ ∕ standards
		Services	
		Use Labour Intensive Construction Methods	
		to Construct, Repair and Maintain Structures	
Site Agent /	5	Manage Labour Intensive Construction Processes	Skills Programme
Manager (i.e. the			against this single unit
contractor's most			standard
senior			
representative that			
is resident on the			
site)			

4.4.4.2 Employment of unskilled and semi-skilled workers in labour-intensive works

4.4.4.2.1 Requirements for the sourcing and engagement of labour.

- 4.4.4.2.1.1 Unskilled and semi-skilled labour required for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.
- 4.4.4.2.1.2 The rate of pay set for the SPWP is R 185.00 per task or per day.
- 4.4.4.2.1.3 Tasks established by the contractor must be such that:
 - a) the average worker completes 5 tasks per week in 40 hours or less; and
 - b) the weakest worker completes 5 tasks per week in 55 hours or less.
- 4.4.4.2.1.4 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 3.4.4.2.1.3.
- 4.4.4.2.1.5 The Contractor shall, through all available community structures, inform the local community of the labour-intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:
 - a) where the head of the household has less than a primary school education;
 - b) that have less than one full time person earning an income;
 - c) where subsistence agriculture is the source of income.
 - d) those who are not in receipt of any social security pension income

- 4.4.4.2.1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:
 - a) 55 % women;
 - b) 55% youth who are between the ages of 18 and 25; and
 - c) 2% on persons with disabilities.

4.4.4.2.2 Specific provisions pertaining to SANS 1914-5

4.4.4.2.2.1 Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

4.4.4.2.2.2 Contract participation goals

- 4.4.4.2.2.2.1 There is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.
- 4.4.2.2.2.2 The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

4.4.4.2.2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

4.4.4.2.2.2.4 Variations to SANS 1914-5

4.4.4.2.2.2.4.1 The definition for net amount shall be amended as follows:

Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.

4.4.2.2.2.4.2 The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

4.4.4.2.2.5 Training of targeted labour

- 4.4.4.2.2.5.1 The contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.
- 4.4.4.2.2.5.2 The cost of the formal training of targeted labour, will be funded by the provincial office of the Department of Labour. This training should take place as close to the project site as practically possible. The contractor must access this training by informing the relevant provincial office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required. The employer must be furnished with a copy of this request.
- 4.4.4.2.2.5.3 A copy of this training request made by the contractor to the DOL provincial office must also be faxed to the EPWP Training Director in the Department of Public Works, Fax Number 012 328 6820 or email cinderella.makunike@dpw.gov.za Tel: 083 677 4026.
- 4.4.4.2.2.5.4 The contractor shall be responsible for scheduling the training of workers and shall take all reasonable steps to ensure that each beneficiary is provided with a minimum of six (6) days of formal training if he/she is employed for 3 months or less and a minimum of ten (10) days if he she is employed for 4 months or more.
- 4.4.4.2.2.5.5 The contractor shall do nothing to dissuade targeted labour from participating in training programmes.

- 4.2.2.5.4 An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of 4.4.2.2.2.5.4 above.
- 4.4.4.2.2.2.5.5 Proof of compliance with the requirements of 4.4.4.2.2.2.5.2 to 4.4.4.2.2.2.5.6 must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

4.4.4.3.1 Contractor's default in payment to Labourers and Employees

- (a) Any dispute between the Contractor and labourers, regarding delayed payment or default in payment of fair wages, if not resolved immediately may compel the Employer to intervene.
- (b) The Employer may, upon the Contractor defaulting payment, pay the moneys due to the workers not honoured in time, out of any moneys due or which may become due to the Contractor under the Contract.

4.4.4.3.2 Provision of Hand tools

(a) The Contractor shall provide his labour force with hand tools of adequate quality, sufficient in numbers and make the necessary provisions to maintain the tools in good and safe working conditions

4.4.4.3.3 Reporting

The Contractor shall submit monthly returns/reports as specified below:

- (a) Signed Muster rolls/pay sheets of temporary workers and permanent staff detailing the number, category, gender, rate of pay and daily attendance.
- (b) Copies of identity documents of workers
- (c) Number of persons who have attended training including nature and duration of training provided
- (d) Assets created, rehabilitated or maintained in accordance with indicators in the EPWP M&E framework.
- (e) Plant utilization returns
- (f) Progress report detailing production output compared to the programme of works

4.4.5 Plant and equipment

Add Sub clause 4.4.5: Restriction on the use of plant.

"Except for the type of plant, and to the extent permitted in terms of the project specification or approved by the Engineer, in writing, the Contractor shall use only hand tools and equipment in the construction of the Works, or portion(s) of the Works, that are required in terms of the project specification to be constructed using labour intensive methods.

Failure by the Contractor to adhere to this clause will put him in breach of contract. The provisions contained in this contract with regard to labour content and labour-intensive construction, are binding, and will be enforced accordingly."

The plant and equipment used on the site shall not be inferior to that described in the Schedule of Plant and Equipment.

C4.5 Management

4.5.1 Applicable SANS 1921 standards

The following parts of SANS 1921 Construction works standards and associated specification data are applicable to the works:

- 1) SANS 1921-1:2004
- 2) SANS 1921-2:2004
- 3) SANS 1921-6:2004

The abovementioned South African National Standards make several references to the Specification Data for data, provisions and variations that make these standards applicable to this contract. The Specification Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and these standards.

Each item of Specification Data given below is cross-referenced to the clause in the standard to which it mainly applies.

The associated Specification Data is as follows:

	ring and construction works
Clause	Specification data
Essentia	l data
4.1.7	There are no requirements for drawings, information and calculations for which the contractor is responsible
4.2.1	The responsibility strategy assigned to the contractor for the works is A.
4.3.1	The planning, programme and method statements are to comply with the following: format of programme, critical path activities and their dependencies, frequency of updating,
4.3.3	The notice period for inspection is 5 Days
4.7.3	The over break allowances for blasting are provided for in the scope of work.
4.9.3	The trees and shrubs which are not to be disturbed are identified in the scope of work.
4.12.2	The samples of materials, workmanship and finishes that the contractor is to provide and deliver to the employer are:
	1)concrete works 2) pressure testing results done.
4.14.3	The office accommodation, equipment, accommodation for site meetings and other facilities for use by the employer and his agents are:
	1) Site office which shall be used for site meetings and for the contractor's use. Such an office shall comprise a minimum of 20m² in area and 3 m high, be ventilated, have good lamination, must be reasonably sound proof, and have a hard floor construction. It shall be furnished with a desk on which drawings can be rolled open and on which there is sufficient writing space and sufficient temporary chairs or benches to accommodate all persons present at site meetings.
4.14.5	The Contractor is required to provide latrine and ablution facilities.
4.14.6	The requirements for the provision and erection of separate sign boards for consultants and subcontractors are:
	1) The boards must comply with the official standard type signboard of the Employer and be at least 2750 x 1800 mm high.
	2) The boards must be constructed with a firm flat exposed face using suitable material of firm construction, painted and lettered according to the standard drawings available from the Employer on request and mounted on sturdy pipe-standards at a height of 1800 mm above natural ground level.
4.17.1	The requirements for the termination, diversion or maintenance of existing services are: 1) Water 2) Electricity 3) Sanitation
4.17.3	Services which are known to exist on the site are: 1) Water 2) Sanitation 3) Electricity

Additional clauses

1 Site meetings and procedures

The Employer's Representative and the Contractor shall hold meetings relating to the progress of the works at regular intervals and at other such times as may be necessary. The Contractor shall attend all site meetings and shall ensure that all persons under his jurisdiction are notified timeously of all site meetings should the Employer's Representative require their attendance at such meetings.

The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site instruction book, a complete set of contract working drawings and a copy of the procurement document and make these available at all reasonable times to all persons concerned with the contract.

2 Water

The Contractor is to provide, and remove and make good upon completion, all the necessary temporary plumbing connections and purchase water from the local authority for the works at his own cost.

3 Electricity

The Contractor is to provide, and remove and make good upon completion, all the necessary temporary electrical connections and installations and purchase electricity form the local authority / ESKOM for the works at his own cost.

4.5.2 Particular / generic specifications

The management of the site shall be in accordance with the provisions of the South African National Standard (SANS 1200) 1200 A, obtainable from the South African Institution of Civil Engineering.

4.5.3 Recording of weather

The Contractor shall erect an effective rainfall gauge on the site and record the daily rainfall figures in a book. Such book shall be handed to the employer's representative for his signature no later than 12 days after rain that is considered to justify an extension of time occurs.

4.5.4 Unauthorised persons

The Contractor shall keep unauthorized persons from the works at all times Under no circumstances may any person except guards be allowed to sleep on the building site.

4.5.5 Management meetings

Site meetings will be held on monthly basis. The following parties are required to attend these meetings: The Employer's Representative, the Engineer and/or Representative, the Contractor and/or Representative, the Community Liaison Officer, the Health and Safety Officer and all members of the Project Steering Committee.

4.5.6 Forms for contract administration

These forms will be issued to the Contractor as required.

4.5.7 Electronic payments

Proof of all electronic payments must on request be supplied to the Employer.

4.5.8 Daily records

All accidents and incidents shall be recorded daily in a site diary. Apart from the site diary the Contractor shall provide a site instruction notebook for use by the Engineer. The notebook shall be signed by both the Engineer and the Contractor whenever a site instruction is issued by the Engineer.

4.5.9 Payment certificates

Contractor must submit claims for the work done. All claims are subjected to verification by the Engineer.

4.5.10 Permits

Contractor to ensure that no unauthorised persons are permitted to site

4.5.11 Proof of compliance with the law

Contractor to submit copies of the CIDB Registration and the Company Registration Certificates

C5. Project Specification

SCOPE

This project specification is set out in two parts. Portion 1 cover a general description of the project, the facilities available, and the requirements to be met. Portion 2 covers variations and additions to standardised or particular specifications that are applicable to the contract.

The numbering method in portion 2 of this project specification deviates as follows from the method suggested in Code of Practice SANS 1200.

Each clause with the prefix PS shall refer to the congruent clause in the appropriate section of the standardised or particular specification. Such clause shall either substitute, or supplement, or amend the clause with the same number. Where there is no such congruent clause in the standardised or particular specification, the PS clause shall be a new clause in the project specification. Any clause that is referred to in the standardised specification will also include the appropriate project specification

PROJECT SPECIFICATION

PORTION 1: THE WORKS

PS 1 GENERAL DESCRIPTION OF WORKS

On this Contract the aim is to provide a basic level of services, with regards to improve aspects of the current conditions. The Contract will entail a provision of the services as listed in the Project Specification. Also with regards to EPWP requirements, labour-intensive works comprise the activities described in SANS 1921-5, Earthworks activities which are to be performed by hand, and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this Scope of Work. Time is of the essence for this contract. The Tenderer shall state the time in calendar months required by him/her to complete the Works. Tenderers offering early completion dates will generally be more favourably received, other things being equal.

The following main items measured in the schedule of quantities:

Pipe network

<u>Material</u>	<u>Diameter</u>	<u>Class</u>	Length (m)
uPVC to SANS 966	<u>200</u>	<u>16</u>	<u>1310</u>
uPVC to SANS 966	<u>160</u>	9	900
uPVC to SANS 966	110	9	52.5
uPVC to SANS 966	75	9	212.5
Total			2475

Air valves - 6 No.
 Double House Connections - 50 No.
 Single House Connections - 135 No.
 Steel manifold for steel tank - 1 No

The 200mm uPVC class 16 pipeline will be installed on the rising main to Mapodile and the 160mm uPVC class 9 will be installed from Tukakgomo Ext steel tank to supply the north-western households of the village. The balance is intended for over and above reticulation sections within Tukakgomo Ext.

The following items will form part of the scope of works and will be performed by specialist subcontractors:

- Ground investigation for high-yield borehole/odex, drill, test, equip and install control and instrumentation at Tukakgomo Ext low lift pump station for abstraction supplementation,
- Refurbishment of sump submersible Pumps at Tukakgomo Ext low lift pump station,
- Refurbishment of Pumps at Tukakgomo Ext high lift pump station (Booster pump house)
- Repairs on the existing rising main to Mapodile reservoir and ground investigation for high-yield borehole, drill, test, equip and install control and instrumentation for supply to reservoir.

PS 2 DESCRIPTION OF THE SITE AND ACCESS

Refer to Part C.7 Site Information.

PS 3 DOCUMENTATION

- **PS 3.1** The Provisional Bill of Quantities is included in this document and *must be completed and handed in with the tender.*
- **PS 3.2** The drawings, <u>for tender purposes</u>, listed under Part C8 are applicable to this contract.
- **PS 3.3** The Tenderer shall check the Bills of Quantities for missing or duplicated pages or drawings and should any be missing or duplicated, or the reproduction be indistinct, or if any doubt exists as to

the full intent or meaning of any particulars or description, or this Bills of Quantities contain any obvious errors, the Tenderer shall notify the Engineer at once who shall promptly give a written directive. No liability whatsoever will be admitted in respect of errors in any tender due to the abovementioned causes.

No alteration, erasure, omission or addition is to be made in the text and conditions of these Bills of Quantities or other documents. Should any such alterations, amendment, note or addition is made, it will not be recognised and the text of the Bills of Quantities or other documents as prepared by the Representative must be adhered to.

PS 3.4 The Tenderer shall examine all documents and shall thoroughly acquaint himself with the nature and extent of the Works and the manner in which they are to be executed as no claim for extra payment in this connection will be entertained.

PS 4 NATURE OF GROUND AND SUBSOIL CONDITIONS ON SITE

No bore tests or investigation of the in-situ material were done. Rocky excavation can however be expected along some sections of the pipeline route. Some excavation will take place in built up areas, along pipeline and Eskom servitudes, through stream beds and restricted areas.

The water table may be relatively high in areas during the summer months and provision must be made for effective draining of excavations.

It is the Contractor's responsibility to supply and deliver all material that complies with the minimum standards as well as for the building and maintaining of access roads to the works on site, haul areas or dumping sites. No additional payment will be applicable to the above-mentioned, other than the relevant items in the schedule of quantities.

Note that the prospective tenderers shall acquaint themselves with the nature of materials on site.

PS 5 DETAILS OF THE CONTRACT

PS 5.1 MAIN CONTRACT

Work included in this contract involves the scope of work as per paragraph PS1 and as measured in the Schedule of Quantities.

The other main components of the work under this contract are:

- a) Establishment of the Contractor's camp.
- b) Site clearance and earthworks.
- c) Provision of all materials, special fittings and accessories as required, to complete the work as prescribed.
- d) Excavation and backfill compacted as specified, of pipe trenches and the removal of all excess material.
- e) Laying, bedding and installation of all pipes and accessories.
- f) Concrete work associated with the abovementioned equipment.
- g) Construction of concrete anchor blocks associated with the above.
- h) Commissioning of the works.
- i) Maintenance on the works for a twelve month period.

PS 6 CONSTRUCTION PROGRAM AND METHODS

The Tenderer shall submit a construction programme for the Works to the Engineer for his approval, complete with critical path, within 14 days after the date of the Letter of Acceptance.

The programme shall clearly show the anticipated date when the Contractor plans to undertake the various operations. The programme shall be in the form of a Bar Chart and clearly show the work anticipated to be completed each week. This programme shall form part of the contract and the Contractor shall be bound by this programme. A detailed cash flow forecast, coupled with the programme for the Works, must also be submitted. The programme shall be in MS Project. During construction MS Project will be used.

The construction site is situated in a built-up area; the Contractor shall ensure the least possible disruption of movement of the public during construction.

Construction methods must be of such a nature that no property or life is endangered. The Employer accepts no responsibility for work that is done without consent by the Engineer outside the site boundaries. The Contractor himself is responsible for liaison and arrangements with the Local Authority in connection with the finalisation and approval of the construction program.

The Contractor is responsible for liaison and the necessary arrangements with the relevant road authorities in respect of the finalisation and approval of the works programme.

Sufficient photos of existing structures, walls, and areas that have to be crossed must be taken by the Contractor and handed over to the Engineer before such operations commence. No payment will be made in this regard and it shall be deemed to be covered in the Preliminary and General items.

Local labourers must do the trench preparation, bedding, handling, laying and backfilling of pipes and fittings. The contractor is responsible to liaise with the Labour Desk for labourers.

No separate payment shall be made for any arrangements with relative local authorities for closing off the current water supply or for the distribution of notices to the public.

The compilation of the construction programme and any amendments thereto during the course of construction shall be at the cost of the Contractor and shall not be measured elsewhere in this contract. The contract has to be completed within the time specified in the "Contract Data" of this document, excluding the builder and public holidays.

PS 7 SITE FACILITIES AVAILABLE

PS 7.1 SOURCES OF WATER SUPPLY, POWER SUPPLY, SANITATION, AND COMMUNICATION

Water for construction purposes will be for the account of the contractor at the ruling tariff and will be supplied at a suitable point, from where the contractor will be responsible to convey the water to the point of usage. Water for human consumption will from the existing network at the ruling tariff. Electrical power is available from the existing reticulation at ruling tariffs. The Contractor shall make his own arrangement for any water or power he may require. Any extension of time due to delays resulting from these facilities will not be granted.

The Contractor must supply and maintain at his own cost a sufficient number of portable chemical toilets, one of which must be situated at the campsite and the rest in the area of the site.

No waste or sludge must be left uncovered until it is removed. The contractor must operate an efficient solid waste removal system to the satisfaction of the engineer for the duration of the contract.

The Contractor must make his own arrangement for communication and a telephone service.

PS 7.2 LOCATION OF CAMP AND DEPOT

A site for the Contractor's camp and depot will be pointed out during the site inspection. No trees may be removed and the Contractor must provide his own firewood.

PS 7.3 HOUSING FOR CONTRACTOR'S EMPLOYEES

No housing is available for the Contractor's employees, and the Contractor shall make his own arrangements for housing his employees or transporting them to and from the site. The Contractor is in all respects responsible for the housing and transporting of his employees, and for the arrangement thereof, and no extension of time due to any delays resulting from this, will be granted.

PS 8 SITE FACILITIES REQUIRED

No housing is required for the Engineer. Other facilities such as an office, telephone, name board, survey equipment, etc. required for the Engineer, are described under the relevant sections.

a) Contractor's Offices and Engineer's Office

The Contractor shall provide, erect on or about the Site of the Works, as agreed with by the Engineer, maintain and remove at completion, ample temporary offices for the use of his site agent and staff as per project specification.

b) Temporary Sheds

The Contractor shall provide, erect, on or about the Site of the Works as agreed with by the Engineer, maintain and remove at completion, ample temporary sheds for the proper storage of materials and tools and for the use of the workmen and watchmen, including special waterproof storage sheds for concrete.

c) Site Laboratory

The Contractor shall provide an adequate site laboratory, equipment, facilities and personnel for carrying out the required quality control tests on construction materials. All facilities and equipment shall comply with the relevant SANS standards applying to the quality control tests stipulated in SANS 1200.

Alternatively the Contractor may make use of an external laboratory to provide the quality assurance in terms of earthworks, concrete, etc. The responsibility however, for all work will continue to rest with the Contractor.

Should the Engineer at any time consider any of the facilities above to be inadequate, he shall instruct the Contractor to cease further work until such time as the Contractor has remedied the deficiency.

d) Sanitary Accommodation

The Contractor shall supply suitable and adequate sanitary accommodation for the use of his staff and workmen. Such accommodation shall be to the satisfaction of the Employer and the Engineer and shall conform to Local, Authority requirements. The Contractor shall during tendering acquaint himself fully with these requirements.

The Contractor shall maintain in a thoroughly clean and orderly condition, move as required and finally remove from site all such sanitary accommodation and make good to the approval of the Engineer.

The sighting of the sanitary accommodation must be excluded from public view and their use will be strictly enforced.

e) Telephone Facilities

The Contractor must make his own arrangements for communication links.

f) Accommodation for Employees/Labour

No accommodation for employees/labour is available on site and the contractor shall make his own arrangements for housing employees/labour.

