



AN AGENCY OF THE DEPARTMENT OF SPORT, ARTS AND CULTURE

SOUTH AFRICAN HERITAGE RESOURCES AGENCY

TENDER DOCUMENT FOR CONTRACT NUMBER: SAHRA/HPM/01/10/2022 CONTRACT NAME: CONSTRUCTION OF PARAMETRIC FENCING TO ROGGELAND FARM, PAARL DATE: SEPTEMBER 2022 SINGLE VOLUME

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|-----------------|--|
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| TENDER |
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| T1 TENDERING PROCEDURES |
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T1.1 Tender Notice and Invitation to Tender

T1.2 Tender Data

T1.3 Standard Conditions of Tender

T1.1 TENDER NOTICE AND INVITATION TO TENDER

SOUTH AFRICAN HERITAGE RESOURCES AGENCY invites tenders for the Construction of Parametric Fencing to Roggeland Farm in Paarl.

It is estimated that tenderers must have a CIDB contractor grading of 3SQ or higher.

Preferences are offered to tenderers in accordance with the Preferential Procurement Regulations, 2017. The Contract Sum is estimated to not exceed R50 million, therefore the **80/20** Preference Point System will be applied to this tender.

Only tenderers who satisfy the eligibility criteria eligible to submit tenders.

Queries relating to the issue of these documents may be addressed to:

Contact Person: Mr D Kolwane

Email: dkolwane@sahra.org.za

Tel: 021 462 4502

A compulsory clarification meeting with representatives of the Employer and the Employer's Agent will take place at Roggeland farm, Roggeland Road, Paarl on **21st October 2022 starting at 14h30**. An attendee(s) arriving 10 minutes late or more will not be allowed to attend the clarification meeting and will not be allowed to sign the attendance register. Tenderers shall sign the attendance list in the name of the tendering entity. An attendee may only sign the attendance register for one tendering entity.

The closing time for receipt of tenders is **11h00 on 04th November 2022**. Tenders must only be submitted on the tender documentation that is issued. Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted. Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

T1.2 TENDER DATA

The Conditions of Tender are the Standard Conditions of Tender as contained in Annexure B of Department of Public Works Notice 425 of 2019, CIDB Standard for Uniformity (SFU) in Engineering and Construction Works, August 2019.

The Standard Conditions of Tender make several references to the Tender Data. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender. Each clause below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

| Clause | Data |
|--------|--|
| C1 | The employer is SOUTH AFRICAN HERITAGE RESOURCES AGENCY. |
| C1.2 | Refer to the CONTENTS of this document for a complete list of tender documents issued by the Employer. |
| C1.4 | <p>The Employer's Agent is:</p> <p>LUKHOZI CONSULTING ENGINEERS (PTY) LTD OFFICE 111, 1ST FLOOR TIJGERPARK 3 WILLIE VAN SCHOOR DRIVE BELLVILLE 7530</p> <p>Contact Person: Mr Jaundre Duvenhage Email: j.duvenhage@lukhozi.co.za Tel: 0216862550</p> |
| C1.4 | The language for communications is English. |
| C1.6 | A competitive negotiation procedure or proposal procedure using the two-stage system will not to be used. |
| C2.1 | Add the following to C.2.1 |
| C2.1.1 | <p>Eligibility Criteria</p> <p>Only those tenderers who substantiate their offer by providing sufficient proof, relevant to each of the following criteria and in terms of the scope of work included in this contract, are eligible to submit tenders:</p> <ul style="list-style-type: none"> a) Must comply with a CIDB grading of 3SQ or higher. T2.1.9 b) T2.1.19 c) Attendance of the compulsory clarification meeting. (Signed attendance register) T2.1.21 <p>Only those tenderers who are registered with the CIDB, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for a 3SQ class of construction work, are eligible to have their tenders evaluated.</p> |

| Clause | Data |
|----------------|--|
| | <p>Joint Ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> 1. Every member of the joint venture is registered with the CIDB. 2. The lead partner has a contractor grading of 3SQ. 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 3SQ class of construction work or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations. |
| C2.2 | The Employer will not compensate the Tenderer for any costs incurred for making a tender submission or for attending tender interviews in the office of the Employer or the Employer's Agent. |
| C2.7 | <p>The arrangements are as stated in the tender notice and invitation to tender.</p> <p>Addenda will be issued to, and tenders will be received only from, those tendering entities appearing on the attendance list.</p> |
| C2.12 | No alternative offers will be considered. |
| C2.13 | Parts of each tender offer communicated on paper shall be submitted as an original copy. |
| C2.13 C2.15 | <p>The tender shall be enclosed in a sealed envelope, bearing the correct identification details as below:</p> <p>Tender reference number: SAHRA/HPM/01/10/2022</p> <p>Title of Tender: CONSTRUCTION OF PARAMETRIC FENCING TO ROGGELAND FARM, PAARL</p> <p>The employer's address for delivery of tender offers is: SOUTH AFRICAN HERITAGE RESOURCES AGENCY 111 HARRINGTON STREET CAPE TOWN 8001</p> <p>This address is available from 8:00-16:00 on working days for delivery of tender offers.</p> <p>The closing time for submission of tender offers is as stipulated in T1.1 Tender Notice and Invitation to Tender.</p> |
| C2.13 | Telephonic, telegraphic, telex, facsimile or e-mailed tender offers shall not be accepted. |

| Clause | Data |
|---------|---|
| C2.13.3 | A tender security is not required. |
| C2.13.4 | <p>The tenderer is required to submit with his tender the following certificates:</p> <ul style="list-style-type: none"> • Tax Compliance PIN • CSD Registration Report • Standard Bidding Document 4 (SBD 4) – Declaration of interest • Standard Bidding Document 6.1 (SBD 6.1) – Preference Points • B-BBEE Certificate • Standard Bidding Document 8 (SBD 8) – Past Supply Chain Management Practices • Standard Bidding Document 9 (SBD 9) – Certificate of Independent Bid Determination • B-BBEE Certificate • CIBD Certificates |
| C2.13.5 | The “ORIGINAL” is to be submitted as separate packages. |
| C2.13.5 | A two-envelope procedure is not required. |
| C2.14 | <p>The Tenderer is required to submit with his tender all returnable schedules. No Tenderer will be allowed to submit documentation or sign any of the schedules after the tender has closed unless specified otherwise. Failure to complete and submit:</p> <ol style="list-style-type: none"> 1. Returnable Schedules for Tender Evaluation Purposes T2.1 will result in the tender being declared non-responsive unless indicated otherwise in this clause. 2. Returnable Schedule T2.2 for Preference Scoring Purposes will result in the Tenderer scoring zero points for preference. 3. Returnable Schedules for Eligibility Purposes T2.3 will result in the Tenderer scoring zero points for eligibility for the relevant criteria for which documents were not provided. <p>Note: A Tenderer will <u>not</u> be allowed to sign any of the tender documents after the tender has closed.</p> <p>A Tenderer will <u>not</u> be allowed to submit Returnable Documentation after the tender has closed unless indicated otherwise.</p> |
| C2.15 | The closing time for submission of tender offers is as stipulated in T1.1 Tender Notice and Invitation to Tender. |
| C2.16 | The tender offer validity period is 120 days. |
| C.2.17 | A tender will be rejected as non-responsive if the tenderer fails to provide any clarification requested by the employer within the time for submission stated in the employer’s written request for such clarification. A tender will also be rejected as non-responsive if the tenderer fails, within the time stated in writing by the Employer, to comply with the requirements of C.3.8 |
| C2.19 | Access to site shall be provided during working hours to tenderers by prior arrangement. |
| C2.22 | Tender documentation submitted will not be returned to the Tenderer. |
| C3.4 | The time and location for opening of the tender offers are: |

| Clause | Data |
|--------|---|
| | <p>South African Heritage Resources Agency 111 Harrington Street Cape Town 8000</p> |
| C3,8 | <p>Add the following:</p> <p><u>RESPONSIVENESS CRITERIA</u></p> <p>Tenders will be considered non-responsive if, inter alia: (This is a requirement on submission of bid document)</p> <ul style="list-style-type: none"> a) The tenderer did not sign and complete the Form of Offer part Contract Data C1.1, b) The tenderer does not comply with the eligibility criteria listed in Tender Data C2.1.1, c) The tenderer has failed to comply with the specifications as advertised, d) The tenderer has failed to comply with the Pricing instructions, e) The tenderer has failed to comply with the Additional Conditions of Tender as specified in Clause C.4.6, and f) The tenderer has failed to comply with the Scope of Works. <p>Add the following:</p> <p><u>RESPONSIVENESS CRITERIA – Refer to Terms of Reference</u></p> <p>Tenders will be considered non-responsive if, inter alia: (This is a requirement on submission of bid document)</p> <ul style="list-style-type: none"> a) The tenderer has failed to clarify or submit any supporting documentation within the time for submission stated in the employer's written request. b) The tenderer has failed to include, append and sign, where prompted in the Returnable Schedules, any and all additional information requested. c) The tenderer has not submitted a municipal account of where the head office of the company is registered or in case where the premises are leased, the tenderer has not provided a copy of the lease of the premises. The successful contractor will be required to submit updated municipal accounts on a quarterly basis. d) The tenderer has failed to complete T2.1.11 and failed to submit a valid tax compliance status pin certificate. A valid tax compliance status pin certificate may be requested. e) The tenderer has failed to submit proof of good standing from the Department of Labour related to good standing with regards to COIDA and UIF payments. A certified copy of the proof of good standing may be requested. Refer to Schedule T2.1.25 f) The tenderer has failed to submit proof of payment of the non-refundable tender participation fee to T2.1.19. Proof of payment could be requested. g) The tenderer has failed to submit proof of good standing with the relevant Bargaining Council (or relevant affiliation). Should such be in place, a certified copy of the proof of good standing may be requested. h) The tenderer has failed to fully complete the SBD 6.2 schedule, it can be requested from the tenderer to fully complete and submit the schedule to the employer. |

| Clause | Data |
|---------|--|
| | <p>i) The tenderer has failed to submit a certified valid B-BBEE certificate, QSE or EME affidavit, whereas points were claimed and a copy of certificate or affidavit was supplied, a certified valid copy of the B-BBEE certificate, QSE or EME Affidavit may be requested;</p> <p>The Employer reserves the right to accept a tender offer which does not, in the Employer's opinion, materially and/or substantially deviate from the terms, conditions, and specifications of the tender documents.</p> |
| C.3.9.5 | <p>Check responsive tender offers for unbalanced unit rates and request tenderers to consider amending and adjusting any rates declared unbalanced by the Employer in accordance with C.4.4 while retaining the total of the prices derived after any correction made in terms of this condition to tender.</p> <p>Reject a tender offer if the tenderer does not correct or accept the correction of arithmetical errors and consider rejection of a tender offer if the tenderer refuses to amend/adjust an unreasonable, unbalanced rate in the manner described above.</p> |
| C3.11 | <p>Tenders shall be evaluated in terms of the Preferential Procurement Regulations 2017. The value of the tender is estimated to not exceed R 50 000 000-00 and therefore the 80/20 system shall be applicable.</p> <p>The financial offer will be scored using the formula $NFO = W1 \times A$ where the value of $W1$ is 80 points and A is the number calculated using the formula describe below. Up to a maximum of 20 points for this tender, will be awarded in terms of the tenderers B-BBEE status level of contribution.</p> $A = \frac{(1 - \frac{(Pt - Pmin)}{Pmin})}{Pmin}$ <p>Where:</p> <p>Pt = Price of bid under consideration</p> <p>$Pmin$ = Price of lowest acceptable</p> <p>The total number of tender evaluation points will be calculated as $TEV = NFO + NP$ as detailed below.</p> <p>Where:</p> <ul style="list-style-type: none"> NFO is the number of tender evaluation points awarded for the financial offer as stated above <p>NP is the number of tender evaluation points awarded for B-BBEE Status Level Contribution in accordance with T2.2.1.</p> <p>Points awarded for B-BBEE Status Level of Contribution</p> <p>In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:</p> |

| Clause | Data | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|------------------------------------|---------------------------------|---|----|---|----|---|----|---|----|---|---|---|---|---|---|---|---|---------------------------|---|
| | <table> <tr> <th>B-BBEE Status Level of Contributor</th><th>Number of points (80/20 system)</th></tr> <tr> <td>1</td><td>20</td></tr> <tr> <td>2</td><td>18</td></tr> <tr> <td>3</td><td>14</td></tr> <tr> <td>4</td><td>12</td></tr> <tr> <td>5</td><td>8</td></tr> <tr> <td>6</td><td>6</td></tr> <tr> <td>7</td><td>4</td></tr> <tr> <td>8</td><td>2</td></tr> <tr> <td>Non-compliant contributor</td><td>0</td></tr> </table> <p>Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.</p> <p>Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.</p> <p>A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.</p> <p>A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.</p> <p>Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.</p> <p>A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.</p> <p>A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.</p> <p>If a valid B-BBEE certificate (construction sector scorecard) of EME affidavit is not attached it will be interpreted that the preference points for B- BBEE status level or contribution are not claimed.</p> | B-BBEE Status Level of Contributor | Number of points (80/20 system) | 1 | 20 | 2 | 18 | 3 | 14 | 4 | 12 | 5 | 8 | 6 | 6 | 7 | 4 | 8 | 2 | Non-compliant contributor | 0 |
| B-BBEE Status Level of Contributor | Number of points (80/20 system) | | | | | | | | | | | | | | | | | | | | |
| 1 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 18 | | | | | | | | | | | | | | | | | | | | |
| 3 | 14 | | | | | | | | | | | | | | | | | | | | |
| 4 | 12 | | | | | | | | | | | | | | | | | | | | |
| 5 | 8 | | | | | | | | | | | | | | | | | | | | |
| 6 | 6 | | | | | | | | | | | | | | | | | | | | |
| 7 | 4 | | | | | | | | | | | | | | | | | | | | |
| 8 | 2 | | | | | | | | | | | | | | | | | | | | |
| Non-compliant contributor | 0 | | | | | | | | | | | | | | | | | | | | |

| Clause | Data | | | | | | | | | | | | |
|----------------------------|---|----------------------------|--|--------|-------------|--|-----------------|----|-------|--|-------------|----|----------------------------------|
| | <p>If a valid B-BBEE certificate (construction sector scorecard) or EME affidavit is attached and if points is not claimed in terms of SBD 6.1 it will be interpreted that the preference points for B- BBEE status level or contribution are not claimed.</p> <p>Please note that the municipality will not request a valid B- BBEE certificate or Sworn Affidavits if such is not attached to the bidders tender at closing date of this tender.</p> <p>Scoring Financial Offers</p> <p>The financial offer will be scored using the formula $NFO = W1 \times A$ where the value of W1 is:</p> <p>1) 80 points where the financial value inclusive of VAT of one or more responsive tender offers equals or less than R50 000 000-00.</p> <p>For this contract, the financial offers will be scored using the value where W₁ is: 80 tender evaluation points. Up to a maximum of 100 minus W₁ namely 20 tender evaluation points will be awarded for Preference with responsive tenders scoring points in accordance with the 80 Financial/20 Preference scoring criteria listed below.</p> <table border="1"> <thead> <tr> <th colspan="2">80 Financial/20 Preference</th></tr> <tr> <th>Points</th><th>Description</th></tr> </thead> <tbody> <tr> <td></td><td>FINANCIAL OFFER</td></tr> <tr> <td>80</td><td>PRICE</td></tr> <tr> <td></td><td>PREFERENCES</td></tr> <tr> <td>20</td><td>B-BBEE Status Level Contribution</td></tr> </tbody> </table> <p>Scoring Preferences</p> <p>Points for preferences claimed will be determined in accordance with the Preferential Procurement Regulations, 2017. Points will be awarded to tenderers who are eligible for preferences in terms of T2.1.13: Preference Points Claim Form (where preferences are granted in respect of B-BBEE Status Level Contribution) which is included in T2.2.1 Returnable Schedules.</p> | 80 Financial/20 Preference | | Points | Description | | FINANCIAL OFFER | 80 | PRICE | | PREFERENCES | 20 | B-BBEE Status Level Contribution |
| 80 Financial/20 Preference | | | | | | | | | | | | | |
| Points | Description | | | | | | | | | | | | |
| | FINANCIAL OFFER | | | | | | | | | | | | |
| 80 | PRICE | | | | | | | | | | | | |
| | PREFERENCES | | | | | | | | | | | | |
| 20 | B-BBEE Status Level Contribution | | | | | | | | | | | | |
| C3.17 | The number of paper copies of the signed contract to be provided by the employer is one. | | | | | | | | | | | | |
| | The additional conditions of tender are: N/A | | | | | | | | | | | | |

T1.3 STANDARD CONDITIONS OF TENDER

The Standard Conditions of Tender are as per CIDB Standard for Uniformity (SFU) in Engineering and Construction Works, August 2019, Annexure C.

C.1 General

C.1.1 Actions

C.1.1.1 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 C.2 and C.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

C.1.1.2 The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.

2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

C.1.1.3 The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

C.1.2 Tender Documents

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

C.1.3 Interpretation

C.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.

C.1.3.2 These conditions of tender, the tender data and tender schedules which are required for tender evaluation purposes, shall form part of any contract arising from the invitation to tender.

C.1.3.3 For the purposes of these conditions of tender, the following definitions apply:

- a) **conflict of interest** means any situation in which:
- someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially.
 - an individual or tenderer is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
 - incompatibility or contradictory interests exist between an employee and the tenderer who employs that employee.
- b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration.
- c) **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.
- d) **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.

C.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 readily read, copied and recorded. Communications 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.

C.1.5 Cancellation and Re-Invitation of Tenders

C.1.5.1 An employer may, prior to the award of the tender, cancel a tender if-

- a) due to changed circumstances, there is no longer a need for the engineering and construction works specified in the invitation;
- b) funds are no longer available to cover the total envisaged expenditure; or
- c) no acceptable tenders are received.
- d) there is a material irregularity in the tender process.

C.1.5.2 The decision to cancel a tender invitation must be published in the same manner in which the original tender invitation was advertised

C.1.5.3 An employer may only with the prior approval of the relevant treasury cancel a tender invitation for the second time.

C.1.6 Procurement procedures

C.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to C.3.13, be concluded with the tenderer who in terms of C.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

C.1.6.2 Competitive negotiation procedure

C.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of C.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of C.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

C.1.6.2.2 All responsive tenderers or at least a minimum of not less than three responsive tenderers that are highest ranked in terms of the evaluation criteria stated in the tender data shall be invited to enter into competitive negotiations based on the principle of equal treatment, keeping confidential the proposed solutions and associated information.

Notwithstanding the provisions of C.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

C.1.6.2.3 At the conclusion of each round of negotiations, tenderers shall be invited by the employer to revise their tender offer based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.

C.1.6.2.4 The contract shall be awarded in accordance with the provisions of C.3.11 and C.3.13 after tenderers have been requested to submit their best and final offer.

C.1.6.3 Proposal procedure using the two stage-system

C.1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

C.1.6.3.2 Option 2

C.1.6.3.2.1 Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.

C.1.6.3.2.2 The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

C.2 Tenderer's obligations

C.2.1 Eligibility

C.2.1.1 Submit a tender offer only if the tenderer satisfies 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.

C.2.1.2 Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

C.2.2 Cost of tendering

C.2.2.1 Accept that, unless otherwise stated in the tender data, 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 complies with requirements.

C.2.2.2 The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

C.2.3 Check documents

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

C.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.

C.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.

C.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.

C.2.7 Clarification meeting

Attend, where required, a 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.

C.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five (5) working days before the closing time stated in the tender data.

C.2.9 Insurance

Be aware that the extent of insurance to be provided by the employer (if any) might 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.

C.2.10 Pricing the tender offer

C.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 fourteen (14) days before the closing time stated in the tender data.

C.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.

C.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.

C.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.

C.2.11 Alterations to documents

Do 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.

C.2.12 Alternative tender offers

C.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.

C.2.12.2 Accept that an alternative tender offer must be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

C.2.12.3 An alternative tender offer must only be considered if the main tender offer is the winning tender.

C.2.13 Submitting a tender offer

C.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

C.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 legibly in non-erasable ink.

C.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.

C.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.

C.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.

C.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.

C.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.

C.2.13.8 Accept that the employer will 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.

C.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

C.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.

C.2.15 Closing time

C.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.

C.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.

C.2.16 Tender offer validity

C.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.

C.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

C.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).

C.2.16.4 Where a tender submission is to be substituted, a tenderer must submit a substitute tender in accordance with the requirements of C.2.13 with the packages clearly marked as "SUBSTITUTE".

C.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 competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

Note: Sub-clause C.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.

C.2.18 Provide other material

C.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.

C.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.

C.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.

C.2.20 Submit securities, bonds and policies

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.

C.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.

C.2.22 Return of other tender documents

If so instructed by the employer, return all retained tender documents within twenty-eight (28) days after the expiry of the validity period stated in the tender data.

C.2.23 Certificates

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

C.3 The employer's undertakings

C.3.1 Respond to requests from the tenderer

C.3.1.1 Unless otherwise stated in the tender Data, respond to a request for clarification received up to five (5) working days before the tender closing time stated in the Tender Data and notify all tenderers who collected tender documents.

C.3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

C.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 that tender documents are available until three (3) working 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, shall then notify all tenderers who collected tender documents.

C.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.

C.3.4 Opening of tender submissions

C.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.

C.3.4.2 Announce at the meeting 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 and, where applicable, the total of his prices, number of points claimed for its BBBEE status level and time for completion for the main tender offer only.

C.3.4.3 Make available the record outlined in C.3.4.2 to all interested persons upon request.

C.3.5 Two-envelope system

C.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

C.3.5.2 Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

C.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.

C.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.

C.3.8 Test for responsiveness

C.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

- a) complies with 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.

C.3.8.2 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:

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) 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.

C.3.9 Arithmetical errors, omissions and discrepancies

C.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

C.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with C.3.11 for:

- a) the gross misplacement of the decimal point in any unit rate;
- b) omissions made in completing the pricing schedule or bills of quantities; or
- c) arithmetic errors in:
 - (i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
 - (ii) the summation of the prices.

C.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

C.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

- a) If bills of quantities or pricing schedules 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 shall be corrected.

- b) 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 bills of quantities apply) to achieve the tendered total of the prices.

C.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.

C.3.11 Evaluation of tender offers

The Standard Conditions of Tender standardize the procurement processes, methods and procedures from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project.

Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the employer's undertakings in soliciting and evaluating tender offers. Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require employers to conduct the process of offer and acceptance in terms of a set of standard procedures.

| The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements: | |
|---|--|
| Requirement | Qualitative interpretation of goal |
| Fair | The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information. |
| Equitable | Terms and conditions for performing the work do not unfairly prejudice the interests of the parties. |
| Transparent | The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest. |
| Competitive | The system provides for appropriate levels of competition to ensure cost effective and best value outcomes. |
| Cost effective | The processes, procedures and methods are standardized with sufficient flexibility to attain best value outcomes in respect of quality, timing and price, and least resources to effectively manage and control procurement processes. |

The activities associated with evaluating tender offers are as follows:

- Open and record tender offers received
- Determine whether or not tender offers are complete
- Determine whether or not tender offers are responsive
- Evaluate tender offers
- Determine if there are any grounds for disqualification
- Determine acceptability of preferred tenderer
- Prepare a tender evaluation report
- Confirm the recommendation contained in the tender evaluation report

C.3.11.1 General

The employer must appoint an evaluation panel of not less than three persons conversant with the proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

C.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.

C.3.13 Acceptance of tender offer

Accept the tender offer; if in the opinion of the employer, it does not present any risk and only if the tenderer:

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract;
- c) has the legal capacity to enter into the contract;
- d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;
- e) complies with the legal requirements, if any, stated in the tender data; and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

C.3.14 Prepare contract documents

C.3.14.1 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 and
- c) other revisions agreed between the employer and the successful tenderer.

C.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

C.3.15 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.

C.3.16 Registration of the award

An employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the cidb Register of Projects.

C.3.17 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.

C.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

T2 RETURNABLE DOCUMENTS AND SCHEDULES

The following documents are to be completed and returned, as they constitute the tender. Whilst many of the returnables are required for the purpose of evaluation of the tenders, some will form part of the subsequent contract, as they form the basis of the tender offer. For this reason, it is very important that the Tenderers return **all information requested**.

T2.1 RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION

The Tenderer's attention is drawn to clause C2.14 of the Tender Data which stipulates that failure to submit the returnable schedules listed below will result in the Tenderer being declared **non-responsive**.

In the event of a Joint Venture, the Tenderers attention is drawn to clause C2.1 of the Tender Data which stipulates that failure to submit the returnable schedules listed below for each member of the Joint Venture will result in the Tenderer being declared **non-responsive**.

| | | |
|---------|--|---------------------------------|
| T2.1.1 | SBD1: Invitation to Bid | Tick if completed and submitted |
| T2.1.2 | CSD Report and/or Tax Compliance Status PIN | Tick if completed and submitted |
| T2.1.3 | SBD3.3: Pricing Schedule (Professional Services) | Tick if completed and submitted |
| T2.1.4 | SBD4: Declaration of Interest | Tick if completed and submitted |
| T2.1.5 | SBD5: Declaration for Procurement Above R10 Million (VAT Included) | Tick if completed and submitted |
| T2.2.6 | SBD6.1(a): Preference Certificate (80:20) | Tick if completed and submitted |
| T2.1.7 | SBD8: Declaration of Bidder's Past Supply Chain Management Practices | Tick if completed and submitted |
| T2.1.8 | SBD9: Certificate of Independent Bid Determination | Tick if completed and submitted |
| T2.1.9 | | Tick if completed and submitted |
| T2.1.10 | Addenda / Notices Issued to Tenderers | Tick if completed and submitted |
| T2.1.11 | Clarification Meeting Certificate | Tick if completed and submitted |
| T2.1.12 | Registration with the Bargaining Council | Tick if completed and submitted |
| T2.1.13 | Schedule of Electrical Equipment Technical Information | Tick if completed and submitted |

T2.2 RETURNABLE SCHEDULES REQUIRED FOR ELIGIBILITY

The Tenderer's attention is drawn to clause C2.14 of the Tender Data which stipulates that failure to submit the returnable schedules listed below will result in the Tenderer **BEING NON-RESPONSIVE** for eligibility .

In the event of a Partnership / Joint Venture / Consortium, a consolidated BBBEE Verification Certificate must be submitted for the Partnership / Joint Venture / Consortium, failure to submit the returnable schedules listed below will result in the Tenderer **scoring zero points** for Preference.

| | | |
|--------|---|---------------------------------|
| T2.2.1 | Broad Based Black Economic Empowerment (BBBEE) Certificate (MBD6.1) | Tick if completed and submitted |
|--------|---|---------------------------------|

T2.3 RETURNABLE SCHEDULES REQUIRED FOR ELEGIBILITY REQUIREMENTS – Not Applicable. Refer to Terms of Reference

The Tenderer's attention is drawn to clause C2.14 of the Tender Data which stipulates that failure to submit Returnable Schedules for eligibility Purposes T2.3 will result in the Tenderer **BEING NON-RESPONSIVE** for eligibility for the relevant criteria for which documents were not provided.

| | | |
|--------|--------------------------------------|---------------------------------|
| T2.3.1 | Eligibility Criteria | Tick if completed and submitted |
| T2.3.2 | Main Contractor (CE) | Tick if completed and submitted |
| T2.3.3 | Company Track Record (CE) | Tick if completed and submitted |
| T2.3.4 | CV of Contracts Manager (CE) | Tick if completed and submitted |
| T2.3.5 | CV of General Foreman (CE) | Tick if completed and submitted |
| T2.3.6 | CV of Health and Safety Officer (CE) | Tick if completed and submitted |
| T2.3.7 | Financial References (CE) | Tick if completed and submitted |

T2.4 OTHER DOCUMENTS AND AFFIDAVITS THAT WILL BE INCORPORATED INTO THE CONTRACT

All documents contained in Volume 1 and Volume 2 will form part of the offer submitted by the Tenderer and will form part of the Contract if the Tenderer's offer is accepted by the Employer.

| | |
|-------------|--|
| T2.1 | RETURNABLE SCHEDULES REQUIRED FOR TENDER EVALUATION |
|-------------|--|

T2.1.1 TENDERING ENTITY AND AUTHORITY OF SIGNATORY

The purpose of this Schedule is to obtain the necessary information about the tendering entity, and to establish authority of the signatory to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender, as well as to sign any contract, and any and all documentation, resulting from the award of the tender to the tendering entity.