It is deemed that the Contractor has made full provision for any such accommodation in his tender.

g) Tools and Equipment

No tools and equipment for the Contractor is available on site and the Contractor shall make his own arrangements for all tools and equipment.

It is deemed that the Contractor has made full provision for any such tools and equipment in his tender.

PS 9 SITE MEETINGS

The Engineer will hold regular site meetings, keep and circulate minutes. The Contractor shall attend all scheduled meetings and shall ensure that all subcontractors are represented. The Contractor shall provide a suitable facility for the Site Meetings on Site.

PS 10 WATCHING AND LIGHTING

The Contractor must programme his work in such a way that the area is secure at all times. The Employer reserves the right to suspend work if, in his opinion, this requirement is not being complied with and, further, to make secure the area and recover any costs involved in labour and materials from monies due to the Contractor.

The Contractor shall make provision in the nature of temporary works as may be required for the purpose of ensuring the safety of adjoining works and property and for the protection of all persons or animals. He shall be responsible for all damage, injuries and accidents that may occur through his omission of any necessary provision in this respect.

The Contractor shall make full provision for all watching and lighting necessary for the protection of all persons, animals, vehicles, etc., from injury by reason of the Works. He shall provide ample warning signs, guard rails, etc., around open trenches, stacks of material, excavated materials, debris or the like, and shall provide walkways over trenches wherever required for the convenience of the public.

The Contractor shall provide and maintain all necessary temporary protection of finished and/or existing work liable to be damaged during the progress of the works by properly covering up, isolating, etc., as required. The Contractor shall be responsible for any damage which may occur and shall make good at his own expense.

Fires will only be allowed in places approved by the Engineer. Any workmen lighting fires in an' unauthorised place shall immediately be removed permanently from the site:

PS 11 CLAIMS FOR INJURY OR DAMAGE

The Contractor shall notify the Engineer immediately of the receipt by him of any claim for compensation in respect of any damage arising out of his execution of the Contract and if, at the expiry of ninety (90) days from the date of receipt of such claim the Contractor cannot satisfy the Engineer that the matter has been settled, the Employer reserves the right to have the claim investigated and adjudicated by the Engineer and to settle the claim where considered necessary, any costs incurred by the Employer thereby to be recovered from the Contractor by deduction from any monies due to the Contractor.

PS 12 LOCAL AUTHORITY, PROVINCIAL OR GOVERNMENT ADMINISTRATION, ETC.

The Contractor shall acquaint himself with all laws and any by-laws, standards and requirements laid down by the Local Authority, Provincial or Government Administration, etc., for the work about to be executed, and shall abide by such standards and requirements throughout the duration of the Contract.

PS 13 TESTING OF PUMPING STATION EQUIPMENT

Equipment shall be subjected to the following, but not limited to, witnessed tests by the Engineer before acceptance for shipment and during installation and commissioning:

- a) Hydraulic test of completely assembled packages and functional test of in-line instrumentation and controls;
- b) Pressure/leak testing of all pipelines,

The Contractor shall submit proposed test procedures to the Engineer two weeks before the tests are due.

The Contractor shall cover all costs for equipment testing prior to shipment and during installation and commissioning.

The Contractor shall be responsible for doing commissioning tests in conjunction with the Engineer and shall provide a duplicate copy of the full commissioning report as specified by the Engineer. The Contractor shall make all arrangements for these tests and shall give prior notice thereof to the Engineer.

PS 14 HEALTH, SAFETY AND SECURITY

The Occupational Health and Safety Act, Act 85 of 1993, will be applicable in all areas of the Works, except for mining areas and mine lease areas where the Mines Health and Safety Act, Act 29 of 1996, will be applicable.

The Tenderer is to note the following additional requirements / information

- a) All Contractors' personnel will be required to attend an induction course and to obtain a medical (entrance and exit) clearance certificate from an approved medical institution or doctor. These activities will have to be completed prior to a staff member commencing work on the site. The costs associated with these activities are deemed to form part of the Tenderers Preliminary and General costs.
- b) The Induction Course (1-day) will be carried out at the Polokwane Municipality offices ±50km from the Site of Works. There will be no charge for the course.
- c) The Medical Examination will be done by Dr _____ whose consulting rooms are in the ____ Clinic, ___ Tel:. ___ Tenderers should allow R500/person for medicals (R250 entrance and R250 exit, VAT excluded). One day should be allowed for an entrance medical and one day for an exit medical.
- d) All Contractors' personnel will be required to complete certain documentation for submission to the Polokwane Municipal office. Tenderers are to note that all personnel are to be in possession of valid identity documentation and that no persons with a criminal record will be permitted on to the site. The costs associated with these activities are deemed to form part of the Tenderers Preliminary and General costs.
- e) All site personnel will be required to wear the following Personal Protective Equipment (PPE):
 - Hard hats
 - Overalls to Employers specification
 - · Reflective jackets
 - Safety glasses
 - · Safety boots
 - Dust masks
 - · Working gloves
 - Name tags

The costs to provide these items are deemed to be included in the Preliminary and General items of the tender submission.

f) The successful Contractor will be permitted to work a maximum of 60 hours per week including overtime. Should overtime be required, permission is to be applied for from the Engineer at least 24 hours in advance.

PS 15 FEATURES REQUIRING SPECIAL ATTENTION

PS 15.1 CONTROL OF WATER

The Contractor is in all respects responsible for the handling of storm water from higher-laying areas, adjacent to the works for the handling of possible sub-surface water and for the handling of spoiled water when disconnecting existing connections or valves. No separate payment shall be made for this, as all costs related thereto shall be deemed to be included elsewhere in the tendered rates.

PS 15.2 "AS BUILT" DRAWINGS

As the work progresses, the Contractor shall keep full records of all amendments to and deviations from the drawings as issued to the Contractor at the start of the contract. The true positions, invert levels and ground levels of all services shall be indicated on the drawings, for which purpose the Contractor shall receive a separate complete set of drawings from the Engineer, at no cost.

The completion certificate shall only be issued after the Engineer has received a properly completed set of "AS-BUILT" drawings from the Contractor. No separate payment shall be made for this service, as all costs related thereto shall be deemed to be included in the related items.

PS 15.3 FINISHING AND TIDYING

Progressive and systematic finishing and tidying will form an essential part of this contract. Under no circumstances shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate unnecessarily and in the event of this occurring the Engineer shall have the right to withhold payment for as long as necessary in respect of the relevant works in the area(s) concerned.

PS 15.4 SURVEY BEACONS

No setting out of the pipeline route was done and is the sole responsibility of the Contractor. Setting out data is however supplied through the construction drawings. All proposed pipelines shall be parallel (at least 2,5 m away) to the existing yard boundaries. No separate payment shall be made for this, as all costs related thereto shall be deemed to be included elsewhere in the tendered rates.

PS 15.5 CONSTRUCTION MODUS OPERANDI

Labour-based or labour-intensive construction may be defined as the economically efficient employment of as much labour as is technically feasible to produce as high a standard of construction as demanded by the specification and allowed by the funding available. In other words, projects based on labour-intensive principles aim at devoting the highest feasible proportion of projects costs to unskilled, semi-skilled and skilled labour without jeopardising the technical quality of the product demanded by the specification.

The following regulations must be adhered to so as to ensure that the construction methods used are labour intensive.

- i) The remuneration to local labour for hourly-rated employees and/or daily-based work shall be in accordance with the terms and conditions of the latest version of the Government Gazette or the requirements of the Employer as per Contract Data.
- ii) The name, identification number, task performed, and hours worked per day for each labourer shall be recorded by the Contractor. These records shall be submitted to the secretary of the Project Steering Committee on the second working day of each week following the recounted week.

The employment of local labour must be at least as per Contract Data.

PS 15.6 LOCALLY BASED SUB-CONTRACTORS

Tenderers are encouraged to utilise the services of locally based sub-contractors.

PS 15.7 RATE ONLY ITEMS

Provision is made in the Schedule of Quantities for Tenderers to price various items on a "Rate Only" basis. Tenderers are therefore informed that those prices tendered will be taken into consideration when adjudicating Tenders, although these tendered prices will not be reflected in the total amount tendered.

PS 15.8 INSURANCE OF EQUIPMENT

Although it is very quiet in the area of the Site, the Employer cannot guarantee that unrest will not break out in the vicinity of the Site. The Contractor is solely responsible for the insurance of his equipment against unrest and no claim in this regard will be recognised by the Employer.

PS 15.9 FACTORY INSPECTIONS

Factory inspections of the materials to be used on this contract will be done by the Engineer or one of his inspectors. Provision is made in the Schedule of Quantities for Tenderers to price for the liaison with the inspectorate.

PS 15.10 SITE INSPECTIONS

Site inspections of valves, steel pipes and specials and the linings and coatings of the pipes, field welds and repair work on the above will be done by the Engineer or one of his inspectors. Provision is made in the Schedule of Quantities for Tenderers to price for the liaison with the inspectorate.

PS 15.11 SAFETY OFFICER

A full time safety officer must be provided on site by the Contractor.

PS 15.12 RECRUITMENT OF LABOUR

Recruitment of local labour may only be done from the Labour Desk at the Municipality. The Contractor must keep a complete record of the costs and number of casual labourers involved in the project.

PS 15.13 COMPLIANCE WITH REGULATIONS

All equipment, including temporary works and, construction equipment, must comply with the requirements of the Occupational Health & Safety Act, 1983 and the Mines Health and Safety Act, 1996, as amended. The Contractor must meet all costs involved should alterations be necessary to secure compliance with the regulations mentioned.

PS 15.14 CONNECTION TO EXISTING SERVICES

These operations are to be done with the minimum amount of water spillage and must be done in close collaboration with the Engineer and the Employer, who must approve the arrangements before such tie-in is performed. Only eight hours are allowed to complete a tie-in. At least one week written notice of a tie-in must be given to the Employer.

PS 15.15 EXPLOSIVES

The Contractor must take special notice of Clause 5.1.1.3 of SASS 1200DA.

PS 15.16 PIPELINE INSPECTIONS

The Contractor shall provide a colour closed circuit television camera with video recorder and monitor for the Engineer to inspect the lining on the pipeline. The Contractor must programme this portion of the work in such a way as to provide the most economical situation. The equipment must be able to record visual material on standard data storage devices and side vision 90 degrees through 350 degrees radius. The system comprises a CCD colour camera with high resolution output, a 6 x zoom lens with auto or manual iris and focus and side view capabilities. The camera is connected to a steel reinforced cable which is rolled on a cable drum and in turn connected to a control unit with colour monitor and text generator.

PS 15.17 DRAWINGS AND OPERATIONAL MANUALS

Three sets of drawings and operating manuals of all valves, water meters, etc., must be supplied to the Employer by the Contractor.

PS 15.18 FELLING OF TREES

Trees which are indicated to be pruned and preserved shall not be damaged by the Contractor. A penalty of **R15 000** per tree will be imposed on the Contractor for felling or damaging any such tree.

PS 16 TRAINING

PS 16.1 General

A suitably capable Training consultant is to be employed on this project.

Their duty is to identify suitable persons and train them for the following:

- i) Employee Training community-based labour
- ii) Employer Training community-based contractors
- iii) Committee Training maintenance and operation of the Works (this however falls outside the scope of this Contract)

This project is a project using community-based labour and community-based contractors as far as possible.

The Contractor using the necessary plant and labour as he sees fit shall carry out conventional construction. However, the Contractor may only bring in key staff from outside the area that has the necessary skills not available among the local community. Other than key staff, all other labour must be employed from the local communities. As a guideline, key staff would include general foreman, foreman, site managers, buyers, quantity surveyors, etc.

The Training Consultant will provide the necessary training so that the local labourers will have the necessary skills to carry out this work. In this respect, the contractor and the Training Consultant will have to work closely together to identify what skills are required, how many labourers in each trade are required and when this labour will be required, so that the necessary training can be given timeously.

Typical training that is envisaged at this stage includes shuttering, concrete work, reinforcing, team leaders, etc.

The other part of the Contract is work that will be carried out by community-based contractors.

The Training Consultant will identify persons, with the assistance of the Project Steering Committee, and train these persons to establish small community based contracting firms, who will employ local labour. These firms will tender to carry out this work and successful Tenderers will be appointed by the Contractor as nominated sub-contractors to execute this work.

Typical training that will be given by the Training Consultant is:

i) <u>Community based contractors</u>

- Preparation phase using a calculator, numeracy, using a scale ruler, reading a building plan, handling administrative tasks in the building industry.
- ➤ Estimating and tendering marketing the services of a company, seeking, selecting, collecting and studying tender documents, investigating and assessing a site, developing a bill of quantities from building plants, calculating the cost of a project, finalizing tender prices, completing and submitting a tender.
- Project planning introducing to planning techniques, pre-tender planning, planning contract activities, contract planning, executing a contract programme.
- Executing the project managing the finances of the company, managing materials, administering record systems, managing manpower, completion and handover.

ii) Community based labour

Local labour will be taught the following skills:

- Excavation if possible, bedding, selected backfill and backfill
- > Pipe laying, valves and fittings
- Valve boxes, manholes, anchor blocks etc.

Again, the Contractor and Training Consultant will have to work closely together to identify what their requirements are and when this labour is needed.

Community based labour training will take place on site before actual production starts. No allowance needs to be made for wages, food or travelling during training.

Training of community-based contractors will take place at a central point. The Provincial Sum allowed in the Schedule of Quantities, makes allowance for travelling and meals for the training of community-based contractors.

PS 16.2 Construction and Materials Management

This section applies only to work to be carried out by community-based contractors.

The contractor shall provide construction and material management to the community-based contractors. In this respect, each party has the following responsibilities.

i) Community Based Contractors

- > To tender on the labour-based sub contract work and enter into a contract with the Contractor.
- To carry out the work according to specification and on time using community-based labour.
- ➤ To liaise and co-operate with the contractor regarding specifications, programme, progress, delivery of material, quality of work etc.
- ➤ To provide wheelbarrows, hand tools, clothing, safety equipment, etc. to enable his labourers to carry out the work. All material (pipes, fittings, valves, etc.) to be provided by the Contractor.

- To receive material required for the task, store it and provide the necessary security until the material is built into the works.
- > To provide the necessary transport for this labour force.
- ➤ To carry out a task in its entirety until final approval and acceptance. In other words, there will be no split responsibility. For example, a community based contractor will excavate, provide the bedding, selected backfill, backfill, lay pipes, valves and fittings, build valve boxes, manholes, anchor blocks etc. and test the pipes in conjunction with the Contractor.
- To pay his labourers. VAT etc. and finalize the final account.

ii) Contractor

- In conjunction with the Training Consultant, establish the needs, training and programming of the work.
- ➤ To assist the Training Consultant in drawing up the agreements of association between the Contractor and the community-based contractors where applicable.
- > To enter into nominated sub contracts with the community-based contractors.
- To provide the necessary skills transfer and construction management for the community-based contractors to successfully complete this work. This includes setting out of the work, quality control over the work, programming of the work, progress, testing and acceptance thereof.
- ➤ To provide the necessary materials to execute the work. This includes purchasing the required materials, transporting them to the camp site, storage at the campsite, transporting of materials as required form camp site to the sites of the various community-based contractors, handing over of the materials.
- ➤ To pay the community-based contractors as the work progresses and the Contractor must make allowance in his Tender for this. Retention monies will be as for this Contract. No sureties will be requited from the community-based contractors.
- To measure the work and finalize the final account.
- Complete copies of the emerging contractor's contracts to be given to the Engineer for endorsement prior to the contract being signed.

Candidate selection would be according to the requirements for a particular discipline. A Certificate of Achievement should be awarded to a student who has attained a prescribed level of competency.

A provisional amount for training has been recorded in both sections under the Item "Training", in the Preliminary and General portions in the Schedule of Quantities.

PS 17 APPLICABLE STANDARDISED SPECIFICATIONS

Although not bound in nor issued with this document, the following standardised specifications shall form part of the contract and, notwithstanding the provisions of sub clause 2.2 of SANS 1200 A, the editions specified below shall apply:

SANS 1200 A	-	1986	General
SANS 1200 AB	-	1986	Engineers Office
SANS 1200 C	-	1986	Site Clearance
SANS 1200 D	-	1988	Earthworks
SANS 1200 DA	-	1988	Earthworks (Small Works)
SANS 1200 DB	-	1989	Earthworks (Pipe Trenches)
SANS 1200 G	-	1982	Concrete (Structural)
SANS 1200 GA	-	1982	Concrete (Small Works)
SANS 1200 L	-	1983	Medium Pressure Pipelines
SANS 1200 LB	-	1983	Bedding (Pipes)

The newest additions of above specifications up to and including the month of this tender will prevail.

PS 18 PARTICULAR SPECIFICATIONS

In addition the applicable Particular Specifications as set out in Portion 2.2, which are bound in this document, shall apply to this contract.

PROJECT SPECIFICATION

PORTION 2 INTERPRETATIONS AND VARIATIONS TO STANDARDISED SPECIFICATIONS AND PARTICULAR SPECIFICATIONS

C5.2.1

PORTION 2.1 INTERPRETATIONS AND VARIATIONS TO STANDARDISED SPECIFICATIONS AS SHOWN UNDER CLAUSE PS-17

This portion contains essential clauses and data and additional clauses required to supplement and augment the Standardized Specifications to suit the nature of this Contract.

The number of each clause and each payment item in this part of the project specifications consists of the prefix PS followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications. The number of a new clause or payment item, which does not form part of a clause or a payment item in the standard specifications and which is included here, is also prefixed by PS, but followed by a new number which follows on the last clause or item number used in the relevant section of the standard specifications.

SANS 1200 A: GENERAL

A 3 MATERIALS

PS A 3.1 QUALITY

Substitute the second sentence of the first paragraph of A 3.1 with the following:

Where there is a standardization mark programme for any material, all such material supplied shall bear the official standardization mark. All materials used in the Works shall, where such a mark has been awarded for a specific type of material, bear the SABS mark.

Substitute the second paragraph with the following:

The Contractor 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 control tests done by the Engineer and of which the results do not comply with the minimum requirements shall be for the Contractor's account.

The Contractor shall inform the Engineer of any control testing to be done <u>at least 48 hours before</u> such tests are required and must allow in his program for the time necessary for the tests and the processing of the results thereof.

The handling, storage, transport, and erection of equipment, machinery, and materials shall be strictly in accordance with the requirements of the supplier and/or manufacturer.

All materials shall be new and of the best quality available unless otherwise specified. They must function satisfactorily under prevailing climate and weather conditions at the place of installations.

PSA 3.3 APPLICABLE STANDARDS FOR CEMENT (ADDITIONAL SUB CLAUSE)

The standard cement specifications SASS 471, SASS 626, SASS 831 and SASS 1466 have been withdrawn and are replaced by the new SABS ENV 197-1: Common cements, and SASS ENV 413-1: Masonry cement. These specifications will be applicable to this contract, and the descriptions and types of cements specified, will be based on the designations as defined in these specifications.

A 4 PLANT

PS A 4.2 Contractor's Offices, Stores and Resources

Add the following to A 4.2:

The Contractor shall provide room space in his office to accommodate a satisfactory first aid kit. The kit shall include adequate supplies of medicines, bandages, drugs, etc. to provide efficient first aid treatment as prescribed by the OHS act, Act 85/1993. The Contractor is at liberty to provide such other medical facilities as he may deem necessary.

Payment for this item is to be included under "Offices and Storage Sheds" under "Facilities for Contractor" in Preliminary and General.

The Contractor's camp shall be kept neat and clean at all times and all surplus or rejected material shall be removed from the site.

PS A 4.3 Hand Tools

The contractor shall provide and maintain all hand tools required for the execution of the Works.

PS A 4.4 Restriction on Employee Accommodation (Additional sub-clause)

No housing is available for the Contractor's employees and the Contractor shall make his own arrangements to house his employees and to transport them to site.