INSTRUCTIONS FOR COMPLETING SCHEDULE:

Tendering entities may be sole proprietors, partnerships, trusts, companies, close corporations or consortia / joint ventures. Schedule 1 must be completed as follows:

- If the tendering entity is a sole proprietor, trust, partnership, company or close corporation, complete both this page and Section 1 of this Schedule, and clearly mark Section 2 (both 2.1 and 2.2) as "Not Applicable".
- If the tendering entity is a consortium or joint venture, then complete both this page and Section 2 (both 2.1 and 2.2) of this Schedule, and clearly mark Section 1 as "Not Applicable".
- The contact details below must be the officially designated contact addresses which will be used by the *Employer* for any and all communication in regard to this tender, and if the tender is awarded, also during the execution of the contract.

THE TENDERING ENTITY IS: (*Circle the applicable option)

*A Sole Proprietor / Partnership / Trust / Company / Close Corporation / Consortium / Joint Venture.

NAME OF THE TENDERING ENTITY:

.....
(Legally correct full name of the tendering entity)

CONTACT DETAILS:

Physical Address:

.....

.....

..... (Postal Code)

Telephone number:

Mobile number:

Email address:

Schedule 1 continues with Section 1 on the next page.

Section 1: Resolution of board of *Trustees/Directors/Members/Partners

Notes:

1. *Delete which is not applicable.
2. IMPORTANT: This resolution must be signed by ALL the trustees/directors/members/partners of the tendering entity.
3. Should the number of trustees/directors/members/partners exceed the space available below, additional names and signatures must be supplied on a separate page.

RESOLUTION by the *Proprietor/Board of *Trustees/Directors/Members/Partners of:

.....
(Legally correct full name and registration number, if applicable, of the tendering entity)

Taken at On
(Place) (Date)

| | Name of Proprietor/Trustee/Director/Member/Partner | Capacity | Signature |
|---|--|----------|-----------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |

(Append separate page if not enough space)

RESOLVED that:

1. The entity submits a bid to the SOUTH AFRICAN HERITAGE RESOURCES AGENCY in respect of Tender No: SAHRA/HPM/ROG/10/2022 : CONSTRUCTION OF PARAMETRIC FENCING TO ROGGELELAND FARM, PAARL
2. *Mr/Mrs/Ms:

in *his/her capacity as:
(Position in the entity)

and who will sign as follows:

| |
|---|
| |
| AUTHORISED SIGNATURE OF TENDERER |

be, and is hereby, authorised to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender, as well as to sign any contract, and any and all documentation, resulting from the award of the bid to the entity mentioned above.

Date:.....

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

Section 2.1: Resolution to enter into Consortium / Joint Venture

Notes:

1. *Delete which is not applicable
2. A separate copy of this Section 2.1 must be duly completed, signed and submitted for each consortium/joint venture partner.
3. IMPORTANT: This resolution must be signed by ALL the trustees/directors/members/partners of the entity entering into the consortium/joint venture.
4. Should the number of representatives exceed the space available below, additional names and signatures must be supplied on a separate page.

RESOLUTION by the *Proprietor/Board of *Trustees/Directors/Members/Partners of:

.....
(Legally correct full name and registration number, if applicable, of the entity)

Taken at On
(Place) (Date)

| | Name of Proprietor/Trustee/Director/Member/Partner | Capacity | Signature |
|---|--|----------|-----------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |

(Append separate page if not enough space)

RESOLVED that:

1. The entity submits a bid, in consortium/joint venture with the following entities to the SOUTH AFRICAN HERITAGE RESOURCES AGENCY in respect of Tender No SAHRA/HPM/01/10/2022 : **Construction of Parametric Fencing to Roggeland Farm, Paarl**

| | Full legally correct name of entity | Registration No (if applicable) |
|---|-------------------------------------|---------------------------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |

(Append separate page if not enough space)

2. *Mr/Mrs/Ms:

in *his/her capacity as:
(Position in the entity)

and who will sign as follows:

| |
|-----------------------------|
| |
| AUTHORISED SIGNATURE |

be, and is hereby authorised to sign a consortium/joint venture agreement with the parties listed under item 1 above, and any and all other documents and/or correspondence in connection with and relating to the consortium/joint venture, in respect of the tender described in item 1 above.

3. The entity accepts joint and several liability with the parties listed under item 1 above for the due fulfilment of the obligations of the consortium/joint venture deriving from, and in any way connected with, the contract to be entered into with the Department in respect of the tender under item 1 above.
4. The entity chooses as its domicilium citandi et executandi for all purposes arising from this consortium/joint venture agreement and the contract with the Department in respect of the tender under item 1 above, the physical address and contact details as furnished on the first page of this Schedule.

Date:.....

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

Section 2.2: Resolution to bid as Consortium / Joint Venture

Notes:

1. IMPORTANT. This resolution must be signed by ALL the representatives of the bidding consortium/joint venture.
2. Should the number of representatives exceed the space available below, additional names and signatures must be supplied on a separate page.
3. Enter the entity details and representative details in the same and corresponding numerical sequence into the respective tables below.

RESOLUTION of a meeting of the duly authorised representatives of the following legal entities who have entered into a consortium/joint venture to jointly tender for Tender No: SAHRA/HPM/01/10/2022 :CONSTRUCTION OF PARAMETRIC FENCING TO ROGGE LAND FARM, PAARL

| | Full legally correct name of entity | Registration No (if applicable) |
|---|-------------------------------------|---------------------------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |

(Append separate page if not enough space)

Held at On.....
(Place) (Date)

| | Name of authorised representative | Capacity | Signature |
|---|-----------------------------------|----------|-----------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |

(Append separate page if not enough space)

RESOLVED that:

- A. The abovementioned entities submit a bid in consortium/ joint venture to the SOUTH AFRICAN HERITAGE RESOURCES AGENCY in respect of the tender mentioned above.

B. *Mr/Mrs/Ms:

in *his/her capacity as:
(Position in the bidding consortium/joint venture)

and who will sign as follows:

| |
|---|
| |
| AUTHORISED SIGNATURE OF TENDERER |

be, and is hereby, authorised to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender, as well as to sign any contract, and any and all documentation, resulting from the award of the tender to the entities in the consortium/joint venture mentioned above.

C. The entities constituting the consortium/joint venture, notwithstanding its composition, shall conduct all business under the name and style of:

.....
(Consortium/joint venture name)

D. The entities to the consortium/joint venture accept joint and several liability with the parties above for the due fulfillment of the obligations of the consortium/joint venture deriving from, and in any way connected with, the contract to be entered into with the Department in respect of the tender mentioned above.

E. Any of the entities to the consortium/joint venture intending to terminate the consortium/joint venture agreement, for whatever reason, shall give the Department 30 days written notice of such intention. Notwithstanding such decision to terminate, the entities shall remain jointly and severally liable to the Department for the due fulfillment of the obligations of the consortium/joint venture as mentioned under item D above.

F. No entity to the consortium/joint venture shall, without the prior written consent of the other entities to the consortium and of the Department, cede any of its rights or assign any of its obligations under the consortium/joint venture agreement in relation to the contract with the Department referred to herein.

G. The entities choose as domicilium citandi et executandi of the consortium/joint venture for all purposes arising from the consortium/joint venture agreement and the contract with the Department in respect of the tender mentioned above, the physical address and contact details as furnished on the first page of this Schedule.

Date:.....

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.2 COMPULSORY ENTERPRISE QUESTIONNAIRE

Note: In the case of a consortium/joint venture, separate enterprise questionnaires as per this schedule in respect of each consortium/joint venture partner must be completed and submitted.

| Section 1: Name of enterprise: Address of enterprise: | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|-----------------------------|-------|------------------|-----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Section 2: VAT registration number, if any: | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Section 3.1: CIDB registration number, if any: | Section 3.2: Central Supplier Database Registration Number: | | | | | | | | | | | | | | | | | | | | | | | | | |
| Section 4: Particulars of sole proprietors and partners in partnerships | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 33%;">Name*</th><th style="width: 33%;">Identity number*</th><th style="width: 33%;">Personal income tax number*</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table> | | | Name* | Identity number* | Personal income tax number* | | | | | | | | | | | | | | | | | | | | | |
| Name* | Identity number* | Personal income tax number* | | | | | | | | | | | | | | | | | | | | | | | | |
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| * Complete only if sole proprietor or partnership and append separate page if more than 6 partners | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Section 5: Particulars of companies and close corporations Company registration number..... Close corporation number..... Tax reference number..... | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Section 6: Record of service of the state Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following: | | | | | | | | | | | | | | | | | | | | | | | | | | |

- ☐ a member of any municipal council
☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
- ☐ a member of any provincial legislature
☐ a member of an accounting authority of any national or provincial public entity
- ☐ a member of the National Assembly or the National Council of Province
☐ an employee of Parliament or a provincial legislature
- ☐ a member of the board of directors of any municipal entity
- ☐ an official of any municipality or municipal entity

If any of the above boxes are marked, disclose the following:

| Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder | Name of institution, public office, board or organ of state and position held | Status of service (tick appropriate column) | |
|---|---|---|-----------------------|
| | | current | Within last 12 months |
| | | | |
| | | | |
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Append separate page if not enough space

Section 7: Record of spouses, children and parents in the service of the state

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months been in the service of any of the following:

- ☐ a member of any municipal council
☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
- ☐ a member of any provincial legislature
☐ a member of an accounting authority of any national or provincial public entity
- ☐ a member of the National Assembly or the National Council of Province
☐ an employee of Parliament or a provincial legislature
- ☐ a member of the board of directors of any municipal entity
- ☐ an official of any municipality or municipal entity

| Name of spouse, child or parent | Name of institution, public office, board or organ of state and position held | Status of service (tick appropriate column) | |
|---------------------------------|---|---|-----------------------|
| | | current | Within last 12 months |
| | | | |
| | | | |
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| | | | |

Append separate page if not enough space

The undersigned, who warrants that he/she is duly authorised to do so on behalf of the enterprise:

- i) authorizes the *Employer* to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- ii) confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

| | | | |
|---------------|--|---------------|--|
| SIGNATURE: | | NAME (PRINT): | |
| CAPACITY: | | DATE: | |
| NAME OF FIRM: | | | |

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.3 SBD2 : TAX CLEARANCE CERTIFICATE

In terms of Clause 14(1)(b) of the Municipal Supply Chain Management Policy, Tenderers must ensure that they are up-to-date with their payments of taxes.

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

1. In order to meet these requirement bidders are required to complete in full 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 bidders / individuals who wish to submit bids.
2. SARS will then furnish the bidder 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 bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
4. In bids where Partnership / Joint Venture / Consortium 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.

Alternatively, the Tenderer must submit a Tax Compliance Status PIN to allow Supply Chain Management to verify the real-time compliance status.

| | |
|---------------------------|-------|
| Tax Compliance Status PIN | |
|---------------------------|-------|

T2.1.4 SBD4 : DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state¹.
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 bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.
3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid:

| | | | | | | | | | | | | | | |
|--------|--|-----|--|----|--|--|--|--|--|--|--|--|--|--|
| 3.1. | Full Name of bidder or his or her representative | | | | | | | | | | | | | |
| 3.2. | Identity Number | | | | | | | | | | | | | |
| 3.3. | Position occupied in the Company (director, shareholder ² etc.) | | | | | | | | | | | | | |
| 3.4. | Company Registration Number | | | | | | | | | | | | | |
| 3.5. | Tax Reference Number | | | | | | | | | | | | | |
| 3.6. | VAT Registration Number | | | | | | | | | | | | | |
| 3.7. | Are you presently in the service of the state? | YES | | NO | | | | | | | | | | |
| 3.7.1. | If so, furnish particulars: | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

¹ MSCM Regulations: "in the service of the state" means to be –

- a. a member of –
 - 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. an executive member of the accounting authority of any national or provincial public entity; or
- f. an employee of Parliament or a provincial legislature.

² "Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

| | | | | | |
|--------|--|-----|--|----|--|
| 3.8. | Have you been in the service of the state for the past twelve months? | YES | | NO | |
| 3.8.1. | If so, furnish particulars: | | | | |
| | | | | | |
| 3.9. | Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? | YES | | NO | |
| 3.9.1. | If so, furnish particulars: | | | | |
| | | | | | |
| 3.10. | Are you aware of any relationship (family, friend, other) between a bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? | YES | | NO | |
| 3.10.1 | If so, furnish particulars: | | | | |
| | | | | | |
| 3.11. | Are any of the company's directors, managers, principal shareholders or stakeholders in the service of the state? | YES | | NO | |
| 3.11.1 | If so, furnish particulars: | | | | |
| | | | | | |
| 3.12. | Is any spouse, child or parent of the company's directors, managers, principal shareholders or stakeholders in the service of the state? | YES | | NO | |
| 3.12.1 | If so, furnish particulars: | | | | |
| | | | | | |
| 3.13. | Do you or any of the directors, trustees, managers, principal shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract? | YES | | NO | |
| 3.13.1 | If so, furnish particulars: | | | | |
| | | | | | |
| 3.14. | Please provide the following information on ALL directors/shareholders/trustees/members below: | | | | |

Contract Name: Construction of Parametric Fencing to Roggeland Farm, Paarl

| Full Name and Surname | Identity Number | Personal Income Tax Number | Provide State ³ Employee Number |
|-----------------------|-----------------|----------------------------|--|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

NB:

- a) PLEASE ATTACH CERTIFIED COPY(IES) OF ID DOCUMENT(S)
- b) PLEASE PROVIDE PERSONAL INCOME TAX NUMBERS FOR ALL DIRECTORS / SHAREHOLDERS / TRUSTEES / MEMBERS, ETC.

4. DECLARATION

I, the undersigned (name) _____, certify that the information furnished in paragraph 3 above is correct.

I accept that the state may act against me should this declaration prove to be false.

| | | | |
|---------------|--|---------------|--|
| SIGNATURE: | | NAME (PRINT): | |
| CAPACITY: | | DATE: | |
| NAME OF FIRM: | | | |

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

³ MSCM Regulations: "in the service of the state" means to be –

- a. a member of –
 - 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. an executive member of the accounting authority of any national or provincial public entity; or
- f. an employee of Parliament or a provincial legislature.

T2.1.5 SBD5 : DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (VAT INCLUDED)

For all procurement expected to exceed R10 million (VAT included), bidders must complete the following questionnaire:

| | | | | |
|--|------------|---------------|-----------|--|
| 1. Are you by law required to prepare annual financial statements for auditing? | YES | | NO | |
| 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. | | | | |
| 2. Do you have any outstanding undisputed commitments for municipal services towards a municipality or any other service provider in respect of which payment is overdue for more than 30 days? | YES | | NO | |
| 2.1. If no, this serves to certify 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. | | | | |
| 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, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic? | YES | | NO | |
| 4.1 If yes, furnish particulars | | | | |
| | | | | |
| CERTIFICATION | | | | |
| I, the undersigned (name) _____, certify that the information furnished on this declaration form is correct. | | | | |
| I accept that the state may act against me should this declaration prove to be false. | | | | |
| SIGNATURE: | | NAME (PRINT): | | |
| CAPACITY: | | DATE: | | |
| NAME OF FIRM: | | | | |

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.6 SBD6.1 : PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017 AND CODES OF GOOD PRACTICE

This preference form must form part of all bids 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, BIDDERS (TENDERERS) MUST STUDY THE BROAD BASED BLACK ECONOMIC EMPOWERMENT ACT AND THE CODES OF GOOD PRACTICE

1 DEFINITIONS

- 1.1 **"acceptable tender"** means any tender which, in all respects, complies with the specifications and conditions of tender as set out in the tender document.
- 1.2 **"affidavit"** is a type of verified statement or showing, or in other words, it contains a verification, meaning it is under oath or penalty of perjury, and this serves as evidence to its veracity and is required for court proceedings.
- 1.3 **"all applicable taxes"** includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies;
- 1.4 **"B-BBEE"** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- 1.5 **"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;
- 1.6 **"bid"** means a written offer on the official bid documents or invitation of price quotations and "tender" is the act of bidding /tendering; ***(Therefore in the context of the 2017 regulations "bidder" and "tenderer" have the same meaning)***
- 1.7 **"Code of Good Practice"** means the generic codes or the sector codes as the case may be;
- 1.8 **"consortium or joint venture"** 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;
- 1.9 **"contract"** means the agreement that results from the acceptance of a bid by an organ of state;
- 1.10 **EME** is an Exempted Micro Enterprise with an annual total revenue of R10 million or less.
- 1.11 **"Firm price"** means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;
- 1.12 **"functionality"** means the ability of a tenderer to provide goods or services in accordance with specification as set out in the tender documents;
- 1.13 **"Large Enterprise"** is any enterprise with an annual total revenue above R50 million;
- 1.14 **"non-firm prices"** means all prices other than "firm" prices;
- 1.15 **"person"** includes a juristic person;
- 1.16 **"price"** includes all applicable taxes less all unconditional discounts;
- 1.17 **"proof of B-BBEE status level contributor"** means-
 - (a) The B-BBEE status level certificate issued by an authorized body or person;
 - (b) A sworn affidavit as prescribed in terms of the B-BBEE Codes of Good Practice; or
 - (c) Any other requirement prescribed in terms of the Broad- Based Black Economic Empowerment Act.
- 1.18 **QSE** is a Qualifying Small Enterprise with an annual total revenue between R10 million and R50 million;
- 1.19 **"rand value"** means the total estimated value of a contract in Rand, calculated at the time of the tender invitation;
- 1.20 **"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;
- 1.21 **"the Act"** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000);
- 1.22 **"the Regulations"** means the Preferential Procurement Regulations, 2017;
- 1.23 **"total revenue"** bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette on 11 October 2013*;
- 1.24 **"trust"** means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and
- 1.25 **"trustee"** means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

2 GENERAL CONDITIONS

- 2.1 The following preference point systems are applicable to all bids:
the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included);

Preference point system for this bid:

The value of this bid is estimated **not to exceed R50 000 000** (all applicable taxes included) and therefore **the 80/20 preference point system shall be applicable.**

- 2.2 Preference points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contribution.

- 2.3 The maximum points for this bid 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 |

- 2.4 Failure on the part of a bidder to fill in, sign this form and submit in the circumstances prescribed in the Codes of Good Practice either a B-BBEE Verification Certificate issued by a Verification Agency accredited by the South African Accreditation System (SANAS) or an affidavit confirming annual total revenue and level of black ownership together with the bid or an affidavit issued by Companies Intellectual Property Commission, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 2.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

3 ADJUDICATION USING A POINT SYSTEM

- 3.1 Subject to Regulation 11 of the Regulations, the bidder obtaining the highest number of total points will be awarded the contract.
- 3.2 A tenderer must submit proof of its B-BBEE status level of contributor in order to claim points for B-BBEE.
- 3.3 A tenderer failing to submit proof of B-BBEE status level of contributor or is a non-compliant contributor to B-BBEE will not be disqualified but will only score:
- (a) points out of 80 for price; and
 - (b) 0 points out of 20 for B-BBEE
- 3.4 Points scored must be rounded off to the nearest 2 decimal places.
- 3.5 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.
- 3.6 When functionality is part of the evaluation process and two or more bids have scored equal total points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest points for functionality.
- 3.7 Should two or more bids be equal in all respects; the award shall be decided by the drawing of lots.

4 POINTS AWARDED FOR PRICE

4.1 THE 80/20 PREFERENCE POINT SYSTEM

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

$$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

P_s = Points scored for price of bid under consideration
 P_t = Price of tender under consideration
 P_{\min} = Price of lowest acceptable tender

5 POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION

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

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

- 5.2 An **EME** must submit a valid, originally certified affidavit confirming annual turnover and level of black ownership or an affidavit issued by Companies Intellectual Property Commission
- 5.3 A **QSE that is less than 51% (50% or less) black owned** must be verified in terms of the QSE scorecard issued via Government Gazette and submit a valid, original or a legible certified copy of a B-BBEE Verification Certificate issued by SANAS.
- 5.4 A **QSE that is at least 51% black owned (51% or higher)** must submit a valid, originally certified affidavit confirming turnover and level of black ownership as well as declare its empowering status or an affidavit issued by Companies Intellectual Property Commission.
- 5.5 A **large enterprise** must submit a valid, original or originally certified copy of a B-BBEE Verification Certificate issued by a verification agency accredited by SANAS.
- 5.6 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.
- 5.7 A trust, consortium or joint venture (including unincorporated consortia and joint ventures) must submit a consolidated B-BBEE status level verification certificate for every separate tender.
- 5.8 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.
- 5.9 A tenderer may not be awarded points for B-BBEE status level of contributor if the bid documents indicate that the tenderer intends sub-contracting more than 25% of the value of the contract to any other person not qualifying for at least the points that such a tenderer qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract.
- 5.10 A tenderer awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level of contributor than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

6 BID DECLARATION: B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPH 5

- 6.1 B-BBEE Status Level of Contribution..... = (maximum of 20 points)
(Points claimed in respect of paragraph 6.1 must be in accordance with the table reflected in paragraph 5.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or an affidavit confirming annual total revenue and level of black ownership in terms of the relevant sector code applicable to the tender.

7 SUB-CONTRACTING

- 7.1 Will any portion of the contract be sub-contracted? **YES / NO** (delete which is not applicable)
- 7.1.1 If yes, indicate:
- (i) what percentage of the contract will be subcontracted?%
 - (ii) the name of the sub-contractor?
 - (iii) the B-BBEE status level of the sub-contractor?
 - (iv) whether the sub-contractor is an EME or QSE? **YES / NO** (delete which is not applicable)

8 DECLARATION WITH REGARD TO COMPANY/FIRM

- 8.1 Name of company/ entity:
- 8.2 VAT registration number:
- 8.3 Company Registration number:
- 8.4 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-BBEE status level of contribution indicated in paragraph 7 above, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:
- (a) The Western Cape Government reserves the right to audit the B-BBEE status claim submitted by the bidder.
 - (b) As set out in Section 13O of the B-BBEE Act as amended, any misrepresentation constitutes a criminal offence. A person commits an offence if that person knowingly:
 - (i) misrepresents or attempts to misrepresent the B-BBEE status of an enterprise;
 - (ii) provides false information or misrepresents information to a B-BBEE Verification Professional in order to secure a particular B-BBEE status or any benefit associated with compliance to the B-BBEE Act;
 - (iii) provides false information or misrepresents information relevant to assessing the B-BBEE status of an enterprise to any organ of state or public entity; or
 - (iv) engages in a fronting practice.
 - (c) If a B-BBEE verification professional or any procurement officer or other official of an organ of state or public entity becomes aware of the commission of, or any attempt to commit any offence referred to in paragraph 9.1 (a) above will be reported to an appropriate law enforcement agency for investigation.
 - (d) Any person convicted of an offence by a court is liable in the case of contravention of 9.4 (b) to a fine or to imprisonment for a period not exceeding 10 years or to both a fine and such imprisonment or, if the convicted person is not a natural person to a fine not exceeding 10% of its annual turnover.
 - (e) The purchaser may, if it becomes aware that a bidder may have obtained its B-BBEE status level of contribution on a fraudulent basis, investigate the matter. Should the investigation warrant a restriction be imposed, this will be referred to the National Treasury for investigation, processing and imposing the restriction on the National Treasury's List of Restricted Suppliers. The bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, may be restricted 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.
 - (f) The purchaser may, in addition to any other remedy it may have –
 - (i) disqualify the person from the bidding process;
 - (ii) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (iii) 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; and
 - (iv) forward the matter for criminal prosecution.
 - (g) The information furnished is true and correct.
 - (h) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 2 of this form.

| | | | |
|---------------|--|---------------|--|
| SIGNATURE: | | NAME (PRINT): | |
| CAPACITY: | | DATE: | |
| NAME OF FIRM: | | | |

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.7 SBD8 : DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1. This Standard Bidding Document must form part of all bids invited.
2. 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.
3. The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - 3.1. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - 3.2. been convicted for fraud or corruption during the past five years;
 - 3.3. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - 3.4. 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).
4. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

| | | | |
|---|--|------------|-----------|
| 4.1 | Is the bidder 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). | Yes | No |
| 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. | | | |
| 4.1.1 | If so, furnish particulars: | | |
| 4.2 | Is the bidder 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)? <i>(To access this Register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012) 3265445).</i> | Yes | No |
| 4.2.1 | If so, furnish particulars: | | |
| 4.3 | Was the bidder 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: | | |
| 4.4 | Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract? | Yes | No |
| 4.4.1 | If so, furnish particulars: | | |

5. CERTIFICATION

I, the undersigned (full name), _____, certify that the information furnished on this declaration form true and correct.

I accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

| | | | |
|---------------|--|---------------|--|
| SIGNATURE: | | NAME (PRINT): | |
| CAPACITY: | | DATE: | |
| NAME OF FIRM: | | | |

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.8 SBD9 : CERTIFICATE OF INDEPENDENT BID DETERMINATION

1. This Standard Bidding Document (SBD) must form part of all bids invited.
2. 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 bidding (or bid rigging).⁴ Collusive bidding is a *per se* prohibition meaning that it cannot be justified under any grounds.
3. Treasury Regulations 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities, to:
 - 3.1. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.;
4. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract. This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and

I, the undersigned, in submitting the accompanying bid, hereby make the following statements that I certify to be true and complete in every respect:
 1. I have read and I understand the contents of this Certificate;
 2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
 3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
 4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
 5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - 5.1. has been requested to submit a bid in response to this bid invitation;
 - 5.2. could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - 5.3. provides the same goods and services as the bidder and/or is in the same line of business as the bidder
 6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium⁵ will not be construed as collusive bidding.
 7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - 7.1. prices;
 - 7.2. geographical area where product or service will be rendered (market allocation)
 - 7.3. methods, factors or formulas used to calculate prices;
 - 7.4. the intention or decision to submit or not to submit, a bid;
 - 7.5. the submission of a bid which does not meet the specifications and conditions of the bid; or
 - 7.6. bidding with the intention not to win the bid.

⁴ Bid rigging (or collusive bidding) 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 bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

⁵ 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.

Contract Name: Construction of Parametric Fencing to Roggeland Farm, Paarl

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 bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid 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 bids and contracts, bids 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: | | NAME (PRINT): | |
| CAPACITY: | | DATE: | |
| NAME OF FIRM: | | | |

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.9

T2.1.10 ADDENDA / NOTICES ISSUED TO TENDERERS

We confirm that the following communications / addenda / notice(s) to tenderers received from the *Employer* before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer (If no addenda/notices mark schedule NIL, if not enough space, attach additional pages):

| ADDENDUM No | DATE | SUBJECT MATTER OF ADDENDUM / NOTICE |
|------------------------|-------------|--|
| | | |

Documentary evidence of addenda / notices issued to tenderers indicating proof of receipt must accompany this Schedule.

| | | | |
|---------------|--|---------------|--|
| SIGNATURE: | | NAME (PRINT): | |
| CAPACITY: | | DATE: | |
| NAME OF FIRM: | | | |

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

T2.1.11 CLARIFICATION MEETING CERTIFICATE

Note: This site/clarification meeting certificate must be taken along to the meeting, completed and signed by a duly authorised and knowledgeable representative of the tenderer, able to comprehend and interpret site conditions and information conveyed, thereby enabling the tenderer to put forward an informed bid, with full understanding of the factors likely to influence the work and cost thereof. This certificate **MUST** be countersigned by a representative of the *Employer* at the time of the meeting, failure of which will render the tender non-compliant and invalid. The attendance register at the site/clarification meeting must also be signed by the tenderer's representative.

This is to certify that I,
(Name)

representing:
(Tenderer)

attended the site clarification meeting on:
(Date)

held at:
(Place)

I am sufficiently knowledgeable and experienced to be able to understand all aspects of the tender and work to be undertaken as described in this tender document. I have made myself familiar, as far as is practically possible, with all local conditions, risks, contingencies and other circumstances likely to influence the execution of the work and the cost thereof. I further certify that I am satisfied with the description of the work and explanations given at the clarification meeting and that I understand fully the work to be done, as specified and implied, in the execution of this contract.

| |
|-------------------------------------|
| |
| SIGNED ON BEHALF OF TENDERER |

| |
|--|
| |
| SIGNED ON BEHALF OF <i>Employer</i> |

Name of *Employer's* Representative:

Date:

T2.1.12 REGISTRATION WITH THE BARGAINING COUNCIL

Tenderers shall attach to this schedule a copy of their **certificate of compliance** issued by the relevant Bargaining Councils.

Tenderers must attach a certificate of compliance issued by the Bargaining Council applicable to the industry the Tenderer and/or his subcontractor/s are part of. These are respectively the NBCEI (National Bargaining Council for the Electrical Industry of South Africa) and BCCEI (Bargaining Council for the Civil Engineering Industry).

T2.1.14 SCHEDULE OF ELECTRICAL EQUIPMENT TECHNICAL INFORMATION

The Contractor shall complete the following schedules and submit them with their tender submission.

The Contractor shall read C3.9 Electrical Works Specification. Where preferred brands are specified the Contractor take cognisance of these requirements. Alternatives may be offered but shall be approved in writing by the Engineer prior to supply and installation.

The schedules will be scrutinised by the Representative / Agent and should any material offered not comply with the requirements contained in the specification, the Contractor will be required to supply material in accordance with the contract at no additional cost.

NB: Only one manufacturer's name to be inserted for each item.

| ITEM | MATERIAL | MAKE OR TRADE NAME | COUNTRY OF ORIGIN | SANS |
|------|---|--------------------|-------------------|------|
| 1 | Distribution boards | | | |
| 2 | Circuit breakers 1P, 2P, 3P | | | |
| 3 | Contactors 1P, 2P, 3P | | | |
| 4 | Earth leakage relays 1P & 3P | | | |
| 5 | Daylight sensitive switch | | | |
| 6 | Motion sensors | | | |
| 7 | 1000V ECC Multi-core cables | | | |
| 8 | Conduit | | | |
| 9 | Conduit boxes | | | |
| 10 | Switches | | | |
| 11 | Weatherproof switches | | | |
| 12 | Flameproof switches | | | |
| 13 | ON-OFF key switch 16A | | | |
| 14 | 16A combination flush socket outlets SANS 164-1 and SANS 164-2 | | | |
| 15 | 16A dedicated/UPS socket outlets | | | |
| 16 | 16A flameproof socket outlets | | | |
| 17 | Weather proof enclosure (IP65) | | | |
| 18 | Galvanised cable tray | | | |
| 19 | Galvanised trunking and cover | | | |
| 20 | 2 channel power skirting PVC | | | |

| ITEM | MATERIAL | MAKE OR TRADE NAME | COUNTRY OF ORIGIN | SANS |
|------|---|--------------------|-------------------|------|
| 21 | CCTV system | | | |
| 22 | Intrusion detection and access control system | | | |
| 23 | Generator set | | | |
| 24 | Type B1 LED Bulkheads | | | |
| 25 | Luminaires : Type C Corrosion resistant | | | |
| 26 | Luminaires : Type F/FE flameproof | | | |
| 27 | Luminaires : Type FL floodlight | | | |
| 28 | Luminaires ; Type O 1200 surface LED | | | |
| 29 | Luminaires : SL LED street light | | | |
| 30 | Luminaires : Type D LED downlight | | | |
| 31 | Luminaires : RM LED running man | | | |
| 32 | Luminaires : Type EX LED exit sign | | | |
| 33 | Finials (lightning protection) | | | |
| 34 | Roof and down conductors (lightning protection) | | | |
| 35 | Surge arrestors | | | |
| 36 | Hour meters | | | |
| 37 | Ammeters | | | |
| 38 | Voltmeters | | | |
| 39 | UPS | | | |
| 40 | Weighbridge | | | |
| 41 | CCTV system | | | |
| 42 | Intrusion alarm system | | | |
| 43 | Access control system | | | |
| 44 | Other | | | |

NOTE: The tenderer shall be deemed to have read the specifications before selecting the materials listed above. Under no circumstances will the tenderer be permitted to deviate from the materials specified above unless agreed in writing, by the Engineer, prior to award of tender.

| | | | |
|---------------|--|---------------|--|
| SIGNATURE: | | NAME (PRINT): | |
| CAPACITY: | | DATE: | |
| NAME OF FIRM: | | | |

Number of additional pages appended by the tenderer to this Schedule:(If nil, enter NIL).

| |
|---|
| T2.2 RETURNABLE SCHEDULES REQUIRED FOR PREFERENCE SCORING |
|---|

| |
|--|
| T2.2.1 BROAD BASED BLACK ECONOMIC EMPOWERMENT (BBBEE) CERTIFICATE (MBD6.1) |
|--|

Attach as part of your tender submission the documentation to be submitted with the tender in terms of returnable T2.1.1 Preference Points Claim Form for 80/20 Version (SBD6.1).

In the event of a Partnership / Joint Venture / Consortium, a consolidated BBBEE Verification Certificate must be submitted for the Partnership / Joint Venture / Consortium, failing which the Tenderer will score zero points for Preference.

| | |
|-------------|--|
| T2.3 | RETURNABLE DOCUMENTS AND SCHEDULES FOR ELIGIBILITY PURPOSES |
|-------------|--|

T2.3.1 ELIGIBILITY CRITERIA

The criteria for the evaluation of the tender offers is as follows:

1. See Terms of Reference for functionality criterion

Failure to provide verifiable proof for the various criteria as described above will result in a rejection of the candidate and thus non-compliance.

1. COMPANY TRACK RECORD

The Tenderer is to attach a record of completed contracts of a similar nature and value to the appropriate Company Track Record returnable schedule. The Tenderer is to take note of the Eligibility criteria and the completed contracts in this section should correspond accordingly.

2. KEY PERSONNEL: QUALIFICATIONS AND EXPERIENCE

The key personnel for this contract are as follows:

2.1 Contracts Manager

The Contracts Manager is the director / partner who takes ultimate responsibility for the contract.

2.2 Construction Manager (Site Agent)

The Construction Manager is the person to whom the Main Contractor has assigned the responsibility of contractual and on-site activities on behalf of the Main Contractor relating to the contract. The Construction Manager shall be solely dedicated to this contract and shall always be on site when work is being performed.

2.3 General Foreman

The General Foreman is the person to whom the Contractor has assigned the responsibility of supervising the teams engaged in construction activities. The General Foreman shall be solely dedicated to this contract and shall always be on site when work is being performed.

2.4 Health and Safety Officer

The Health and Safety Officer is the person to whom the Contractor has assigned the responsibility of ensuring compliance with the Health and Safety Specification. The Health and Safety Officer shall be solely dedicated to this contract and shall always be on site when work is being performed.

The Health and Safety Officer must be registered with the SACPCMP as a Health and Safety Officer.

Note: Should a substitution of any of the key personnel be allowed, only a person with the same or higher qualifications and experience will be accepted.

3. FINANCIAL REFERENCES

The Tenderer is to attach a letter from the bank at which he declares he conducts his. The contents of the bank's letter must state the credit rating that it accords to the Tenderer for the business envisaged by this tender.

T2.3.2 COMPANY TRACK RECORD (CE)

The Tenderer shall attach hereto a Company Track Record of fencing contracts completed within the last five (5) years, completion certificates to be attached and will be verified. If the tenderer was a sub-contractor a letter from the Main Contractor will suffice.

The Tenderer shall state details of the Contract as stipulated in the table below, as well as referee names, contact details and certificates of completion.

| 1. Contracts completed involving the erection of fencing | | | | | | | |
|--|---------------------|-------------|----------------|-------------------|----------------|-------------------|----------------|
| EMPLOYER | CONSULTING ENGINEER | CONTRACT NO | NATURE OF WORK | TELEPHONE NUMBERS | CONTRACT VALUE | CONTRACT DURATION | YEAR COMPLETED |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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| T2.3.3 CV OF CONTRACTS MANAGER (CE) |
|--|

The Tenderer shall attach hereto the Curriculum Vitae of the proposed Contracts Manager including certified copies of qualifications and confirmation that the proposed Contracts Manager is currently employed on a full-time basis by the Tenderer.

Should a substitution be allowed, only a person with the same or higher qualifications and experience will be accepted.

| |
|---|
| T2.3.4 CV OF CONSTRUCTION MANAGER (CE) |
|---|

The Tenderer shall attach hereto the Curriculum Vitae of the proposed Construction Manager including certified copies of qualifications and confirmation that the proposed Construction Manager is currently employed on a full-time basis by the Tenderer.

Should a substitution be allowed, only a person with the same or higher qualifications and experience will be accepted.

T2.3.5 CV OF GENERAL FOREMAN (CE)

The Tenderer shall attach hereto the Curriculum Vitae of the proposed General Foreman including certified copies of qualifications and confirmation that the proposed General Foreman is currently employed on a full-time basis by the Tenderer.

Should a substitution be allowed, only a person with the same or higher qualifications and experience will be accepted.

| |
|--|
| T2.3.6 CV OF HEALTH AND SAFETY OFFICER (CE) |
|--|

The Tenderer shall attach hereto the Curriculum Vitae of the proposed Health and Safety Officer including certified copies of qualifications and confirmation that the proposed Health and Safety Officer is currently employed on a full-time basis by the Tenderer.

Should a substitution be allowed, only a person with the same or higher qualifications and experience will be accepted.

T2.3.7 FINANCIAL REFERENCES (CE)

The Tenderer shall attach to this form a letter from the bank at which he declares he conducts his account. The contents of the bank's letter must state the credit rating that it, in addition to the information required below, accords to the Tenderer for the business envisaged by this tender.

The Tenderers banking details as they appear below shall be completed.

If the Tenderer is a joint venture enterprise, the same required details as specified above of all members of the joint venture shall be provided and attached to this form.

| DESCRIPTION OF BANK DETAIL | BANK DETAILS |
|--|---------------------|
| Credit Limit | |
| Name of Account Holder | |
| Account Number | |
| Name of Bank | |
| Branch Name | |
| Branch Code | |
| Bank Rating (Current) Attach letter from Bank | |
| Bank and Branch Contact Details | |

| |
|-----------------|
| CONTRACT |
|-----------------|

| |
|--|
| C1 AGREEMENT AND CONTRACT DATA |
|--|

C1.1 Form of Offer and Acceptance

C1.2a Contract Data (Part 1)

C1.2b Contract Data (Part 2)

C1.3 Form of Guarantee (Pro Forma)

C1.4 Confirmation of Receipt of Contract (Pro Forma)

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 NUMBER: SAHRA/HPM/ROG/10/2022
CONTRACT NAME: CONSTRUCTION OF PARAMETRIC FENCING TO ROGGE LAND FARM, PAARL

The Tenderer, identified in the offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the tender 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:

.....
.....
..... Rand (in words)
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 terms of the Conditions of Contract identified in the Contract data.

For and on behalf of the Tenderer:

Name
Capacity
Signature Date:

Name and address of tenderer:

.....
.....
.....

Witness Name
Witness Signature Date:

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 the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto, as listed in the returnable 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, which must be duly signed by the authorised representative(s) of both parties.

The Tenderer shall, within two weeks after receiving a completed copy of this agreement including the schedule of deviation (if any), contact the Employer's Agent (whose details are given in the Contract data) to arrange the delivery of any securities, bonds, guarantees, proof insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract data at or just after, the date this Agreement comes into effect. Failure to fulfil 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 (5) 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.

For and on behalf of the Employer:

Name
Capacity
Signature Date:

Name and address of employer:

.....
.....
.....

Witness Name
Witness Signature Date:

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the conditions of tender.
2. A Tenderer's covering letter shall not be included in the final Contract document. Should any matter in such letter, which constitutes a deviation as aforesaid become be the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents, and which it is agreed by the parties becomes an obligation of the Contract, shall also be recorded here.
4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

A Tenderer's covering letter shall not be included in the final Contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, be the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

Subject.....
Details
.....
Subject.....
Details
.....
Subject.....
Details
.....
Subject.....
Details
.....
Subject.....
Details
.....

By the duly authorized representatives signing this schedule of deviations, 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 returnable schedules, as well as any confirmation, clarification or change 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.

C1.2a CONTRACT DATA (PART 1)

Part 1: Contract Data provided by the Employer

The Conditions of Contract are clauses 1 to 42 of the **JBCC Series 2000 Principal Building Agreement (Edition 5.0 (Reprint 1) of July 2007)**, as prepared by the Joint Building Contracts Committee Inc.

Copies of these conditions of contract may be obtained from the Association of South African Quantity Surveyors (011-3154140, 021 4626431), Master Builders Association (011-205-9000; 021 6852625), South African Association of Consulting Engineers (011-4632022) or South African Institute of Architects (011-4860684; 021 424 7128).

The pro forma "JBCC Contract Data EC and CE" as defined in clause 1 of the JBCC Series 2000 Principal Building Agreement (Edition 5.0 of July 2007) prepared by the Joint Building Contracts Committee shall not apply to this Contract and shall be replaced with the documentation incorporated into this tender document.

The pro forma "JBCC Construction Guarantee" and "JBCC Advance Payment Guarantee" as defined in clause 1 of the JBCC Series 2000 Principal Building Agreement (Edition 5.0 of July 2007) prepared by the Joint Building Contracts Committee shall not apply to this Contract and shall be replaced with the documentation incorporated into this tender document.

The JBCC Principal Building Agreement makes 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 JBCC Principal Building Agreement.

Each item of data given below is cross-referenced to the clause in the JBCC Principal Building Agreement to which it mainly applies.

The JBCC Principal Building Agreement shall be read in conjunction with the variations, amendments and additions set out in the Contract Specific Data below.

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- a) the Form of Offer and Acceptance
- b) the Contract Data
- c) JBCC Series 2000 Principal Building Agreement (Edition 5.0 of July 2007)
- d) the Drawings
- e) the Scope of Work
- f) the Pricing Data

CONTRACT SPECIFIC DATA

The following contract specific data are applicable to this Contract:

PRINCIPAL BUILDING AGREEMENT CLAUSE:

41. POST-TENDER PROVISIONS

- 41.1.** All information provided in this section requires consultation with the **parties** to the **agreement**. The **principal agent** shall not preselect any of the alternatives available to the **contractor**.
- 41.2.** The completed Contract Data — Employer and Contract data — Contractor addenda and such other pertinent documents as listed below shall form part of this agreement.
- 41.3.** The dispute resolution body selected by the parties is: **Association of Arbitrators Southern Africa**
- 41.4** The employer shall not provide a Payment Guarantee.
- 41.5** An annual building industry holiday period is applicable.
- 41.6.** Further provisions and information agreed by the parties:

CONTRACT DATA – EMPLOYER

1.0 CONTRACTING AND OTHER PARTIES

- 1.1** South African Heritage Resources Agency
Address: 111 Harrington Street
Tel: 021 462 4502
E-mail: dkolwane@sahra.org.za
Physical address: 111 Harrington Street, Cape Town 8000
- 1.2** Principal Agent **[5.1] : Lukhozi Consulting Engineers**
Postal address: P. O Box 23725, Claremont, Cape Town 7735
Tel: +27 21 686 2550 Fax +27 86 663 7202
E-mail: j.lochner@lukhozi.co.za
Physical address: Office 111, First Floor, Tyjier park 3, Willie van Schoor Drive, Bellville, 7530
- 1.3** Interest of the **principal agent** or other **agents** in the project **[5.5]: None/Not Applicable**
- 1.4** The **principal agent** named in 1.2 above is responsible for the preparation of the **contract data** schedule and must be contacted should the **contractor** be uncertain of the information

provided or to be provided. Failure to complete the **contract data** schedule in full may result in the tender being disqualified.

2.0 CONTRACT AND SITE INFORMATION

2.1 The **law** applicable to this **agreement [1.7]: South Africa**

2.2 Works Identification **[1.1]**: The works comprises of the construction of fencing to Welcome Cottage in Simons Town, Western Cape..

2.3 Site description **[1.1]**: The Welcome Cottage Precinct, (Cape Farms 967/5) is located within the residential suburb of Glencairn, Western Cape

The coordinates for the centre of the site are:

- Latitude 34°9'12.07"S; Longitude 18°24'29.19"E

2.4 Possession of the site is to be given **[15.2.1] in 5 working days** after receipt of

1. Approved Health and Safety Plan.
2. Documentary evidence that insurances has been effected **[12.2]**, and
3. **Security** has been provided to the **employer [14.1])**.

2.5 Period for the commencement of the work **[15.3]** after the contractor takes possession of the site: **5 Working Days**

2.6 Completion of the works in sections **[15.4, 28.0]** is not required.

2.7 Waiver of the contractor's lien or right of continuing possession **[3.3]** is required.

2.8 Defined restrictions to the site area **[16.1]** are required. Specific requirements are described below or detailed in the contract documents.

The Contractor or any of his staff shall only access buildings on the premises with the formal permission of the Employer and then only for the purpose of completing the Works as set out in the contract documents.

2.9 A Geotechnical investigation of the **site [16.4]** has not been undertaken . A geotechnical investigation will need to be conducted as per the engineers instruction/ detailed design drawings. A provision has been implemented in the bill.

2.10 Existing premises will be occupied **[16.6]**. The specific requirements are described below or detailed in the **contract documents – This clause is not applicable**

2.11 Provision of temporary services **[16.7]** is required. The specific requirements are described below or detailed in the **contract documents**.

| | | |
|--------------------|----------------|----------------------------------|
| 2.11.1 Water | Option: | Contractor – at his cost |
| 2.11.2 Electricity | Option: | Contractor – at his cost |
| 2.11.3 Telecom | Option: | Contractor — at his cost. |
| 2.11.4 Ablutions | Option: | Contractor — at his cost. |

- 2.12 Protection of existing trees and shrubs **[16.8]** is required unless otherwise stated in the Landscape Architects Specification/drawing and/or a written instruction from the professional team.

3.0 INSURANCES AND SECURITIES

- 3.1 Contracts works insurance **[10.1.1, 11.1-3,12.6]** to be effected by Contractor, **for the sum of R 10 million with a deductible of R zero.**
- 3.2 Supplementary/special insurance **[101.2, 11.1-3,12.6]** to be effected by Contractor for the sum of **R 10 million** with a deductible of **R zero.**
- 3.3 Public liability insurance **[10.1.3, 12.6]** to be effected by Contractor, **for the sum of R 20 million with a deductible of R zero**
- 3.4 Support insurance **[10.1.3, 12.6]** not to be effected by **employer.**
- 3.5 Special Insurance **[10.1.1, 12.6]** not to be effected by **employer.**
- 3.6 Advance Payment Guarantee **[3.2.2, 14.5, 20.1.3, 21.1.4, 31.6.5]** **not applicable.**

4.0 PRACTICAL COMPLETION DATES AND PENALTIES

- 4.1 For the works as a whole:
The date for practical completion **[24.3.1]** shall be within **construction period** of **2 months.**

The penalty per calendar day **[30.1-3]** shall be **R 2 500.00.**

- 4.2 Criteria to achieve **practical completion**

- No element or section of the works is excluded to achieve practical completion.
- The site to be cleared properly with no rubble, equipment or unused materials left lying outside.
- All temporary services connections to be disconnected.
- Contract related signage to be removed.
- All as built drawings, guarantees, etc. must be provided

5.0 DOCUMENTS AND GENERAL

- 5.1 Construction documents supplied to the contractor **[3.7]** free of charge: **one copy**
- 5.2 The **priced document [3.9]** may not be used as a specification of **materials and goods** and work methods.
- 5.3 The **contractor** shall provide a schedule of rates **[3.10].**
- 5.4 Changes are made to **JBCC** standard documents **[3.11]: See Clause 6 below.**
- 5.5 On acceptance of the tender the **priced document [15.1.1]** shall be accepted as the **priced document submitted with the tender.**

5.6 Works to be undertaken by direct contractors **[22.2]: Not applicable.**

5.7 On achievement of practical completion the contractor is to handover manuals etc. related to the works as listed below:

1. Operating maintenance manuals, etc
2. As-built drawings
3. Electrical Guarantee and warranty
4. Mechanical guarantee and warranty

5.8 Interim payment certificate **[31.1]** will be issued by the last working day of the month.

5.9 The **contract value** shall not be adjusted **[32.13]**.

6.0 CHANGES MADE TO THE STANDARD JBCC DOCUMENT

1.0 DEFINITIONS AND INTERPRETATION

AGREEMENT: Agreement from the signing of the Form of Offer and Acceptance by the parties.

BILLS OF QUANTITIES: The document drawn up in accordance with the Pricing Assumptions contained in the Pricing Data.

CONSTRUCTION GUARANTEE: A guarantee at call obtained by the **contractor** from a financial institution approved by the **employer**, as listed in the Annexure in Part C1.3 of the Contract Data, and shall be in the form of and shall contain the precise wording of the document included in Part C1.3: Form of Construction Guarantee.

CONSTRUCTION PERIOD: The period commencing on the date on which the possession of the **site** was handed over to the **contractor** as recorded on the site possession certificate and ending on the **date for practical completion** and excluding all statutory holidays and recognized annual building holiday periods.

CONTRACT DOCUMENTS: The **Agreement** and all documents referenced therein.

CONTRACT DRAWINGS: The drawings listed in the Scope of Work.

CONTRACT MINUTES: A comprehensive set of minutes prepared by the **principal agent** in which all pertinent contractual information that arises at meetings is progressively recorded.

CONTRACT PERIOD: The period commencing on the date of acceptance in terms of C1.1 and ending on the date of **final completion**.

CONTRACT SUM: The accepted amount provided for in the agreement made in terms of the Form of Offer and Acceptance.

DATE FOR PRACTICAL COMPLETION: The contractual completion date or dates stated in the **contract data** or revision thereof **[29.0]** on or before which the **contractor** agrees to bring the **works to practical completion**.

DATE OF PRACTICAL COMPLETION: The construction completion date or dates, which is initially the intended or planned date or dates to bring the **works** or **sections** thereof to **practical completion** and subsequently the actual or deemed date or dates on which the **contractor** achieves **practical completion**.

DEPOSIT: Any sum payable by the **contractor** to a manufacturer I supplier prior to the manufacture of an item of equipment, required at the time of placing an order.

PRACTICAL COMPLETION: The stage of completion as certified by the **principal agent** where the **works** or a **section** thereof has been completed free of patent defects other than minor defects identified in the practical completion list and can be used for the intended purpose as detailed in the **contract data**.

PROGRAMME: The Programme [29.0] shall be a diagrammatic representation, made available electronically, of the planned execution sequence of the works indicating the dates for commencement and completion thereof and approved by the employer, and shall be used by the contractor to plan and execute the works and by the principal agent to monitor progress and shall be the basis for the assessment of any claims. The programme shall be developed in sufficient detail to show (inter alia) the critical path, start and end dates for all activities, interdependencies, terminal float, subcontracts and completion dates as contained in the contract data, etc. The Programme shall be presented in portable document format (PDF) as well as Microsoft Project (MPP) format, alternatively downloaded in XML-format.

3.0 DOCUMENTS

3.1 Payment Guarantee: **No clause.**

3.2.2 An **advanced payment guarantee** where so required in the **contractor's** accepted tender.

3.2.3 Proof of Registration I Letter of Good Standing with the Building Industries Bargaining Council (BIBC) prior to site handover.

3.3 Where the **employer** requires the **contractor** to waive his lien or right of continuing position of the **works** as stated in the **contract data**, the **contractor** shall do so within seven (7) **calendar days** of the commencement of the **contract period**. The waiver shall be according to the **JBCC** Waiver of Contractor's Lien form or such other form as stated in the **contract data**.

3.5 The **principal agent** shall complete the **contract data** and arrange the formal signing of this **agreement** once the **contract documents** have been provided and effected

3.6 The **parties** shall sign, in original, the number of sets of **contract documents** required by the **parties**. The **contractor** shall be entitled to receive one (1) set of **contract documents** for this **agreement** and two (2) sets of **contract documents** for each n/s subcontract agreement at no expense to the **contractor**. The original set of contract documents shall be held by the **Employer**.

4.0 DESIGN RESPONSIBILITY

4.1 The **contractor** shall be responsible for the design of the **works** as identified in the **contract data** and for the **contractor's** or his subcontractors' temporary works. The **contractor** shall be responsible for the coordination of design of these elements contained in the **contract data**.

5.0 EMPLOYER'S AGENT

5.1. The **employer** warrants that the **principal agent** as stated in the **contract data** has full authority and obligation to act in terms of the **agreement** subject to the limitations detailed in clauses 17 and 32.

7.0 COMPLIANCE WITH LAWS AND REGULATIONS

7.2 The **employer** and the **contractor** shall enter into an agreement to complete the work required for the construction of the **works** in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (No. 85 of 1993) and the Construction Regulations promulgated there under.

7.3 The **contractor** shall provide proof to the **employer**, within 14 days from the commencement date, that he has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases (Act No. 130 of 1993).

7.4 Payment shall be subject to the **employer** being in possession of an original valid tax clearance certificate at the time payment is due (it is the responsibility of the **contractor** to submit an updated original tax clearance certificate with his first original tax invoice and with the first tax invoice due after expiry of the original tax clearance, should any current certificate expire during the **contract period**).

Notwithstanding anything above, the **employer** will be entitled to withhold payment until the **contractor** has complied with his obligations in this regard.

8.0 WORKS RISK

8.4 The contractor shall (subject to **[8.5]**) bear the full risk of damage to and/or destruction of the works by whatever cause during the construction of the works and hereby indemnifies and holds harmless the employer against any such damage. The contractor shall take such precautions and security measures and other steps for the protection and security of the works as the contractor may deem necessary and his own cost.

9.0 INDEMNITIES

9.2 The **employer** shall bear the risk of loss in respect of all claims, proceedings, damages, costs and expenses arising from:

9.2.7 Damage to existing structures for alterations and additions (No clause).

9.3 The **employer's** rights to claim damages for the **contractor's** omissions and actions will not be affected.

10.0 GENERAL INSURANCES

10.4 Liability for deductibles (No clause).

11.0 SPECIAL INSURANCES

11.1.3 Such other specialized insurances as the **employer** deems necessary as stated in the **contract data**

Additional insurances:

1. Insurance of Construction Plant and Equipment (including tools, offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.
2. Insurance in terms of the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993.

12.0 EFFECTING INSURANCES

12.2 The **party** responsible [12.6] for effecting such insurances shall make available to the other party, before commencement of the **construction period**, documentary evidence as provided for in C1.6: Insurance Brokers Warranty as contained in this document, that insurances have been effected. A copy of the insurance policies shall be provided to the other **party** within thirty (30) **calendar days** of the commencement of the **construction period**. Approval by the other **party** shall be deemed unless a reasonable objection is lodged within fourteen (14) **calendar days** of receipt of such policies. Where required, the **party** responsible shall provide evidence of renewal to the other **party** before the expiry of the current period of insurance

12.3 Where the **contractor** fails to effect any of the required insurances or to keep them in force, the **employer** may terminate this **agreement [36.0]**.

12.4 Before effecting temporary lateral support insurance [11.1.1] the **contractor** shall engage an engineer or technologist to design and inspect the provision of the necessary support.

12.5 Where the **employer** has not ascertained the need for any of the insurance [11.0] the **contractor**, on demonstrating reasonable cause, may give the **employer** five (5) **working days'** notice to do so. Where the **employer** fails to act thereon the **contractor** may give three (3) **working days'** notice of suspension of the **works**. Where the **employer** fails to act on such notice the **contractor** may give notice of termination [38.1.4].

12.6 Where the works is for alterations or renovations to an existing building(s) the effecting of contract works insurance [10.1.1] shall be the responsibility of the contractor.

14.0 SECURITY

14.1 The **contractor** shall provide a fixed **construction guarantee** as security on the form of guarantee as provided in C1.3. Such **security** shall be provided to the employer within fourteen (14) **calendar days** of acceptance of the **contractor's** tender.

14.3 Variable Construction Guarantee: **No Clause.**

14.4. Where **security** as a fixed **construction guarantee** and payment reduction of the value certified has been chosen:

14.4.1 The **contractor** shall furnish a fixed **construction guarantee** to the employer equal in value to five percent (5%) of the **contract sum**.

14.4.2 The fixed construction guarantee shall come into force, be administered and expire in terms of part C1.3 Form of Construction Guarantee as contained in this document.

14.4.3. The **employer** shall return the fixed **construction guarantee** to the **contractor** within fourteen (14) **calendar days** of its expiring.

14.4.4. The payment reduction of the value certified in a **payment certificate** shall be made **[31.8, 34.8]**.

14.4.5. Where the **employer** has a right of recovery against the **contractor [33.0]**, the **employer** may issue a written demand in terms of the fixed **construction guarantee** or may recover from the payment reduction **[33.4]** or both.

14.7.1 Retention in lieu of guarantee: **No clause.**

EXECUTION

15.0 PREPARATION FOR AND EXECUTION OF THE WORKS

15.1. Prior to the acceptance of the tender or negotiated amount the **contractor** shall submit to the **principal agent** within the period stated in the **contract data**:

15.1.1 In the event that the **principal agent** may instruct the **contractor** to adjust prices which are considered to be imbalanced or unreasonable and to eliminate errors or discrepancies, the **priced document** with all items properly priced, extended and cast. Adjustments of imbalanced or unreasonable rates shall be effected to the approval of the **principal agent** and shall not change the tendered sum. The **contractor** may elect to amend the tendered sum due to the correction of arithmetical errors.