With the exception of a night watchman no employees may be housed or accommodated or allowed to sleep over on the Site of the Works.

The Contractor shall provide the necessary ablution facilities at his campsite and on the Site of the Works for the use of his employees. Only chemical toilets will be allowed.

A 5 CONSTRUCTION

A 5.1 SURVEY

PS A 5.1.1 Setting Out Of The Works

Substitute the first sentence in A 5.1.1 with the following:

Setting out of the works is the sole responsibility of the Contractor and shall be done from the layouts given to him. The proposed network pipes must be placed 2,0m (or as indicated on the drawings) away from the erf boundaries in the road reserve. Any discrepancy shall immediately be reported in writing to the Engineer. Any costs or subsequent costs arising from discrepancies, which had not been reported to the Engineer, shall be the sole responsibility of the Contractor. The exact position of the network pipes shall be determined on site in conjunction with the Engineer and must be approved before construction of the specific section starts.

The Engineer may alter any part of the works to suit local conditions. The Contractor must therefore contact the Engineer immediately after the preliminary setting out of any part of the works before starting with detail setting out, or construction. Only after the Engineer has approved a specific site or part of the works, may the detail setting out and construction commence.

PS A 5.2 WATCHING, BARRICADING, LIGHTING AND TRAFFIC CROSSINGS

Add the following to A 5.2:

The crossing of existing tar and dirt roads must be done in half widths, while the total traffic is accommodated on the other lane.

Road traffic signs shall comply with the requirements of the "South African Road Traffic Signs Manual" and shall be approved by the Engineer before construction commences.

PSA-5.8 Ground and access to works

Add the following:

On completion of operations the Contractor shall restore the ground surface, wherever it may have been disturbed, to its original condition by filling in all ruts with material similar to the material within the rut and levelling the ground and, where necessary, planting grass and shrubs as may be required.

A 7 TESTING

PS A 7.4 STATISTICAL ANALYSIS OF CONTROL TESTS

Substitute A 7.4 with the following:

Test results shall not be evaluated by statistical methods. All results shall comply with the specified minimum requirements of the materials concerned.

A 8 MEASUREMENT AND PAYMENT

A 8.2 PAYMENT

PS A 8.2.1 Fixed-Charge and Value-Related Items

The tendered amounts for fixed-charge and value-related items will not be increased, if extension of time for the completion of the works is awarded.

PS A 8.2.2 Time-Related Items

The tendered amount for a time-related item will be increased; if an extension of time for the completion of the works is awarded on the condition that the activity related to the item tendered for must be sustained during the extended period.

The ratio between the increased amount for a time-related item and the tendered amount must be the same as the ratio between the extension of the time period for the completion of the works and the original time period allowed for completion of the works.

If the works is completed before the end of the original time period allowed for completion of the works, the tendered amount of a time related item that is influenced by the earlier completion would be reduced similarly.

A 8.3 SCHEDULED FIXED-CHARGE AND VALUE-RELATED ITEMS

PS A 8.3.3 Other Fixed-Charge Obligations

This item as listed under Schedule A of the bill of quantities is as specified in the standardised specification SANS 1200 A.

A 8.4 SCHEDULED TIME RELATED ITEMS

PS A 8.4.5 Testing Unit: Sum

The cost of all sampling and testing executed by the Contractor or approved laboratory must be included in the amount for other time related items and no separate payment shall be made for this. This condition also relates to the placing, curing and testing of concrete cubes.

A 8.5 SUMS STATED PROVISIONALLY BY ENGINEER

PS A 8.5(a)1 Community Liaison Officer

The Contractor must pay a salary to a person appointed as the Community Liaison Officer for the project. The amount of payment and payment dates will be determined as soon as the Community Liaison Officer is appointed.

PS A 8.5(a)2 Overheads, charges and profit on (1) above

Unit: %

Unit: P.Sum

Handling cost and profit in respect of sub-item 8.5(a) 1. A percentage of the payment made to the Community Liaison Officer will be paid to the contractor. The rate shall cover the Contractor's overheads, charges, and profit on payments for the Community Liaison Officer. No payment will be made under this item before payment to the Community Liaison Officer.

PS A 8.5(b)1 Training

Unit: P.Sum

Provisional sum for training services supplied by the Training Company. The name and contact details of the Training Company, to be appointed by the Contractor, will be supplied to the Contractor by the Employer or Engineer.

PS A 8.5(b)2 Overheads, changes and profit on (1) above

Unit: %

Handling cost and profit in respect of sub-item 8.5(b) 1. A percentage of the payment made to the Training Company will be paid to the Contractor. The rate shall cover the Contractor's overheads, changes, and profit on payments for the Training Company. No payment will be made under this item before any payment is made to the Training Company.

PS A 8.5(c)1 Refurbishment of sump submersible Pumps at Tukakgomo Ext low lift pump station (Pump house) by a specialist sub-contractor / supplier Unit: P.Sum

The Contractor must pay the company to appointed as "Sub-contractor" appointed by the Contractor approved by the Employer. The actual cost of the work will be measured, agreed upon by the Contractor, client and Engineer only the after shall be processed for payment.

PS A 8.5(c)2 Overheads, charges and profit on (1) above

Unit: %

Handling cost and profit in respect of sub-item 8.5(c) 1. A percentage of the payment made to the "Sub-contractor" will be paid to the contractor. The rate shall cover the Contractor's overheads, charges, and profit on payments for the item 8.5.(c)1. No payment will be made under this item before payment to 8.5.(c)1.

PS A 8.5(d)1 Refurbishment of Pumps at Tukakgomo Ext high lift pump station (Pump house) by a specialist sub-contractor / supplier Unit: P.Sum

The Contractor must pay the company to appointed as "Sub-contractor" appointed by the Contractor approved by the Employer. The actual cost of the work will be measured, agreed upon by the Contractor, client and Engineer only the after shall be processed for payment.

PS A 8.5(d)2 Overheads, changes and profit on (1) above

Unit: %

Handling cost and profit in respect of sub-item 8.5(d) 1. A percentage of the payment made to the "Sub-contractor" will be paid to the contractor. The rate shall cover the Contractor's overheads, charges, and profit on payments for the item 8.5.(d)1. No payment will be made under this item before payment to 8.5.(d)1.

PS A 8.5(e)1 Ground investigation for high-yield borehole/odex, drill, test, equip and install Control and Instrumentation atTukakgomo Ext low lift pump station for abstraction supplementation by a specialist sub-contractor / supplier approved by client. Unit:P.Sum

The Contractor must pay the company to appointed as "Sub-contractor" appointed by the Contractor approved by the Employer. The actual cost of the work will be measured, agreed upon by the Contractor, client and Engineer only the after shall be processed for payment.

PS A 8.5(e)2 Overheads, changes and profit on (1) above

Unit: %

Handling cost and profit in respect of sub-item 8.5(e) 1. A percentage of the payment made to the "Sub-contractor" will be paid to the contractor. The rate shall cover the Contractor's overheads, charges, and profit on payments for the item 8.5.(e)1. No payment will be made under this item before payment to 8.5.(e)1.

PS A 8.5(f)1 Repairs on existing rising main to Mapodile reservoir and ground investigation for highyield borehole, drill, test, equip and install Control and Instrumentation for supply to reservoir by a specialist sub-contractor / supplier approved by client Unit: P.Sum

The Contractor must pay the company to appointed as "Sub-contractor" appointed by the Contractor approved by the Employer. The actual cost of the work will be measured, agreed upon by the Contractor, client and Engineer only the after shall be processed for payment.

PS A 8.5(f)2 Overheads, changes and profit on (1) above

Unit: %

Handling cost and profit in respect of sub-item 8.5(f) 1. A percentage of the payment made to the "Sub-contractor" will be paid to the contractor. The rate shall cover the Contractor's overheads, charges, and profit on payments for the item 8.5.(f)1. No payment will be made under this item before payment to 8.5.(f)1.

PS A 8.7 DAYWORK

Replace A 8.7 with the following:

Daywork will be paid according to the percentage allowance method. For calculating the total remuneration, the General Conditions of Contract for Construction Works, 2015 shall apply, with the amendments as in the appropriate special conditions of contract, which is bound into this document. A daywork schedule will be provided for filling in the necessary information.

A 8.8 TEMPORARY WORKS

PS A 8.8.2 Accommodation Of Traffic

Unit: Sum

Add the following to A 8.8.2:

The rate shall cover all costs pertaining to the provision, erection, moving, re-erection and maintenance of all temporary barricades, road signs, lights, flagmen, etc. as required, for the guarding and protection of the works, for the construction, gravelling and maintenance of access roads and detours to the site of the works, borrow pits or spoil sites, as well as for the later removal or the cleaning and tidying up thereof.

SANS 1200 AB: ENGINEER'S OFFICE

AB 3 MATERIALS

PS AB 3.1 NAME BOARDS

Substitute "South African Institution of Civil Engineers" in the first paragraph of AB 3.1 with "Consulting Engineers South Africa".

PS AB 3.2 OFFICE BUILDING

Replace AB 3.2 with the following:

Prior to commencing with work, the contractor shall provide and furnish for the use of the engineer's representative and his staff one office (3.0 x 6m Wendy House Type with 1.5m veranda) in an approved position. The Engineer will indicate the position. All plans shall be submitted to the engineer for approval, before the commencement of erection.

The office with a minimum floor area of 18m² (the smaller dimension at least 3.0m) with a ceiling height of minimum 2.1m, shall also have one toilet apart from the office building for the exclusive use of the engineer's representative.

The office shall be provided with lined walls, boarded ceilings, floor, approved floor covering, suitable security door with secure locks, burglar bars at all windows, security gate at the door, approved florescent lighting, power supply, a minimum of four electrical plugs, air conditioner to cool 40m³ and furnishings. The office shall be ventilated, weather proof and waterproof and shall have windows with an area to at least 20% of the floor area. The office shall be insulated to provide comfortable working conditions.

Internal furnishings shall include:

- One desk (1,5m long x 1,0m wide x 0,9m high) with lockable drawers with keys.
- One drawing table (1,5m long x 1,0m wide x 0,9m high).
- Twelve desk chairs.
- One boardroom type table (3,0m long x 1,2m wide x 0,9m high) with smooth top.
- One steel cupboard.
- One steel filing cabinet.

AB 4 PLANT

PS AB 4.1 TELEPHONE AND FAX

Replace AB 4.1 with the following:

The Contractor shall supply the Engineer with a cellular telephone service for the exclusive use of the Engineer and Engineers Representative for official purposes for the duration of the contract.

AB 5 CONSTRUCTION

PS AB 5.1 NAME BOARDS

Add the following to AB 5.1:

The name boards shall be erected within a month of the commencement date of the contract and shall be placed at the position indicated by the Engineer. Any damage to these boards shall be repaired within seven days of a written instruction issued by the Engineer. No payment shall be made in terms of the contract prior to the erection of the name boards.

The Contractor will be permitted to erect a maximum of two of his own name boards, in positions approved by the Engineer. The Engineer reserves the right to order the removal of these boards if they are not kept in good repair.

PS AB 5.5 SURVEY ASSISTANTS

Substitute "two or more suitably educated survey labourers" in the first sentence of PS 5.5 with "two semi-skilled labourers."

PS AB 5.6 SURVEY EQUIPMENT

The Contractor shall provide the following tested and approved survey equipment on site for the duration of the contract and for the use of the Engineer whenever needed:

- a) one tachometer capable of reading to minimum 20 seconds and maximum 6 seconds of arc, plus tripod;
- b) one automatic level plus tripod;
- c) two tachometer staffs and one level staff, all graduated metrically;
- d) one 10m Stanley and one 100 m Stanley fibre tape measure; and
- e) diverse surveyor's necessities like paint, pegs, etc.

The above-mentioned equipment may by arrangement be shared between the Contractor and the Engineer's representative.

The Contractor shall keep the equipment continuously insured against any loss, damage, or breakage, and he shall indemnify the Engineer and the Employer against any claims in this regard.

The Contractor shall maintain the equipment in good working order and keep it clean throughout the contract period.

AB 8 MEASUREMENT AND PAYMENT

AB 8.2 PAYMENT

PS AB 8.2.2(a) Office buildings

Unit: Sum

The rate shall cover all time-related costs pertaining to the office building as prescribed in PS AB 3.2.

PS AB 8.2.2(b) Telephone and fax

Unit: Sum

The rate shall cover all time-related costs pertaining to the telephone and fax as prescribed in PS AB 4.1.

PS AB 8.2.2(c) Name boards (2 off)

Unit: Sum

The rate shall cover all time-related costs pertaining to the name board/s as prescribed in PS AB 5.1.

PS AB 8.2.2(d) Survey assistance and equipment

Unit: Sum

The rate shall cover all time-related costs pertaining to the survey assistants and equipment as prescribed in PS AB 5.6.

SANS 1200 C : SITE CLEARANCE

C 3 MATERIAL

PS C 3.1 DISPOSAL OF MATERIAL

Substitute the first sentence of C 3.1 with the following:

Material obtained from clearing and grubbing shall be disposed of at the site indicated at the site inspection. If such a site is indicated at tender stage, the cost of transporting material and debris will be included under 8.2.1.

Loading and off-loading should be done by hand and the contractor must price accordingly under item 8.2.1.

C 5 CONSTRUCTION

PS C 5.1 AREAS TO BE CLEARED AND GRUBBED

Substitute the first sentence of C 5.1 with the following:

Unless otherwise indicated by the Engineer, clearing and grubbing are limited to a 2,5m wide strip along the pipe route. Measurement and payment for clearing and grubbing shall only occur for areas as required in writing by the Engineer.

The Contractor may proceed with clearing and grubbing after the handing over of the site.

C 5.2 CUTTING OF TREES

C 5.2.3 Preservation of Trees

PS C 5.2.3.2 Individual trees

Change the sub item 5.2.3.2 as follow:

The Contractor shall inform the Engineer before the clearance of the pipeline routes and the Pumping Station sites commences. All the trees indicated by the Engineer to the Contractor shall be preserved and left standing. An amount of R15 000 shall be deducted from due monies to the Contractor as a penalty in respect of every such tree that is damaged or removed unnecessarily.

PSC 5.6 Conservation of Topsoil

Add the following:

"150mm Topsoil shall be preserved for the width of the pipe trench. Where topsoil occurs on pipe routes, the Engineer will instruct to the removal and replacement and measurement will be as per SANS 1200 DB.

At borrow pits the Contractor shall stockpile and maintain the topsoil adjacent to such positions for later use in reinstatement of the borrow areas."

PS C 5.9 EXISTING FENCING

The fencing parallel to the pipeline routes must only be removed and re-erected at the positions as indicated and approved by the Engineer and repaired where it was damaged. When the pipeline routes cross fencing or gates temporary wire gates must be provided that must be kept closed. After completion of the work these fences or gates must be repaired to the same condition as before commencement of the work.

C 8 MEASUREMENT AND PAYMENT

C 8.2 SCHEDULED ITEMS

PS C 8.2.1 Clear and grub

• Change the sub item 8.2.1 as follow:

The area designated by the Engineer to be cleared and grubbed will be measured to the nearest 0,1ha or, in the case of pipelines where the width is specified, to the nearest metre or kilometre. The rate shall cover the cost of clearing the surface, removing boulders of size up to 0.5m^3 , grubbing trees and tree stumps up to 3.5m high and <1m in \emptyset , cutting of trunks and branches exceeding 0.5m in girth into transportable lengths, backfilling of cavities, demolishing structures (except where otherwise provided for in the project specification) and removing, transporting (except where sub clause 8.2.9 is applicable), and disposing of material thus cleared, grubbed, cut and demolished. Boulders over 0.5m^3 will be dealt with as hard rock excavation.

Unit: ha or m or km

SANS 1200 D : EARTHWORKS

D 3 MATERIALS

D 3.1 CLASSIFICATION FOR EXCAVATION PURPOSES

PS D 3.1.1 Method of Classifying

Substitute D 3.1.1 with the following:

The Contractor may use any method he chooses to excavate any class of material, but his chosen method of excavation shall not determine the classification of the material. The Engineer shall classify excavated materials as Soft and Rock. The classification will be based on inspection of the material to be excavated and on the criteria of Table 1 in PS DB 3.1.2. All excavation equipment shall be in good mechanical condition. "Economically fragmented and loosened" and "efficiently" shall mean "in a manner that can be reasonably be expected of the Contractor, having regard to the production achieved."

PS D 3.1.2 Classes of excavation

Replace sub clause 3.1.2 with the following:

Excavation of materials is classed as Soft excavation and Hard Rock excavation as per Table 1 below. Hard rock will be measured individually as extra-over items.

TABLE 1: CI	ASSIFICATION	OF MATERIALS
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CLASSIFICATION	DESCRIPTION
Soft	All material other than rock
Rock	Material, including boulders, which cannot be economically fragmented and loosened for removal by hand implements and pneumatic tools, except by drilling and blasting or the use of rock breaking equipment.

- Soft material shall be excavation in all material that can be efficiently excavated by a 20ton excavator with a tined bucket or be ripped by a bulldozer of mass 35 ton, with of a flywheel power of approximately 220 kW, fitted with a single-tine ripper suitable for heavy ripping.
- Soft material in restricted and general excavation shall be material that can be excavated by back-acting excavator (TLB type) with a flywheel power exceeding 0,1 kW per millimetre of tined-bucket width or material that requires pneumatic equipment without blasting.

In the event of disagreement between the Contractor and the Engineer, the Engineer shall reclassify the material in accordance with relevant specifications and without being unreasonable to the Contractor. The decision of the Engineer on the classification shall then, subject to the provisions of the Contract, be final and binding.

The Contractor shall notify the Engineer of the presence of what he considers to be rock immediately upon discovery thereof. The Engineer will inspect the material and decide whether or not it warrants the use of pneumatic tools or rock breaking equipment. In the case of isolated boulders set in a soil matrix, the Engineer may order the Contractor to either widen the excavation or roll the boulders sideways or lift the boulders out from the trenches.

In the event that the Engineer decides that the use of pneumatic tools, rock breaking equipment, or blasting is necessary, he will classify the material accordingly and arrange for the quantity thereof to be measured. The Construction Manager will supply necessary pneumatic equipment and arrange for others to break up rock into manageable pieces.

D 3.3 SELECTION

PS D 3.3.1 General

Substitute the second paragraph of D 3.3.1 with the following:

The Contractor shall deal selectively with material from general excavation. Any imported material in road reserves that do not comply with the minimum requirements for the respective layers, shall be removed, and replaced with suitable material, all at the Contractor's expense.

The Contractor shall deal in such a way with materials from all excavations for pipe trenches to ensure that usable material is not contaminated with unsuitable material. If usable material is contaminated, such contaminated material shall be removed and replaced with suitable material, all at the Contractor's expense. No additional payment shall be made in respect of this and all relevant costs shall be deemed to be included in the tendered rates.

All unsuitable material shall be removed prior to importing fill material in such areas.

D 5 CONSTRUCTION

D 5.1 PRECAUTIONS

PS D 5.1.2.1 Barricades and Lighting

The Contractor's attention is drawn to the fact that pipelines must be constructed under access roads. The Contractor must arrange his work in order to assure free flow of traffic. No additional payment for any discomfort, extra costs, or delaying as a result of the provision of this facility will be made except for the items as allowed under PS A 8.8.2.

PS D 5.1.2.2 Detection, location and exposure

Add the following to D 5.1.2.2:

If existing services are not shown on the drawings, but the existence thereof can be reasonably expected, the Contractor shall, in conjunction with all relevant authorities, determine the exact depth and location of such services before the commencement of construction. After locating the exact position of services, whether indicated on the drawings or not, such services shall be deemed to be known services and the Contractor shall be liable for all costs and subsequent costs arising from the damage thereof as a result of the Contractor's activities. These services must also be indicated on the "As Built" drawings.