15.6 The **contractor** shall:

15.6.1 Prepare a **programme** of the **works** together with a schedule of outstanding construction information in sufficient detail to enable the **principal agent** to assess the progress of the works (inter alia critical path, start and end dates for all activities, interdependencies, terminal float, subcontracts, completion dates as contained in the contract data, etc.) and timeously provide the necessary **contract instructions**, and

15.6.3 Revise and modify the **programme** on at least a monthly basis to reflect actual progress and any approved revisions of the date for **practical completion**, and the schedule of outstanding construction information and issue copies timeously to the **principal agent**.

15.6.4 Should the **contractor** fail to submit a **programme** for acceptance or not regularly update the **programme**, the **principal agent** shall be entitled to reduce by 25% the amount due

to the **contractor** in interim **payment certificates** until the **contractor** has complied with his obligations hereof.

16.0 SITE AND ACCESS

16.5.1 The **contractor** shall bear all costs and charges for special and temporary rights of way required by him in connection with access to the **site**. The **contractor** shall also provide at his own cost any additional facilities outside the **site** required by him for the purposes of the **works**.

17.0 CONTRACT INSTRUCTIONS

17.1 The **principal agent** may issue **contract instructions** to the **contractor**, provided that the cumulative effect of all instructions does not exceed the approved contract value, regarding:

1. Changes to the scope of work to meet/accommodate site requirements.
2. Specific requirements with regard to existing scope of work, as indicated by the **employer**.

COMPLETION

26.0 FINAL COMPLETION

26.2.2 Has not reached **final completion** the **principal agent** shall forthwith issue a **defects list** to the **contractor** defining **defects**, which have appeared since **practical completion**, to be rectified to achieve **final completion**.

26.5.2 The remaining portion of the subcontractor's **defects** liability period is hereby ceded to the **employer** and the subcontractor shall no longer be the responsibility of the **contractor**.

29.0 REVISION OF DATE FOR PRACTICAL COMPLETION

29.1 The circumstances for which the **contractor** is entitled to a revision of the **date for practical completion**, subjected to full compliance with [15.6], and for which revision the **principal agent** shall not adjust the **contract value** [32.12] are delays to **practical completion** caused by one or more of the following:

29.2 The circumstances for which the **contractor** is entitled to a revision of the **date for practical completion**, subjected to full compliance with [15.6], and for which revision the **principal agent** shall adjust the **contract value** [32.12] are delays to **practical completion** caused by one or more of the following:

29.3 Further circumstances for which the **contractor** is entitled to a revision of the **date for practical completion**, subjected to full compliance with [15.6], are delays to **practical completion** by any other cause beyond the **contractor's** reasonable control that could not have reasonably been anticipated and provided for. The **principal agent** shall adjust the **contract value** where such delay is due to the **employer** exercising his rights in terms of the **agreement** or by the default of the **employer**

29.9 The **contractor** shall only be entitled to a revision of the **date for practical completion** to the extent that delays [29.1-3] exceeds concurrent delays caused by or at the risk of the **contractor**.

30.0 PENALTY FOR LATE OR NON-COMPLETION

30.2 Where the **employer** elects to levy such **penalty [33.1.1]** the **principal agent** shall detail the **penalty** amount due at the rate(s) per **calendar day** stated in the **contract data** from the current **date for practical completion [29.0]** up to and including:

1. Date of issue by the Principal Agent of the Certificate of Practical Completion.

PAYMENT

31.0 INTERIM PAYMENT

31.3 An interim **payment certificate** shall be issued to the **contractor** with a copy to the **employer** by not later than the date stated in the **contract data**.

Notwithstanding the above, the **principal agent** shall be empowered to withhold **payment** until the **contractor** has completed his obligations in terms of clause 15.1.2 and provided for in C3.5 Scope of Work — Management.

31.4.4 **No clause.**

31.5.3. **No clause.**

31.6.5 **No clause.**

31.8 **No clause.**

31.9 The employer shall pay the contractor the amount certified in an interim payment certificate within thirty (30) calendar days of the date for issue of the payment certificate. Payment shall be subject to the contractor giving the employer a tax invoice for the amount due.

31.16.1-2 Demand on payment guarantee and exercising lien: **No clause.**

32.0 ADJUSTMENT TO THE CONTRACT VALUE

32.1. The **principal agent** shall determine the value of adjustments to the **contract value** according to the **priced document**. Where items of additional work are required the **principal agent** and the **contractor** may agree on the adjustment before the commencement of such work, but failure to reach such agreement does not entitle the **contractor** to delay commencement of the additional work. The **principal agent** may not approve any adjustment to the **contract value** that will result in the approved **contract value** being exceeded without the approval of the **employer**.

32.13 The **contract value** shall not be adjusted according to **CPAP**.

If as a result of any extension of time granted the duration of the contract period exceeds one year, then contract price adjustment will automatically apply for that period which exceeds such one year, subject to the contract being on schedule as per the

approved Work Programme. The base month will be the calendar month six months after the tender closing date.

32.16 Plant and Materials Imported from Outside South Africa: **No clause.**

32.16.1 **Adjustment** for variations in rates of exchange: **No Clause.**

33.0 RECOVERY OF EXPENSE AND LOSS

33.1.8 Money withheld due to default regarding programme **[15.6.4]**.

33.1.9 Penalties for breach of conditions of granting preferences in terms of Schedule 19: Preferencing Schedule.

33.1.10 Penalties for failure to meet targeted labour and local enterprises contract participation goals (if applicable).

33.1.11 Any fines levied in accordance with the Health and Safety or Environmental Management Specifications

34.0 FINAL ACCOUNT AND FINAL PAYMENT

34.10 The **employer** shall pay the **contractor** the amount certified for payment in the final **payment certificate** within thirty (30) **calendar days** of the date for issue of the final **payment certificate** subject to the **contractor** giving the **employer** a **tax** invoice for the amount due.

TERMINATION

36.0 TERMINATION BY EMPLOYER — CONTRACTOR'S DEFAULT

36.1 The **employer** may terminate this **agreement** where:

36.1.1 The **Contractor** fails to comply **[12.2, 14.1, 15.1, 3]**, or

36.1.2. The **Contractor** refuses to comply with a **contract instruction [17.1]** subject to 17.2

36.1.3 The Contractor committed a corrupt or fraudulent act during the procurement process or the execution of the contract.

36.1.4 An official of the **employer** or other role player in the procurement process committed any corrupt or fraudulent act during the procurement process or in the execution of the contract that benefited the Contractor.

37.0 TERMINATION BY EMPLOYER — LOSS AND DAMAGE

37.1.3 The Contractor who is a sole proprietor dies.

38.0 TERMINATION BY CONTRACTOR — EMPLOYER'S DEFAULT

38.1.1 Payment Guarantee: **No clause.**

38.1.4 Act on notice to ascertain need for special insurances in terms of **[11.0, 12.5]**.

38.3 Where default is due to non-performance of the **principal agent [38.0]** the **employer** may take such actions as are deemed necessary to fulfil the obligations of the **principal agent [38.5]**

DISPUTE

40.0 SETTLEMENT OF DISPUTES

40.2.2 Litigation shall not be applicable.

40.3.2 Adjudication shall not be applicable.

40.3.3 No Clause.

40.3.4 No Clause.

40.4 Arbitration **[40.2.2]: Arbitration shall apply. The Arbitrator shall be selected as per the Contract Data.**

CONTRACT AGREEMENT

42.0 CONTRACTUAL AGREEMENT

42.2 Contracting Parties: **No clause. (See Part C1.1 Form of Offer and Acceptance)**

CONTRACT DATA EC

3.0 INSURANCES AND SECURITIES

3.6 Advance Payment Guarantee **[3.2.2, 14.5, 20.1.3, 21.1.4, 31.6.5]: No clause.**

4.0 PRACTICAL COMPLETION DATES AND PENALTIES

4.3 Items that do not have to be completed to achieve **practical completion**

4.4 Criteria to achieve **practical completion**

- No element or section of the works is excluded to achieve practical completion.
- The site to be cleared properly with no rubble, equipment or unused materials left lying outside.
- All temporary services connections to be disconnected.
- Contract related signage to be removed.
- All as built drawings, guarantees, operation and maintenance manuals, etc. must be provided

5.0 DOCUMENTS AND GENERAL

5.9 The contract value shall not be adjusted according to **CPAP [32.13]**

5.10 The following items of **works** shall be designed by the **contractor [4.1]**

1. Mechanical Equipment installation.
2. Temporary Works, including Site Establishment, Formwork and Scaffolding and Support – and de-watering of excavations.

CONTRACT DATA CE

2.1.3 No Clause

2.1.4 No Clause

3.2.4 No Clause

5.1 No Clause

5.3 No Clause

5.5 This tender shall remain in full legal force for **hundred and twenty (120) calendar days**. The tenderer accepts liability for damages as may be suffered by the employer should the tender validity period not be honoured.

Notwithstanding the tender validity period as stated above, bids shall be deemed to remain valid until formal acceptance by the **employer** of an offer at any time after the expiry of the original validity period, unless the **employer** is notified formally in writing of anything to the contrary (including any further conditions) by the bidder.

Any further conditions introduced by the bidder will be considered at the sole discretion of the **employer**.

5.8 **TENDER SUM COMPILATION**
(No Clause)

FORMS OF GUARANTEE

The pro forma "JBCC Construction Guarantee" and "JBCC Advance Payment Guarantee" as defined in clause 1 of the JBCC Series 2000 Principal Building Agreement (Edition 5.0 of July 2007) prepared by the Joint Building Contracts Committee shall not apply to this Contract and shall be replaced with the documentation incorporated into this tender document, refer to C1.3.

7.0 DECLARATION BY THE PRINCIPAL AGENT

I, the principal agent named in 1.2 above, declare that the information provided above is complete and accurate at the time of calling for tenders. Where necessary, should any of the above information need to be varied, tenderers will be forthwith informed thereof in writing.

C1.2b CONTRACT DATA (PART 2)

PRINCIPAL BUILDING AGREEMENT

Contract data CE CONTRACT DATA — CONTRACTOR

1.0 CONTRACTING PARTIES

1.1 Contractor:

Postal address:

Tel: Fax

E-mail:

Tax I VAT registration No:

Physical address:

2.0 SECURITIES

2.1 The security provisions selected are:

2.1.1 Fixed Construction Guarantee **[14.1]**

2.1.2 No clause **[14.4]**.

2.1.3 No Clause **[14.5]**

2.1.4 No Clause.

3.0 PAYMENT AND ADJUSTMENT OF PRELIMINARY & GENERAL ITEMS

3.1 Payment of Preliminary & General items

The amount included in each monthly **payment certificate** in respect of Preliminary & General items as stated in the **contract data** shall be

1. Fixed Charges as per SANS 1200A.
2. Time-related Charges assessed by the **principal agent** as an amount prorated to the value of the work duly executed in the same ratio as the Preliminary & General items bears to the **contract sum** excluding:
 - The amount for Preliminary & General items
 - Any contingency sum
 - All inclusive of **tax**

3.2 Adjustments of Preliminary & General items

The amount or items of Preliminary & General items shall be adjusted to take account of the theoretical financial effect which changes in time and/or value have on Preliminary & General items. Such an adjustment shall be based on the priced Bill of Quantities:

1. Fixed Charge items as required by the Employer.
2. Time-related items pro-rata with the additional time awarded in working days to the working days in the original contract duration.

3.2.3 **Payment certificate cash flow**

The **contractor** shall provide all reasonable assistance to the **principal agent** in the preparation of cash flow projections of claims for **payment certificates** where required by the **employer**. The projections shall be based on the **programme** and shall be updated as and when the **programme** requires updating. The cooperation of the **contractor** in terms of this item shall not prejudice his right to receive payment in terms of the **agreement**.

3.2.4 No clause.

3.2.5 Payment of Preliminary & General items **[3.1 .1 -2]**

3.2.6 Adjustment of Preliminary & General items **[3.2.1-2]**

4.0 **EMPLOYER CHANGES TO JBCC STANDARD DOCUMENTS**

4.1 Changes (if any) in terms of the Employer's Contract Data are not accepted **[3.11]**.

5.0 **THE TENDER**

5A No Clause

5.2 By the submission of this tender to the **employer** the tenderer offers and agrees to contract for, execute and complete the **works** of the tender sum as stated below.

5.3 No Clause

5.4 The lowest or any tender will not necessarily be accepted.

5.5 This tender shall remain in full legal force for one hundred and twenty (120) **calendar days**. The tenderer accepts liability for damages as may be suffered by the **employer** should the tender validity period not be honoured.

Notwithstanding the tender validity period as stated above, bids shall be deemed to remain valid until formal acceptance by the **employer** of an offer at any time after the expiry of the original validity period, unless the **employer** is notified formally in writing of anything to the contrary (including any further conditions) by the bidder.

Any further conditions introduced by the bidder will be considered at the sole discretion of the **employer**.

5.6 This tender takes into account all listed items **[4.0]** for the purpose of preparing and submitting this tender.

5.7 The successful tenderer will be appointed in terms of the JBCC Principal Building Agreement.

5.8 **TENDER SUM COMPILATION:** (No Clause)

C1.3 FORM OF GUARANTEE (PRO FORMA)

PERFORMANCE GUARANTEE

For use with the JBCC 2000 Edition 5 (2007).

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address:

"Employer" means:

"Contractor" means:

"Employer's Agent" means:

"Works" means:

"Site" means:

"Contract" means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

"Contract Sum" means: The accepted amount inclusive of tax of R.....

Amount in words:

"Guaranteed Sum" means: The maximum aggregate amount of R.....

Amount in words:

Type of Performance Guarantee: Fixed

"Expiry Date" means: Date of issue of the Certificate of Completion

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate of Completion of the Works as defined in the Contract.

1. FIXED PERFORMANCE GUARANTEE

1.1. Where a fixed Performance Guarantee has been selected. The Guarantor's liability shall be limited to the amount of the Guarantee Sum.

1.2. The Guarantor's period of liability shall be from and including the date on which the Performance Guarantee is signed, up to and including the Expiry Date, or the date of issue

by the Employer's Agent of the Certificate of Completion of the Works, or the date of payment in full of the Guaranteed Sum, whichever occurs first.

- 1.3. The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

2. CONDITIONS APPLICABLE TO FIXED PERFORMANCES GUARANTEES:

- 2.1. The Guarantor hereby acknowledges that:

- 2.1.1. Any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be constructed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship.

- 2.1.2. Its obligation under this Performance Guarantee is restricted to the payment of money.

- 2.2. Subject to the Guarantor's maximum liability referred to in 1.1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 2.2.1 to 2.2.3:

- 2.2.1. A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 2.2.2;

- 2.2.2. A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 2.2.1 and the sum certified has still not been paid;

- 2.2.3. A copy of the aforesaid payment which entitles the Employer to receive payment in terms of the Contract of the sum certified in 2.2.

- 2.3. Subject to the Guarantor's maximum liability referred to in 1.1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:

- 2.3.1. The Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 2.3; or

- 2.3.2. A provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 2.3; and

- 2.3.3. The aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provision liquidation court order.

- 2.4. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 2.2 and 2.3 shall not exceed the Guarantor's maximum liability in terms of 1.1.

- 2.5. Where the Guarantor has made payment in terms of 2.3, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of the Performance Guarantee shall bear interest at the prime overdraft rate by the Employer's Bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
- 2.6. Payment by the Guarantor in terms of 2.2 or 2.3 will only be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 2.7. Payment by the Guarantor in terms of 2.3 will only be made against the return of the original Performance Guarantee by the Employer.
- 2.8. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may consider fit and the Guarantor shall not have right to claim his from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
- 2.9. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 2.10. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 1.1.2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
- 2.11. This Performance Guarantee, with the required demand notices in terms of 2.2 or 2.3, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 2.12. Where the Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act of section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the magistrate's Court.

Signed at

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)

| |
|--|
| C1.4 CONFIRMATION OF RECEIPT OF CONTRACT (PRO FORMA) |
|--|

The Tenderer, (now Contractor), identified in the Offer part of this Agreement, hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) on:

The (day) of (month) (year)

At (place)

It is hereby agreed that the official commencement date of the Contract will be:

The (day) of (month) (year)

For and on behalf of the Contractor:

Name

Capacity

Signature Date:

Witness Name

Witness Signature Date:

C2 PRICING DATA

C2.1 Pricing Instructions

C2.2 Bill of Quantities

C2.3 Summary of Bill of Quantities

C2.1 PRICING INSTRUCTIONS

C2.1.1 PREAMBLE TO THE BILL OF QUANTITIES

- C2.1.1.1 The method of measurement published by the South African Bureau of Standards in Clause 8 of the Standardised Specifications for Civil Engineering Construction is applicable, subject to the variations and amendments contained in the section "Applicable SABS 1200 standardised specifications".
- C2.1.1.2 Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardised or Scope of Work, as applicable, shall prevail.
- C2.1.1.3 A payment reference column is provided in the Bill of Quantities to assist the Tenderer when pricing this tender. Certain items may not have a payment reference and the onus is on the Tenderer to refer to the relevant specifications as stated above to ensure that the item is priced correctly. If in doubt the Tenderer shall preferably seek clarification or else qualify any assumptions made.
- C2.1.1.4 The clauses in a specification in which further information regarding the bill item can be obtained appear under "Payment" column in the Schedule. The reference clauses indicated are not necessarily the only sources of information in respect of bill items. Further information and specifications may be found elsewhere in the Contract documents. Standardised Specifications are identified by the letter or letters which follow SABS in the SABS 1200 series of specifications, e.g. G for SABS 1200 G.
- C2.1.1.5 Unless otherwise stated, items are measured nett in accordance with the drawings, and no allowance is made for waste.
- C2.1.1.6 The quantities set out in the Bill of Quantities are the estimated quantities of the Contract Works, but the Contractor will be required to undertake whatever quantities may be directed by the Employer's Agent from time to time. The Contract Price for the completed Contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.
- C2.1.1.7 The Bills of Quantities must be completed by the insertion of rates / prices in accordance with the instruction described in the items above. As this Contract is a re-measurable Contract and not a Lump Sum Contract, a blank bill of quantities with only a lump sum amount will not be accepted.
- C2.1.1.8 The prices and rates to be inserted in the Bill of Quantities are to be the full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution 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 tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
- C2.1.1.9 Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered such items.
- C2.1.1.10 A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered or where a word or phrase such as "included" or "provided elsewhere" will be accepted as a rate of nil (R0,00) having been entered against such items and covered by the other prices or rates in the Schedule. Any work executed to which such a pay item applies, shall be measured under the appropriate items in the Bill of Quantities and valued at a rate of

nil (R0,00). The rate of nil shall be valid irrespective of any change in the quantities during the execution of the Contract.

C2.1.1.11 Except where rates only are required, the Tenderer shall insert all amounts to be included in his total tendered price in the "Amount" column and show the corresponding total tendered price.

C2.1.1.12 All prices or rates inserted in the Bill of Quantities shall EXCLUDE VAT. Provision has been made on the Summary Page, of the Bill of Quantities, for the addition of VAT.

C2.1.1.13 Arithmetical errors of responsive tenders will be corrected in terms of the Standard Conditions of Tender.

C2.1.1.14 The units of measurement described in the Schedule/Bill of Quantities are metric units. Abbreviations used in the Schedule/Bill of Quantities are as follows:

| | | | | | |
|----------------------|---|-----------------------|----------|---|------------------|
| mm | = | millimetre | h | = | hour |
| m | = | metre | kg | = | kilogram |
| km | = | kilometre | t | = | ton (1 000 kg) |
| m ² | = | square metre | No. | = | number |
| m ² .pass | = | square metre-pass | sum | = | lump sum |
| ha | = | hectare | MN | = | MegaNewton |
| m ³ | = | cubic metre | MN.m | = | MegaNewton-metre |
| m ³ .km | = | cubic metre-kilometre | P C sum | = | Prime Cost sum |
| ℓ | = | litre | Prov sum | = | Provisional sum |
| kℓ | = | kilolitre | % | = | per cent |
| MPa | = | Mega Pascal | kW | = | kilowatt |

| | |
|-------------|---------------------------|
| C2.2 | BILL OF QUANTITIES |
|-------------|---------------------------|

| ITEM NO | PAYMENT | DESCRIPTION | UNIT | QTY | RATE | AMOUNT | |
|-----------------------|-----------------------|--|------|-----|------|--------|---|
| | | | | | | R | c |
| A1 | SABS1200 A | SECTION A : PRELIMINARY AND GENERAL | | | | | |
| A1.1 | | FIXED CHARGE ITEMS | | | | | |
| A1.1.1 | PSA8.3.1 | Contractual requirements | Sum | | | | |
| | 8.3.2 | Establishment of facilities on the Site | | | | | |
| A1.1.2 | 8.3.2.3 PSA8.3.2.1 | Facilities for Engineer as listed in C3.4.5.5 | Sum | | | | |
| | "8.3.2.2 | | | | | | |
| PSA8.8.2" | | Facilities for Contractor including offices, storage sheds, workshops, laboratories, living accommodation, ablution and latrine facilities, tools and equipment, water supplies, electric power, communications, setting out of Works, security, dealing with traffic and access | | | | | |
| A1.1.3 | | Offices and storage sheds | Sum | | | | |
| A1.1.4 | | Workshop | Sum | | | | |
| A1.1.5 | | Ablution and latrine facilities | Sum | | | | |
| A1.1.6 | | Tools and equipment | Sum | | | | |
| A1.1.7 | | Water supply, electric power and communication | Sum | | | | |
| A1.1.8 | | Dealing with water (Sub-clause 5.5) | Sum | | | | |
| A1.1.9 | | Access (Sub-clause 5.8) | Sum | | | | |
| A1.1.10 | | Plant | Sum | | | | |
| Total Carried Forward | | | | | | | |

Section A

| ITEM NO | PAYMENT | DESCRIPTION | UNIT | QTY | RATE | AMOUNT | |
|-----------------------|-----------------------|--|------|-----|------|--------|---|
| | | | | | | R | c |
| Brought Forward | | | | | | | |
| A1.1.11 | 8.3.3 | Other fixed-charge obligations | Sum | | | | |
| A1.1.12 | PSA8.12 | Compliance with Ocupational Health and Safety requirements | Sum | | | | |
| A1.1.13 | 8.3.4 | Removal of Site establishment on completion | Sum | | | | |
| A1.2 | | TIME RELATED ITEMS | set | | | | |
| A1.2.1 | "PSA8.4.1 | | | | | | |
| | 8.4.1 | Contractual requirements | Sum | | | | |
| | "PSA8.4.2 | | | | | | |
| | 8.4.2 | Operation and maintenance of facilities on the Site for duration of construction except where otherwise stated | | | | | |
| A1.2.2 | 8.4.2.3 PSA8.3.2.1 | Facilities for Engineer as for Item A1.1.2 | Sum | | | | |
| A1.2.3 | 8.4.2.3 PSA8.8.2 | Facilities for Contractor as for Item A1.1.3 to A1.1.10 | Sum | | | | |
| A1.2.4 | 8.4.3 | Supervision for duration of construction | Sum | | | | |
| A1.2.5 | 8.4.4 | Company and Head Office overhead costs | Sum | | | | |
| A1.2.6 | 8.4.5 | Other time-related obligations | Sum | | | | |
| A1.2.7 | PSA8.12 | On-going compliance with Occupational Health and Safety requirements | Sum | | | | |
| A1.3 | "8.5 | | | | | | |
| Total Carried Forward | | | | | | | |

| ITEM NO | PAYMENT | DESCRIPTION | UNIT | QTY | RATE | AMOUNT | |
|-----------------------|---------|---|------|-----|------|--------|---|
| | | | | | | R | c |
| Brought Forward | | | | | | | |
| | PSA8.5" | SUMS STATED PROVISIONALLY BY THE ENGINEER | | | | | |
| | | | | | | | |
| A1.3.1 | | Allow for the cost of additional materials testing to be undertaken at the requestof the Engineer | Sum | | | | |
| | | | | | | | |
| A1.3.2 | | Contractor's overheads, charges and profit on Item A4.1 (State % and extend as an amount) | % | | | | |
| | | | | | | | |
| A1.4 | "8.7 | | | | | | |
| | PSA8.7" | DAYWORKS | | | | | |
| | | | | | | | |
| | | Labour | | | | | |
| | | | | | | | |
| A1.4.1 | | Skilled labour | h | | | | |
| | | | | | | | |
| A1.4.2 | | Semi-skilled labour | h | | | | |
| | | | | | | | |
| A1.4.3 | | Unskilled labour | h | | | | |
| | | | | | | | |
| | | Materials | | | | | |
| | | | | | | | |
| A1.4.4 | | Allow for net cost of goods or materials actually used | Sum | | | | |
| | | | | | | | |
| A1.4.5 | | Percentage mark-up on Item A6.2.1 (State % and extend as an amount) | % | | | | |
| | | | | | | | |
| | | Plant | | | | | |
| | | | | | | | |
| A1.4.6 | | Allow for all-inclusive cost of using Contractor's own plant on Site | Sum | | | | |
| | | | | | | | |
| A1.4.7 | | Allow for all-inclusive cost of hired plant | Sum | | | | |
| | | | | | | | |
| Total Carried Forward | | | | | | | |

Section A

[illegible]

Section B

| ITEM NO | PAYMENT | DESCRIPTION | UNIT | QTY | RATE | AMOUNT | |
|-----------------------|--------------|---|-------|-------|------|--------|---|
| | | | | | | R | c |
| B | | SECTION B: FENCING | | | | | |
| B1 | "SANS1200 C" | Clear Site | | | | | |
| B1.1 | 8.2.1 | "Clear and grub 3 m width along route of fence line, including for trees and stumps of girth up to 1,0 m" | m | 770.0 | | | |
| B1.2 | 8.2.2(a) | "Remove and grub large trees and tree stumps of girth over 1,0 m, up to and including 2,0 m" | No. | 50.0 | | | |
| | 8.2.2(b) | "Remove and grub large trees and tree stumps of girth over 2,0 m, up to and including 3,0 m" | No. | 20.0 | | | |
| B1.3 | 8.2.9 | Cart materials and debris to municipal specified site and dump (provisional) | m³.km | 200.0 | | | |
| B1.4 | | Remove all building rubble, rubbish, including domestic waste, tyres, etc. and transport and dispose at an approved spoil site. Rate to include all fees payable at spoil site. | m³ | 0.0 | | | |
| B1.5 | | Demolish and remove concrete pedestals, slabs, walkways and foundations from existing structures and dispose off site | m³ | 30.0 | | | |
| B2 | | 1.8 High Security Fence | | | | | |
| B2.1 | 8.1.1 | Supply and erect 1.8m high security fencing, betafence or similar approved inclusive of posts | m | 210.0 | | | |
| | 8.1.2 | Extra over item 2.1 for : | | | | | |
| B2.2 | | Posts, 76 mm x 76 mm | No. | 70.0 | | | |
| B2.3 | | Sharktooth spikes | m | 210.0 | | | |
| B2.4 | | 3m wide sliding gate, motor priced elsewhere | No. | 1.0 | | | |
| Total Carried Forward | | | | | | | |

| ITEM NO | PAYMENT | DESCRIPTION | UNIT | QTY | RATE | AMOUNT | |
|-----------------------|-----------------------|---|------|---------|------|--------|---|
| | | | | | | R | c |
| Brought Forward | | | | | | | |
| B2.5 | | Pedestrian gate at the back | No. | 1.0 | | | |
| B3 | | 1.8m high Diamond mesh | | | | | |
| B3.1 | PSF8.1 | Supply and erect 50 x 2.5 x 1.8m high diamond mesh, fastened to straining wires, including standard posts | m | 600.0 | | | |
| B3.2 | | "3 no. 3,15 mm diameter galvanised straining wires, fastened to polesto poles" | m | 1,710.0 | | | |
| | PSF8.2 | Extra-over item 1.1 for: | | | | | |
| B3.3 | | Corner posts including stays | No. | 6.0 | | | |
| B3.4 | | Straining posts including stays | No. | 7.0 | | | |
| B3.5 | | Gate posts including stays | No. | 2.0 | | | |
| B3.6 | PSF8.3 | Supply and install double leaf, steel swing gates: 5m wide. | No. | 0.0 | | | |
| B4 | | Brick Wall | | | | | |
| B4.1 | | Brick columns as per detail | No. | 52.5 | | | |
| B4.2 | | 200mm thk Brick walls as per relevent details | m | 210.0 | | | |
| | "SANS | | | | | | |
| 1200 G" | Concrete (Structural) | | | | | | |
| | 8.1.3 | Concrete | | | | | |
| | | Strength concrete: 20 MPa/19mm | | | | | |
| B4.3 | | Footings | m³ | 44.1 | | | |
| Total Carried Forward | | | | | | | |