A minimum of three trial cross trenches per street block must be excavated by hand perpendicular to the pipeline route to establish the position of existing services and the final portion of the network pipeline.

All services must be located and opened for inspection by the Engineer before commencing trench excavation. Any costs or losses suffered by the Contractor as a result of not abiding by this specification will be for the Contractor's account.

PS D 5.1.4.1 Dust nuisance

Add the following to D 5.1.4.1:

The Contractor is responsible for dust control and is liable for all claims that may result from dust nuisance on all parts of the site and at all times from the date of handing over of the site to the completion date of the contract. No payment regarding the above-mentioned will be made and all costs shall be deemed to be covered by the tendered rates.

PS D 5.1.6 Road Traffic Control

Add the following to D 5.1.6:

- a) Sufficient road signs must be erected in such a way that motorists will be warned in time of works, e.g. at the closing of a street sufficient signs to direct traffic must be erected at the preceding intersection.
- b) Bypasses and/or road signs shall be provided and/or erected at all locations where the free flow of traffic is obstructed and shall be approved by the Engineer before the commencement of construction. Where main roads are crossed, detours and temporary traffic signs must be provided as shown on the attached drawings.
- c) Where a trench crosses a street or any place where a trench crosses the direction of traffic flow, drums must be placed in the street and not just along the sides of the street with danger tape in between.
- d) Danger tape must be put up between drums and tied around the drums.
- e) Drums may not be filled with stones. The spacing of drums must be in such a way (maximum 5 m) that they are visible from all directions.
- f) Sufficient safety measures must be utilised for pedestrians.
- g) Vehicular and pedestrian access must be maintained to all stands, businesses, etc. at all times.

D 5.2 METHODS AND PROCEDURES

D 5.2.2 EXCAVATION

PS D 5.2.2.2 Borrow Pits

The contractor must construct and maintain at his own cost the necessary access roads and borrow pits. The position of borrow pits must be approved by the Engineer before opening up the borrow pits.

PS D 5.2.2.3 Disposal

Substitute the second sentence of D 5.2.2.3 with the following:

All surplus and unsuitable material shall be dumped and neatly finished off in the area pointed out for this during the site inspection.

PS D 5.2.3.2(b) Backfilling

Add the following to D 5.2.3.2 (b):

The backfilling of excavations along the perimeter of valve chambers, etc. to provide workspace for vertical shuttering must be placed in \pm 200mm layers and compacted to 90% Mod. AASHTO with material from the excavation or with material from approved borrow pits. This backfilling is not measured separately but is included in the tariff for the chambers.

D 8 MEASUREMENT AND PAYMENT

D 8.3 SCHEDULED ITEMS

D 8.3.3 Restricted Excavation

The excavation of the valve chamber, stand posts, etc. is not measured separately and is included in the tariffs of the chambers.

SANS 1200 DA: EARTHWORKS (SMALL WORKS)

PS DA EARTHWORKS (Small Works)

PS DA 3 MATERIALS

PS DA 3.1 CLASSIFICATION FOR EXCAVATION PURPOSES

PS DA 3.1.1 Method of Classifying

Substitute DA 3.1.1 with:

The method of classifying will be as specified in sub clause 3.1.1 of SANS 1200 D.

PS DA 3.1.2 Classes of Excavation

Substitute DA 3.1.2 with:

The classes of excavation will be as specified in sub clause 3.1.2 of SANS 1200 D.

PS DA 8 MEASUREMENT AND PAYMENT

PS DA 8.1 Basic Principles

• Replace sub clause 8.1.3 with the following:

No allowance will be made in the excavation for working space. The contractor shall include for working space for outside formwork in rates.

SANS 1200 DB: EARTHWORKS (PIPE TRENCHES)

DB 3 MATERIALS

DB 3.1 CLASSES OF EXCAVATION

Substitute DB 3.1:

The excavation of material will, for the purpose of measurement and payment, be classified as specified in sub clause 3.1.1 of SANS 1200 D.

PS DB 3.5 BACKFILL MATERIALS

Replace sub clauses 3.5 with the following:

All backfilling of pipe trenches shall comply with sub-clauses 3.5(a) and 5.7.1, except the backfilling in trafficked areas as shown on the drawings which conform to sub-clause 3.5(b) and sub-clause 5.7.2. It shall also comply with clause 3.16 of Particular Specification PG.

PS DB 3.7 SELECTION OF MATERIAL FOR REPAIR WORK

If the excavation of a pipeline damages an existing road surface, the Contractor must stockpile material from the top 200mm of such a road surface in order to reuse it as sub base for the repairing of the road crossing.

If necessary gravel material that is suitable for the reparation of road surfaces must be imported.

The Contractor must make provision in his tariffs for compaction in road reserves for the selection of excavated material as specified above.

DB 4 PLANT

PS DB 4.1 EXCAVATION EQUIPMENT

Add the following to DB 4.1:

An adequate number of suitable tools, including hand stampers, wheelbarrows and hosepipes shall be provided by the Contractor. The Contractor will supply mechanical compaction equipment and when required pneumatic and rock breaking equipment.

All excavations exceeding the specified widths shall be backfilled with approved selected material. No payment shall be made for this and all relevant costs shall be deemed to be included in the tendered rates.

DB 5 CONSTRUCTION

DB 5.1 PRECAUTIONS

PS DB 5.1.1.1 Water in Trenches

Water in pipe trenches may cause movement of the pipes as a result of flotation and backfilling must therefore be executed as quickly as possible. If movement of the pipes does occur the contractor must, unless otherwise instructed by the Engineer, remove the pipes from the trench and reinstall it at his own expense.

• Add the following sub clause 5.1.5:

PS DB 5.1.5 Open Trenches

Unless otherwise permitted in writing by the Engineer, not more than 1000m of trench in anyone place shall be opened in advance of the completed pipeline. No trench may be left open for any period exceeding 2 weeks. No extra payment will be made for trenches closed and subsequently re-opened in terms of this clause.

Where a pipe crosses a road, the trench shall be backfilled immediately the service has been installed and all works shall be completed within one week of commencement of excavation. The pipe shall be laid in two sections across the roadway to obviate the flow of traffic. Only one lane of traffic may be closed to the public at a time.

PS DB 5.4 EXCAVATION

Add the following to DB 5.4:

"Excavation and backfilling of pipe trenches on sidewalks in the residential area shall be done in such a manner as to ensure the least possible disruption to the public and access to the properties. No additional payment shall be made for this and all relevant costs shall be deemed to be included in the tendered rates.

PS DB 5.5 TRENCH BOTTOM

Substitute "90 %" in the second paragraph of DB 5.5 with "93 %".

PS DB 5.5.1 Over Excavation of Trenches

Where pipe trenches are excavated deeper than specified or shown on the drawings, these excavations must be backfilled with suitable approved selected material in layers of not more than 150mm un-compacted thickness and must be compacted to the thickness of the adjoining in-situ material or as prescribed by the Engineer.

DB 5.6 BACKFILLING

PS DB 5.6.1 General

Backfilling in road reserves must be compacted in 100mm layers up to natural ground level.

Where prescribed by the Engineer all surplus material must be neatly piled over the real trench width to a height not more than 150mm higher than the adjoining level.

PS DB 5.6.3 Disposal of Soft Excavation Material

Add the following to DB 5.6.3:

All surplus and unsuitable material as described in DB 5.6.3 shall be disposed of at the spoil site, (as described in PS D 5.2.2.3) and levelled.

DB 5.7 COMPACTION

PS DB 5.7.2 Areas Subject To Traffic Loads

Add the following to DB 5.7.2:

All pipe trenches within road crossings, accesses to services, farms and camps that fall within the road reserve, will be regarded as areas subject to traffic loads. Backfilling of trenches that are subject to traffic loads will be executed in layers of 100mm as follows:

Item	% mod AASHTO	Final Layer Thickness
Approved Backfill	93%	200mm
Main Backfill up to road layers	96%	200mm
Sub-base	97%	200mm
Base	98%	175mm

DB 5.9 REINSTATEMENT OF SURFACE

PS DB 5.9.2 Private Property and Commonage

Add the following to DB 5.9.2:

Gardens and lawns shall be repaired to the original standard where they were crossed. Grass and plants shall be taken out of the ground, temporarily stocked, watered during construction, and replanted after backfilling.

PS DB 7 TESTING

• Add the following to sub clause 7.1:

PS DB 7.1 "The Contractor shall test compaction density on all backfill of the pipelines as stated under clause 7.2.6 of Particular Specification PG".

DB 8 MEASUREMENT AND PAYMENT

DB 8.2 COMPUTATION OF QUANTITIES

PS DB 8.2.4 Shoring

Add the following to DB 8.2.4:

Shoring will only be measured and paid for, if the Engineer gives written approval before it is installed.

DB 8.3 SCHEDULED ITEMS

PS DB 8.3.2 Excavation

PS DB 8.3.2(a) Excavate in all materials for trenches on specified sites, backfill, compact & dispose of surplus material within 5km free haul distance for pipes: Unit: m

Add the following to D 8.3.2(a):

The depth of excavation in street reserves shall be measured from the final finished level.

In cases where services lay parallel to steep slopes, the depth of the excavation will be measured along the centre of the trench (on the route of the service).

PS DB 8.3.2(b) Extra-over item (a) above for

Unit: m³

Delete "Intermediate excavation".

PS DB 8.3.2(c) Excavate Unsuitable Material From Trench Bottom

Unit: m³

Delete "within free haul distance" and replace with "within 5km from an excavation".

PS DB 8.3.2(d) Excavate by hand and expose existing services

Unit: m³

The rate shall cover all aspects of identifying, opening and closing of the existing service.

DB 8.3.3 Excavation Ancillaries

PS DB 8.3.3.3 Compaction in Road Reserves

Unit: m³

Add the following to DB 8.3.3.3:

This item is only applicable to the main fill above the bedding and fill blanket.

PS DB 8.3.4 Particular Items

(a) Shore trench opposite structure or services

Unit: m

Add the following to DB 8.3.4(a):

The tariff for shoring must also make provision for the difference in the tariff for excavation.

Delete DB 8.3.4(b) and replace with the following:

(b) Temporary works: Control water inflow

Unit: m

The tendered rate for the effective control of ground water shall cover for all equipment, plant, material as well as the labour involved to use the well points, pumps and pipes, etc. to control the ground water before and during excavation. The rate shall also cover the maintenance of the equipment for the total contract period.

Payment for this item will only be made if the Contractor used well points and pumps to control ground water before or during excavation and measurement will be done on the length of pipe laid in trenches where ground water control had been applied.

DB 8.3.5 Existing Services That Intersect Or Adjoin A Pipe Trench

PS DB 8.3.5(a) Services that intersect a trench

Add the following to DB 8.3.5(a):

Existing services with a depth of cover exceeding 300 mm, measured from the bottom of excavation to the top of the existing service shall not be measured and paid for. There will be distinguished between existing trunk services and existing erf connections.

Unit: No

Unit: No or m

The rate shall also allow for the following costs:

- Sufficient photos have to be taken of existing services and handed over to the Engineer before they are being crossed, if there is a possibility of a difference in opinion over the condition of those services, especially on private property.
- ii) If such a service is damaged, it has to be repaired to its original condition or if possible, to a standard agreed to in writing with the relevant owner. This agreement has to be approved by the Engineer.
- iii) If such a service is removed, it has to be replaced as per original.

PS DB 8.3.5(b) Services that adjoin a trench

Add the following to DB 8.3.5 (b):

The unit "number" will only be used for services such as poles and trees.

The cost for shoring shall be deemed as covered by the listed items and no additional payment will be made for this.

No payment will be made for overhead services that do not directly rest on the ground except where allowance is made for this in the bill of quantities.

Existing services that rest directly on the ground e.g. poles, trees, walls, and structures are handled in the same way as underground services, but the axle of the service will be determined as follows:

The vertical axle is defined as the nearest side or corner of the existing structure to the excavation, measured at the point where the structure and natural ground level intersect.

The horizontal axle will be at the point where the structure and the natural ground level intersect. In this instance, where the excavation falls above the 45° line but within 1,0 meter horizontally from the structure, the service will also be measured as adjoining.

If the structure, according to the abovementioned, does not qualify as an adjoining service but the foundation of the structure is such that if a 45° line drawn from the nearest bottom corner thereof cuts through the excavation, the structure will be measured as an adjoining service **if approved by the Engineer**.

If there is more than one service adjoining the same trench and such a service is on the same side of the trench, payment will only be made for the nearest service to the trench, or if they are the same distance from the trench for the top one. The maximum number of services that will be paid for, is therefore one on each side.

There will be distinguished between existing trunk services and existing erf connection.

DB 8.3.6 Finishing

PS DB 8.3.6.1 Reinstate road surfaces complete with all courses

Replace DB 8.3.6.1 with the following:

u) Gravel Unit : m²

Unit: m²

The area will be calculated from the length of finished road or paved surfaces as applicable and with the trench width taken as 0,8m. Payment for finishing will be additional to that for excavation covered by 8.3.2.

The rate shall cover the cost, selective excavation (including the equipment that is required to break up, remove and, if necessary, stockpile the original surface material), and subsequently of reinstating and compaction and shall include the cost of delays and the cost of any risk of having to repair damage as specified in DB 5.10. Compaction to be according to PS DB 5.7.2.

SANS 1200 G: CONCRETE (STRUCTURAL)

SANS 1200 GA: CONCRETE (SMALL WORKS)

PS G/PS GA 3 MATERIALS

PS G/PS GA 3.1 APPROVAL OF MATERIALS

Substitute "in good time" with "within 14 days of site handover" in the first sentence.

PSG/PSGA 3.2 CEMENT

PS G/PS GA 3.2.1 Portland Cement and Slagment

Substitute G 3.2.1 with the following:

"Where reference is made in this specification or the standard specifications to the cement specifications, e.g. SABS 471: Portland cement and rapid hardening Portland cement, it shall be replaced with the new specification:

SABS ENV 197-1: Cement-composition, specifications and conformity criteria.

Part 1: Common cements.

Furthermore, where reference is made in this specification or the standard specifications to the different cement types, the following new names/types shall apply:

Old product	Typical new product nomenclature	
nomenclature	Cement type	Cement
nomenciature		strength class
OPC	CEM I	32,5
	CEM I	32,5R
RHC	CEM I	42,5
	CEM I	42,5R
LASRC	No provision made	No provision made
PC15SL	CEM II/A-S	32,5
	CEM II/A-S	32,5R
	CEM II/A-S	42,5
PC15FA	CEM II/A-V	32,5
	CEM II/A-V	32,5R
	CEM II/A-W	32,5
	CEM II/A-W	32,5R
RH15FA	CEM II/A-V	42,5
	CEM II/A-V	42,5R
	CEM II/A-W	42,5
	CEM II/A-W	42,5R
PBFC	CEM III/A	32,5
	CEM III/A	32,5R
PFAC	CEM II/B-V	32,5
	CEM II/B-W	32,5
RH30SL	CEM II/B-S	32,5R
	CEM II/B-S	42,5
RH40SL	CEM III/A	32,5R
	CEM III/A	42,5

CEM I 32,5, CEM II A-S 32,5, CEM II/A-V 32,5, or CEM III A may be used for the manufacture of reinforced concrete members."

PS G/PS GA 3.2.3 Storage of cement

Add the following to G 3.2.3:

Cement supplied in bags shall be arranged in such a way that it is used in the order in which it was delivered to site. The bags shall be closely stacked to a height not exceeding 12 bags. Bags shall not be stacked against the outside walls. The cement storage facility shall be weatherproof and provided with a damp proof floor, which shall be cover by a heavy duty plastic sheet. Brand and/or types shall be stored together and not mixed in a stack.

Cement shall not be kept in storage for longer than ten weeks from the date of manufacture without the Engineer's permission. If the cement is older than ten weeks it may be removed from site by order from the Engineer. Alternatively the Engineer can alter the mix design for use in concrete or the use thereof in concrete intended for less critical importance, as in blinding layers.

For the estimation of the storage facility it can be assumed that 20 bags of cement can be stored in one (1) cubic meter with a floor load of 25kN/m².

PS G/PS GA 3.4 Aggregates

PS G/PS GA 3.4.2 Use of Plums

Amend sub clause 3.4.2 as follow:

"The use of plums as aggregate in structures is not be allowed".

PSG/PSGA-3.5 Admixtures

PSG/PSGA-3.5.1 <u>Approval of Admixtures Required</u>

Amend sub clause 3.4.2 as follow:

"No admixtures or additives will be allowed in any concrete mix."

PS G/PS GA 5 CONSTRUCTION

PS G/PS GA 5.4 Pipes and Conduits

Replace sub clause 5.4 as follow:

"Except with the written approval of the Engineer, no pipes other than those shown on the drawings shall be embedded in the concrete, and the approval of the Engineer for the position of all services to be embedded shall be obtained before concreting commences. The clear space between pipes of any kind embedded in reinforced concrete and the clear space between such pipes and reinforcement shall not at any point be less than:

- a) 40mm or,
- b) 5 mm plus the maximum size of coarse aggregate, whichever is the greater

PS G/PS GA 5.5 Concrete

PS G/PS GA 5.5.1 Quality

PS G/PS GA 5.5.1.5 Durability

The exposure conditions for structures will be deemed to be "severe".

PS G/PS GA 5.5.1.6 Prescribed Concrete Mix

• Replace sub clause 5.5.1.6 as follow:

"No prescribed concrete mix will be used in this contract."

PS G/PS GA 5.5.1.7 Strength Concrete

Replace sub clause 5.5.1.7 as follow:

"The strengths of the various concretes required are detailed on the drawings. The maximum size of aggregate must be suited to the work in hand and is subject to the Engineer's approval."

PS G/PS GA 5.5.3 Mixing

PS G/PS GA 5.5.3.2 Ready-Mixed Concrete

Replace sub clause 5.5.3.2 as follow:

"Ready mixed concrete will only be permitted with written approval of the Engineer and if so, the test results obtained by such a production will <u>NOT</u> be part of the quality control system."

PS G/PS GA 5.5.5 Placing

Amend sub clause 5.5.5.9 as follow:

"The pumping of concrete will not be permitted."

PS G/PS GA 5.5.8 Curing and Protection

Amend sub clause 5.5.B(a) as follow:

"The roofs of reservoirs shall be watertight and the Contractor shall cure the roof slab as follows:

Within 12·to 24 hours after completion of the pour the Contractor is to build a one-brick high up stand around the perimeter of the pour. Upon completion of this up stand it is to be filled with water. This water is to be supplemented as evaporation occurs and is to remain for seven days after which it can be allowed to evaporate.

PS G/PS GA 5.5.10 Concrete Surfaces

• Add the following sub clauses to sub clause 5.5. 10:

PS G/PS GA 5.5.10.4 Surface Finishes

PS G/PS GA 5.5.10.4.1 Shuttered Surfaces

Immediately following the removal of the forms, all fins and irregular projections shall be carefully removed from all surfaces. Any cavities in the concrete surface, caused by form ties, honeycombs, broken corners or edges or other defects shall after inspection by the Engineer, be thoroughly cleaned, saturated with water for at least one hour and filled with a mortar in the proportions by volume of one (1) part of cement to nought comma seven five (0,75) of the sand proportion used in the concrete in which the cavity occurs. Every effort should be made to match the colour of concrete. Care should be taken, in the choice of any release agent used, to ensure that the finished concrete surface is not permanently stained or discoloured.

PS G/PS GA 5.5.10.4.2 Surfaces which are not shuttered

On completion of placing and compacting the concrete as specified before, the top surface shall be struck off with a template cut to the required cross-section and tamped with a tamping board to compact the concrete thoroughly and to bring mortar to the surface, leaving the surface slightly rough but generally at the correct elevation and finally finished by wood float.