Section B

| ITEM NO | PAYMENT | DESCRIPTION | UNIT | QTY | RATE | AMOUNT | |
|----------------------------------|---------|-----------------------------------|------|-------|------|--------|---|
| | | | | | | R | c |
| Brought Forward | | | | | | | |
| B4.5 | 8.1.1 | Formwork | | | | | |
| | 8.2.1 | Rough walls below ground | | | | | |
| | | Vertical plane | m² | 126.0 | | | |
| B4.6 | 8.1.2 | Reinforcement | | | | | |
| | 8.3.1 | High-tensile steel bars | | | | | |
| | | b) 10 mm | t | 4.4 | | | |
| B4.7 | 8.4.4 | Unformed surface finishes | | | | | |
| | | Wood-floated finish (see PSG 7.1) | | | | | |
| | | Strip footings | m² | 147.0 | | | |
| Total Carried Forward To Summary | | | | | | | |

Section C

| ITEM NO | PAYMENT | DESCRIPTION | UNIT | QTY | RATE | AMOUNT | |
|-----------------------|---------|--|------|------|------|--------|---|
| | | | | | | R | c |
| C | | SECTION C: ELECTRICAL INSTALLATION | | | | | |
| | | EARTHWORKS | | | | | |
| | | TRENCH | | | | | |
| | | Trenching, backfilling and compacting | | | | | |
| C.1 | | 300 (w) x 600 (d) mm | m | 5.0 | | | |
| | | CABLE MARKER | | | | | |
| | | Nylon rope connection to cable | | | | | |
| C.2 | | Supply | m | 5.0 | | | |
| C.3 | | Install | m | 5.0 | | | |
| | | Red/white danger tape | | | | | |
| C.4 | | Supply | m | 5.0 | | | |
| C.5 | | Install | m | 5.0 | | | |
| | | DISTRIBUTION BOARDS | | | | | |
| | | Add 10A 6kA Circuit breaker in existing Kiosk | | | | | |
| C.6 | | Supply | No. | 1.0 | | | |
| C.7 | | Install | No. | 1.0 | | | |
| | | CERTIFICATE OF COMPLIANCE | | | | | |
| C.8 | | Allow for Certificate of Compliance (COC) in terms of the Occupational and Health Safety Act, OHS ACT of 1993. Allow for testing and balancing of Phases as well as commissioning of the whole electrical lighting and power installation. | No. | 1.0 | | | |
| | | CABLES INSTALLED IN THE GROUND AND/OR SADDLED TO WALLS | | | | | |
| | | Supply and install PVC/SWA/PVC 600/1000V copper cable as per manufacturer's requirement. Including sand bedding, danger tape, backfilling, cable markers | | | | | |
| | | THREE CORE COPPER STEEL WIRE ARMoured CABLE (LNE) | | | | | |
| | | 6mm² | | | | | |
| C.9 | | Supply | m | 15.0 | | | |
| C.10 | | Install | m | 15.0 | | | |
| | | CABLE TERMINATIONS | | | | | |
| Total Carried Forward | | | | | | | |

Section C

| ITEM NO | PAYMENT | DESCRIPTION | UNIT | QTY | RATE | AMOUNT | |
|-----------------------|---------|---|------|------|------|--------|---|
| | | | | | | R | c |
| Brought Forward | | | | | | | |
| | | Including cable gland, screw type earth tag, gland bracket, earth tail and fixing. | | | | | |
| | | THREE CORE COPPER STEEL WIRE ARMOURED CABLE (LNE) | | | | | |
| | | 6mm² | | | | | |
| C.11 | | Supply | No. | 2.0 | | | |
| C.12 | | Install | No. | 2.0 | | | |
| | | EARTHING CONDUCTORS | | | | | |
| | | BARE COPPER EARTH | | | | | |
| | | The Bare Copper earth conductors installed/strapped to the power cables (power cable measured elsewhere) | | | | | |
| | | 6mm² | | | | | |
| C.13 | | Supply | m | 15.0 | | | |
| C.14 | | Install | m | 15.0 | | | |
| | | EARTHING AND BONDING OF ELECTRICAL INSTALLATION | | | | | |
| | | General earthing and bonding of items not included above | | | | | |
| C.15 | | Bonding of all equipment and materials in accordance with SANS 10142 | Sum | 1.0 | | | |
| | | LUMINAIRES | | | | | |
| | | Luminaires shall include for lamp sources, suspension, fixing and connecting. All recessed fittings will be connected to an isolator or plugged into an 5A socket outlet. Refer to the Schedule of Luminaires for technical information | | | | | |
| | | FLOODLIGHTS | | | | | |
| | | Type L2 Floodlight LED 160W Equal to Lascon L16 | | | | | |
| C.16 | | Supply | No. | 5.0 | | | |
| C.17 | | Install | No. | 5.0 | | | |
| | | POLE MOUNTED | | | | | |
| | | 8m Galvanised pole including 4x 6A single pole circuit breaker and internal wiring | | | | | |
| C.18 | | Supply | No. | 1.0 | | | |
| C.19 | | Install | No. | 1.0 | | | |
| | | PHOTOCELL | | | | | |
| Total Carried Forward | | | | | | | |

Section C

[illegible]

C2.3 SUMMARY OF BILL OF QUANTITIES

| Section | Description | Price |
|---------|-------------------------|-------|
| A | Preliminary And General | R |
| B | Fencing | R |
| C | Electrical | R |

SUBTOTAL OF PRICED ITEMS

R

PROVISIONAL ALLOWANCE FOR CONTINGENCIES (10%)

R

NET CONTRACT PRICE

R

VALUE ADDED TAX (15% of Net Contract Price)

R

CONTRACT SUM (CARRIED TO C1.1 FORM OF OFFER)

R

C3 SCOPE OF WORK

- C3.1 Description of the Works
- C3.2 Engineering
- C3.3 Procurement
- C3.4 Construction
- C3.5 Management
- C3.6 Specifications for Civil Infrastructure
- C3.7 Specifications for Building Infrastructure
- C3.8 Specifications for Landscape works
- C3.9 Specifications for Electrical Equipment
- C3.10 Health and Safety Requirements and Procedures

C3.1 DESCRIPTION OF THE WORKS

C3.1.1 EMPLOYER'S OBJECTIVES

The Employer's objectives are to improve the condition of its immovable assets by complying to current building standards. All projects must provide local employment opportunities.

C3.1.2 OVERVIEW OF THE WORKS

This contract is for the construction of the parametric fence to Roggeland Farm in Paarl, Western Cape.

C3.1.3 EXTENT OF THE WORKS

This Contract includes:

- Construction of a parameter fence around the property
- Site Establishment
- Site Clearance
- Installation of security Flood Lights and Associated Electrical Work

C3.1.4 LOCATION OF THE WORKS

Roggeland farm is part of three (3) farmsteads within the Daljosafat Farm on the outskirts of Paarl, Western Cape.

The Locality Plan is attached hereto as Annexure A.

The coordinates for site are as follows:

- Latitude 34°9'12.07"S; Longitude 18°24'29.19"E

C3.1.5 TEMPORARY WORKS

The Contractor will be required to design and build their own temporary works.

C3.1.5.1 Other Services (i.e. Telkom, Electricity, etc.)

The Contractor shall ensure that the position of all existing services affected by the Works have been verified before construction works commences and should it be necessary to lower or relocate any service, the Contractor will be required to make the necessary arrangements with the relevant service provider and to advise the Engineer accordingly.

C3.1.5.2 Survey Beacons and Benchmarks

The Contractor shall be responsible for the preservation of all land survey, erf or other pegs, benchmarks, and beacons. If damage or disturbance of any such pegs or beacons is caused by the operations of the Contractor or his subcontractors, the pegs are to be replaced by a Registered Land Surveyor at the cost of the Contractor. Information regarding the position of all such pegs will be made available to the Contractor by the Engineer.

The Contractor is to ensure that no spoil is placed over erf pegs or benchmarks and that these are adequately protected for the full duration of the Contract.

Where disturbances of boundary pegs are unavoidable due to excavation or other operations adjacent to the pegs, the Contractor shall advise the Engineer or his Representative immediately, and agreement is to be reached that the disturbance of the peg is unavoidable and a strict record of such disturbed pegs is to be kept. Such pegs are to be replaced by a Registered Land Surveyor as described above and the Contractor is to submit proof of the cost of replacement of pegs. The Contractor will be reimbursed on a basis pro-rata to the total cost of peg replacement determined on completion of the Works.

C3.1.5.3 Protection of Existing Works

The Contractor shall take all necessary steps to ascertain the location of existing services before commencing any section of the works and shall exercise the greatest care when working in the vicinity of such services. No more than three weeks and not less than one week before commencing his operations in any area, the Contractor shall request in writing from the Engineer the latest available drawings showing the location of services already installed. The Contractor will also be responsible for contacting the various service providers, arranging a meeting and verifying all known as well as possible unknown services on site.

The Contractor shall take all necessary steps to protect any existing works whatsoever against damage which may arise as a result of his operations on Site. The Contractor shall bear the cost of the repair of damage to any service, the possible existence of which could reasonably have been ascertained by him in good time.

Where the Contractor is responsible for damage for which repairs must be carried out by the Employer or an outside Authority, the costs of these repairs will be recovered by means of a deduction from the Contractor's monthly Payment Certificate. The Employer will attend to the payment of monies due to outside authorities, should the Contractor not make direct payment, to the outside authorities, timeously.

C3.1.5.4 Tidying up of the Works

The Contractor shall take note that progressive and systematic finishing and tidying will form an essential part of this contract. On no account shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily be a hindrance to or impede the activities of other contractors or service providers. In the event of this occurring, the Employer shall have the right to withhold payment for as long as may be necessary in respect of the relevant works in the area(s) concerned.

Upon completion of the Works or any portion thereof, the ground, fences, gates and any structures that have been interfered with are to be carefully restored to their original condition and all rubbish, tools, tackle, plant and material must be removed so as to leave the Site in a clean and orderly condition. No additional payment shall be made for work set out above.

C3.2 ENGINEERING

C3.2.1 DESIGN SERVICES AND ACTIVITY MATRIX

The Employer is responsible for the design of the Permanent Works.

The Contractor is responsible for the design of the Temporary Works.

Permanent works include:

| | |
|---|------------|
| Concept, feasibility and overall process | Consultant |
| Basic engineering and detail layout to tender stage | Consultant |

Final design for construction stage:

| | |
|-------------|------------|
| Civil Works | Consultant |
|-------------|------------|

The Contractor is responsible for the design of the Temporary Works (refer to C3.1.5).

Temporary works include:

| | |
|--|------------|
| Site Establishment | Contractor |
| Formwork and scaffolding | Contractor |
| Shoring / lateral support and dewatering | Contractor |

C3.2.2 EMPLOYER'S DESIGN

The entire Permanent Works have been designed by the Engineer.

C3.2.3 DESIGN BRIEF AND PROCEDURES

C3.2.3.1 Design Brief

There are no permanent works that need to be designed by the Contractor.

C3.2.3.2 Design Procedures

The Contractor shall take all statutory requirements, as well as the Health and Safety Specification into consideration when designing all Temporary Works.

- interfaces with existing structures, plant etc;
- any temporary works requirements, if any, e.g. specialized items equipment;
- design integration before and during construction;
- procedures for all necessary approvals;
- special procedures e.g. environmental;
- design change procedures; and
- record keeping and tracking of documents].

C3.2.4 DRAWINGS

The drawings listed below are included on the attached CD in order to give an overview of the contract, refer to the contents page for the relevant annexure.

| Drawing No | Description | Rev | Sheet Size |
|----------------------------|--------------------------------|-----|------------|
| Fencing Drawings | | | |
| 1711-01-FEN-003 | Roggeland Farm Fencing Layout | T0 | A0 |
| 1711-01-FEN-002 | Roggeland Farm Fencing Details | T0 | A0 |
| Electrical Drawings | | | |
| 1711-R-ELE-L-001 | Lighting Layout | T0 | A3 |

Additional construction drawings will be issued to the Contractor by the Engineer / Employer on the commencement date and from time to time as required.

C3.3 PROCUREMENT

C3.3.1 PREFERENTIAL PROCUREMENT PROCEDURES

C3.3.1.1 Requirements

The Preferential Procurement Regulations, 2017 shall apply.

C3.3.1.2 Resources standard pertaining to targeted procurement

SANS1914-1:2002 Targeted Construction Procurement shall apply to this contract.

C3.3.2 SUB-CONTRACTING

No part of the Works may be sub-contracted without the written consent of the Engineer.

C3.3.2.1 Scope of mandatory subcontract works

C3.3.2.2 Preferred Sub-contractors/suppliers

Not applicable

C3.3.2.3 Subcontracting procedures

Where provisional sums or prime costs items have been provided in the Bills of Quantities, and where the work or items to which the allowances relate are to be executed/supplied by sub-contractors/suppliers, then the following selection process shall be followed in respect of the required sub-contractors/suppliers:

Where the monetary allowance is less than or equal to R200 000, the Contractor shall invite three quotations from suitably qualified sub-contractors/suppliers for the required work or items. The selection of the three sub-contractors/suppliers shall be in consultation with, and to the approval of the Engineer. The evaluation of the quotations received must include a preference points system as described in F.3.11 of the Tender Data.

Where the monetary allowance is in excess of R200 000, an open competitive tender process shall be followed in respect of the selection of a sub-contractor/supplier for the required work or items. In such circumstances, tender documentation will be prepared by the Engineer in consultation with and to the approval of the Contractor, invitations to tender will be advertised in the media by the Engineer on behalf of the Contractor, and a sub-contractor/supplier will be selected from the responses received, by the Contractor and Engineer in consultation. The evaluation of the offers received must include a preference points system as described in F.3.11 of the Tender Data. The Contractor must satisfy him/herself that the selected sub-contractor/supplier can meet the requirements of the sub-contract /supply agreement and may, on reasonable grounds, elect not to employ a particular sub-contractor/supplier.

In both instances above (less than or equal to R200 000 or in excess of R200 000), the contractual relationship between the Contractor and sub-contractor/supplier shall be as described in clause 23.(1 - 2) of the JBCC 2000 Edition 5 July 2007.

C3.3.2.4 Attendance on Sub-contractors

Not applicable.

C3.3.2.5 Monitoring the use of sub-contractors

Notwithstanding the restriction on sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the preference points that the Contractor qualified for, it is recognised that sub-contracting is an integral part of construction.

In order, however, to ensure that not more than 25% of the value of the contract is not sub-contracted to sub-contractors that do not qualify for at least the preference points that the Contractor qualified for, the contractor shall submit to the Engineer, on a monthly basis, a B-BBEE Sub-contract Expenditure Report. The format of this report is provided in Annex 1 attached.

The Contractor shall submit to the Engineer documentary evidence (either an original valid B-BBEE status level verification certificate in terms of the Construction Sector Charter on Black Economic Empowerment, or an Exempted Micro Enterprise certificate issued by a registered auditor, accounting officer (as contemplated in section 60(4) of the Close Corporation Act, 1984 (Act No. 69 of 1984)) or an accredited verification agency, or certified copies thereof) in terms of the Preferential Procurement Regulations, 2011) of the B-BBEE status level of every sub-contractor employed by the Contractor. Until such time as documentary evidence as described above has been submitted to the Engineer, a sub-contractor shall be deemed to be a non-compliant contributor.

The contractor shall furthermore, on the written request of the Engineer, provide documentary evidence showing the value of work sub-contracted to any or all the sub-contractors employed by the Contractor.

C3.3.3 PARTICIPATION OF TARGETED LABOUR – Not Applicable. Refer to Terms of Reference for Local Labour employment

C3.3.3.1 Minimum targeted labour contract participation goal

In support of the National Government of South Africa's aim to alleviate poverty through the creation of employment opportunities, the Employer is seeking to increase the intensity of labour, as appropriate, in all of its infrastructure sector projects.

It is a requirement of this contract, therefore, that the work be executed in such a manner so as to maximise the use of labour-intensive construction methods in order to provide unskilled and semi-skilled employment opportunities.

To this end, a minimum targeted labour contract participation goal is specified below, which shall be achieved by the Contractor in the performance of the contract, failing which, penalties as described will be applied.

The specified minimum targeted labour contract participation goal (CPGL) is **5%**.

The minimum CPGL is such that the Contractor will have to carry out some of the work that would normally have been undertaken using mechanised construction methods, by using labour intensive construction methods instead. It is left to the discretion of the Contractor to identify suitable work activities for the intensification of labour. The Contractor shall, within 5 working days of being

requested in writing by the Engineer to do so, submit details of his/her plan to achieve the minimum CPGL.

C3.3.3.2 Definitions

For the purposes of the requirements in respect of the participation of targeted labour, the following definitions shall apply:

“Target area” means the geographical area of Paarl in the Drakenstein Municipality.

“Targeted labour contract participation goal (CPGL)” means the sum of the wages (excluding any benefits), for which the Contractor, or any of his/her sub-contractors contracts targeted labour in the performance of the contract, expressed as a percentage of the value of the contract.

“Targeted labour” means unskilled and semi-skilled individuals, whose wages (excluding any benefits) do not exceed the threshold value, who reside in the target area, that are employed by the Contractor, or any of his/her sub-contractors, in the performance of the contract.

“Threshold value” is **R 250,00** per day. The threshold value is not to be confused with any industry sector minimum wage determined in accordance with the Basic Conditions of Employment Act, No. 75 of 1977.

“Value of the contract” means the contract sum (accepted contract amount) less provisional sums, contingencies and VAT.

C3.3.3.3 The selection and recruitment of targeted labour

Where targeted labour is to be drawn from specific local communities (defined in terms of the target area), such labour shall be identified by the Community Liaison Officer, who shall establish a list of suitable candidates, from which the Contractor shall make his/her final selection. The contractor shall enter written contracts of temporary employment with all targeted labour.

Any difficulty experienced by the Contractor in identifying candidates, or as regards any matter relating to the employment of targeted labour, shall be immediately referred to the Engineer.

C3.3.3.4 Contract participation goal credits

Credits towards the achieving the minimum CPGL shall be granted by converting the total monetary value of wages paid to targeted labour to a percentage of the value of the contract. No credits shall be accorded should the contractor fail to enter into written contracts with the targeted labour. Furthermore, no credits shall be accorded in respect of targeted labour employed on work in respect of provisional sums or prime cost items. Such labour shall nevertheless be recorded on the Project Labour Report which is required to be furnished by the Contractor.

In addition to the forms required for contract administration (the Project Labour Report and Targeted Labour Contract Participation Expenditure Report, in particular), the Contractor shall furnish the Employer with written proof that employment contracts entered into with targeted labour have been concluded, as well as evidence of payments to the such labour in the form of copies of payslips or payroll runs.

C3.3.3.5 Training of targeted labour

The Contractor is required to provide all informal (on-the-job) skills training to ensure that a minimum level of competence is achieved and maintained, such that the various activities are carried out safely and to the required standard. The cost of informal training shall be included in the rates for the various work activities.

C3.3.3.6 Penalties

The financial penalty to be applied for failing to meet the specified minimum targeted labour contract participation goal in the performance of the contract (unless proven to be beyond the control of the Contractor), is as follows:

$$\text{Penalty} = (\text{CPGLS} - \text{CPGLA}) \times P^*$$

Where CPGLS = the specified minimum targeted labour contract participation goal (expressed as a percentage)

CPGLA = the targeted labour contract participation goal achieved (expressed as a percentage)

P* = the value of the contract.

Penalties will be calculated and deducted in each monthly payment certificate, on a cumulative basis, up to a maximum of **2%** of the Value of the contract, as defined.

C3.3.4 PARTICIPATION OF TARGETED ENTERPRISES – Not Applicable

C3.3.4.1 Minimum targeted enterprises contract participation goal

It is a requirement of this contract that enterprises located within the target area, as defined, be engaged by the Contractor for the provision of supplies, services or works necessary for the performance of this contract.

To this end, a minimum targeted enterprises contract participation goal is specified below, which shall be achieved by the Contractor in the performance of the contract, failing which, penalties as described will be applied.

The specified minimum targeted enterprises contract participation goal (CPGE) is **30%**.

The Contractor shall engage targeted enterprises directly or indirectly in the performance of the contract to the extent that the total monetary value of such engagements (exclusive of VAT), expressed as a percentage of the value of the contract, is sufficient to achieve the specified minimum CPGE.

C3.3.4.2 Definitions

For the purposes of the requirements in respect of the participation of targeted enterprises, the following definitions shall apply:

"Target area" means the geographical area of the **Drakenstein** Municipality boundaries, with greater preference for areas within greater **Paarl**, and most preference for the **Mbekweni and Groenhuewel** areas in **Paarl**.

"Targeted enterprises contract participation goal (CPGE)" means the value of supplies, services or works (exclusive of VAT), for which the Contractor contracts targeted enterprises, either directly or indirectly, in the performance of the contract, expressed as a percentage of the value of the contract.

"Targeted enterprises" means any sole trader, partnership or legal entity that acts as a supplier, manufacturer, service provider or Small Medium Micro Enterprise (SMME) sub-contractor registered with the Construction Industry Development Board with a contractor grading designation up to and including 4 in a relevant class of construction work, and which has its base of operations in the target area.

"Value of the contract" means the contract sum (accepted contract amount) less provisional sums, contingencies and VAT.

C3.3.4.3 Achieving the contract participation goal

The contractor may achieve the specified minimum CPGE as follows:

- by engaging one or more targeted enterprises to perform commercially useful functions in the performance of the contract;
- by engaging non-targeted enterprises, who in turn engage one or more targeted enterprises to perform commercially useful functions in the performance of the contract;
- by a combination of the above.

The Contractor shall, within 5 working days of being requested by the Engineer to do so, submit details of his/her plan to achieve the minimum CPGE.

C3.3.4.4 Contract participation goal credits

Credits towards achieving the minimum CPGE shall be granted by converting the total monetary value (exclusive of VAT) of the agreements between the Contractor, or Contractor's sub-contractors, and targeted enterprises, to a percentage of the value of the contract.

No credits shall be accorded should the Contractor (or sub-contractors):

- make direct payment to third parties in connection with the contract on behalf of targeted enterprises, when such payment is recovered by making deductions from payments due to the targeted enterprise;
- fail to enter into written contractual agreements with the relevant targeted enterprises.

Credits claimed towards the contract participation goal shall be denied where such written contractual agreements contain any of the following:

- conditions which are more onerous than those that exist in the prime contract (this contract);
- payment procedures based on a pay when paid system;

- authoritarian rights given to the employing contractor, with no recourse to independent adjudication in the event of a dispute arising.

No credits may be claimed in respect of targeted enterprises that do not adhere to statutory labour practices.

No credits shall be accorded in respect of targeted enterprises engaged on work in respect of provisional sums or prime cost items.

If a targeted enterprise sub-contracts to another targeted enterprise, only the value of the higher-level sub-contract shall be granted as credit towards achieving the specified minimum CPGE.

In addition to the form required for contract administration (the Targeted Enterprises Contract Participation Expenditure Report), the Contractor shall furnish the Engineer, upon written request, with documentary evidence that the targeted enterprises have their base of operations in the target area, copies of the contractual agreements with the various targeted enterprises, as well as documentary proof of payments made to the various targeted enterprises.

C3.3.4.5 Penalties

The financial penalty to be applied for failing to meet the specified minimum targeted enterprises contract participation goal in the performance of the contract (unless proven to be beyond the control of the Contractor), is as follows:

Penalty = $(CPGES - CPGEA) \times P^*$

Where CPGES = the specified minimum targeted enterprises contract participation goal (expressed as a percentage)

CPGEA = the targeted enterprises contract participation goal achieved (expressed as a percentage)

P* = the value of the contract.

Penalties will be calculated and deducted in each monthly payment certificate, on a cumulative basis, up to a maximum of **10%** of the Value of the contract, as defined.

C3.3.5 REPORTING

The Contractor shall prepare reports in line with SANS 1914, and submit with each monthly statement for payment, the following updated return :

- Sub-contract Expenditure Report
- Project Labour Report
- Targeted Labour Contract Participation Expenditure Report
- Targeted Enterprise Contract Participation Expenditure Report

The Project Labour Report must include details of all labour (including that of sub-contractors) that earns less than **RXXX.XX** per day (excluding any benefits) employed from within the target area on this contract in the month in question.

C3.4 CONSTRUCTION

C3.4.1 WORKS SPECIFICATION

C3.4.1.1 Applicable SANS standards

The SABS 1200 Standardised Specifications for Civil Engineering Construction read in conjunction with the SABS 0120 Code of Practice for use with standardised specifications for Civil Engineering Construction and Contract Documents apply.

C3.4.1.2 Applicable national and international standards

The following Standardised Specifications for Civil Engineering Construction, as amended in the Scope of Work, form part of the Contract Documents:

| | | |
|--------------|------------------------|------------------------|
| SABS 1200 A | 1986 | General |
| SABS 1200 AA | 1986 | General (Small Works) |
| SABS 1200 C | 1980 (as amended 1982) | Site Clearance |
| SABS1200 G | 1982 | Concrete (Structural) |
| SABS1200 GA | 1982 | Concrete (Small Works) |

The term “project specifications” appearing in any of the SABS 1200 Standardised Specifications shall be replaced with the term “Scope of Work”.

The variations and additions of the Standardised Specifications are provided in C3.6.

C3.4.1.3 Particular / Generic specifications

The following additional specifications included in this volume are applicable to this contract:

| | | |
|------------|---|---|
| Annexure C | : | Site Specific Health & Safety Specification |
| Annexure D | : | Site Specific Baseline Risk Assessment |

C3.4.1.4 Certification by recognized bodies

Not applicable.

C3.4.1.5 Agrément certificates

Not applicable.

C3.4.2 PLANT AND MATERIALS

C3.4.2.1 Plant and materials supplied by the Employer

The Employer will not provide plant or materials for this Contract.

C3.4.2.2 Materials, samples and shop drawings

Any material that shall comply with the requirements of a South African National Standard specification in terms of this Contract, shall bear the official SABS mark, should the material be available with such mark.

C3.4.3 CONSTRUCTION EQUIPMENT

C3.4.3.1 Requirements for equipment

All equipment used on this Contract shall comply with the requirements of the Occupational Health and Safety Act (1993) and the Construction Regulations (2014) [and the Environmental Management Plan].

C3.4.3.2 Equipment provided by the Employer

The Employer will not provide equipment for this Contract.

C3.4.4 EXISTING SERVICES

Refer to C3.1.5, C4.3 and PSA5.4.

C3.4.5 SITE ESTABLISHMENT

C3.4.5.1 Service and facilities provided by the Employer

No services or facilities will be provided by the Employer.

C3.4.5.2 Facilities provided by the Contractor

As specified in SABS 1200A and SABS 1200AB to be provided

C3.4.5.2.1 Water supply

The Contractor shall make his own arrangements, and pay all installation and consumption charges, for the supply of water required.

C3.4.5.2.2 Power supply

There is no power available on site. The Contractor shall be responsible for providing on site, at his own cost, the power required.

The Contractor shall negotiate directly with the local power supply authority to arrange a power supply as he requires.

Any distribution network that the Contractor may require shall be carried out by himself at his own cost in accordance with the requirements and regulations of the local authority.

C3.4.5.2.3 Camps and depot

The Contractor may erect his site offices and storage depot within the boundaries of the area indicated by the Engineer.

The Contractor shall submit a general layout drawing to a scale of not less than 1:200 to the Engineer for approval before any work on the camp or offices is commenced.

No housing is available, and the Contractor shall make his own arrangements to house his employees and transport them to and from the Site. All arrangements for housing workmen shall be made in accordance with and subject to applicable regulations and requirements.

C3.4.5.2.4 Sanitary conditions

The Contractor shall supply chemical toilets for use by his workmen. The number of toilets shall be based on one toilet per fifteen personnel on site. Under no circumstances will the Contractor's staff be allowed to use public toilet facilities.

Unhygienic habits and other behaviour that may cause contamination of any part of the Works or the surrounding areas are strictly prohibited. The Contractor shall ensure that sanitary conditions prevail throughout the Site and that all his workmen are aware of, and comply with, this rule.

C3.4.5.2.5 Disposal sites

Unless instructed otherwise, the Contractor shall dispose all surplus material from the site at a Municipal Solid Waste Disposal Facility.

The Contractor shall inform the Employer's Agent in writing of any other site he proposes to use. Use of the alternative disposal site may only be used if approved by the Engineer in writing.

C3.4.5.3 Storage and laboratory facilities

Storage and laboratory facilities are not required.

C3.4.5.4 Other facilities and services

No other facilities or services are required.