- Top of Walls to Valve Chambers:- The top of all walls shall receive woodfloated finish.
- Floors of Valve Chambers:- The surface shall first be given a tamped surface finish as specified above and then left for approximately one hour after which it shall be brushed with a soft brush to break up laitance formed on the surface.
- 3. Top of Reservoir Wall:- If the reservoir roof is carried by means of rubber bearing pads on the wall, the wall shall receive a wooden-floated finish to degree "1" accuracy. If the reservoir roof is carried directly on the wall, the wall shall receive steel-floated finish to degree "1" accuracy.
- 4. Reservoir Roof:- The surface shall first be given a tamped surface finish as specified above and shall then be finished with a wooden float to a smooth even surface without any unevenness of more than 3 mm showing under a 3m straight edge or of more than 2mm under any bearing plate. Plastering shall not be permitted at all.
- 5. Reservoir Floor:- The surface shall first be given a tamped surface finish as specified above and then left for approximately one hour after which it shall be brushed with a soft brush to break up laitance formed on the surface.

PS G/PS GA 5.5.11 Watertight Concrete

Add the following sub clauses to sub clause 5.5.11:

"The concrete mix to be used in water-retaining structures shall have a cement/water ratio of at least 2,0."

The minimum cement content shall be 325 kg/m³ and the maximum cement content for SABS ENV 197-1: Common cements shall be 400 kg/m³."

Add the following sub clause 5.6 to clause 5:

PS G/PS GA 5.6 No-Fines Concrete

PS G/PS GA 5.6.1 Classes OF No-Fines Concrete

"No-fines concrete shall be classified by the prefix NF and the size of aggregate to be used. Class NF 19 means a no-fines concrete with a 19mm nominal size aggregate.

The volume of aggregate per 50kg of cement for each class of concrete shall be as follows:

Class	Aggregate per 50kg cement
NF38	0,33m ³
NF 19	0,30m ³
NF 13	0.27m^3

PS G/PS GA 5.6.2 Batching

PS G/PS GA 5.6.2.1 Water

The quantity of water added shall be just sufficient to form a smooth grout which will adhere to and coat completely each and every particle of aggregate, and which is just wet enough to ensure that at periods of contact of aggregate the grout will run together to form a small fillet to bond the aggregate together. The mix shall contain no more than 20 Litres of water per 50kg of cement.

PS G/PS GA 5.6.3 Placing

No-fines concrete shall be placed in accordance with the procedure agreed to by the Engineer. It shall be placed in its final position within 30 minutes of mixing.

The concrete shall be worked sufficiently to ensure that it completely fills the space to be concreted and that adjacent aggregate particles are in contact with one another. Excessive tamping or ramming shall be avoided and under no circumstances shall the concrete be vibrated.

PS G/PS GA 5.6.4 Curing

All no-fines concrete shall be protected from the elements and loss of moisture. Protection against loss of moisture shall be accomplished by one or more of the following:

- a) Retaining formwork in place.
- b) Covering exposed surfaces with sacking or other approved material kept continuously wet.
- c) Covering exposed surface with plastic sheeting.

No-fines concrete shall be cured for at least 7 days.

PS G/PS GA 5.6.5 Covering of No-Fines layer

Before the floor is cast 'on the no-fines, the surface will be covered with building paper to prevent mortar from the wet concrete entering the no-fines layer. The building paper will be properly protected against unnecessary damage before the floor is cast, and if damaged during the fixing of the steel, be replaced just before casting of the floor."

PS G/PS GA 8: MEASUREMENT AND PAYMENT

PS G/PS GA 8.1 Measurement and rates

PS G/PS GA 8.1.1 Formwork

Add the following sub clause 8.1.1.7 to sub clause 8.1.1:

No separate payment shall be made for the finishing of un-shuttered surfaces as described above, and payment therefore will be deemed to be included in the rates tendered for concrete.

PS G/PS GA 8.1.2 Reinforcement

PS G/PS GA 8.1.2.2 and PSG/PSGA-8.1.2.3

• Replace sub clauses 8.1.2.2 and 8.1.2.3 with the following:

"Mild steel and high tensile steel will be measured separately. Welded mesh will be scheduled separately for each type and mass per square metre of mesh.

The rate for steel reinforcement shall cover the cost of supply, cutting, bending, placing in position, and fixing of the reinforcing and supporting steel scheduled, and the provision of all spacer devices and binding wire, as well as the cost of tests in terms of SABS 920.

The rate for welded mesh shall cover the supply, cutting and placing of mesh, as well as the cost of all waste due to laps."

Add the following sub clauses to sub clause 8.1.4:

PS G/PS GA 8.1.4 No-Fines Concrete

a) Cast in situ no-fines concrete

Unit: square metre (m²).

The unit of measurement for cast in situ no-fines concrete shall be the square metre of concrete IN PLACE for the various thicknesses indicated on the drawings. Quantities shall be calculated from the dimensions shown on the drawings.

b) Cast no-fines concrete in pre-formed channels

Unit: metre (m).

The unit of measurement for no-fines concrete in pre-formed channels for under floor drainage shall be the running metres of concrete IN PLACE for the sectional profile of no-fines concrete channels indicated on drawings. Quantities shall be calculated from the dimensions shown on the drawings.

c) No deduction in volume measured for payment shall be made for the volume of any reinforced steel, inserts and pipes or conduits below 150mm in diameter embedded in the concrete.

The tendered rate shall include full compensation for procuring and furnishing of all material, provision of all plant, mixing, transporting, placing and compacting of the concrete; for curing' of the concrete, repairs to defective surfaces and finishing of concrete surfaces as specified and including the layer of building paper. Payment shall distinguish between the different classes of concrete.

SANS 1200 L: MEDIUM PRESSURE PIPELINES

PSL3 MATERIAL

PS L 3.1 GENERAL

Replace the first sentence of L 3.1 with the following:

uPVC to SABS 966 Duraflow pipes or similar approved, where relevant, will be used in the water pipelines.

PS L 3.4 STEEL PIPES, FITTINGS AND SPECIALS

PS L 3.4.2 Pipes with Nominal Bore up to 150mm

This paragraph will only be applicable to steel pipes with nominal bore up to 65mm.

Steel pipes with a nominal bore range of 80 to 150 shall be fabricated with flanges.

PS L 3.4.3 Pipes with Nominal Bore over 150mm

Steel pipes with a nominal bore over 150mm shall comply with the applicable requirements of API5L.

Steel pipes with a nominal bore range of 80 to 200 shall be fabricated with flanges.

PS L 3.7 OTHER TYPES OF PIPES

PS L 3.7.1 uPVC Pipes

• Replace sub clause 3.7.1 with the following:

"uPVC pipes shall be fitted with spigot and socket rubber joints and shall comply with the relevant SASS 966 Part 1 (1998) as amended."

PS L 3.8 Jointing Materials

· Add the following additional sub-clauses

PS L 3.8.8 Gaskets

Gaskets for flanged joints shall be of compressed asbestos fibre to BS 2815 Grade "A" and full faced with a minimum thickness of 3mm.

PS L 3.9 CORROSION PROTECTION

PS L 3.9.5 Joints, Bolts, Nuts and Washers

All aboveground bolts, nuts and washers to be hot-dip galvanized to SABS 763. The threads of all bolts must also be treated with a hot-dip bitumen compound.

All underground-flanged couplings shall be protected with petroleum jelly mastic to a minimum of 100mm from the flanges and covered with plastic tape wrapping.

Add the following clause

PS L 3.9.7 Valves

The corrosion protection of all valves shall be in accordance with and comply to Department of Water Affairs and Forestry specification "DWS 9900: Corrosion Protection."

PS L 3.10 VALVES

Replace sub clause 3.10 with the following:

All valves shall comply with the requirements and specifications of the Department of Water Affairs and Forestry, Standard Specification: DWS 2510 - "Supply of Valves."

PSL5 CONSTRUCTION

PS L 5.1 LAYING

PS L 5.1.1 General

Where connecting to the existing pipeline the position of the existing pipeline must be established by excavating test holes (hand excavation) before any trench excavation to the planned connection point is undertaken. The Contractor will not be compensated for excavation and any other work that is executed and proves to be unnecessary because this specification was not followed.

PS L 5.1.4 Depths of Cover

• Amend sub clause 5.1.4 with the following:

"The minimum cover to pipelines shall be 1000mm."

PS L 5.4 CONCRETE ENCASING

Replace the first sentence of L 5.4 with the following:

Concrete encasing with concrete with strength of 20 MPa/19mm, must be provided at positions indicated by the Engineer. Provision must be made to keep the pipe in position during the placement of the concrete encasing. The length of concrete encasing will be determined by means of site instructions from the Engineer.

PS L 5.4.1 Soilcrete Encasing

Add the following:

A mixture of Portland cement and gravel of base quality that is mixed in a ratio of 1:10 must be provided at positions indicated by the Engineer. Provision must be made to keep the pipe in position during the placement of the soilcrete encasing. The length of soilcrete encasing will be determined by means of a site instruction from the Engineer.

PS L 5.5 ANCHOR BLOCKS

Delete "15 MPa/37,5mm" in the second sentence and replace with "20Mpa/19mm"

PS L 5.6 VALVE CHAMBERS

PS L 5.6.1 General

Substitute the first sentence of L 5.6.1 with the following:

The drawings of valve chambers, which are bound into the document, shall supersede the corresponding drawings in the standard specification.

Valve chambers, to the relevant specified sizes and specifications, shall be installed at all the new positions as indicated on the detailed drawings.

PS L 5.10 DISINFECTION OF POTABLE WATER PIPELINES

Sub clauses (a), (b) and (c) must be adhered to.

PS L 5.11 PIPE MARKERS

Pipe markers shall be installed at 50m intervals on the pipeline route, at all the newly installed isolation and scour valves as indicated on the detailed drawings as well as at all positions where the pipeline route deviates from the horizontal.

PS L 5.12 BOREHOLE PUMP STATIONS

Borehole pump stations, complete as per detailed drawings, shall be installed at the positions indicated on the drawings. The position of the installation shall be at the position indicated on the drawings and the long dimension installation direction of the pump station shall be in the direction of the pipeline and/or flow direction.

PS L 7 TESTING

• Add sub clause 7.2 as follow:

PS L 7.1.2 Valves

"All valves shall, where not otherwise indicated, be pressure tested. Test certificates are to be furnished to the Engineer before delivering valves to site and who is to be allowed access to the manufacturing works for inspections at his discretion."

PS L 7.3 STANDARD HYDRAULIC PIPE TEST

PS L 7.3.1 Test pressure and time of test

Add the following to L 7.3.1.1:

Pipes shall not be tested against isolating valves. Special blank flanges or end caps, fully anchored, shall be provided for testing.

PS L 8 MEASUREMENT AND PAYMENT

PS L 8.2 SCHEDULED ITEMS

Add sub clause 8.1.2 as follow:

PS L 8.1.2 Pipelines

"Pipes installed in the ground but not tested will be regarded as material on site and payment will be affected accordingly until the pipelines are tested either in sections or completely according to specification."

Unit: No

Unit: m3

Unit: No

Unit: m³

Unit: No

Unit: No

PS L 8.2.3 Extra-over 8.2.1 For the Supply, Fixing And Bedding Of Valves

Add the following to L 8.2.3:

Valves are measured and paid for per installation, complete with the inclusion of the cutting of pipes, couplings, extra excavation and all extra material and labour that is required, including tees, fittings complete as shown on the drawings.

PS L 8.2.11 Anchor/Thrust Blocks and Pedestals

Anchor, thrust blocks and pedestals shall be measured per cubic metre concrete and the tendered rate shall include for all formwork, reinforcement (where specified) and uPVC sleeves (pedestals) for the required dimensions. Pedestals shall be one standard pipe size bigger than pipe \emptyset .

PS L 8.2.16 Cut Into And Connect To Existing Mains

The number of each type and diameter of pipe cut into shall measure the cutting into existing mains.

The tendered rate shall include full compensation for all arrangements with the relevant authorities, isolating the main, cutting into the main to accommodate the connecting fitting, dewatering, excavating, removing of excess material, taking steps to prevent the ingress of soil, stones and other material into the main as well as all material and labour to connect the pipe.

PS L 8.2.17 Soil Crete Casing

The soil crete (1:10 ratio) is measured by volume according to the specified width and depth that exceeds the outside volume of the pipe (the volume of the pipe detracted).

The tariff includes the cost of shuttering and soil crete mixture.

PS L 8.2.18 Pipeline Markers and Survey Benchmarks

Pipe markers and survey benchmarks will be measured and paid for by number and the tariff must include all excavation, installation, and paint and numbering of marker, concrete as well as labour as described in PS L 5.11.

PS L 8.2.19 Valve chambers

Valve chambers will be measured and paid for by number and the tariff must include all excavation, installation, finishing and numbering of the chamber, all materials as well as labour.

SANS 1200 LB: BEDDING (PIPES)

PS LB 1 SCOPE

PS LB 1.1 SCOPE

Add the following to LB 1.1:

This specification also covers the bedding required for sleeve pipes.

PS LB 3 MATERIALS

PS LB 3.1 SELECTED GRANULAR MATERIAL

Substitute LB 3.1 with the following:

Selected granular material shall be an aggregate, sand or granular material, all of a non-cohesive nature and free from any organic material, of which the grading analysis shows 100 % passing a 13,2 mm sieve and not more than 5 % passing a 0,075 mm sieve.

Only if approved by the Engineer may sand from the trench excavations be used as selected material.

PS LB 3.2 SELECTED FILL MATERIAL

Substitute LB 3.2 with the following:

The requirements of PS LB 3.1 shall apply mutatis mutandis.

PS LB 3.3 BEDDING

Add the following to LB 3.3:

All pipes shall be classified as flexible pipes and shall have a bedding of selected granular material and selected fill material.

PS LB 3.4 SELECTION

PS LB 3.4.1 Suitable Material Available from Trench Excavation

• Delete sub clause 3.4.1 and replace with the following:

Contractor shall excavate selectively for bedding materials. Notwithstanding the requirements of Sub-clause 3.7 of SANS 1200 DB and Sub-clause 3.4.1 of SANS 1200 LB regarding the use of selective methods of excavating, the Contractor shall use selective methods of excavating and shall provide and use plant that will enable him to avoid burying or contaminating material that is suitable and is required for bedding. All material suitable for bedding and backfill should be put in separate stockpiles. Material from these stockpiles should be screened out to meet the specifications for bedding and backfill.

PS LB 5 CONSTRUCTION

PS LB 5.1 GENERAL

PS LB 5.1.4 Compacting

Substitute "90 % of Mod. AASHTO" in LB 5.1.4 with "93 % of Mod. AASHTO.

If sand is used the compaction grade must be 100% Mod. AASHTO.

PS LB 8 MEASUREMENT AND PAYMENT

PS LB 8.1 PRINCIPLES

PS LB 8.1.1 Supply of Bedding Materials Measured Separately

Add the following to LB 8.1.1:

Payment for bedding material and selected fill material is only made if the selected trench excavation material cannot be used in the same position as bedding material but has to be obtained from another part of the site of works or designated borrow pits, or from commercial sources.

PS LB 8.1.4 Separate Items for Cradle and Blanket

Substitute LB 8.1.4 with the following:

No distinction shall be made as regards material for the bedding cradle and selected fill blanket, and the material shall comply with the requirements for material for bedding cradle.

PS LB 8.1.5 Disposal of Displaced Material

Add the following to LB 8.1.5:

Surplus displaced material shall be dumped and levelled at the spoil site.

PS LB 8.1.6 Free haul

Replace "0,5km" with "5km".

PS LB 8.2 SCHEDULED ITEMS

PS LB 8.2.1 <u>Provision of Bedding from Trench Excavation</u>

• Replace "0,5km" with "5km"

PS LB 8.2.5 Overhaul Of Material For Bedding Cradle And Selected Fill Blanket Unit: m³.km

Substitute LB 8.2.5 with the following:

a) Limited overhaul (0,5 km to 1,0 km) Unit : m³

b) Long overhaul Unit : m³.km

Except that the volume is calculated according to LB 8.1.3, the requirements of D 8.3.6 or DA 8.3.3, as applicable, shall apply for overhaul.

PROJECT SPECIFICATION

PORTION 2 INTERPRETATIONS AND VARIATIONS TO STANDARDISED SPECIFICATIONS AND PARTICULAR SPECIFICATIONS

C5.2.2

PORTION 2.2 PARTICULAR SPECIFICATIONS AS SHOWN UNDER CLAUSE PS 18

This portion contains essential clauses and data and additional clauses required to supplement and augment the Standardized Specifications to suit the nature of this Contract as. Particular Specifications and are bound in hereafter.

PH ENVIRONMENTAL PROTECTION AND CONTROL

POHS OCCUPATIONAL HEALTH AND SAFETY

The number of each clause and each payment item in this part of the project specifications consists of the prefix "P" followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications.

PARTICULAR SPECIFICATION

PH: ENVIRONMENTAL PROTECTION AND CONTROL SPECIFICATIONS

PH 1 PLANS

Prior to establishment of the site camp(s), the Contractor shall produce a plan showing the positions of all buildings, laydown yards, vehicle wash areas, fuel storage areas, batching areas and other infrastructure for approval by the Engineer or the Environmental Officer.

PH 2 USE OF LAND

The Contractor shall not use the land forming the Site of, or connected with the Works, for any purpose whatsoever other than for the proper carrying out of the Works under the Contract and shall place any camps that may be required for himself and his employees only on sites approved by the Engineer. No trees or bushes shall be damaged or cut down by the Contractor or by any of his employees whether for use on the Works or otherwise without the written consent of the Engineer or the Environmental Officer and then only where and in the manner as they may direct.

PH 3 VEGETATION CLEARANCE

PH 3.1 Woody vegetation

- PH 3.1.1 Prior to the start of construction, woody vegetative matter shall be stripped. This material shall either be spread randomly throughout the surrounding veldt so as to provide biomass for other micro-organisms and habitats for small mammals and birds, or it may be stockpiled for later redistribution over the reinstated top soiled surface.
- **PH 3.1.2** No vegetative matter shall be burnt or removed for firewood.

PH 3.2 Herbaceous vegetation

During clearing of woody vegetation no basal cover or grass and topsoil shall be removed and damage to this layer shall be minimised as far as possible.

PH 4 PROTECTION OF VEGETATION

The Contractor shall ensure that all works are undertaken in such a manner that vegetation outside the Works area is not damaged under any circumstances.

PH 4.1 Vegetation outside the Works area

The following provisions shall apply with respect to the protection of areas of vegetation adjacent to the marked Works areas:

- PH 4.1.1 No tree or shrub outside of the Works area shall be felled, lopped, cut or pruned without the prior written approval of the Engineer or the Environmental Officer.
- PH 4.1.2 No tree or shrub outside the Works area shall be felled, lopped, cut or pruned until it has been clearly marked for this purpose by the Engineer or the Environmental Officer. The method of marking will be specified by the Engineer or the Environmental Officer, and the Contractor will be informed in writing.
- **PH 4.1.3** No tree outside the Works area shall be burned for any reason.

- PH 4.1.4 For every tree protected by these specifications which is removed or, in the opinion of the Engineer or Environmental Officer, is unduly damaged by the Contractor, the Contractor shall pay a penalty of R 15 000.00 per tree to the client.
- PH 4.2 Vegetation within or adjacent to the Works area.
- PH 4.2.1 No tree or shrub within the works area shall be felled, lopped, cut or pruned without the prior written approval of the Engineer or the Environmental Officer.
- PH 4.2.2 Trees which have been selected for preservation by the Engineer or the Environmental Officer within or adjacent to the Works areas shall be fenced around their drip line. The fence shall be clearly marked with danger tape. No open fires shall be allowed within this fenced area, nor shall vehicles be parked underneath these trees.
- **PH 4.2.3** If trees are located within the working width of the pipeline, the pipeline shall be aligned to avoid these trees wherever possible.
- PH 4.3 Transplantation of rare and endangered plant species

Prior 10 vegetation clearing any rare or endangered plant species which have been identified by the Environmental Officer or Engineer must be removed and transplanted as instructed by these persons.

- PH 4.3.1 Transplanting of small trees (1 to 1,5 m height) and small shrubs (0,5 to 1 m height).
 - a) Trees and shrubs shall only be transplanted between the months April and September. Deciduous trees and shrubs shall be transplanted only when they are in a leafless condition.
 - b) Holes for transplanting trees and shrubs shall be dug before these plants are dug out. Trees shall be planted in holes of 1 m x 1 m x 1 m and shrubs shall be transplanted in holes of 600 mm x 600 mm x 600 mm.
 - c) Trees and shrubs shall be planted so that their stems or trunks are at the same depth as in their original location. The orientation of the transplanted plants must be the same as in their original location (Le. the north-facing side must remain north-facing).
 - d) Transplanted plants shall be pruned to limit transpiration. Plants shall also be sprayed with an evapotranspiration retardant liquid *it* they are evergreen.
 - e) Transplanted plants shall' be watered once a week for 5 weeks and thereafter once every 2 weeks.
- PH 4.3.2 Transplanting of Aloes, succulents and bulbous plants
 - a. Aloes, succulents and evergreen bulbous plants may be transplanted at any time of the year. Deciduous bulbous plants shall be transplanted when they are leafless.
 - b. Aloes and bulbous plants shall be planted in similar soil conditions and to the same depth as they were before removal.
 - c. Transplanted aloes and bulbs shall be watered once directly after transplanting to settle the soil.

PH 4.4 Alien vegetation

The Contractor shall remove all alien vegetation from the works area for the duration of construction. Such vegetation will be identified by the Environmental Officer and the method of eradication will be specified by him.

PH 5 PROTECTION OF FAUNA

The Contractor shall ensure that all Works are undertaken in a manner which minimizes the impact on the local fauna and shall apply the following specifications with respect to fauna management and protection:

- PH 5.1 Under no circumstances shall any animals be handled, removed, killed or interfered with by the Contractor, his employees, his subcontractors or his subcontractors' employees.
- **PH 5.2** The Contractor and his employees shall not bring any domestic animals onto the site.
- PH 5.3 The Contractor shall ensure that the work site is kept clean and tidy and free from rubbish which would attract animal pest species.
- **PH 5.4** There shall be no feeding of animals.
- **PH 5.5** The Contractor shall ensure that domestic and native animals belonging to the local community are kept away from unprotected works.

PH 6 ARCHAEOLOGICAL ARTEFACTS

- **PH 6.1** The Contractor shall engage an archaeologist to demarcate archaeological sites identified during the impact study.
- PH 6.2 Archaeological sites shall be protected by a three strand fence which will be at least 2 m outside the extremities of the site. The fence shall be clearly marked with danger tape.
- PH 6.3 Should the Contractor expose any archaeological artefacts during excavation, work on the area where the artefacts were found shall cease immediately and the Engineer or the Environmental Officer shall be notified as soon as possible.
- PH 6.4 Upon receipt of such notification, the Engineer or the Environmental Officer will arrange for the excavation to be examined by an Archaeologist as soon as practicable. Aching upon advice from the Archaeologist, the Engineer will advise the Contractor of necessary actions to be taken. The Engineer will take all necessary actions to ensure that delays are minimized.
- **PH 6.5**. Under no circumstances shall archaeological artefacts be removed, destroyed, or interfered with by the Contractor, his employees, his subcontractors or his subcontractors' employees.
- PH 6.6 The Contractor shall ensure that none of his employees gain access to any archaeological areas (whether fenced or unfenced), except when authorised to do so by the Engineer or the Environmental Officer.

PH 7 SCENIC QUALITY

- PH 7.1 The Contractor shall not establish or undertake any activities which, in the opinion of the Resident Engineer or Environmental Officer, are likely to adversely affect the scenic quality of the area. The Engineer may direct the Contractor to refrain from such activities or to take ameliorative actions to reduce the adverse effect of such activities on the scenic quality of the environment.
- PH 7.2 No painting or marking of natural features shall be done. Marking for surveying and other purposes shall only be done with pegs and beacons.
- **PH 7.3** All cut and fill forms shall be rounded at the edges to blend them with the surrounding landforms.
- PH 7.4 All packed rock and exposed rock cuttings shall be treated in order to blend their colour with the colours of the natural weathered rocks of the adjacent environment.
- PH 7.5 All concrete structures shall be treated so as to blend in with the colours of the surrounding landscape. This shall be done either through painting or through treatment with a staining or colouration compound. All other permanent structures shall have colours, which are chosen to blend in with the dominant colours of the surrounding landscape. Painted surfaces shall be painted with non-reflective (matt) colours.

PH 8 WORKING AREA

- **PH 8.1** The area of construction along the pipeline shall be contained within a 15 m servitude.
- PH 8.2 The servitude shall be temporarily fenced for the portion under construction at any one time. The fence shall be progressively erected and removed as the work proceeds. The location and extent of the fence shall be determined by the Engineer or the Environmental Officer.

PH 9 ACCESS ROADS

- PH 9.1 No new permanent access roads shall be developed by the Contractor other than those determined or approved by the Engineer.
- **PH 9.2** Existing roads shall be used as far as possible for inspection purposes.
- **PH 9.3** Topsoil shall be stripped as described under item 12 "Topsoil" prior to construction and reinstated on completion of use of the road.
- **PH 9.4** The temporary access road shall form part of the 15 m working width servitude.
- PH 9.5 Horse and trailer vehicles transporting pipes may not turn in areas of cultivated lands but shall turn in areas specifically identified by the Engineer or the Environmental Officer.

PH 10. FIRES

No open fires shall be permitted except in areas specifically prepared and' controlled for this purpose.

PH 11 FENCING

- **PH 11.1** Fencing shall be erected around sensitive natural or cultural elements to protect them from damage. No pedestrian or vehicular access shall be allowed to such fenced areas.
- PH 11.2 In places where temporary fencing is required, the Contractor shall erect such fencing when and where required by the Site Engineer and re-erect and maintain temporary fencing as necessary. Temporary fencing shall remain in position either until it is replaced by permanent fencing or until completion of the whole of the Works, unless the Contractor requires, or the Engineer or the Environmental Officer directs, its earlier removal. The Contractor shall erect and maintain the aforementioned temporary fencing in the locations and for the period described in the Contract.
- **PH 11.3** If temporary fencing is removed temporarily for the execution of any part of the Works it shall be reinstated as soon as practicable by the Contractor.
- **PH 11.4** The clearing for permanent fencing shall be limited to the removal of trees and shrubs within 1 m of the fence line. There shall be no removal of the grass cover or topsoil within this width.
- **PH 11.5** Any fences damaged by the Contractor shall be repaired as soon as practicable at his cost.

PH 12 TOPSOIL

PH 12.1 Source of topsoil

Topsoil shall be stripped from all areas that are to be utilized during the construction period and where permanent structures and access is required. These areas will include all areas to be excavated, temporary and permanent access roads, construction camps and borrow pits. Topsoil shall be stripped after clearing of woody vegetation and before excavation or construction commences.

The topsoil is regarded as the top 300 mm of the soil profile irrespective of the fertility and composition of the soil.

PH 12.2 Topsoil stripping

- PH 12.2.1 Soil shall be stripped to a minimum depth of 150 mm or to the depth of bedrock where soil is shallower than 150 mm. Herbaceous vegetation, overlying grass and other fine organic matter shall not be removed from the stripped soil.
- **PH 12.2.2** No topsoil which has been stripped shall be buried or in any other way be rendered unsuitable for further use.
- **PH 12.2.3** Topsoil shall only be stripped when it is in a dry condition in order to prevent compaction.

PH 12.3 Topsoil stockpiling

- PH 13.3.1 Stripped topsoil shall be stockpiled on sites adjacent to where it has been stripped which have been approved by the Engineer. Soil stockpiles shall not take the form of windrows, unless this can be placed far enough away from the working area. This is to prevent the soil from being spread out or mixed with the other spoil during construction.
- **PH 12.3.2** Topsoil stripped from different soil zones shall be stockpiled separately and clearly identified as such. Topsoil obtained from different sites shall not be mixed.
- **PH 12.3.3** Soil stockpiles shall not be higher than 2,5 m, and the slopes of soil stockpiles shall not have a vertical: horizontal gradient exceeding 1:2,5.
- PH 12.3.4 No vehicles shall be allowed access· onto the stockpiles after they have been placed. Topsoil stockpiles shall be clearly demarcated in order to prevent vehicle access and later identification as the resource for rehabilitation and vegetation establishment.

- **PH 12.3.5** Soil stockpiles shall not be allowed to become contaminated with oil, diesel, petrol, garbage or any other material which may inhibit the later growth of vegetation in the soil.
- **PH 12.3.6** After topsoil stockpiling has been completed, the Contractor shall apply soil conservation measures to the stockpiles to the approval of the Engineer or Environmental Officer.

PH 12.4 Topsoil placement

- PH 12.4.1 Topsoil shall be placed to a minimum depth of 150 mm over all areas where it has been stripped and over disused borrow pits after construction in those areas has ceased. Topsoil placement shall be done concurrent with construction as soon as construction in an area has ceased.
- PH 12.4.2 All areas onto which topsoil is to be spread shall be graded to the approximate original landform with maximum slopes of 1:2,5 and shall be ripped prior to topsoil placement. The entire area to be top soiled shall be ripped parallel to the contours to a minimum depth of 150 mm.
- PH 12.4.3 Topsoil shall be placed in the same soil zone from which it had been stripped. However, if there is insufficient topsoil available from a particular soil zone to produce the minimum specified depth, topsoil of similar quality may be brought from other reservoir sites.
- PH 12.4.4 Where insufficient topsoil that has been stripped by the Contractor to provide the minimum specified depth, the Contractor shall obtain suitable substitute material from other sources at no cost to the employer. The suitability of the substitute material shall be determined by means of a soil analysis which is acceptable to the Engineer or the Environmental Officer.
- PH 12.4.5 No vehicles shall be allowed access onto topsoil after it has been placed.
- **PH 12.4.6** After topsoil placement is complete, cleared and stockpiled vegetation matter shall be spreadrandomly by hand over the top soiled area as instructed by the Environmental Officer.

PH13 REVEGETATION

- PH 13.1 Areas where topsoil has been redistributed shall be hydro seeded with a seed mixture approved by the Engineer or Environmental Officer. Hydro seeding shall be carried out as soon as practicable during the growing season, after topsoil placement is complete.
- PH 13.2 Areas to be seeded shall be ripped in lines 300 mm centre to centre and to a depth of at least 300 mm parallel to the contours to alleviate soil compaction and to establish a seedbed suitable for the establishment of-growth.
- PH 13.3 The Contractor shall work into the soil fertilizers at a rate and depth to be determined by the Environmental Officer, based on a soil analysis. Fertilizers shall be spread evenly over the area to ensure a uniform distribution.
- PH 13.4 Notwithstanding the fact that the Environmental Officer will determine the method of grassing, the type of grass seed used and the rate of application of seed, the Contractor shall be solely responsible for the cost of replanting or re-hydro seeding where acceptable cover is not obtained.

However, where in the opinion of the Contractor it is doubtful from the outset whether [t will be possible to establish an acceptable cover he may inform the Engineer or Environmental Officer of his reasons therefore and the Engineer or Environmental Officer shall, if he agrees, either adopt another method of grassing or agree to accept whatever cover can be obtained, provided that all reasonable efforts have been made to establish a good cover using the method proposed. Any such agreement shall only be valid if given in writing by the Engineer or Environmental Officer.

Acceptable cover is defined as follows:

An acceptable grass cover shall mean that not Jess that 80% of the hydro seeded area shall be covered with grass and that there shall be no bare patches of more than 500mm in maximum diameter.

PH 13.5 The areas which show no vegetation growth 9 months after completion of the rehabilitation work, will be ripped, additional topsoil spread and seeded with indigenous grass species.

PH 13.6 The grass mix to be used shall be:

During Summer	Kg / ha
Eragrostis teff'	2.0
Eragrostis curvula(selected)	3.0
Digitaria eriantha	5.0
Chloris guyana	4.0
Cenchris ciliaris	4.0
Cynodon dactylon	7.0
Aristida congesta	2.5
Melinis repens	2.5
Andropogon eucomus	2.5
Imperata cylindrica	2.5

35.0 kg/ha

Available from the University of Potchefstroom - Reclamation Research Institute.

During winter (May to August/September) add: Kg / ha

Lolium multiflorum 2.0 Lolium perenne 3.0

Grass seeds shall be mixed with either chopped straw, sawdust or sand in order to prevent the separation of seeds of different size, weight and shape. Prior to seeding, trials shall be carried out to determine which of these materials is most effective in preventing the separation of seeds. 2:3:2 fertilizer shall also be added to the seed mixture prior to broadcasting.

After mixing the seed mixture shall be halved. The two halves shall be sown in two successive applications which follow directly on one another. Seed shall be sown along parallel lines 1.5 m apart. The two halves of the mixture shall be sown in directions perpendicular to each other to cover the entire area. Should the total area have been seeded and some seed mixture remains unused, the remaining seed mixture shall be broadcast in the prescribed manner.

During seeding, the seed mixture shall be regularly mixed by hand in order to prevent the separation of smaller and larger seeds in the mixture.

After seeding, the soil surface shall be lightly raked parallel to the contours in order to cover the seed. During raking, care shall be taken to prevent the redistribution or removal of seed from any area.

PH 13.7 The following fertilizers shall be broadcast in the specified concentrations:

2:3: (22) Zn 400 kg / ha Superphosphate 350 kg / ha Total 750 kg / ha

The superphosphate shall be mixed into the soil during scarification and shall be spread by hand in the same manner as the seed. 2:3:2 Fertilizer shall be mixed and broadcast together with the seed.

PH 14 BORROW PITS AND QUARRIES

- **PH 14.1** If a borrow pit is to be developed or an existing one is to be extended, all topsoil from the area that is to be quarried must be stripped and stored for later rehabilitation of the pit.
- PH 14.2 Stripping and excavation actions shall be progressive in such manner that those parts of a borrow pit or quarry where work is complete can be rehabilitated while other areas are still being quarried.

- PH 14.3 Cut Slopes of borrow pits and quarries shall not have a vertical: horizontal gradient of not steeper than 1 3, preferably 1:5.
- PH 14.4 Borrow pits shall be used as dump sites for excess rock spoil. On completion of spoiling the pits shall be reshaped and covered with a layer of topsoil. On no account may spoil or rock be placed in drainage ways without prior consent being obtained from the Engineer.
- PH 14.5 Storm water cut off drains shall be provided at the top of the cut slope, where identified as necessary by the Engineer, to prevent erosion of the rehabilitated surface of the borrow pit or quarry.
- **PH 14.6** No borrow pit shall be used as a dump site for refuse material or for toxic material ego cement, oil, diesel, rubber and similar materials.

PH15 EROSION PREVENTION

- PH 15.1 The Contractor shall take measures, to the approval of the Engineer, to ensure that there is no undue storm water damage and soil erosion resulting from the construction activities inside and outside the construction camp and Works areas.
- PH 15.2 Surface storm water shall, where possible, not be allowed to be concentrated and to flow down cut or fill slopes without erosion protection measures being in place.
- PH 15.3 Overflow and/or scour channels shall be lined with stone pitching along their length and at their points of discharge to prevent soil erosion: The point of discharge shall be at a point where there is dense natural grass cover. These channels shall not discharge straight down the contours but shall be aligned at such an angle to the contours that they have the least possible gradient.

PH 16 EARTHWORKS

PH 16.1 Cut and fill forms

All cut and fill forms should be rounded on the edges to allow them to blend with the surrounding landforms.

PH 17 SPOIL AND WASTE MATERIAL

- PH 17.1. The Contractor shall load and haul excess spoil to fill in the borrow pits or to dump sites approved by the Engineer. The dumped material must be finally rounded off to have slopes not steeper than 1:3.
- PH 17.2 The Contractor shall remove all foundations and similar waste and transport all such waste material off site to dump areas which have been approved by the Engineer.

PH 18 BLASTING

- **PH 18.1** When doing blasting the Contractor shall take measures to limit fly rock.
- **PH 18.2** Fly rock 150 mm and larger which falls beyond the cleared working area shall be collected and removed together with the rock spill.
- PH 18.3 When blasting under power lines the Contractor shall arrange for power to be temporarily switched off or have the lines moved or comply with the requirements of ESKOM who will be advised in reasonable time of the intention to blast.

PH 19 PREVENTION OF OIL POLLUTION

- PH 19.1 Waste run-off water from the vehicle wash bays, workshops and diesel/fuel tank areas shall be collected in a series of covered conservancy tanks with oil baffles/oil traps. The oil sludge thus collected shall be disposed of at an approved toxic waste disposal site. Water from conservancy tanks shall be drained to retention areas to allow silt settlement.
- **PH 19.2** Above mentioned areas should be dished concrete floor slabs which drain into the conservancy tanks.
- **PH 19.3** All spillage of oil onto concrete surfaces shall be controlled by the use of an approved absorbent material such as Oclansorb or Drizit.
- **PH 19.4** All old oils shall be retained for recycling by the supplier.
- PH 19.5 All soil contaminated by oil, fuel, etc. shall be collected immediately and disposed of at an acceptable disposal site to the approval of the Engineer or the Environmental Officer.

PH 20 REFUSE DISPOSAL

The Contractor shall dispose of all refuse generated by him or his subcontractor on a weekly basis at an approved refuse disposal site.

PH 21 ABLUTION FACILITIES

Portable toilets shall be placed within easy access of the Contractor's employees. These shall be moved to follow the progression of the Works.

PH 22 CLEARANCE OF SITE ON COMPLETION

On completion of the Works the Contractor shall clear away and remove from the works area all constructional plant, surplus rock and other materials, foundations, plumbing and other fixtures, rubbish and temporary works of every kind. Areas thus cleared shall be graded and scarified to restore the ground to its original profile as near as practicable before topsoil placement and revegetation.

PH 23 ENVIRONMENTAL AWARENESS OF EMPLOYEES

The Contractor shall arrange that all his employees and those of his subcontractors receive environmental training before the commencement of construction to the satisfaction of the Engineer or Environmental Officer, in order that these employees:

- **PH 23.1** acquire a basic understanding of the key environmental features of the work site and environs;
- **PH 23.2** are thoroughly familiar with the requirements of the Environmental Protection and Control Specifications as they apply to the Works;
- **PH 23.3** receive basic training in the identification of archaeological artefacts, and rare and endangered flora and fauna that may be encountered along the route;
- **PH 23.4** are made aware of any other environmental matters which are deemed to be necessary by the Engineer or the Environmental Officer.

PH 24 COMPLIANCE WITH ENVIRONMENTAL PROTECTION SPECIFICATIONS

- PH 24.1 All persons employed by the Contractor or his subcontractors shall abide by the requirements of these Specifications as they apply to the works.
- PH 24.2 Any employees of the Contractor or his subcontractors found to be in breach of any of the Environmental Protection Specifications may be' ordered by the Engineer to leave the site forthwith. The order may be given orally or in writing. Confirmation of an oral order will be given as soon as practicable but lack of confirmation in writing shall not be a cause for the offender to remain on site. No extension of time will be granted for any delay or impediment to the Contractor brought about by a person ordered to leave the site.
- PH 24.3 Supervisory staff of the Contractor or his subcontractors shall not direct any person to undertake any activities which would place such person in contravention of the Environmental Protection and Control Specifications.
- PH 24.4 For every tree protected by these specifications which is removed or, in the opinion of the Engineer or the Environmental Officer, is unduly damaged by the Contractor, the Contractor shall pay a penalty of R5 000.00 per tree.

PH 25 SUBCONTRACTED WORK

Subcontractors and their employees shall comply with all the requirements of the Environmental Protection and Control Specifications that apply to the Contractor. Absence of specific reference to the subcontractor in any specification does not imply that the subcontractor is not bound by that specification.