C3.4.5.5 Vehicles and equipment

The Contractor shall provide for the use of the Engineer, maintain and service, as applicable, the following facilities as specified in SANS 1200AB and PSAB:

- two nameboards,
- latrine and ablution facilities,
- covered carport for two vehicles,
- survey equipment,
- a site instruction book,
- protective clothing, safety equipment, and medical facilities,
- nine 150mm concrete cube moulds and a temperature-controlled cube-curing water bath (see PSG)

Unless specified otherwise, on completion of the Works these facilities shall revert to the Contractor who shall remove them from the site.

The term "use of the Engineer" will be deemed to include, as appropriate, use by the Engineer's staff and the Engineer's Representative and his staff.

C3.4.5.6 Advertising rights

Not applicable.

C3.4.5.7 Notice boards

The Contract notice board shall be manufactured, installed, maintained and removed in accordance with PSAB 3.1.

C3.4.6 SITE USAGE

Access to the site shall be restricted to the Contractor, Employer, Engineer and their personnel, agents or Subcontractors. The Contractor shall control entry to the site and shall report unauthorised entry to the Engineer.

C3.4.7 PERMITS AND WAY LEAVES

Contractor will be responsible for the permits required that are applicable from the various wayleaves. The engineer/engineer/principal agent must be made aware/informed of any developments.

C3.4.8 ALTERATIONS, ADDITIONS, EXTENSIONS AND MODIFICATIONS TO EXISTING WORKS

All as specified in the relevant drawings/instruction from the principle agent

C3.4.9 INSPECTION OF ADJOINING PROPERTIES

The condition of the existing roads shall be assessed and recorded by video and/or photography before commencing construction.

C3.4.10 WATER FOR CONSTRUCTION PURPOSES

Refer to C3.4.5.2.1.

C3.4.11 SURVEY CONTROL AND SETTING OUT OF THE WORKS

Before commencement of work, the Contractor shall liaise with the Engineer to establish and verify the position and level of benchmarks, and the status of all boundary pegs in the Township. The Contractor shall record the exact position of all erf pegs on a marked-up print of the site.

On completion of the Contract, the pegs that have been unavoidably disturbed will be replaced by the Employer. Pegs which have, in the opinion of the Engineer, been disturbed due to the negligence of the Contractor, will be replaced at the Contractor's cost.

C3.4.12 FEATURES REQUIRING SPECIAL ATTENTION

C3.4.12.1 Health and Safety

Refer to C3.10.

C3.4.12.2 Continuous operation of existing services

All existing services shall be maintained in operation, unless prior arrangements have been made with the relevant authority and written permission for an interruption of the service has been granted and adequate notice has been given to the affected residents.

C3.4.12.3 Sanitary conditions

Unhygienic habits and other behaviour that may cause contamination of any part of the Works or the surrounding areas are strictly prohibited. The Contractor shall ensure that sanitary conditions prevail throughout the Site and that all his workmen are aware of, and comply with, this rule.

C3.4.12.4 Neatness of the site

The Works are in an environmentally sensitive area. The Contractor shall, therefore, on a day to day basis, keep the area of the Works in a condition acceptable to the Engineer.

C3.4.12.5 Temporary fences

The Contractor shall erect temporary fences where required for the execution of the Works, where shown on the drawings and in place of existing fences which have to be temporarily relocated.

All fences shall be maintained during construction.

Temporary fences shall be suitable for preventing stock on adjacent properties from wandering.

The cost of the erection, maintenance and removal of temporary fencing will be deemed to be covered by the rates for the establishment of facilities for the Contractor (Items A1.3 and A2.3).

C3.4.12.6 Dust control

The wind speed at the site is known to reach gale force strength on a regular basis. Since the site is situated in an established residential area, such winds will lead to nuisance to the surrounding residents. The Contractor shall take preventative measures to control dust arising from the site. Such measures will include, but not be limited to, watering, placing tarpaulins on exposed areas, placing thatch grass on exposed areas, as appropriate, or instructed by the Engineer.

C3.4.12.7 Connection to existing services

All connections to the existing water and sewerage systems shall be undertaken in a manner and at times to be approved by the Engineer. It is anticipated that this work may have to be done at night in order to minimise inconvenience to users. No claims for additional payment will be considered in this regard.

C3.4.12.8 Community Liaison Officer

The Contractor shall employ a Community Liaison Officer (CLO) for the duration of construction. The function of the CLO is to represent the local community and to assist the Contractor, the Employer and the Engineer with their communication with the community and vice versa.

The Community Liaison Officer's duties will be:

- to be available on site daily during the normal working hours as stated in the Contract.
- to communicate daily with the Contractor and the Engineer to determine the labour requirements regarding numbers and skill, to identify possible labour disputes and to assist in their resolution.
- to attend all meetings in which the community and/or labour is present or is required to be represented. He/she will attend the first part of the monthly site meeting to report on the local community and labour involvement.
- to identify, screen and nominate labour from the community in conjunction with the PWC in accordance with the Contractor's requirements.
- to inform local labour of their conditions of temporary employment, to ensure their timeous availability and to inform local labourers timeously when they will be relieved.
- to attend disciplinary proceedings to ensure that hearings are fair and reasonable.
- to consult on all decisions regarding local problems and any matters of importance that, in any way, be of relevance to the Contract.
- to keep a daily written record of his/her interviews and community liaison.

The Contractor shall pay the CLO fortnightly and will be paid by certification in the monthly certificates of payment. The CLO shall be paid at the prevailing minimum wage at the time of his appointment. The Contractor will be paid for his overheads and profit in a separate item in the Bill of Quantities.

C3.5 MANAGEMENT

C3.5.1 MANAGEMENT OF THE WORKS

C3.5.1.1 Applicable SANS and SABS standards

As specified in Clause C3.4.

C3.5.1.2 Particular or Generic specifications

As specified in Clause C3.4.

C3.5.1.3 Planning and programming

The Contractor's programme shall be submitted in electronic and hard copy format in bar chart format. In addition to the requirements of the JBCC 2000, Edition 5 – July 2007, the Contractor's programme shall show:

- the various activities on a time scale, including those of Subcontractors,
- the start date, completion date and programmed duration of each activity
- anticipated production rates in m/week, m³/day, etc
- critical path activities and their dependencies,
- key dates in respect of work to be carried out by others and information to be provided by the Engineer and/or others,

If any change to the critical path occurs, the Contractor shall as soon as practicable notify the Engineer in writing. The Contractor's programme and method statement will not be accepted as the basis for claims for additional compensation without due reference to all relevant associated factors.

The Contractor shall make allowance for the following when preparing his programme:

- expected weather conditions and their effects,
- known physical conditions or artificial obstructions,
- searching for, dealing with and carrying out alterations to the existing services,
- the accommodation of public access and traffic,
- the provision and implementation of the health and safety plan in terms of the Construction Regulations of the Occupational Health and Safety Act.
- the design, testing and approval of the concrete mixes,
- the reasonable requirements and programmes of the mechanical and electrical Contractors including but not limited to the preparation of detailed designs, shop drawings, acceptance hereof, lead times for purchases and delivery and installation of equipment, etc.,
- the restrictions on the length of trench open at any one time as specified.

The Contractor shall review his progress every month and should progress lag behind the latest approved programme by more than 2 weeks, he shall submit a revised programme for approval, with a method statement indicating how he will make up the lost time. If, in the opinion of the Engineer, such revised programme will not make up the lost time, the Engineer will have the right to instruct the Contractor to reorganize his resources and his work to ensure an acceptable programme. Claims for additional payment for costs incurred due to such reorganisation will not be accepted.

C3.5.1.4 Sequence of the works

The Contractor shall programme his work so that:

- The preparation and acceptance of the documentation required prior to access and possession of the site is granted as stipulated in the Contract Data.
- The preparation of designs and drawings in terms of C3.2.3.

C3.5.1.5 Software application for programming

The Contractor shall prepare the programme with proprietary software that uses the critical path method of network analysis and can display the programme in a bar chart format, amongst others. The software shall be compatible with Microsoft Project.

C3.5.1.6 Methods and procedures

The Works shall be executed in accordance with the Contract, and all relevant statutory requirements.

The way in which work is to be executed when buildings are occupied

- Contractor to make sure that no building is occupied prior to commencement of works

The cleanliness of the site

- The contractor is to comply to all environmental and health/safety specifications as per contract data

Protection of trees and shrubs

- All trees and shrubs are to be protected unless otherwise specified in the Landscape Architects Design/specification and or specified as per the engineer's instructions

Deposition of materials in any construction activities

- To confirm to specifications as highlighted in the contract document

Work on or adjacent to structures, railway lines, pipelines, roads, cables etc;

- Procure the necessary work-permits and or wayleave documentation prior to the commencement to works

The management and disposal of water on the site arising from whatever cause

- The contractor is to comply to all environmental and health/safety specifications as per contract data

Access, roads, maintenance of accesses and walkways

- The contractor shall not hinder the use of road/walk-way adjacent to the property/site in question without prior consent. Any an all hinderances shall first be put into writing to the

engineer for approval. Should approval not be granted, this will not count towards a delay claim/ extension to practical completion

Co-operation with others on the site

- The contractor is advised to work co-operatively with others on the site, should any disputes arise, they need to be reported to the engineer in writing as soon as possible

Existing premises and adjoining properties

- The contractor is advised to prepare a traffic accommodation plan and/or a sequence of works should he undertake work that involving existing premises and/or adjoining properties

Dealing with underground and other existing services cable and pipe trenches and covers

- The contractor is advised to review all existing information regarding existing services and/or procure all the necessary wayleaves/work permits prior to the commencement of work. Should any existing services be damaged during the course of works the employer/contract will not be held liable

Dealing with objects of historical or environmental interest

- The contractor is to comply to all environmental and health/safety specifications as per contract data

Site records

- All records (schedule of works, test results, inspection requests, site diary, etc) are to be kept on site, in a proper filing system. These records are to be made available to the engineer, if and when required

Hours of work

- Working hours are as specified in the contract document. Should the contractor wish to work outside of these hours, written consent must first be given by the engineer

Rules and conduct in respect of the personnel of Contractor and his Sub-contractors

- The contractor is advised to work co-operatively with others on the site, should any disputes arise, they need to be reported to the engineer in writing as soon as possible

Noise, dust, water, waste and other impediments

- Contractor to refer to the necessary health and safety and environmental specifications in the contract data

Checking work of others

- The contractor shall be responsible for the works of any sub-contractor. These works must be checked prior to calling the engineer for inspection. The

engineer/head of discipline can only give the final approval for any work completed by the contractor

Access for other Contractors

- The main contractor is to give access to other contractors for works purposes so as not to impede the contract duration. Should there be any conflict that could possibly cause delays, the engineer is to be notified in writing immediately

Giving notice of work to be covered up

- The contractor is to give the engineer a minimum of 48 hours notices to check any construction works. Should work not be checked/ signed off, it will not be approved. All works items that are not approved will not be reflected in the payment to the contractor.

Scaffolding and temporary works

- All scaffolding and temporary works are the sole responsibility of the contractor. The contractor is to produce a certificate of stability prior to works involving the above

Care of the works; plant and materials

- This is the sole responsibility of the contractor. Should any of these items be damaged, the employer/contract with not be held liable for any associated costs

Establishing and removing equipment from the site

- This is the sole responsibility of the contractor. Should any works be damaged during this period, the employer/contract with not be held liable for any associated costs

Progress photographs

- The contractor is to maintain a record of photographs for work progress purposes, these photos are to be time/date stamped

Maintenance until completion

- The works are the sole responsibility of the contractor until such time that the site is handed over to the client

Training of operators

- The training of all operations on site must conform to the health and safety regulations as well as any government regulations

Materials storage facilities and samples for tests and inspections to be provided

- Are required as per the contract data

C3.5.1.7 Quality plans and control

Quality control shall be carried out in accordance with the requirements of the Standardised Specifications for Civil Engineering Construction, the Scope of Work and the General Conditions of Contract as amended in the Contract Data.

The Contractor shall provide the Engineer 48 hours' notice when he requires the inspection/testing of parts of the Works. Failure to notify the Engineer or to provide adequate test results (including level control and setting out information) will be regarded as test results that do not comply with the specified requirements. Payment for such parts of the Works, and all subsequent parts of the Works that would be affected by such non-compliance will not be certified until adequate test results are provided.

C3.5.1.8 Health and Safety

Refer to C3.10.

C3.5.1.9 Environmental Management

Refer to C3.11.

C3.5.1.10 Accommodation of traffic on public roads occupied by the Contractor

Refer to PSA 5.

C3.5.1.11 Other Contractors on site

The Contractor shall provide adequate working space for the electrical Contractor who will be installing the electricity cables and streetlighting.

C3.5.1.12 Testing, completion, commissioning, and correction of defects

Quality control shall be carried out in accordance with the requirements of the Standardised Specifications for Civil Engineering Construction, the Scope of Work and the JBCC 2000 Edition 5 July 2007.

C3.5.1.13 Recording of weather

All rain days are to be recorded on site, with an approved rain-gauge and a cross-reference is to be done with the nearest airport data. Any days in exclusion of the days on the table below, should they cause any subsequent delays will need to be submitted to the principle agent for approval.

Abnormal Rainfall

The extension of time to be granted for abnormal rainfall shall be calculated by the formula :

$$V = (N_w - N_n) + \frac{R_w - R_n}{20}$$

Where :

V = Extension of Time in calendar days in respect of the calendar month under consideration

N_w = Actual number of days during the calendar month under consideration on which a rainfall of 10 mm and more has been recorded

R_w = Actual total rainfall in mm recorded during the calendar month under consideration

N_n = Average number of days, derived from rainfall records, on which rainfall of 10 mm and more has been recorded during the relevant calendar month as per the data tabulated hereinafter

R_n = Average total rainfall in mm for the relevant calendar month, derived from rainfall records, as tabulated hereinafter

Where the extension of time due to abnormal rainfall has to be calculated for portion of a calendar month, pro rata values shall be used.

Should V be negative for any particular month and should its absolute value exceed the corresponding value of N_n then V shall be taken as being equal to minus N_n .

The total extension of time to be granted shall be the algebraic sum of all the monthly extensions provided that if this total is negative then the extension of time to be granted for abnormal rainfall shall be taken as zero.

The rainfall records applicable in respect of this Contract are those recorded at the Weather Station at Cape Town Airport (as given below) and shall be used for calculating the extension of the Time for Completion on account of abnormal rainfall.

| RAINFALL RECORDS | | |
|------------------|-------------|--------------|
| MONTH | N_n | R_n |
| January | 0.2 | 9.9 |
| February | 0.3 | 12.9 |
| March | 0.6 | 17.1 |
| April | 1.5 | 45.8 |
| May | 2.9 | 74.6 |
| June | 3.4 | 94.5 |
| July | 3.1 | 92.0 |
| August | 2.5 | 73.2 |
| September | 1.4 | 46.7 |
| October | 0.8 | 31.6 |
| November | 0.6 | 21.5 |
| December | 0.3 | 15.5 |
| TOTAL | 17.6 | 535.3 |

C3.5.1.14 Format of communications

All contractual communications shall be in writing. Verbal instructions will only be regarded as instructions from the Engineer if confirmed in writing.

C3.5.1.15 Key personnel

Key personnel shall be on site full-time during working hours. Key personnel may only be substituted with a person who has equal or better qualifications and experience.

C3.5.1.16 Management meetings

Monthly site meetings will be held on site, in the Contractors site office. The dates of these meetings will be agreed at the Inaugural Meeting.

C3.5.1.17 Forms for contract administration

The Contractor, Employer and Engineer shall operate and maintain their separate contract administration procedures and documentation.

C3.5.1.18 Electronic payments

Payment of monthly certificates will be made by electronic transfer to the bank account stated on the Contractor's tax invoice.

C3.5.1.19 Daily records

The Contractor shall keep daily records of the activities on site, key milestones achieved, plant and labour, deliveries and removals of key materials and equipment, weather conditions, delays, dayworks and visitors, amongst others. All information is to be communicated to the engineer at the end of each day in the electronic site diary. The contractor is to produce a weekly progress report, this report will be distributed to the engineer at the Friday of each week review.

C3.5.1.20 Bonds and guarantees

The Guarantee shall be lodged with the Engineer.

C3.5.1.21 Payment certificates

Payment certificates shall be in the format required by the Engineer. Payment certificates shall be submitted monthly, on a date to be agreed with the Engineer at the Inaugural meeting.

A cession of ownership, in the required format shall be submitted with each payment certificate when a claim is made for materials on site.

The Contractor shall provide the reports as specified in C3.3.5 with his monthly statement.

C3.5.1.22 Permits

Contractor is to confirm that all work permits (wayleaves, municipal, government, etc) have been granted prior to the commencement of works on site. The contractor will not accept any liability or bear any costs if the contractor is fined due to a lack of any permits.

C3.5.1.23 Proof of compliance with the law

Refer to requirements of the Scope of Works and all relevant legislation.

C3.5.1.24 Insurance provided by the Employer

Refer to the Contract Data.

C3.6 SPECIFICATIONS FOR CIVIL INFRASTRUCTURE

PSA GENERAL (SABS 1200 A)

PSA 2 INTERPRETATIONS

PSA 2.3 Definitions and abbreviations

"SABS" shall mean "SANS", except for references to the official SABS mark.

PSA 2.8 Items in Schedule of Quantities

PSA 2.8.1 Principle

In the fourth line of Clause 2.8.1, after the word "specification", add: "or in the measurement and payment clause of the standard specification or Scope of Works".

PSA 3 MATERIALS

PSA 3.1 Quality

Where applicable, materials shall bear an official standardization mark. Where it is specified that a material shall comply with the requirements of a SABS specification, the material shall bear the official SABS mark, unless the Contractor can prove that such material is not available with the mark.

PSA 4 PLANT

PSA 4.1 Silencing of plant

Replace the reference to "Machinery and Occupational Safety Act, 1983 (Act No.6 of 1983) with "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

PSA 4.2 Contractor's offices, stores and services

The Contractor's offices, buildings, sheds, stores and other facilities erected for the purposes of the contract shall be fenced off and shall be kept in a neat and tidy condition at all times.

No personnel may reside on the site, except for night-watchmen.

The Contractor shall provide one chemical toilet for every 15 workers, which shall be easily accessible to workers at all areas of the site and shall be effectively screened from public view. The Contractor shall strictly enforce the use of the toilets and shall ensure that the toilets are serviced/replaced on an acceptable, regular basis.

The Contractor shall provide a first aid cabinet fully equipped and maintained with at least the minimum contents as listed in the Annexure (Regulation 3) to the General Safety Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993). The Contractor shall also provide personal protective equipment and facilities as required by Regulation 2 of the General Safety Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

PSA 5 CONSTRUCTION

PSA 5.1 Survey

PSA 5.1.1 Setting out of the Works

In addition to the requirements of Clause 5.1.1, the Contractor shall check the positions and levels of all setting out pegs and benchmarks before commencing any construction and advise the Engineer of any discrepancies.

PSA 5.2 Watching, Barricading and Lighting

The Contractor shall comply in all aspects with the requirements of the Occupational Health and Safety Act (Act 85 of 1993). Refer also to PSA5.10.

PSA 5.3 Protection of structures

Replace the reference to "Machinery and Occupational Safety Act, 1983 (Act No.6 of 1983) with "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

PSA 5.4 Protection of overhead and underground services

Existing services are known to exist along the route of the Grabouw Bulk Water Main. The approximate position of known services is shown on the drawings according to the best information available. It is also likely that other services that are not shown on the drawings exist along the route. Neither the employer nor the Engineer gives any warranty for the accuracy or completeness of the information provided.

***PSA 5.4.1 Locating existing services**

As existing services can seldom be reliably located from drawings, the Contractor shall locate all existing services with the co-operation of the relevant authority, and carefully excavate by hand, expose and survey such services before commencing any excavation. The requirements of Clauses 4.4 and 5.1.2.2 of SABS 1200D shall also apply. If the information regarding any existing service as given in the drawings is missing, incomplete or incorrect, the Contractor shall, as soon as the service has been located, submit details of the exact location, depth and type of service in writing to the Engineer. This procedure shall also be followed for services not shown on the drawings, but which may reasonably be anticipated by an experienced contractor to be present on, under, over or within the Site.

The Contractor shall locate the position of the control points of the services (valves, manholes, switches, etc) and shall have readily available the equipment necessary to shut-off and isolate any such service as well as spare parts in the event of potentially damaging the service, before commencing any excavation. The Contractor shall liaise with the relevant officials of the affected authorities or controlling bodies for the temporary suspension of any service during construction.

***PSA 5.4.3 Alterations and repair of existing services**

Unless specified otherwise by the Engineer, the Contractor shall not carry out alterations to services, or repairs of damaged services. Where any such alteration or repair become necessary, the Contractor shall immediately inform the Engineer, who will make arrangements for the alterations or repair to be carried out by the owner of the service or instruct the Contractor to make such arrangements.

***PSA 5.4.4 Disconnection procedure**

Before carrying out any work that involves the disconnection of a service to a property, the Contractor shall serve written notice on the resident/occupier and/or owner of every property, at

least 3 working days before any temporary disconnection, advising the nature, time and duration of the disconnection.

***PSA 5.9 Safeguarding and accommodation of traffic**

Temporary traffic signs shall be erected at all diversions.

The number and layout of the traffic signs shall comply with the Site Manual entitled "Safety at Roadworks in Urban Areas", as published by the Department of Transport. It shall also comply with the South African Road Traffic Signs Manual Chapter 13.

Traffic signs shall have a yellow background with either a red or black border.

The existing roads within and around the Site shall remain operational throughout the Contract period. To this end the Contractor shall provide and maintain all temporary works, temporary road signs, temporary bridges, culverts, barriers, kerb ramps, flagmen, drums, lighting, deviations and all other incidentals that are necessary to maintain the normal, safe and easy flow of all vehicular and pedestrian traffic.

Temporary road signs and road markings shall comply with the Site Manual entitled "Safety at Roadworks in Urban Areas", as published by the Department of Transport. Road signs shall have a yellow background with either a red or black border.

The Contractor shall accommodate and maintain through traffic, traffic at crossings and vehicle access to houses and buildings at all times, unless the closing of streets and thoroughfares has been approved by the local authority.

PSA 5.10 Drawings

Construction drawings and additional detailed information will be made available to the Contractor as and when required by him. Tender drawings shall not be used for construction.

PSA 7 TESTING

PSA 7.2 Approved laboratories

In addition to the approved laboratories stated in Clause 7.2, a testing laboratory certified by the South African National Accreditation Systems (SANAS) in respect of the nature and type of testing to be undertaken for the purposes of the Contract, will also be regarded as an approved laboratory.

PSA 8 MEASUREMENT AND PAYMENT

PSA 8.3.1 Contractual Requirements

Add to sub-clause 8.3.1 :

"In addition, the sum tendered shall cover all initial costs incurred in complying with the requirements of the Special Conditions of Contract.

PSA 8.3.2.1 Facilities for Engineer (Clauses 8.3.2.1 and 8.4.2.1)

The sums tendered for Items A1.1.2 and A1.2.2 shall cover the costs of providing and maintaining all the facilities as detailed in Clause 3.4.5.5 of the Scope of Works.

PSA 8.4.1 Contractual Requirements

Where the Engineer has awarded an extension of time, the Time-Related Items will be adjusted in accordance with the following formula:

$$\text{Sum of Tendered amounts for Time Related Items} \times \frac{\text{Extension of Time awarded by Engineer}}{\text{Tender contract period}}$$

For the purposes of applying this formula "Extension of Time" will exclude the Contractor's December/January close-down period, if applicable. The abovementioned adjustment of the payment for Time-Related Items shall be made in the Completion Payment Certificate and shall be the only payment for additional Time-Related costs irrespective of the actual period required to complete the Contract including its authorised extensions.

In the case of fixed price contracts, the amount by which the Time-Related Items are adjusted will not be subject to the Contract Price Adjustment formula. In the case of contracts subject to Contract Price Adjustment, the amount by which the Time-Related items are adjusted shall be subject to the Contract Price Adjustment formula.

PSA 8.4.2 Adjusted Payment for Time-Related Items

The payment to the Contractor for Time-Related Items shall be adjusted in accordance with the following formula in the event of the Contract being extended by means of a variation order :

$$\text{Sum of Tendered amounts for Time Related Items} \times \frac{\text{Extension of Time authorised by variation order}}{\text{Tender contract period}}$$

*For the purposes of applying this formula "Extension of Time" will exclude the Contractor's December/January close-down period, if applicable.

The abovementioned adjustment of the payment for Time-Related Items shall be made in the Completion Payment Certificate and shall be the only payment for additional Time-Related costs irrespective of the actual period required to complete the Contract including its authorised extensions.

In the case of fixed price contracts, the amount by which the Time-Related Items is adjusted shall not be subject to the Contract Price Adjustment formula.

PSA 8.4.5 Other Time-related Obligations

Provision of Security Personnel Unit: month

This item shall cover the cost of providing such security personnel the Contractor deems appropriate, taking cognizance of the location of the site and the historical record of incidents of crime in the area.

PSA 8.5 Sums stated provisionally by Engineer

Insert after the last sentence of Clause 8.5:

"Payment will be made on the basis of the sums actually paid for such work."

PSA 8.6 Prime cost items

Insert before the last sentence of Clause 8.6:

"Payment will be made on the basis of the sums actually paid for such goods or materials."

PSA 8.7 Daywork

Provisional items for Daywork are scheduled as follows:

Labour at hourly rates for skilled, semi-skilled and unskilled labourers.

Material as a Provisional Sum with a percentage allowance on the net cost.

The Contractor's own plant at hourly rates for various types. The rates for the Contractor's own plant shall be all inclusive, covering the cost of plant operators, consumable stores, fuel and maintenance.

Hired plant as a Provisional Sum with a percentage allowance on the net cost. The Contractor will be paid the actual net cost of plant hired by him for Daywork and in addition will be paid a percentage allowance on the net cost of such hire, which allowance will cover the Contractor's own overhead costs and profit.

PSA 8.8.1 Main access

The sum tendered shall cover the cost of constructing and maintaining the main access road and, unless the access road is specified to be handed over in good condition, the removal of the road and the reinstatement of the area on completion.

PSA 8.8.2 Dealing with traffic

A specific item has been included in the Schedule of Quantities to allow the Contractor to cover the costs of accommodating traffic on the adjacent roads at all times.

The sum shall cover the effect on the Contractor's programme, delay in the works, damage to or loss of a deviation, supply, erection and moving and re-erection of all necessary traffic signs, drums, barricades, the provision of flagmen and any other operation or equipment, plant or labour necessary.

Payment under this item will be made on a pro-rata basis to the duration of the contract.

PSA 8.8.4.1 Dealing with existing services

The cost of locating and exposing existing services by careful excavation will be held to be included in the rates for excavation.

Where it is necessary for the Contractor to locate and expose existing services that are not shown on the drawings, or where the existing service is found to be further than 3m from the position indicated on the drawings, the cost of locating and exposing such services will be measured by volume. The rate shall cover all costs of materials, labour and plant, including specialist detecting equipment, required to locate and expose the service.

PSA 8.8.4.2 Existing services

A Provisional Sum is included in Item A5.1.1 of the Schedule of Quantities for work on existing services by the relevant authorities.

The Contractor shall pay for work ordered by the Engineer and carried out by the relevant authorities, such as locating, protecting or diversion of existing services. The Contractor shall arrange with the relevant authority for invoices to be addressed to him. The Contractor will be paid in Item A5.1.1 upon submission of proof of payment of the relevant authority's invoice.

The Contractor's costs in connection with work carried out by service authorities will be measured and paid separately under Item A5.1.2 as a percentage of the actual amount paid, excluding VAT. The percentage shall cover the costs of all administrative and supervisory costs and profit, as well as the cost of the Contractor's liaison and aid to the authorities in locating and protecting the abovementioned services and any other costs resulting from the work of the authorities.

PSA 8.8.4.3 Alterations to existing services

Alterations to existing services made by the Contractor will be measured and paid under the relevant scheduled items. The length of a service that is re-laid will be measured in its final position.

The sums or rates shall cover the cost of excavation and backfilling, lifting, recovery of the existing service and laying of the service in the new position and any other related work and materials such as new rubber ring seals, packing, etc., required to complete the alteration. New material required to make up shortfalls resulting from a longer route or damage caused, beyond the control of the Contractor, during recovery, and other work carried out by the Contractor in making permanent alterations for which no scheduled items apply will be measured and paid under Item A4: "Daywork".