PH 26 MEASUREMENT AND PAYMENT

The reinstatement of borrow pits, pipe trenches and work areas shall be included in the contractor's rates for earthworks and excavations. Erosion protection such as construction of berms for storm water drainage shall be included in the rates for pipe trenches and excavations of earthworks. Only gabions, where instructed by the Engineer will be paid separately.

PARTICULAR SPECIFICATION

POHS: OCCUPATIONAL HEALTH AND SAFETY

POHS 1 SCOPE

This specification details the health and safety requirements associated with the Works.

POHS 2 INTERPRETATIONS

Occupational Health and Safety Act, Act 85 of 1993 shall apply to this Contract. The Construction Regulations promulgated on 18 July 2003 and incorporated into the said Act by Government Notice R1010, published in Government Gazette 25207 apply to any person involved in construction work. These regulations are hereinafter referred to as "the Construction Regulations" and the said Act as "the Act".

Construction work is defined as:

"Any work in connection with:-

- a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
- b) the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar Type of work".

POHS 3 GENERAL

POHS 3.1 The Employer will appoint the Contractor in writing for execution of the Works.

The Contractor shall accept his appointment under the terms and Conditions of Contract. The Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction work in terms of Regulation 3 of the Construction Regulations. The Contractor shall submit the notification in writing prior to commencement with work.

POHS 3.2 The Contractor shall ensure that it is fully conversant with the requirements of this Specification.

This Specification is not intended to supersede the Act nor the Construction Regulations. Those sections of the Act and the Construction Regulations which apply to the scope of work to be performed by the Contractor in terms of this Contract continue to be a legal requirement of the Contractor.

POHS 3.3 The Contractor shall provide and demonstrate to-the Employer a suitable and sufficiently documented health and safety plan, based on this Specification, the Act and the Construction Regulations, which shall be applied from the date of commencement of and for the duration of execution of the Works.

The Employer will take reasonable steps to ensure that the Contractor's health and safety plan is implemented and maintained. The steps taken will include periodic audits at intervals once every month.

- **POHS 3.4** Should the Contractor at any stage in execution of the Works.
 - a) fail to implement or maintain his health and safety plan;
 - execute construction work which is not in accordance with his health and safety plan;
 or
 - c) act in any way which may pose a threat to the health and safety of persons, the Employer will stop the Contractor from executing construction work.
- POHS 3.5 The Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the Works.
- POHS 3.6 The Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and the Construction Regulations.
- POHS 3.7 The Contractor shall constantly demonstrate his competence and adequacy of resources to perform the duties imposed on the Contractor in terms of this Specification, the Act and the Construction Regulations.
- **POHS 3.8** The Contractor shall ensure that a copy of his health and safety plan is available on request to the Employer, an inspector, employee or sub-contractor.
- POHS 3.9 The Contractor shall ensure that a health a('1d safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Employer or inspector upon request.

Upon completion of the Works, the Contractor shall hand over a consolidated health and safety file to the Employer.

POHS 3.10 The Contractor shall, throughout execution of the Contract, ensure that all conditions imposed on his sub-contractors in terms of the Act and the Construction Regulations are complied with, as if they were the Contractor.

POHS 4 GENERAL REQUIREMENTS

POHS 4.1 Contractor's Construction Safety Officer

Before commencing work, the Contractor shall designate a competent construction safety officer (CSO) who shall be acceptable to the Engineer, to represent and act for the Contractor. The Contractor shall inform the Engineer in writing of the name and address of the officer, together with the scope and limitations of the CSO's authority to act for the Contractor. The Contractor's CSO shall make available to the Employer an all-hours telephone number at which the CSO can be contacted at any time in the event of an emergency involving any of the Contractor's employees or other persons at the Works.

POHS 4.2 Log Books

The Contractor shall keep the following log books and shall make them available to the Engineer on request:

- POHS 4.2.1 A record of the weekly inspections of first aid boxes.
- POHS 4.2.2 A record of the weekly inspections of ladders.
- POHS 4.2.3 A record of the weekly inspections of fire-fighting equipment.
- POHS 4.2.4 A record of the names and addresses of its employees who are registered as trained fire-fighting personnel and who are available on site for fire-fighting duties.
- POHS 4.2.5 A record of the monthly inspections of welding machines.
- POHS 4.2.6 A record of the monthly inspections of oxy-acetylene equipment.
- POHS 4.2.7 A record of the weekly inspections of scaffolding structures.
- POHS 4.2.8 A record of the monthly inspections of builder's hoists.
- POHS 4.2.9 A record of the monthly inspections of mobile and tower cranes.
- POHS 4.2.10 A record of the monthly inspections of lifting gear.
- POHS 4.2.11 A record of the inspections of electrical equipment.
- POHS 4.2.12 A record of the monthly tests of earth leakage units.

POHS 4.3 First Aid

POHS 4.3.1 Safety Notice Board

The Contractor shall provide a safety notice board where safety notices, site regulations concerning safe working practices and information on the location of the nearest first aid station, can be conspicuously displayed to all his staff. The size of the notice board shall be at least 600mm x 800mm.

POHS 4.3.2 First Aid Equipment

The Contractor shall provide for his employees a stretcher for emergencies and an approved first aid box. A responsible person, who shall be appointed by the Contractor, shall check the first aid box weekly and a record shall be kept of the contents. The Contractor shall promptly replenish any deficient medical supplies.

POHS 4.3.3 Hazard Notices

The Contractor shall display hazard notices in all areas where hazardous conditions prevail or may occur.

POHS 4.3.4 Contractor's First Aid Officer

Before commencing work, the Contractor shall designate a competent First Aid Officer (FAO) who shall be acceptable to the Engineer, to represent and act for the Contractor. The Contractor shall inform the Engineer in writing of the name and address of the officer, together with the qualifications of the FAO for approval. The Contractor's FAO shall make available to the Employer an all-hours telephone number at which the FAO can be contacted at any time in the event of an emergency involving any of the Contractor's employees or other persons at the Works.

POHS 4.3.5 Reporting on Incidents and/or Injuries

All incidents in respect of damage to Works, property or machinery, or injury to persons, shall be reported by the Contractor's Safety Officer, First Aid Officer or Site Representative to the Engineer by the quickest means possible.

A mandatory report form, containing full details of the incident, shall be completed and submitted to the Engineer within twenty four (24) hours of the occurrence of the incident.

The Engineer shall have the right to make all or any enquiries as to the cause and result of any such incident. The Contractor shall provide the Engineer with full facilities for carrying out such enquiries.

POHS 4.4 Good Housekeeping and Safety Policy

The Contractor shall at all time carry out the Works in a manner to *avoid* the risk of bodily harm to persons or risk of damage to any property. The Contractor shall take all precautions which are necessary and adequate to eliminate any conditions which contribute to the risk of injury to persons or damage to property. The Contractor shall continuously inspect all work, materials and equipment to discover and determine any such conditions and shall be solely responsible for the discovery, determination and elimination of such conditions.

During the period of this Contract, the Contractor shall be responsible for the safe storage of all materials and equipment required for execution of the Contract, and for disposal of all non-usable waste material in an orderly manner.

All materials, whether stored on the construction site or within the Contractor's designated area, shall be stored neatly and safely to prevent possible injury to any personnel. The material shall be stored to facilitate safe access to, and removal of the material from the storage area.

Any flammable material, such as paint, diesel fuel and oil, shall be stored in lockable non-combustible structures, which shall be clearly marked to indicate the hazardous nature of the materials stored within. The flammable materials stores shall be located in safe areas away from hazardous surroundings and adequate and suitable fire-fighting equipment shall be provided within easy reach of the materials stores.

POHS 4.5 Exposed Danger Areas

All exposed danger areas shall be demarcated by the Contractor with appropriate barrier tape and hazard notices to prevent unauthorized entering the danger area.

POHS 4.6 Personal Protective Clothing

The Contractor shall provide the necessary personal protective clothing for its employees in hazardous areas, appropriate to the nature of the hazard.

POHS 4.6.1 Hard Hats

All employees of the Contractor shall wear hard hats in areas where appropriate hazard notices are displayed. The Engineer shall have the right to ban certain colours if they are similar to the Employer's identifying colours. Hard hats shall not be painted or otherwise defaced.

POHS 4.6.2 Eye Protection

Suitable eye protection shall be worn in areas where appropriate hazard notices are displayed, or when grinding, chipping, breaking, drilling, arc-welding, cutting with oxyacetylene equipment or similar activities are taking place.

POHS 4.6.3 Hearing Protection

Suitable hearing protection shall be worn in areas where appropriate hazard notices are displayed.

POHS 4.6.4 Foot Wear

All employees of the Contractor shall wear steel capped safety boots or shoes, undamaged, laced-up, suitable for the intended purpose, in prescribed areas where appropriate hazard notices are displayed.

POHS 4.6.5 Gloves

All employees of the Contractor shall wear suitable protective gloves in areas where appropriate hazard notices are displayed, or when handling hot or hazardous materials or chemicals.

POHS 4.6.6 Clothing

All employees of the Contractor shall wear suitable protective clothing when working in proximity of machinery, power tools, hazardous materials or chemicals.

POHS 4.6.7 Overalls & Reflective Vests

All employees of the Contractor shall at all times wear overalls and reflective vests as specified by the Employer.

POHS 4.6.8 Dust masks

All employees of the Contractor shall wear suitable dust masks when working in areas where dust nuisance is experienced.

POHS 4.7 Road Traffic / Transportation

- POHS 4.7.1 The Contractor shall ensure that drivers of motor vehicles are in possession of a driver's licence, valid for the class of vehicle which they are required to drive, and shall produce the licence on request
- **POHS 4.7.2** The Contractor shall not permit any driver to be in control of a vehicle at the Works while under the influence of alcohol or drugs.
- **POHS 4.7.3** All vehicles of the Contractor shall display a name board bearing the Contractor's name. Hired vehicles shall bear an identifying sticker.

POHS 4.8 Overhead Powerlines

Regulations of the Electricity Supply Authority in connection with prohibition of operations in the vicinity of overhead powerlines shall be observed by the Contractor at all times.

POHS 4.9 Machine Guarding

All power tools and machinery driven by belts, gears, ropes, chains, couplings and similar drives shall be adequately guarded. The Contractor shall prohibit the use of any equipment with a damaged, missing or inadequate guard.

POHS 5 SPECIAL REQUIREMENTS

POHS 5.1 Formwork and Support Work

The Contractor shall ensure that -

- A) all formwork and support work operations are carried out under the supervision of a competent' person who has been appointed by the Contractor in writing for that purpose;
- B) all formwork and support work structures are adequate designed, erected, supported, braced and maintained so that they will be capable of supporting all anticipated vertical and lateral loads that may be applied to them and also that no loads are imposed onto the structure that the structure is not designed to withstand;
- C) the foundation conditions are and remain suitable to withstand the load caused by the formwork and support structure and any imposed loads such that the formwork and support work structure are stable;
- D) all formwork and support work structures are inspected by a competent person, who has been appointed by the Contractor in writing for that purpose, immediately before, during and after the placement of concrete or any other imposed load and thereafter on a daily basis until the formwork and support work structure has been removed and the results have been recorded in a register and made available on the site of the Works; and
- E) upon casting concrete, the support work of formwork structure should be left in place until the concrete has acquired sufficient strength to support safely, not only its own load, but also any imposed loads and not removed until authorisation has been given by the competent person contemplated in sub-paragraph (a).

POHS 5.2 Prevention of Uncontrolled Collapse

The Contractor shall ensure that -

- A) all reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work; and
- B) no structure or part of a structure is loaded in a manner that would render it unsafe.

POHS 5.3 Safe Working Loads

The Contractor shall ensure that -

- a) the safe working loads of hoists, load-bearing beams and cranes are prominently displayed at all times.
- b) the safe working loads are not exceeded under any circumstances.
- c) all lifting gear is marked with a unique identity number and recorded in a register.

POHS 5.4 Commissioning Safety Precautions

The Contractor shall ensure that whatever repairs, adjustments or any work are undertaken on any plant or machinery, the power supply is switched off, disconnected or the plant *I* machinery disengaged until the work or repairs have been completed.

POHS 5.5 Toxic Materials

The Contractor shall exercise all necessary care in the handling of toxic compounds and shall be able to identify the major chemical components in the event of medical treatment being required.

POHS 5.6 Hazardous Chemicals and Materials

- a) The Contractor shall provide suitable and adequate protective equipment when working in an area where hazardous chemicals and materials are being used.
- b) The Contractor shall ensure that its employees have familiarised themselves with the hazardous material data sheets applicable to the specific site as well as the location of firefighting equipment, safety showers/baths and other washing facilities; prior to commencement of work.

POHS 5.7 Indemnity of Employer and his Agents

- a) The Form of Tender to this Contract Document contain a "Mandatory Form of Authority and Agreement in terms of Section 37(2) of the Occupational Health and Safety Act, No. 85 of 1993" which agreement shall be entered into and duly signed by both the Employer and Contractor prior to commencement with work.
- b) A copy of the signed agreement shall be included in the Contractor's health and safety plan.
- c) Any acceptance, approval, check, certificate, consent, examination, inspection, instruction, notice, observation, proposal, request, test or similar act by either the Employer, any of his agents of the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, the Act and the Construction Regulations, including responsibility for errors, omissions, discrepancies and non-compliances.

POHS 6 MEASUREMENT AND PAYMENT

POHS 6.1 Health and Safety Plan Compilation

Preparation of a Health and Safety Plan by a competent for compliance with all the requirements of the Department of Labour, OHS Act based on the Risk Assessment and the Construction Regulations 2014.

Unit: Sum

Unit: Months

Unit: Sum

POHS 6.2 Health and Safety Plan Management

Compilation and keeping up to date the Health & Safety plan and file, including all documentation required in terms of the act, over the entire construction period.

POHS 6.3 Personal Protective Clothing

Providing and keeping in good order, for the duration of the construction period, the protective clothing as per specification.

POHS 6.4 First Aid Unit: Sum

Providing and keeping in good order, for the duration of the construction period, the first aid requirements as per specification.

SEKHUKHUNE DISTRICT MUNICIPALITY

C6. OHS Specifications for construction projects

6.1 Specification

1. PREAMBLE

In terms of Construction Regulation 4(1)(a) of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), the SEKHUKHUNE District Municipality, as the Client, shall be responsible to prepare Health & Safety Specifications for any intended construction project and provide any Principal Contractor who is making a tender or appointed to perform construction work for the Client on its behalf with the same.

The Client's further duties are as described in The Act and the Regulations made there-under. The Principal Contractor shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 5 as well as the Health and Safety Plan for the project.

This 'Health and Safety Specifications' document is governed by the "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as 'The Act'. Notwithstanding this, cognisance should be taken of the fact that no single Act or its set of Regulations can be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is required that the entire scope of the Labour legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document this requirement is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. Despite the foregoing it is reiterated that environmental management shall receive due attention.

Due to the wide scope and definition of construction work, every construction activity and site will be different, and circumstances and conditions may change even on a daily basis. Therefore, due caution is to be taken by the Principal Contractor when drafting the Health and Safety Plan based on these Health and Safety Specifications. Prior to drafting the Health and Safety Plan, and in consideration of the information contained here-in, the contractor shall set up a Risk Assessment Program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. This Risk Assessment and the steps identified will be the basis or point of departure for the Health and Safety Plan. The Health and Safety Plan shall include documented 'Methods of Statement' (see definitions under Construction Regulations) detailing the key activities to be performed in order to reduce as far as practicable, the hazards identified in the Risk Assessment.

2. SCOPE OF HEALTH AND SAFETY SPECIFICATION

The Health and Safety Specifications pertaining to this project; cover the subjects contained in the index and is intended to outline the normal as well as any special requirements of the Client pertaining to the health and safety matters (including the environment) applicable to the project in question. These Specifications should be read in conjunction with the Act, the Construction Regulations and all other Regulations and Safety Standards which were or will be promulgated under the Act or incorporated into the Act and be in force or come into force during the effective duration of the project. The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract documentation and technical specifications shall not be interpreted, in any way whatsoever, to countermand or nullify any stipulation of the Act, Regulations and Safety Standards which are promulgated under, or incorporated into the Act.

3. PURPOSE

The Client is obligated to implement measures to ensure the health and safety of all people and properties affected under its custodianship or contractual commitments, and is further obligated to monitor that these measures are structured and applied according to the requirements of these Health and Safety Specifications.

The purpose of this specification document is to provide the relevant Principal Contractor with any information other than the standard conditions pertaining to construction sites which might affect the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; and to protect persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work during the carrying out of construction work for the SEKHUKHUNE District Municipality. The Principal Contractor is to be briefed on the significant health and safety aspects of the project and to be provided with information and requirements on inter alia:

- a) Safety considerations affecting the site of the project and its environment;
- b) Health and safety aspects of the associated structures and equipment;
- c) Submissions on health and safety matters required from the Principal Contractor and,
- d) The Principal Contractor's health & safety plan.

To serve to ensure that the Principal Contractor is fully aware of what is expected from him/her with regard to the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Regulations made there-under including the applicable safety standards, and in particular in terms of Section 8 of the Act.

To inform the Principal Contractor that the Occupational Health and Safety Act, 1993 (Act 85 of 1993) in its entirety shall apply to the contract to which this specification document applies. The Construction Regulations shall apply to any person involved in construction work pertaining to this project, as will the Act.

4. DEFINITIONS

"Purpose of the Act" -

To provide for the health and safety of persons at work and the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

"Agent" –

means any person who acts as a representative for a client;

"Client" –

means any person for whom construction work is performed;

"Construction Work" is defined as any work in connection with -

- (a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
- (b) the installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- (c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

"Contractor" -

means an employer, as defined in Section 1 of the Act, who performs construction work and includes Principal Contractors;

"Health and Safety File" -

means a file, or other record in permanent form, containing the information required a contemplated in the regulations;

"Health and Safety Plan" -

means a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified;

"Health and Safety Specification" -

means a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons;

"Method Statement" -

means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

"Principal Contractor" -

means an employer, as defined in section 1 of the Act who performs construction work and is appointed by the client to be in overall control and management of a part of or the whole of a construction site;

"Risk Assessment" -

means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard.

5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

5.1 Structure and Organisation of OH&S Responsibilities

5.1.1. Overall Supervision and Responsibility for OH&S

- The Client and/or its Agent on its behalf to ensure that the Principal Contractor, appointed in terms of Construction Regulation 4(1)(c), implements and maintains the agreed and approved H&S Plan. Failure on the part of the Client or Agent to comply with this requirement will not relieve the Principal Contractor from any one or more of his/her duties under the Act and Regulations.
- The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the Act to ensure that the Employer (as defined in the Act) complies with the Act.
- All OH&S Act (85 /1993), Section 16 (2) appointee/s as detailed in his/her/their respective
 appointment forms to regularly, in writing, report to their principals on matters of health and safety per
 routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether
 the observation was made during any routine or ad hoc inspection and to ensure that the reports are
 made available to the principal Contractor to become part of site records (Health & Safety File).
- The Construction Supervisor and Assistant Construction Supervisor/s appointed in terms of Construction Regulation 6 to regularly, in writing, report to their principals on matters of health and safety per routine and ad hoc inspections and on any deviations as soon as observed, regardless of whether the observation was made during any routine or ad hoc inspection and to ensure that the reports are made available to the principal Contractor to become part of site records (Health & Safety File).
- All Health and Safety Representatives (SHE-Reps) shall act and report as per Section 18 of the Act.

5.1.2. Legal Appointments

Several appointments or designations of responsible and /or competent people in specific areas of construction work are required by the Act and Regulations. The following competent appointments, where applicable, in terms of the Construction Regulations are required to ensure compliance to the Act, Regulations and Safety Standards.