***PSA 8.9 Dealing with water**

The sums tendered for Items A7.4.1 and A7.4.2 shall cover all costs with regard to the preventive measures that must be taken with regard to water and the repair of damaged portions of the Works, including the control of surface water, precautions against flooding, drainage and removal of ground water in the trenches, the protection of the road prism for the proper execution of the Works.

PSA 8.10 Freehaul and overhaul *

Notwithstanding any clauses in the Standardized Specifications dealing with transport, freehaul and/or overhaul, no measurement or payment will be made for overhaul. All haulage will be regarded as freehaul and the cost thereof will be deemed to be covered by the rates for the provision or disposal of the applicable material.

PSA 8.11 Miscellaneous items *

The sum or rate for any item which refers to this clause shall cover the cost of all materials, labour and plant required to execute and complete the work as specified, described in the Bill of Quantities or shown on the drawing(s), including the Contractor's overheads and profit.

***PSA 8.12 Compliance with OHS Act and The Construction Regulations**

Unit: sum

The sums tendered shall cover all costs associated with compliance with all the requirements of the OHS Act, Regulations (including the Construction Regulations 2014) and the Employer's Site-Specific Health and Safety Specifications, at all times for the full duration of the Contract. Both fixed charge and time related items in this regard have been allowed, measurement shall be as per clause 8.2.1. and 8.2.2 of SABS 1200A.

PSC SITE CLEARANCE (SABS 1200 C)

PSC 3 MATERIALS

PSC 3.1 Disposal of material

The Contractor shall dispose of all cleared vegetation, rubble and construction waste at the site described in C3.4.5.2.5, unless instructed otherwise by the Engineer.

PSC 5 CONSTRUCTION

PSC 5.1 Areas to be cleared and grubbed

The Contractor shall ensure that the areas cleared and grubbed are kept to the minimum area necessary for the execution of the Works.

The Contractor shall clear and grub the area required for the Works, areas on which material will be stockpiled for later use and areas where material is to be dumped and spread, unless instructed otherwise by the Engineer.

PSC 5.2 Cutting of trees

The Contractor shall not remove trees with a trunk girth of more than 1m without the written permission of the Engineer.

PSC 5.6 Conservation of topsoil

Topsoil shall be removed from the cleared areas up to a depth of 150 mm (if available) and stockpiled on approved sites for later reuse. Until required for spreading, the stockpiles of topsoil material shall be stabilized by watering or other approved means.

PSC 8 MEASUREMENT AND PAYMENT

PSC 8.2.1 Clear and grub

The rate tendered for clearing and grubbing shall cover the cost of disposal of the material at the Disposal Site by approved means at places indicated by the Engineer. Site clearance for pipe trenches will not be measured where such trenches lie within the carriageway of any road.

PSC 8.2.7 Dismantle and remove pipelines, etc

In addition to the requirements of Clause 8.2.7, the rate shall cover the cost of locating the pipeline and any additional costs of excavation and backfilling not covered by other normal rates for excavation and backfilling under SABS 1200 DB.

PSC 8.2.8 Demolish and remove structures, etc

In addition to the requirements of Clause 8.2.8 the rate shall cover the cost of excavation and demolition of the scheduled unit, salvaging and delivery of metal fittings, complete removal of all rubble from the Site, and the supply of material for and backfilling of the voids so formed, including compaction, all to the satisfaction of the Engineer.

PSC 8.2.10 Removal and conservation of topsoil

The rate tendered for the removal of in situ topsoil shall, in addition to the items listed in Clause 8.2.10, also cover the cost of stabilizing, watering and protecting the stockpiles of topsoil.

PSF FENCING

PSF 5.1 PRELIMINARY

Before any fencing is erected, the fence line shall be cleared of all bush, trees, etc. and graded to remove sharp local rises and hollows. Where a trench or local watercourse must be spanned, the bottom of the fence shall be suitably extended to close the gap.

PSF 5.2 ERECTION

PSF 5.2.1 Corner posts, standard posts and straining posts

Posts shall be set plumb and in correct alignment. Posts shall be firmly embedded in the ground to a depth of 0.6 m and surrounded with a mix 15 MPa concrete block as shown on drawings. The post shall be 2.4m long. Posts shall be spaced at maximum of 3.0 m centres.

Straining posts shall be erected at all ends, corners and bends in the line of fences and at all junctions with other fences. Straining posts shall not be paced further apart than shown on the drawings. The length of posts above ground shall be such that the correct clearance between the lowest wire and the ground can be obtained.

Posts shall be accurately set in holes and, where shown on the drawings, provided with concrete bases to the dimensions shown on the drawings.

Holes shall be excavated to the full specified depth of the posts irrespective of the materials encountered.

Corner, gate, end and straining posts shall be braced by means of stays or anchors as shown on the drawings or as directed by the Engineer. Pipe stays shall be securely bolted to the posts.

Standards shall be firmly plated into the ground at the spacing shown on the drawings or as directed by the Engineer. The spacing of standards between any two straining posts shall be uniform and not greater than shown on the drawings. In rock or hard material standards shall be either driven or set in holes shall be such that a tight fit is obtained. Care shall be exercised when driving standards to prevent buckling or damage to them.

After posts and standards have been firmly set, but not before a period of 3 days has elapsed for the curing of any concrete surround where applicable, the fence wire shall be attached thereto at the spacing shown on the drawings.

All bolts used for the erection of the fence shall have their ends burred over and the holes shall be filled with cement mortar.

PSF 5.2.2 Wire Strainers

All fencing wire shall be wired to the sides of standards or posts to prevent the wires from being displaced or becoming loose. The wires shall be carefully stretched and hung without sag, and with true alignment. Wires shall be tensioned to no less than 1,5 kN and no more than 2,0 kN.

Each strand of fencing wire shall be securely fastened in the correct position to each standard with smooth or tire wire. The smooth or tire wire for each horizontal fence wire shall pass through a hole or notch in the standard to prevent slipping of the fence wire in a vertical direction while the ends of the wire shall be wound at least three times around the fencing wire to prevent it moving in a vertical direction.

At end, corner, straining and gate posts the fencing wire shall be securely wrapped twice around the post and secured against slipping by tying the end tightly around the wire by means of at least five snug tight twists.

Splices in the fencing wire shall be permitted if made in the following manner using a splice tool. The end of each wire at the splice shall be carried at least 75 mm past the splice tool and wrapped snugly around the other wire for not less than six complete turns, the two separate wire ends being turned in opposite directions. After the splice tool is removed the space left by it in the splice wire shall be closed by pulling the wire ends together. The unused ends of wire be cut close so as to leave a neat splice.

The gaps between posts and adjacent straining posts shall be fenced off with short fencing wires.

Droppers shall be tied to each fence wire with soft binding wire in the required position as specified for standards to prevent slipping in a vertical direction. The spacing of droppers between any two straining posts shall be uniform.

PSF 5.2.3 1,8 m and 1.2 m High Square Mesh Fence

The square mesh or wire netting shall be stretched against the fence and properly tied to the fencing wire as shown on the drawing. The diamond mesh or wire netting shall be secured by means of soft binding wire at 750 mm centres along the top and bottom wires and at 3 m centres along each of the other fencing wires.

PSF 5.2.4 Gates

The gates shall be hung level and plumb and provided with suitable steel hitching posts with hooks for holding the gates in the open position.

The gap between the bottom of the gate and the ground surface or road surface shall not exceed 75 mm.

Each section of the gate must be secured to the gate post by means of 2 approved hinges. Proposed hinges shall be submitted for approval before fitting.

The gate must be installed in such a way that the leaves can open in both directions.

Gates shall be so erected as to swing in a horizontal plane at right angles to the gate posts, clear of the ground in all positions. Gates shall not be further than 50 mm from the gate post when closed. The bottom frame of the gate shall not be further than 75 mm from the ground at any point.

PSF 8 MEASUREMENTS AND PAYMENT

PSF 8.1 SQUARE MESH FENCING

The unit of measurement will be linear metre. Fencing will be measured linear with no deduction for gates.

The unit rate shall cover the cost of preliminary clearing and grading, and for the provision of all materials, including standard posts, excavating, concreting and backfilling post holes and the erection of all materials and fittings complete as specified.

PSF 8.2 EXTRA-OVER FOR CORNER POSTS, STRAINING POSTS AND GATE POSTS INCLUDING STAYS

The unit of measurement for gate posts and gates will be No.

The unit rates shall cover the additional cost of complying with the requirements of clause 8.1 above for any portion where the corner, straining and gate posts including stays are applicable.

PSF 8.3 GATES

The unit of measurement for double leaf gates will be No.

The unit rates shall cover the costs of the supply and installation of the double leaf gates, chain and padlocks including any other operation required to complete the work to the satisfaction of the Engineer.

C3.7 ELECTRICAL SPECIFICATIONS

1. list of abbreviations

| | | |
|-----------------|---|---|
| A | - | Ampere |
| AC | - | Alternating current |
| ACB | - | Air circuit breaker |
| ADMD | - | After diversified maximum demand |
| AFFL | - | Above finished floor level |
| Ah | - | Ampere hour |
| BCE | - | Boer copper earth |
| CCTV | - | Close circuit television |
| CIBSE | - | Chartered Installation of Building Services Engineers |
| CoC | - | Certificate of Compliance |
| DB | - | Distribution board |
| DC | - | Direct current |
| e.g. | - | For example |
| HRC | - | High rupturing capacity |
| HVAC | - | Heating ventilation and air-conditioning |
| Hz | - | Hertz |
| IEC | - | International Electrotechnical Commission |
| IP | - | Ingress protection (distribution boards) |
| IP | - | Internet protocol (network services) |
| kA | - | Kilo Ampere |
| kV | - | Kilo Volt |
| kVA | - | Kilo Volt Ampere |
| kW | - | Kilo Watt |
| kWh | - | Kilo Watt hour |
| LED | - | Light emitting diode |
| LV | - | Low voltage |
| m | - | Meter |
| MCB | - | Miniature circuit breaker |
| MCCB | - | Moulded case circuit breaker |
| MDB | - | Main distribution board |
| MICC | - | Mineral insulated copper covered |
| mm | - | Millimeter |
| mm ² | - | Square millimeter |
| MV | - | Medium voltage |
| pf | - | Power factor |
| PFC | - | Power factor correction |
| PVC | - | Polyvinyl Chloride |
| UPS | - | Uninterrupted power supply |
| UV | - | Ultraviolet |
| V | - | Volt |
| VA | - | Volt ampere |
| VoIP | - | Voice over IP |
| W | - | Watt |
| RMS | - | Root mean square |
| SDB | - | Sub distribution board |

2. applicable standards

All work shall be carried out in accordance with the applicable standards, codes and regulations. The contractor shall review the specifications and drawings. If any section of the specifications contradicts the current/latest editions/revisions of standards, codes and regulations listed and/or as applicable, the engineer shall immediately be informed in writing for review and a formal response.

No claims for extra and/or alteration to work completed as a result of the contractor failing to inform the engineer of contradictions changes in the above standards, codes, and regulations will be considered/entertained.

The complete installation including the electrical, fire, Telkom, intercom, communications, and data/IT systems shall comply with the current/latest editions/revisions of the relevant and applicable standards, codes, and regulations,

3. general standards

- Occupational Health and Safety Act No. 85 of 1993
- SANS 10400 - National Building Regulations
- The relevant SANS and NRS Specifications
- The Municipal Bye-Laws and any requirements of the local and supply authorities of the area
- All the Specifications within the Contract Document
- All the drawings forming part of the Contract Document
- Other, as relevant and applicable

4. electrical standards

- SANS 10142-1 - The Wiring of Premises Part 1: Low-voltage installations
- SANS 10142-2 - The Wiring of Premises Part 2: Medium-voltage installations above 1kV AC not exceeding 22kV AC. and up to and including 3,000 kW installed capacity.
- SANS 10114 - Interior lighting Part 1: Artificial lighting of interiors
- SANS 10313 and 62305 - Protection against Lightning – Physical damage to structures and life hazard.
- SANS 1973-1 - Low-voltage switchgear and control gear ASSEMBLIES Part 1: Type-tested ASSEMBLIES with stated deviations and a rated short-circuit withstand strength above 10 kA
- SANS 1973-3, Low-voltage switchgear and control gear ASSEMBLIES – Part 3: Safety of ASSEMBLIES with a rated prospective short-circuit current of up to and including 10 kA
- SANS 1473-1, Low-voltage switchgear and control gear ASSEMBLIES – Part 1: Type-tested, partially type-tested and specially tested assemblies with a rated short-circuit withstand strength above 10 kA
- SANS 1973-8, Low-voltage switchgear and control gear ASSEMBLIES – Part 8: Safety of minimally tested ASSEMBLIES (MTA) with a rated short- circuit current above 10 kA and a rated busbar current of up to and including 1 600 A AC and DC
- SANS 60439-4/IEC 60439-4, Low-voltage switchgear and control gear assemblies – Part 4: Particular requirements for assemblies for construction sites (ACS)
- SANS 60439-5/IEC 60439-5, Low-voltage switchgear and control gear assemblies – Part 5: Particular requirements for assemblies for power distribution in networks
- Other, as relevant and applicable

5. fire standards

- Local Fire Department Regulations
- SANS 10139 - Code of practice for design, installation, commissioning and maintenance of fire detection and alarm systems in non-domestic premise

6. OCCUPATIONAL HEALTH AND SAFETY

The contractor shall work safely and in accordance with the provisions of the OSH Act.

The contractor is required to appoint a full-time safety co-ordinator on site who shall take responsibility for safety on site and liaise with the Main Contractor/Employer on matters relating to safety.

Should any hazardous situation arise during construction and/or from the work being performed/undertaken, the contractor shall immediately inform the Main Contractor/Employer/Architect/Engineer of such situation, as well as what action he is taking to rectify this situation, alternatively what assistance/action the contractor may require from the Main Contractor/Employer in this regard.

The Main Contractor/Employer reserves the right to take whatever action as may be required to enforce safety standards should the Main Contractor/Employer/Architect/Engineer discover that the contractor is working unsafely.

No claims for extras in respect of failure by the contractor to comply with any of the regulations will be considered /entertained.

6.5 other relevant standards

- Regulations of Telkom
- Plant and Equipment Manufacturer's Specifications
- SANS 10061 Part 1 - The installation of communal and single antenna systems for the reception of television and sound broadcast transmissions – VHF and UHF television and VHF sound antenna
- SANS 10061 Part 2 - The installation of communal and single antenna systems for the reception of television and sound broadcast transmissions – Satellite antenna systems.
- SANS 10086-1 - The installation, inspection and maintenance of equipment used in explosive atmospheres
- SANS 10108 - The classification of hazardous locations and selection of apparatus for use in such locations
- SANS 1252 - Passive antennae for the reception of VHF and UHF television and VHF sound transmissions
- SANS 1611 - The mechanical requirements for satellite television receiving antennas.
- SANS 60079 - Classification of areas: explosive gases and dusts
- Green Buildings Council South Africa – Green Star
- CIBSE Commissioning Codes
- Other, as relevant and applicable

7. precedence of clauses

Precedence of clauses as follows:

- Applicable and specified National and Local standards/codes/regulations
- Project drawings, specifications and annexures
- General specification

The engineer shall be informed in writing of any uncertainty regarding any precedence of clauses/requirements and/or contradictions, for clarification and/or a ruling.

8. general

This general specification covers the general requirements regarding material, equipment, installation, testing and commissioning of the installations and shall be read in conjunction with the conditions of tender, conditions of contract, the project specifications and annexures, and drawings.

The completed installations shall comply with the requirements of this specification and good practice. Should any differences and/or contradictions exist between this general specification and the specification for specific installation(s), these should be pointed out to the engineer for clarification and a ruling.

Any items not specifically specified, but reasonably required/assumed to be necessary, for the proper completion of the works to recognized standards of workmanship and good practice, shall be deemed to be included in the contract. All work shall be executed and finished in a permanent and neat manner

by competent workmen, incorporating accepted methods in recognized practice and in conformity with the various standards and codes of practice and regulations

Drawings indicating general arrangement for equipment and construction illustrative detail are included in this part of the specification. Where information/requirements on these drawings differ from the project drawings, the information/requirements on the latter drawings shall take precedence. Information/requirements on the project drawings shall in general take precedence over any conflicting requirements specified in this general specification but shall never there less be clarified with the engineer.

Where deviations to contract drawings/specifications are made during the execution of the works, marked up drawings showing the changes as-built, must be submitted to the engineer before the final acceptance of the works.

The scaled dimensions to the center of the symbol shall be taken to the center of the outlets in the absence of specified dimensions on drawings. The contractor is responsible for checking with the main contractor, by reference to the drawings on site, the positions where paneling, tiling, tile edging or dadoes, etc. may affect the electrical equipment/installation(s).

Before final connections are made, the phases in the relevant distribution boards shall be checked for "out of balance" and connections made to the phase or phases with the lowest reading so that the loads shall be balanced over the phases.

The contractor is responsible to maintain progress of work, so that the main contractor/other contractors are not obstructed and/or delayed in completing the contract works timeously, in sequence and on program. Extension of the contract completion date required due to variations to the contract will be in accordance with the conditions of contract used/applicable, as provided/specified by the Employer or the main contractor.

The contractor shall make good damage to surfaces necessitated by the execution of the installation, unless expressly stated as an exception elsewhere. The contractor will be responsible for the condition of the surfaces and the finishes of all electrical equipment installed. Any such equipment shall be repaired by the contractor in such a way as to match the original finish as supplied by the manufacturer and as specified/intended.

The contractor shall regularly remove his accumulated debris from/off site. In production related areas, the debris shall immediately be removed from/off site.

The site shall remain neat and tidy and accessible.

All defects found/identified during the first delivery inspection shall be rectified as soon as possible, and within program. The contract works will not be deemed to be complete until the engineer's final inspection evaluation/report is issued and the electricidal certificate of compliance is issued by the contractor and reviewed/accepted by the engineer.

All metal exposed to the elements and/or corrosive atmospheres/environments, to be built-in and/or installed underground and/or in service trenches, shall be hot dip galvanized (or otherwise protected) unless specified or approved otherwise.

The contractor shall notify the engineer and/or his duly designated representative when the installation(s) reach various stages of completion so that the engineer may inspect the installations and point out defects and clarify issues as raised or identified on site.

These inspections will be informal and under no circumstances will they partly and/or wholly invalidate or over-ride the requirements of the specifications. Any costs incurred in correcting defects shall be for the contractor's account.

Where specific makes of equipment are referred to in this document the intention is to establish standards and/or specific requirements pertaining to such equipment. Tenderers may offer similar and equal equipment but must obtain written approval from the engineer prior to ordering/use/installation of such equipment.

9. coordination

Prior to setting out of wireways, outlets and/or equipment, the contractor shall arrange a co-ordination meeting with all service providers and/or contractors, to review the drawings and co-ordination requirements. Prior to any wireways, outlets and/or equipment being installed, the services shall be coordinated and any clashes shall be identified and issued to the engineer in writing for clarification/rulings.

Extra costs/expenditure as a result of failure to complete the above-mentioned service co-ordination requirements impacting on the contractor's work will not be considered/entertained.

If any additional equipment is required as a result of the service co-ordination meeting, which was not specified in the contract, the engineer shall be informed in writing for a formal response/ruling.

Where existing equipment is indicated on the drawings, this is only indicative, and the contractor must confirm exact details/positions prior to any work being carried out which might impact the works.

Should already plastered walls be chased without permission, the repair cost will be for the account of the contractor.

10. materials

The contractor shall ensure that all materials and equipment used for/on the project comply with the South African National Standards. All material and equipment shall bear the SABS/SANS mark and where the code does not apply or one does not exist, the applicable British Standard or International Electrotechnical Commission standard shall apply, and the applicable standards mark must be present. The contractor, at no additional cost, shall provide, if required, the proof of compliance with standards and the supporting documentation.

The contractor shall supply and install equipment, supports and fixings suitable for use together and for the specific environment where located and shall these be corrosion proof. All screws/fixings in areas where damp/water is present, shall be stainless steel.

Special attention shall also be paid to the combination and finishes of materials so as to avoid electrolysis/electrolytic interactions and corrosion.

Interchangeability of equipment: similar and equivalent equipment shall be identical in all respects and to the smallest detail such as contacts, fuses, coils, methods of wiring, wiring numbers, instruments, indicating lights and other accessories. It shall be possible to replace any piece of equipment with any similar and equivalent item of equipment under the same contract/subcontract.

Where a certain manufacturer's material or apparatus is mentioned/specified in the drawings or specifications, such materials or apparatus shall be provided as specified, except where an alternative to this condition is allowed in the specifications. Where a specification for material or apparatus is not provided, it shall be understood that all normal requirements for the use of such material or equipment shall apply.

11. DRAWINGS

The Installation is specified on the drawings as listed in the drawing register. The contractor shall also consult the architectural, civil, structural, mechanical and other services drawings.

Workshop drawings shall be provided of the following:

- Distribution boards: electrical, telephone, IT/computers, security, access control, fire alarm, CCTV and communication
- Builder's works required for the services installation, e.g. plinths, holes, openings, etc.
- Powerskirting and fittings/accessories layouts and details
- Cable ladders/trays and fittings/accessories layouts and details
- Wiring trunking/ducting layouts and details

These must be submitted timeously to permit enough time for scrutiny, adjustment and resubmission and such that no delivery problems are caused.

The engineer's scrutiny of shop drawings and/or samples shall not relieve the contractor of responsibility for any deviation from the requirements of this Contract, unless the contractor has informed the engineer in writing of such deviations at the time of submission of shop drawings or samples and the engineer has given written approval for the specific deviation, nor shall this relieve the contractor of responsibility for errors or omissions in the shop drawings or samples.

As-built drawings of all drawings for which workshop drawings were submitted, as well as of the cable routes in the ground with location dimensions, shall be provided.

12. labelling

All labels shall be permanent type where visible

- Permanent is defined as having to use a tool or a key to fix in position or remove the label.
- No adhesive type (sticker) label may be used unless it is used for labelling inside outlet boxes or the back of cover plate, thus not visible/exposed.

13. making safe and removing

Prior to any work commencing, the contractor shall ensure that any existing electrical installation is safe and provide written confirmation of this to the engineer and the main contractor. Any electrical materials

and/or equipment removed during the project remains the property of the Employer. The contractor may only remove from site and discard the materials/equipment removed once confirmation/approval has been issued by the engineer, after liaison with the Employer.

Where any material/equipment removed has any environmental impact, the Health and Safety Agent shall be contacted and confirm that the steps to be taken by the contractor are the appropriate measures to mitigate any environmental impact.

An example is lamps: these must be removed off site and be correctly disposed of, and the disposal certificate must be submitted to the engineer to confirm correct disposal.

An inventory of all material/equipment removed from site must be issued monthly by the contractor to the engineer. Failing to issue the inventory list shall result in no payment against/for the claimed items.

14. busbar TRUNKING

15. general

Busbars shall be rated in accordance with the drawings, shall be braced for the fault currents specified. and shall comply with SANS 1195. Detail manufacturer's drawings of the busbar runs with fixing and accessories shall be submitted to the engineer for scrutiny prior to fabrication.

16. construction

Busbars shall be of rectangular section, manufactured copper, complying with SANS 1195 and be suitable for flat/horizontal or vertical mounting.

Horizontal busbar runs shall have a minimum clearance of 2400mm above the finished floor level, except where the busbar enters or leaves distribution equipment.

Access to busbar trunking shall be maintained at all points except where passing through floors, walls partitions and as otherwise specified and/or approved. Busbar location relative to other trades/services shall be coordinated on site.

Busbar enclosures and covers shall be manufactured from galvanized sheet steel in accordance with SANS 1195, except where otherwise specified and/or approved.

All joints in the busbars shall be properly cleaned and shall be firmly clamped together with suitable clamps and high tensile steel bolts, washers and nuts.

Clamped joints shall be designed to maintain contact pressure permitting rated current at rated temperature and thermal expansion without buckling of busbars. Joints shall not loosen under vibration and/or long-term use.

The manufacturer shall specify the tightening torque to be applied to bolted or screwed joints in busbars. Maximum temperature rise for plated joints shall not exceed 50°C above 30° ambient.

All busbars shall be carried/supported on insulated supports placed at intervals not exceeding 600mm.

All current carrying parts, connecting strips, collector bars, etc. shall be adequately marked in phase colours with heat shrink PVC sleeving or be painted and colour coded. The colour yellow shall not be associated with any conductor which is not at earth potential.

Connecting strips and connector bars shall be of sufficient cross-sectional and contact area to carry full rated current of the switches served, irrespective of the fuse or trip rating.

At openings through floors, the building contractor shall provide 100mm x 100mm concrete kerb/upstand or approved equivalent, to prevent ingress of water down into the shaft. The contractor shall close the openings through the floor with approved non-combustible fire barrier/proofing material fitted closely around the busbar.

Non-ferrous drip pans, extending 300mm beyond the sides of the busbars, shall be provided under water, steam, sewer, sprinkler, etc. pipes where such pipes are routed over busbars.

Built-in fire barriers shall be provided at every floor level on vertical runs and at locations where busbars go through fireproof barrier walls. Busbars shall be provided/installed with approved clamped joints above and below/before and after fire barriers for easy removal of busbars.

Nameplates/Labels shall be provided on busbars in all LV switch rooms, risers etc. so that it is easily identifiable anywhere along its route.

17. busbar insulators

A laboratory report shall be submitted, confirming the material content, physical properties and electrical characteristics of the insulators, if required.

Busbar insulator material shall be Tufnell, or equivalent, shaped and spaced to provide protection against tracking, flashover and warping of busbars.

Busbar insulators, supports and clamps shall prevent deflection during short circuits. Provision shall be made for expansion of/adding to the busbars.

18. earth bars

A copper earth bar shall be provided, running the full length of the busbars. It shall be fastened to the outside of the busbar enclosure at intervals not exceeding 1500mm, and shall be rated as specified, but in any case not smaller than 50% of the phase busbars.

19. enclosure

The busbar enclosure shall be of galvanised sheet steel of thickness in accordance with the relevant SANS code and shall adequately protect the busbars whilst providing adequate ventilation and vermin proofing.

The enclosure shall be treated inside and outside with an approved rust inhibitor and finished in an approved electric orange, unless otherwise specified or approved.

20. plug-in switch and circuit breaker units

The circuit breaker units shall be completely enclosed in sheet steel housings with hinged covers. Adequate knockouts and attachments shall be provided on the busbars. High contact pressure silver plated stubs to engage the busbars shall be provided, totally enclosed in shock-resisting thermosetting plastic insulators. All load terminals shall have solderless lugs.

21. guarantee

The contractor shall provide/include a twelve (12) month guarantee to replace, free of charge, any portion of the busbars installation in which manufacturing defects may be identified/develop during that period. Such period shall commence from the date on which the installation including the busbars are taken over by the employer.

22. distribution boards and kiosks

23. general construction

11.1.1 Distribution Boards

Standard, approved manufacture, SABS/SANS approved, and type tested as per SANS/SABS distribution boards, complete with doors where specified, shall be used.

Distribution boards of 150A and larger shall be certified. Certificates are required with the workshop drawings and again on delivery of the boards and for the record/as-built documents/manual. Type tests are not required, unless specifically specified.

All distribution boards shall comply with the requirements of the Electricity Supply Authority and shall have the necessary space and/or equipment per their normal requirements, e.g. for metering, pre-payment meters, current demand circuit breakers, as well as space for the necessary equipment for the switching of water heating equipment by means of ripple relay, etc.

Workshop drawings of distribution boards must be submitted timeously for comment.

Distribution boards shall consist of a deep architrave frame which shall carry the equipment chassis panel and door. A bonding tray shall be provided onto which the architrave frame is secured.

Bonding trays shall be designed to be built into the wall. Expanded metal, the size of the tray, shall be spot welded to its rear surface. The tray shall be constructed of minimum 1.6mm galvanised sheet steel suitably braced by means of gussets. It shall be suitably sized to accommodate the specified equipment without congestion. At least 30% spare capacity/space shall be provided for future expansion.

An architrave frame, constructed of minimum 1.6mm sheet steel, suitably braced and formed with beveled edges, shall accommodate chassis panel and door(s). The frame shall be fixed to the tray in such a manner as to allow for depth and out of plumb adjustment.

Doors shall be of smooth flat finish, suitably braced to ensure rigidity, and recessed flush in the architrave. A chassis, of rigid construction for mounting of equipment, shall be fixed to the architrave or tray.

Each distribution board shall be provided with neutral and earth bars of solid brass or copper with one way for each conductor. Double pinching screws of brass shall be provided per way. Sufficient spare ways shall be provided to accommodate at least 30% expansion.

Each busbar shall be accessible from the front. Large terminals shall be provided on each busbar for the main conductor/s.