Required appointments as per the Construction Regulations:-

Item	Regulation	Appointment	Responsible Person
1.	4(1)(c)	Principal contractor for each phase or project	Client
2.	5.(3)(b)	Contractor	Principal Contractor
3.	5(11)	Contractor	Contractor
4.	6(1)	Construction supervisor	Contractor
5.	6(2)	Construction supervisor sub-ordinates	Contractor
6.	6(6)	Construction Safety Officer	Contractor
7.	7(1)	Person to carry out risk assessment	Contractor
8.	7(4)	Trainer/Instructor	Contractor
9.	8(1)(a)	Fall protection planner	Contractor
10.	10 (a)	Formwork & support work supervisor	Contractor
11.	10(e) + (f)	Formwork & support work examiner	Contractor
12.	11(1)	Excavation supervisor	Contractor
13.	11(3)(b)(ii)(b)	Professional engineer or technologist	Contractor
14.	11(3)(k)	Explosives expert	Contractor
15.	12(1)	Supervisor demolition work	Contractor
16.	12(2) + (3)	Demolition expert	Contractor
17.	12(11)	Explosives expert	Contractor
18.	14(2)	Scaffold supervisor	Contractor
19.	15(1)	Suspended platform supervisor	Contractor
20.	15(2)(c)	Compliance plan developer	Contractor
21.	15(8)(c)	Suspended platform expert	Contractor
22.	15(13)	Outrigger expert	Contractor
23.	17(8)(a)	Material hoist inspector	Contractor
24.	18(1)	Batch plant supervisor	Contractor
25.	18(7)	Batch plant operator	Contractor
26.	19(2)(b)	Power tool expert	Contractor
27.	19.2 (g) (i)	Power tool controller	Contractor
28.	20(f)	Tower crane operator	Contractor
29.	21(1)(d)(i)	Construction vehicle and mobile plant operator	Contractor
30.	21(1)(j)	Construction vehicle and mobile plant inspector	Contractor
31.	22(d)	Temporary electrical installations inspector	Contractor
32.	22 (e)	Temporary electrical installations controller	Contractor
33.	26 (a)	Stacking and storage supervisor	Contractor
34.	27 (h)	Fire equipment inspector	Contractor

This list may be used as a reference or tool to determine which components of the Act and Regulations would be applicable to a particular site. This list must not be assumed to be exclusive or comprehensive.

5.2 Communication & Liaison

- 5.2.1 OH&S Liaison between the Employer, the Principal Contractor, the other Contractors, the Designer and other concerned parties shall be through the project Committee as per the procedures determined by the project Committee.
- 5.2.2 In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing, as and when the need arises.
- 5.2.3 Consultation with the workforce on OH&S matters will be through their Supervisors and H&S Representatives ('SHE Reps')
- 5.2.4 The Principal Contractor will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g. design changes agreed with the Client and/or its Agent on its behalf and the Designer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc.

6. RESPONSIBILITIES

6.1 Client

- 6.1.1 The Client or his appointed Agent on his behalf will appoint each Principal Contractor for this project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations and determined by the Bills of Quantities.
- 6.1.2 The Client or his appointed Agent on his behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of the both Principal Contractor and Contractor for approval.
- 6.1.3 The Client or his appointed Agent on his behalf, will take reasonable steps to ensure that the health and safety plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month.
- 6.1.4 The Client or his appointed Agent on his behalf, will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor and/or the Contractor at any stage in the execution of the works be found to:
 - have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;
 - have failed to implement or maintain their health and safety plan;
 - have executed construction work which is not in accordance with their health and safety plan; or
 - act in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.

6.2 Principal Contractor

- 6.2.1 The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction work in terms of Regulation 3 of the Construction. The Principal Contractor shall submit the notification in writing prior to commencement of work and inform the Client or his Agent accordingly.
- 6.2.2 The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation. This Specification is not intended to supersede the Act nor the Construction Regulations or any part of either. Those sections of the Act and the Construction Regulations which apply to the scope of work to be performed by the Principal Contractor in terms of this contract will continue to be legally required of the Principal Contractor to comply with. The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may perceivable be applicable to this contract.
- 6.2.3 The Principal Contractor shall provide and demonstrate to the Client a suitable and sufficiently documented health and safety plan based on this Specification, the Act and the Construction Regulations, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the health and safety plans of all Subcontractors for which he has to take responsibility in terms of this contract.
- 6.2.4 The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.
- 6.2.5 The Potential Principal Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and Construction Regulations.
- 6.2.6 The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.
- 6.2.7 The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to the Client, an Inspector, Employee or Sub-contractor.
- 6.2.8 The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Client or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to the Client.
- 6.2.9 The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.
- 6.2.10 The Principal Contractor shall from time to time evaluate the relevance of the Health and Safety Plan and revise the same as required, following which revised plan shall be submitted to the Client and/or his/her Agent for approval.

7. SCOPE OF WORK

These specifications are applicable to the specific scope of work pertaining to the project as detailed in the tender documents. *Refer to Project specification.*

8. HEALTH AND SAFETY FILE

The Principal Contractor must, in terms of Construction Regulation 5(7), keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done.

The Health and Safety File will remain the property of the Client and/or its Agent on its behalf throughout the period of the project and shall be consolidated and handed over to the Client and/or its Agent on its behalf at the time of completion of the project.

The safety file shall contain the following documentations:

- Safety reports,
- Notification documents,
- Appointment letters,
- Records of incidents,
- · Records of training,
- Records of safety meetings,
- Records of PPE provision,
- And any other document related to safety issues on site.

9. MONITORING AND REVIEWING OH&S PERFORMANCE

The Principal Contractor is required to maintain acceptable incident rate and report on this to the Client and/or its Agent on its behalf on a monthly basis. The frequency rates must reflect permanent disability, lost workdays, restricted workdays, medical treatment and first aid treatment.

10. HAZARD IDENTIFICATION AND RISK ASSESSMENT

The Principal Contractor is required to develop Risk Assessments, Standard Working Procedures (SWP) and Method Statements for each activity executed in the contract or project. The identification of hazards is over and above the hazards identification program and those hazards identified during the drafting of the Health and Safety Plan. Hazard identification should be conducted continuously over and above the baseline risk assessment.

11. ARRANGEMENTS FOR MONITORING AND REVIEW

11.1 Monthly Audit by Client

The Client and/or its Agent on its behalf will be conducting Periodic Audits at times agreed with the Principal Contractor Audit to comply with Construction Regulation 4(1)(d) to ensure that the principal Contractor has implemented, is adhering to and is maintaining the agreed and approved OH&S Plan.

11.2 Other audits and inspections

The Client and/or its Agent on its behalf reserves the right to conduct any other ad hoc audits and inspections as it and/or its Agent on its behalf deem necessary.

A representative of the Principal Contractor and the relevant Health and Safety Representative(s) (SHE-Reps) must accompany the Client and/or its Agent on its behalf on all Audits and Inspections and may conduct their own audit/inspection at the same time. Each party will, however, take responsibility for the results of his/her own audit/inspection results. The Client and/or its Agent on its behalf may require to be handed a copy of the minutes of the previous Health and Safety Committee meeting reflecting possible recommendations made by that committee to the Employer for reference purposes and any other health and safety related issues..

11.3 Reports

- 11.3.1 The Principal Contractor shall report all incidents where an employee is injured on duty to the extent that he/she dies, becomes unconscious, loses a limb or part of a limb, is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed, or where a major incident occurred, the health or safety of any person was endangered, where a dangerous substance was spilled, the uncontrolled release of any substance under pressure took place, machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects, machinery ran out of control, to the Provincial Director of the Department of Labour within seven days and at the same time to the Client and/or its Agent on its behalf.
- 11.3.2 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all statutory reports required in terms of the Act and the Regulations.
- 11.3.3 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with a monthly "SHE Risk Management Report".
- 11.3.4 The Principal Contractor is required to provide the Client and/or its Agent on its behalf with copies of all internal and external accident/incident investigation reports. As soon as the occurrence of any accident/incident of whatever nature comes to the notice of the Principal Contractor, it shall be reported immediately to any of the following:

11.4 Review

The Principal Contractor is to review the Hazard Identification, Risk Assessments and Standard Work Processes at each Production Planning and Progress Report meeting as the construction work develops and progresses and each time changes are made to the designs, plans and construction methods and processes. The Principal Contractor must provide the Client and/or its Agent on its behalf, and all other concerned parties with copies of any changes, alterations or amendments

11.5 Site Safety Rules

11.5.1 Site OH&S Rules

The Principal Contractor must develop a set of site-specific OH&S rules that will be applied to regulate the Health and Safety Plan and associated aspects of the construction. When required for a site by law, visitors and non-employees upon entering the site shall be issued with the proper Personal Protective Equipment (PPE) as and when necessary.

11.5.2 Security Arrangements

The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must include the rule that non-employees shall at all times be provided with fulltime supervision while on site. The Principal Contractor must develop a set of Security rules and procedures and maintain these throughout the construction period.

If not already tasked to the H&S Officer appointed in terms of Construction Regulation 6(6), the Principal Contractor must appoint a competent Emergency Controller who must develop contingency plans for any emergency that may arise on site as indicated by the risk assessments. These must include a monthly practice/testing program for the plans

11.6 Training

The Principal Contractor shall ensure that all employees under the his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment.

The Principal Contractor shall ensure that all labourers are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such times as may be determined in the risk assessment.

The Principal Contractor shall ensure that as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment.

No Principal Contractor shall allow or permit any employee to enter any site, unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

The Principal Contractor shall ensure that all visitors to a construction site undergoes health and safety instruction pertaining to the hazards prevalent on the site and shall be provided with the necessary personal protective equipment: Provided that where visits are made only to the site office which is not in direct contact with the construction work activities, those health and safety instructions and the provision of personal protective equipment may not apply.

The contents and syllabi of all training required by the Act and Regulations including any other related or relevant training as required must be included in the Principal Contractor's Health and Safety Plan and Health and Safety File.

The Principal Contractor shall ensure that CETA accredited training (technical skills and or life skills / generic training) is provided to the local labours to complement the skill shortage gap withing the area for local youth. Training needs shall be identified and agreed upon with SDM.

11.6.1 General Induction Training

The Principal contractor must ensure that the employees on site are conversant with the general health and safety requirements on site. All employees of the Principal and other Contractors must be in possession of proof of General Induction training.

11.6.2 Site Specific Induction Training

All employees of the Principal and other Contractors must be in possession of Site Specific Occupational Health and Safety Induction or other qualifying training.

11.6.3 Other Training

All operators, drivers and users of construction vehicles, mobile plant and other equipment must be in possession of valid proof of training. All employees in jobs requiring training in terms of the Act and Regulations must be in possession of valid proof of training as follows:

- General Induction (Section 8 of the Act)
- Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- Site/Project Manager
- Construction Supervisor
- OH&S Representatives (Section 18 (3) of the Act)
- Training of the Appointees indicated in 12.6.1 & 12.6.2 above
- Operation of Cranes (Driven Machinery Regulations 18 (11)
- Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 21)
- Basic Fire Prevention & Protection (Environmental Regulations 9 and Construction Regulation 27)
- As a minimum basic First Aid to be upgraded when necessary (General Safety Regulations 3)
- Storekeeping Methods & Safe Stacking (Construction Regulation 26)
- Emergency, Security and Fire Coordinator

11.7 Accident and Incident Investigation

The Principal Contractor is responsible to oversee the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to receive first aid or be referred for medical treatment by a doctor, hospital or clinic, (General Administrative Regulation 9). The Principal Contractor is responsible for the investigation of all non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar incidents in future.

The Principal Contractor is responsible for the investigation of all road traffic accidents relating to the construction site and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future. Notwithstanding the requirements of Section 24 of the Act, ALL incidents shall be investigated and reported on in writing, irrespective of whether such incident gave rise to injury or damage.

11.8 H&S Representatives and H&S Committees

11.8.1 Designation of H&S Representatives

Where the Principal Contractor employs more than 20 persons (including the employees of other Contractors (sub-contractors) he has to appoint one H&S Representatives for every 20 employees or part thereof. (Section 17 of the Act and General Administrative Regulation 6. & 7.) H&S Representatives have to be designated in writing and the designation shall be in accordance with the Collective Agreement as concluded between the parties as is required in terms of General Administration Regulation 6.

11.8.2 Duties and Functions of the H&S Representatives

The Principal Contractor must ensure that the designated H&S Representatives conduct at least a weekly inspection of their respective areas of responsibility using a checklist and report thereon to the Principal Contractor, after which these reports shall be consolidated for submission to the Health and Safety Committee. H&S Representatives must be included in and be part of accident/incident investigations. H&S Representatives shall be members of at least one H&S Committee and must attend all meetings of that H&S committee.

11.8.3 Establishment of H&S Committee(s)

The Principal Contractor must establish H&S Committees consisting of designated H&S Representatives together with a number of Employers Representatives appointed as per Section 19(3) that are not allowed to exceed the number of H&S Representatives on the committee. The persons nominated by the employer on an H&S Committee must be designated in writing for such period as may be determined by the project period. The H&S Committee shall co-opt advisory (temporary) members and determine the procedures of the meetings including the chairmanship.

12. HOUSE KEEPING

Good housekeeping will be maintained at all times as per Construction Regulation No. 25. Poor housekeeping contributes to three major problems, namely, costly or increased accidents, fire or fire hazards and reduction in production. Good housekeeping will enhance production time.

Particular emphasis is to be placed on the following crucial elements of a construction site:

- Phase priorities and production/plant layout
- Enclosures
- Pits, openings and shoring
- Storage facilities
- Effective, sufficient and maintained lighting or illumination
- Principal sources of injuries e.g. stairways, runways, ramps, loose building material
- Oil, grease, water, waste, rubble, glass, storm water
- Colour coding
- Demarcations
- Pollution
- Waste disposal
- Ablution and hygiene facilities
- · First aid disposals
- Hazardous chemical substances

This list must not be taken to be exclusive or exhaustive.

In promotion of environmental control all waste, rubble, scrap etc., will be disposed of at a registered dumping site and records will be maintained. Where it is found to be impractical to use a registered dump site or it is not available, the Principal Contractor will ensure that the matter is brought to record with the client or his representative, after which suitable, acceptable alternatives will be sought and applied. Dross and refuse from metals, and waste matters or by-products whose nature is such that they are poisonous or capable of fermentation, putrefaction or constituting a nuisance shall be treated or disposed of by methods approved of by an inspector.

13. OPERATIONAL CONTROL

The Principal Contractor shall take reasonable steps to ensure that necessary control measures are taken to promote safe working environment during all operational works. Routine safety inspections shall be carried out to ensure plant; machinery and tools are safe enough for employees to work with. Operational control measures shall be taken for the following activities and plant or machinery where applicable:

- Fall protection;
- Excavation work;
- Scaffolding:
- Mobile plants;
- Electrical installation and machinery; and
- · Other associated activities.

14. SUB CONTRACTORS

The Principal Contractor shall ensure that agreements are entered into by all sub-contractors on site, and ensure that all sub-contractors are in compliance with the health and safety standards on site. Particulars of sub-contractors involved in specialised work such as blasting, concrete works and electrical installations must be submitted to the designers for approval and their safety plans submitted to the Client for approval.

15. OFFENCES AND PENALTIES

Any contractor who does not comply with the requirements of the Act, will be penalised or punished as per Section 38 of the Act. The principal contractor must also note that the Client may stop the execution of construction work if it is not in accordance with the health and safety plan or if it poses a threat on the health and safety of employees and the public.

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C7. Site Information

7.1 General

This section describes the site at the time of the tender in order to enable the tenderer to price his tender accordingly and to decide upon his method of working, programming and risks.

The tenderer shall inform him / her on the nature of the site and inspect the site.

The Employer will consider a tender only if the site inspection and/or tenderer's meeting arranged by the Engineer has been attended by a representative who must:

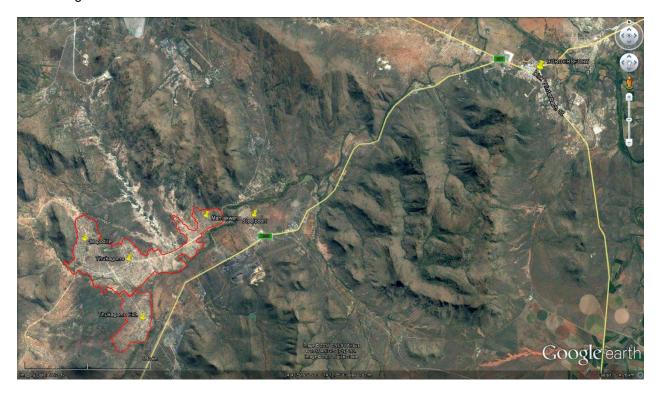
- · Be suitably qualified to comprehend the implications of the work involved, and
- Be the tenderer him/herself or a person in the direct employ of the tenderer

7.2 Site location

The project area is situated within the boundaries of Tukakgomo Extension village.

Coordinates are as follows:

Latitude : 24° 45' 52.53" Longitude : 30° 09' 20.80"



The climate is very dry with an average annual rainfall between 500mm and 700mm. General vegetation is denuded because of settlement. The site is generally flat, with mountain range on the northern side from Polokwane direction. The general slope is towards the south east.

The available geological information shows that the area is characterized by occurrence of soil, sand, alluvium and calcrete as the main lithologies.

The site has isolated hard rock outcrops of calcretes which needs to be blasted. It is anticipated that between 10% to 15% of the trench excavations between depths of 0.8 to 2.0m deep needs to be blasted and will be classified as hard rock excavation.

7.3 Access to site and restrictions

The construction sites are situated in the existing villages as mentioned. These sites can be reached via existing streets/roads and Provincial Roads

The operation of construction vehicles on existing roads or streets, or on streets which have been completed on the level of sub-base or base or bituminous surface treatment, shall be limited to traffic with an axle load not exceeding that allowed by the Road Traffic Ordinance of the authority concerned, or any amendment thereof. Hauling is strictly forbidden on sections of streets that have been completed as described above. The Contractor shall make use of temporary haul roads, or where not practically possible, program his work in such a manner that the haulage of materials shall be restricted to that required for the particular section of street. No additional payment shall be made for the use of temporary haul roads and all relevant costs shall be deemed to be covered by the appropriate rates.

The Contractor must note that no additional payment will be made for the construction of temporary access roads to the construction site, borrow-areas or to the spoil sites, except for payment made under payment item A.8.3.2.2 of SANS 1200 A.

If the Contractor does not make use of existing streets for the hauling of materials to or from the site, he shall be held responsible to clear any spillage caused by his activities on or near the roads by whatever means necessary, within two (2) days after such spillage has occurred. No additional payment will be made for the clearance of spillage and all relevant costs will be deemed to be covered under the relevant items.

7.4 Existing services, servitudes and way leaves

All the known existing services are indicated on the drawings.

7.5 Security

The security of the Contractor's plant, employers, materials and site camp will be the Contractor's responsibility.

7.6 Nature of ground and subsoil conditions

The Contractor shall familiarize himself with the conditions on site.

The materials on site mainly consist of soft and hard material. The majority of excavation will be in weathered and hard granite.

Also refer to the Project Specification "PS 4: NATURE OF GROUND AND SUBSOIL CONDITIONS ON SITE".

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C.7 Drawings

The following drawings, **FOR TENDER PURPOSES ONLY**, form part of this contract.

Layouts Drawings

<u>Name</u>	<u>Description</u>
501160-CIV-DRG-PH5-001-T0	Pump House Layout
501160-CIV-DRG-PH4-002-T0	House Connection Layout
Details	
<u>Name</u>	<u>Description</u>

501160-CIV-DRG-PH4-003-T0	Bedding, thrust block, valve & valve box details
501160-CIV-DRG-PH4-004-T0	House Connection Details
501160-CIV-DRG-PH4-005-T0	Typical Tap Connection Details
501160-CIV-DRG-PH4-006-T0	Construction Name Board