Wiring shall be carried out from the sides and in front of the chassis, where possible. Conductors shall be straight, neatly arranged in horizontal and vertical rows and shall be bound together.

All wiring trays shall be bonded to the distribution board earth bar by means of a copper earth conductor. Where distribution boards are surface mounted in cupboards specifically provided, conduits entering the boards may be terminated in wiring trays which may be fixed to the top and/or bottom of the boards. Vermin proofing is required for all distribution boards.

As a precondition for completion and hardcover, as part of record information, the contractor shall obtain the workshop drawings from the distribution board manufacturer and issue these to the engineer electronically in CAD (.dwg) and .pdf.

11.1.2 kiosks

Standard, approved manufacture, SANS approved, and type tested as per SANS code kiosk, complete with doors where specified, shall be used.

Kiosks of 150A and larger shall be certified. Certificates are required with the workshop drawings and again on delivery of the kiosks and for the record/as-built documents/manual. Type tests are not required, unless specifically specified. Workshop drawings of kiosks must be submitted timeously for comment.

The kiosks shall also comply with the following:

- Manufactured from glass fibre by Golnix.
 - Suitable for outdoor use i.e. weather and rust proof and UV-resistant.
 - The kiosk shall be prewired in the factory.
 - All non-current carrying metal parts and equipment must be connected to the earth bar.
 - All metal parts must be treated against corrosion e.g. heavy duty galvanised, etc.
 - The kiosk shall be suitable for a 400 V, three-phase, four-wire, 50 Hertz system with separate earth.
 - The kiosks busbars and equipment shall be suitable for minimum 6kA fault level.
 - The equipment in the kiosk shall be surface mounted on a 25mm thick board on an angle iron frame.
 - All equipment shall be labelled with the name of the board(s)/consumer(s) that it supplies.
 - All outgoing circuits shall be connected directly to the switchgear by means of bolt type terminals.
-
- The switchgear terminals shall not be nearer than 200mm from the cable gland plate.
 - The cable gland plate shall consist of a 3mm galvanised steel plate, galvanised after drilling the holes, with the correct number and size gland holes for the cables, with spare holes for future cables.
 - The cable gland plate may also be manufactured of 3CR12.
 - The cable gland plate may not be painted.
 - The kiosk busbars shall be suitable for 250A with minimum 6kA fault level.
 - The feeder circuit breakers must be curve one (1).
-
- The following name labels, white letters on black, are required.
 - kiosk name
 - circuit breaker names
 - equipment names
 - The kiosk shall be fitted with a legend card.

- The kiosk shall be installed on a root type base approximately 75mm to 120mm above finished ground level.
- The top part of the kiosk shall be removable.
- The kiosk must be placed with minimum free spaces to buildings and roads: 600mm.
- All cable ends shall be protected against damp/water by means of Densal tape.
- The kiosk root base shall be filled with sand with a 50mm topping of 10:1 sand cement mixture, after installation of the cables.
- The kiosk shall be lockable by means of padlock.
- The kiosk padlock shall be supplied and installed and 2 keys per lock shall be handed over to the Employer.
- Padlock master keys: Required
- Danger sign on door: Required
- Door restraining strap: Required
- Earthing cable armour: Required
- Earth at kiosk and earth test: Required

11.1.3 TELEPHONE, IT/DATA, SECURITY, ETC BOARDS

Telephone, IT/data, security, access control, fire alarm, CCTV, communication, etc boards shall be manufactured to the same standard as for electrical distribution boards, to Telkom requirements, with hinged doors with handles and Telkom approved locking, soft wood backing, interconnection openings between compartments and name labels.

All telephone, data, security, access control, fire alarm, TV, communication, etc. boards and drawboxes larger than 100 x 100 shall be labelled as such. Location, sizes, surface/recessed and compartments specified on the drawings.

24. labelling

All labels shall be the permanent type, including the ratings plates and cascading labels, where applicable.

All distribution boards shall be numbered using suitable ivory or plastic labels. Lettering shall be a minimum of 15mm in height.

All circuit breakers shall be numbered using suitable ivory or plastic labels. Lettering shall be a minimum of 12mm in height.

A legend card, covered by a removable transparent acrylic plastic (Perspex) or equal panel shall be installed on the inside of the door of the distribution board. The legend card shall depict the number and corresponding description of each circuit. The legend card shall be completed in bold type of 10mm minimum height. Handwritten legend cards are not acceptable.

A duplicate of the legend card shall be provided on project completion, as part of the record/as-built information.

25. painting

Distribution boards shall be painted using epoxy powder coating. Hammer tone finish is not acceptable.

Unless otherwise specified, colour finishes shall be Electric Orange with fascia's being:

- White for non-essential/normal circuits
- Red for essential/standby power circuits and
- Blue for UPS/isolated circuitry

Touch up paint from the same batch as the original coat shall be provided with each distribution board.

26. steel

All non-galvanized steel shall be thoroughly de-rusted.

Where galvanised steel is specified/used it shall be thoroughly degreased and then treated as follows:

- One (1) coat of calcium plumbate.
- One (1) coat of white undercoat.
- One (1) coat of gloss enamel, the colour of which will be detailed in the specification.

27. short circuit current rating and loading

The short circuit ratings specified in the drawing's schedules shall apply to the switches and to all other component parts on each distribution board. All components shall withstand, for three seconds, a symmetrical current in RMS values corresponding to the short circuit rating specified. The maximum continuous working loads which can be carried shall be as specified.

28. wiring

Distribution boards must be pre-wired by the distribution board manufacturer prior to delivery to site, unless it is an existing distribution board where alterations are required.

- Bootlace ferrules shall be used on all stranded conductors unless the conductor is crimped with a lug.

Secondary wiring shall consist of suitably rated, high conductivity stranded copper conductors, insulated with PVC in the appropriate phase colours and shall be cleared to approval within the switchboards. All conductors shall be numbered at both ends, in accordance with the markings shown on the schematic and wiring diagrams on the contract and workshop drawings.

The connections from all dual ratio current transformers shall be brought out to approved, easily accessible link boards to facilitate change of ratio and an approved clear engraved plate, showing the ratio, in each position of the links, shall be fixed to the link board.

The secondary wiring earth leads shall be brought to marked, easily accessible links for insulation resistance testing purposes. All secondary fuses shall have approved spring-type fuse holders and cartridge fuses.

29. phase rotation

The markings of conductors and terminals of power and secondary circuits shall show the phase sequence.

30. earthing

An approved copper earth bar shall be provided along the entire length of each switchboard, inside the switchboard on top of or near the gland plate, to which each panel of the sheet metal enclosure and each gland earth tag and each cable box armour clamp shall be bonded. The earth bar shall not be less than 25mm x 3mm in section and shall be drilled at each end and provided with size M10 bolts for the attachment of earth conductors entering from the cable trench. For busbars smaller than 25mm x 3mm, the earth bar shall be at least the size of the busbar.

31. space restrictions

When sizing switchboards, cognisance shall be taken of the sizes of the access routes/openings through which the switchboards must pass and where they will be installed. The contractor must ensure that workshop drawings are checked in accordance with the layout drawings.

- If any conditions on site limit the bringing in and or installation of the distribution board, it remains the responsibility of the contractor to provide such information/detail to the distribution board manufacturer to consider and resolve prior to manufacturing.

No claims for extras in respect of failure by the contractor to comply with the above will be considered/entertained.

32. components

The components provided in the distribution boards shall meet the requirements of the schedules. All moulded case circuit breaks shall be equipped with insulating phase barriers.

Fault levels of equipment shall be as appropriate/specified, but in no instance less than 6kA.

33. busbars and connections

Busbar and busbar connections and risers shall be insulated and shall conform to the requirements of BS EN 61439. Clearances from phase to earth and between phases shall be in accordance with BS EN 61439 and shall not be less than 19mm.

Busbar support insulators shall be suitable for use under damp conditions, made of porcelain, or synthetic resin bonded materials of a non-moisture absorbing type, which provide a minimum creepage distance of 25mm to earth and 38mm between phases.

All connections from busbars shall be supported on insulators to provide the same spacing between phases and to earth as the busbars, up to the point of entry into HRC fuse or circuit breaker. This applies also to connections for voltmeters, kWh meters and control circuit supplies.

34. pvc insulated cables

Glands for PVC insulated cables shall be suitable for general purpose grade cables manufactured to SANS 1411-1 of the sizes and types specified. The glands shall be of approved type, machined from non-corrodible material and shall incorporate approved sealing washers, shrouds, bushes, locknuts, earthing tags and compression nipples and one type of wire armour clamps and shall be water-tight, if specified or dictated by the installation circumstances.

35. doors, FACEPLATES, and inner panels

All doors shall have door handles with locks and concealed hinges and hinges flush with the architrave of the distribution board. No doors, faceplate and/or inner panels may be removable: all must be equipped with hinges. All hanged doors and panels shall be earthed by means of braided copper or pigtail style strap.

36. distribution blocks

The use of distribution blocks is not permitted without prior written request to the engineer and after formal written approval is granted.

37. cascading

In circumstances where cascading is used to reduce the prospective short circuit current, the contractor shall provide documentation confirming that cascading is achieved. No circuit breaker may have a prospective short circuit current of less than 6kA.

38. drawings

The contractor shall submit the following drawings as soon as reasonably possible to minimise any delay in the ordering/manufacturing process of the distribution boards/kiosks,

- General arrangement drawings showing the overall dimensions of the boards/kiosks and switchgear, the space required for the opening of doors, lids and withdrawal of circuit breakers and sizes and positions of holding down bolts related to the cable trench. Any projection affecting the passage of boards through doors shall be shown
- Sectional drawings showing positions of switchgear, components, busbars and riser connections, contactors, and cable end boxes/plates.
- Schematic diagrams on which all terminals and wires are shown and numbered to correspond with the circuits/equipment, and in which ac and dc circuits are shown separately. The diagram shall show the internal connections inside all apparatus such as for kWh meters and relays.

Prior to the drawings being issued to the engineer for review, the contractor shall preview the drawings and provide comments where applicable,

The engineer will also scrutinize the workshop drawings and provide comments where applicable.

If any of the engineer's comments provided limits and/or restricts the contractor from ordering and/or subsequently installing the distribution board(s), the engineer must be notified in writing to scrutinize and provide timeous feedback to the contractor, as the distribution board, its compliance to SANS 10142 and approval thereof are the responsibility of the contractor.

The contractor signs the electrical certificate of compliance and thus is the responsible person for the entire installation including the approval of the workshop drawings.

39. inspection of distribution BOARDS/KIOSKS

Prior to delivery to site of the distribution boards, the engineer must be invited to, and may request to inspect the distribution board at the manufacturer's premises. At least three days prior notice shall be provided by the contractor.

40. testing of DISTRIBUTION boards/KIOSKS

All distribution boards delivered to site must be accompanied by a Type or Semi-type tested certificate and factory acceptance certificate.

12. EARTHING AND BONDING

Main earth, earthing and bonding of electrical systems and equipment and structure by contractor. Earthing and bonding shall be carried out in accordance with the Wiring Code and as specified.

All cables and circuits wiring shall have a separate earth conductor: Refer to distribution board schematics and distribution board symbol drawings.

A common earth may be installed in cable ducts, cable trays, wiring channels, power skirtings and floor ducts T-ing off from this to DB's, outlets, etc. when more than one cable/circuit are drawn in together. D-Pin socket outlets circuits are "dedicated clean power" circuits for computers: no earth leakage protection and separate PVC insulated earth conductor.

The entire installation shall be properly and effectively earthed and bonded as prescribed in the SABS/SANS Code of Practice for wiring of Premises, Code SANS 10142.

Self-tapping screws are not acceptable as means of securing earth conductors. All equipment shall be earthed at the earth bars which in turn shall be connected to the main earth system. Cable armoring's shall be earthed via cable glands.

All luminaires shall be earthed. Earth conductors shall loop into the kiosks and shall be connected in such a way that disconnection from the earth busbar or terminal does not break the continuity of the earth conductor.

Jointing and T-off's of lengths of earth conductor shall be performed by means of suitable line taps Cadwelding or Silbralloy welding. An overlap of minimum three times the width of the conductor shall be used.

Where lugs are used for terminating stranded earth conductors, the lugs shall be crimped with an approved type of crimping tool. The lug stud size shall correspond to the fixing bolt and the lug shall be so positioned that the full contact area of the lug is utilized.

All bolts and screws used for the earthing shall be high tensile steel, brass or cadmium plated mild steel bolts. The cable armor shall be bonded to earth at all terminations of cables.

13. trenches

14. trenching

Unless specifically specified otherwise elsewhere, all low voltage cable trenches shall be at least 450mm wide and 600mm deep, and all medium voltage cable trenches shall be at least 450mm wide and 1000mm deep. Prior to excavation of trenching, the cable routes shall be confirmed on site

If, during the excavations of the trenches the contractor encounters hard rock, the engineer shall be informed in writing to conduct an inspection and issue formal feedback. If hard rock is identified/confirmed the contractor will be compensated from an extra over allowance in the bills of quantities.

The engineer shall provide the contractor with the relevant construction drawings and the contractor shall ensure that the installation of all ducts is carried out in accordance with these drawings and the relevant conditions stipulated by the Authorities. The contractor shall carefully examine the drawings and resolve any inaccuracies, discrepancies and/or inconsistencies with the engineer before commencing the necessary work. These drawings shall be updated by the contractor to record the exact/as-built positions of installations on completion of the works and shall be returned/submitted to the engineer.

Should the positions of existing services be shown on the construction drawings as issued by the engineer, the accuracy thereof is not guaranteed. The contractor shall verify positions of existing services and any discrepancy in the information provided shall not be accepted as the basis of a claim.

Ducts shall be of the type and manufacture as specified and shall comply with the following SANS Codes:

- SANS 819, Fibre-cement ducts and accessories
- SANS 791, UPVC ducts and accessories

The contractor remains solely responsible for contacting and liaising/cooperating with the relevant Authorities, whenever any work on or in the vicinity of existing services is required. The contractor is responsible to lay the ducts in accordance with the technical specifications of the relevant Authorities

Trenches for the cable ducts shall generally be excavated in a straight line between manholes/end points in accordance with the relevant construction drawings, except where obstructions or other conditions require deviations/bends, as permitted, and approved by the engineer.

The contractor shall ensure that a minimum period of seven (7) clear days' notice is given to any Authority which is responsible for any aspects of the cable laying or duct installation (if this responsibility is not that of the contractor as may be specified elsewhere in the document).

15. backfilling

Backfilling shall be compacted in layers of not more than 200mm at a time. Filling around and over cables and ducts to a depth of ± 50 mm shall be carefully carried out with fine materials and the contractor shall ensure that the cables and ducts are not damaged in any way by such backfilling and compaction. Where, in the opinion of the engineer, there is no excavated material suitable for use (even after screening) as bedding and the first layer of backfill, the contractor shall obtain suitable material and deliver to site. The onus shall be on the contractor to prove to the satisfaction of the engineer the actual need for, as well as quantities necessary and used.

All surplus soil from any excavation that cannot, in the opinion of the engineer, be spread evenly over the surface, shall be removed from site at no extra cost to the employer.

Warning tape shall be placed over/above all cables with a 200mm clearance above the top of the cables to the warning tape.

16. cables

17. general

600/1000Volt PVC SWA PVC Cable shall comply with SANS 1411. Borehole/Submersible cables shall comply with SANS 1574. The conductors shall be stranded and of high conductivity copper.

Aluminium conductor cables shall only be used where specified and/or specifically approved by the engineer in writing.

Prior to excavation for cables, the cable routes shall be confirmed on site and these shall be known/confirmed prior to cutting of any cables.

All wire ends of stranded conductors shall be boot laced ferruled unless the conductor is crimped with a lug. This also applies to distribution boards and to all power and lighting outlets.

Where exposed cables may be subject to mechanical damage, they must be protected in galvanised kickpipe.

18. installation

Glands shall be suitable for PVC SWA general purpose 600\1000 Volt cables. Glands shall be correctly sized, as specified by the manufacturer, to fit the specified cable types and sizes.

The glands shall be Pratley, or equivalent standard, and shall include waterproof shrouds. The shrouds shall be made of non-deteriorating neoprene or synthetic rubber and shall be resistant to water, oil and sunlight. The glands shall fit tightly around the gland and cable.

Cable splicing and/or jointing is not recommended and shall be approved by the engineer. Where necessary, splicing/cable jointing kits shall be of the epoxy-resin moulded type and shall be of Scotch-Guard, 3M or approved similar and equal manufacture. Splicing/cable jointing shall be carried out strictly in accordance with the manufacturer's instructions. Conductors shall be terminated using crimped or soldered lugs, unless otherwise approved.

The earth terminal shall be connected to a separate "way" on the earth bar using a suitable earth conductor/bonding strip and crimping lug or bootleg ferrule.

19. cable support and fixing

Where cables are surface mounted, they shall be run on suitably sized heavy or medium duty galvanized cable tray or cable ladder, depending on the weight of the cable, or as specified on P2000 batons at 500mm intervals. All the necessary bends, splices, reducers, fixings, and fittings required to neatly complete the work shall be provided. Purpose-made cover plates shall be fitted where cables run on the floor.

Where cables are run in sleeves, the sleeve ends shall be sealed with an impervious foam once the cables have been installed. Spare/Unused duct/sleeve and shall also be sealed.

Cables shall be properly fixed onto the cable ladder with a distance/spacing of at least one cable diameter between them. Sundry control cables shall also be fixed to the cable ladder or run-in galvanized conduits. Cables shall be run in galvanized conduits from sliprings to motors on bridges.

20. cable in and/or on wireways

Cables laid in cable trays or ladder racks shall be secured with approved locking cable ties or pre-galvanized steel strapping with locking clips at intervals not exceeding 300mm for vertical and horizontal hanging and 500mm for horizontal lay-in mounting.

Wire binders will not be permitted/accepted.

Cables shall be installed and strapped/secured such that, in the event of a cable requiring replacement, the remainder of the cables are not disturbed.

Where practical, cables shall be laid at least one (1) cable diameter away from each other to provide a suitable air gap.

Where cable ties are used on exterior installations, only ultra-violet treated/resistant exterior ties shall be used.

Cables rising vertically and fixed to concrete or masonry shall be secured using approved, and correctly sized cable clamps located into cleats of galvanized "Unistrut" or approved equal.

Cleats shall be fixed at intervals not exceeding:

- Cable diameter exceeding 35mm - 1 000mm
- Cable diameter less than 35mm - 500mm

21. cable markers

Cable markers shall consist of a concrete block in the shape of a truncated pyramid, approximately 300mm (deep) x 150mm x 150mm at the top and 230mm x 230mm at the bottom.

An Aluminum indicator plate shall be cast onto the top of the marker with the following stamped inscriptions:

" CABLE/CABLE SLEEVES"

" INDICATE NUMBER AND SIZE"

Markers for cable joints shall have the following stamped inscription on the indicator plate:

"CABLE JOINT No....."

Markers shall be placed at regular intervals along the cable routes, approximately fifteen (15) meters apart and also at all joints, changes in direction and road crossings with arrows indicating route/direction of cable.

A sample of the proposed markers shall be submitted to the engineer for approval before they are manufactured.

The as-built positions of the cable markers shall be recorded on the record drawings submitted to the engineer.

22. wiring in conduit

Where circuits are wired for power and lighting, all cables/wiring/conductors shall be in conduit unless in a main run wireways and power/or skirting. No cables may be exposed, even in ceiling. The only exception to this is the supply cable/lead to luminaires fed from a 5A socket outlet.

23. wireways

24. general

Unless otherwise specified elsewhere in this document, wiring channels, trunking and covers shall be equivalent to Cabstrut support systems.

25. trunking

Trunking sizes shall be as specified on the drawings, or as approved. Trunkings shall be of galvanized steel, mechanically continuous throughout and, covers shall be PVC. PVC trunking is only permissible where specified and with fixing/support intervals per SAN

The contractor shall plan and co-ordinate trunking layouts in conjunction with the other trades and no work shall commence until positions are coordinated and agreed with the main contractor.

Trunking shall be securely fixed with brackets at regular intervals as specified by the manufacturer, with additional fixings provided at bends, tees, and intersections. Splices shall be adequately fixed using manufacturer's recommended methods/accessories.

Where trunking is damaged or cut, filed or shaped, the affected portion shall be cleaned and touched up with cold galvanizing paint.

26. cable tray

Cable trays shall be of perforated mild steel in standard sections and lengths, the width not being less than 110mm wide and the flange not less than 12mm. The metal thickness shall not be less than 2.5mm. Cable trays shall be mechanically continuous throughout and shall be hot dipped galvanized to SANS 121.

The design and construction of the cable trays shall be such that a deflection on a two (2) meter span shall not exceed 7mm in mid-span under a mid-span load of 100kg.

Cable tray accessories shall be compatible with the cable trays and shall be used for all bends, tees and reducers, supports and fixings.

The contractor shall plan and coordinate the cable tray layout/s in conjunction with the other trades and no work shall commence until the contractor has verified that the trunking will not clash with the services of the other trades and agreed with the main contractor.

Cable trays shall be securely fixed with brackets at not more than 1500mm intervals, with additional fixings at bends, tees, and intersections.

Mushroom headed corrosion resistant bolts and nuts shall be used on all joints and for fixings to brackets. There shall be at least two bolts per joint.

Where a tray is damaged or cut, filed or shaped, the affected area shall be cleaned and painted with cold galvanizing paint.

27. wiring

Circuit wiring to the switched socket outlets must only be drawn into the electrical compartment, i.e., the top or center compartment of the channel/trunking/power skirting (but NOT the bottom channel unless so approved).

Under no circumstances shall wiring joints be made in the channel/trunking/power skirting other than at junction boxes and inside pedestals.

It is essential that the contractor adheres to the rotation of telephone, electrical intercom and IT/Data compartments, and maintains their integrity.

When wiring the channel, the contractor shall allow slack/loops wiring for the (future) installation of a switched socket outlet pedestal at every 1500mm module (unless otherwise specified), irrespective of whether a switched outlet socket pedestal is currently specified.

In order to make these provisions, the covers over the channel openings (electrical compartment only) must be removed during wiring and a loop of sufficient length to connect directly onto the terminals of the switched socket outlet must be left in the wiring and pushed back into the channel.

28. conduits

29. general

Conduit shall be galvanized steel conduit to SANS 60614 or shall be PVC conduit to SANS 950, as specified. No conduit smaller than 20mm overall diameter shall be used.

IT/Computers, Telephone and Electronic Services conduits and cables/conductors shall NOT be run parallel and directly adjacent to electrical conduits or cables.

A clear gap of 200mm minimum shall be left between these and electrical conduits and cables/conductors where these are installed near or parallel to each other.

30. construction

Heavy duty galvanized (threadless) conduit shall be used:

- Where conduit is run exposed on external wall surfaces or rises free from floors
- Where exposed to the weather, and
- In return air plenums of air conditioning plant
- Where specified

All flexible conduit lengths shall be of galvanized construction with a PVC sheath, commonly known as "Copex".

PVC conduit shall be used in ceiling spaces and recessed in walls or cast in concrete.

- All conduits shall as far as possible be recessed, unless otherwise specified or approved.

The contractor shall apply plaster to ensure conduits are firmly mounted/installed where chased in.

31. installation

Conduit must butt firmly together at joints and hard against the shoulders of conduit box spouts and other conduit fittings. The ends of cut lengths must be beveled internally and all burrs removed with a burring reamer. All conduits shall be installed in straight lines and mounted at right angles to building elements.

Except where otherwise specified all conduits shall be concealed by laying in concrete, chasing into walls or running in roof spaces. The contractor shall be responsible for chasing for the conduits and subsequent plaster to ensure conduits are firmly mounted/installed.

Should already plastered walls be chased without permission, the repair cost will be for the account of the contractor. Drops to wall outlets shall be from ceiling level, unless otherwise specified.

Conduits shall be looped from point to point and no draw-in boxes which are not in themselves outlets shall be permitted, unless specifically approved. Draw-in boxes shall be installed where it is necessary to draw cables round more than two 90 degrees bends or where conduit runs exceed twenty (20) meters. Draw-in boxes in ceilings shall have flat metal covers and counter sunk screws so as to be flush with the ceiling. Cover plates shall overlap boxes by 12mm on all sides and be painted to match surrounding finishes.

In roof spaces conduits shall be run along or at right angles to the direction of the roof trusses. Conduits running parallel to ceiling joists or tie beams shall be fixed to the sides and not on the top of such timbers. In roof spaces and on surfaces installations, conduit runs, where possible, shall be grouped together and conduits shall be kept at saddle distances apart and fixed with saddles at spacing not exceeding 2000mm.

In surface installations, conduit shall be supported on spacer saddles to approximately 5mm clearance behind the conduit and shall be fixed at spacings not exceeding 1500mm. Except for surface installations, outlet boxes for ceiling fittings shall be finished flush with the underside of the ceiling. Where conduits enter boards, trays and outlet boxes, couplings and male bushes shall be used.

Conduits laid in concrete shall be laid above the reinforcing bars, where possible, and shall be tied to the bars. Conduits chased into brick walls shall be secured at spacings not exceeding 2m. No conduits shall be installed within 75mm of hot water pipes or appliances.

Galvanized steel draw wires for use by others shall be provided by the contractor in each conduit in which permanent wiring is not installed.

Conduits serving outlets in cold rooms shall be run outside these rooms and enter only at the service points.

Surface mounted conduits shall be installed parallel with or at right angles to the building walls/elements, and shall be supported adequately by saddles, or by other approved methods. Conduits in suspended ceilings shall be located, when practicable, between the concrete slab and the ceiling and shall be supported from/fixed to the concrete slab.

No wiring shall be carried out until the installation wireways/conduits/etc. have been installed and fixed in position. No conductors/wiring shall be drawn in/through before the conduit has been thoroughly cleared of all debris and moisture. Unused switch or plug outlet boxes shall be closed/covered with blank metal cover plates. Where conduits cross expansion joints, approved type draw boxes shall be provided.

32. conduit accessories

33. general

The locations of all specified outlets boxes, switched socket outlets, switches, etc shall be confirmed on site.

34. construction

Outlet boxes, junction boxes, conduit hangers, rods, inserts, and supports shall be either hot dip galvanized or finished to match surrounding equipment, conduit and trunking.

The height of outlets from finished floor level to underside of outlet box shall generally be as below to the nearest brick course.

- Consistency of height shall be maintained throughout the installation.
- Wall switches, general - 1100 mm
- Socket outlets, general - 300 mm
- Telephone outlets, general - 300 mm
- IT outlets, general - 300 mm

Exceptions are as follows:

- Where outlets would occur in moulding, break in wall surface or unsuitable location in tile, wood, face brick or similar finish
- In removable metal partitions
- Socket outlets in kitchens shall be mounted at a minimum height of 200mm from the worktop or where the worktop height is not known, at a minimum height of 1100mm from finished floor level
- As instructed otherwise.

35. powerskirting

The make and model of the power skirting shall be as specified or approved, with the finish/colour selected from the manufacturer's standard range.

- Submit colour samples selection

Systems shall comprise a trough/wiring channels and cover of PVC with minimum mass of three (3) kilograms per 3000mm length.

Separate compartments shall be provided for power, data and telecommunications. (minimum two (2) main channels). The power channel shall be the upper channel (NOT the bottom one)

Separate pre-punched covers shall be provided for each of the services described in the specification and/or shown on the drawings. Covers shall be provided in modular lengths to avoid unnecessary cutting and random lengths.

Power skirting shall be fixed to the perimeter wall, partition, or other medium with inserts and screws, or with expanding spring toggle screws into dry wall panels, at centers not exceeding 1250mm. Skirting shall be set level.

Rear entry to the power skirting shall be by means of rear entry modules or cut-outs suitably sized for 100mm x 100mm or 100mm x 50mm conduit boxes.

Switching devices shall be provided with suitable mounting brackets which clamp or screw into the flanges of the relevant power compartment.

Bottom entry boxes set in the screed or cast in the concrete shall be set with the front edge of the box behind the front edge of the power skirting, and similarly, back entry boxes shall also fit behind the power skirting.

All metal power skirting runs shall be continuously earthed. Each section shall be fixed to the other using bolted brackets.

Full-length common earth conductors shall be installed in the powerskirting and earthing of outlets shall be T'd-off with an own earth conductor; 4mm² BCE for normal power and separate 4mm² insulated for dedicated clean power circuits.

Every length/butt/joint in metal skirting/trunking shall be bonded/bridged together with minimum 4mm² earth conductor screwed/bolted to the metal and every 4th length/butt/joint shall be bonded to the common earth conductor in the skirting/trunking.

36. small power and lighting

37. luminaires

All luminaires must be supplied, installed, connected, and commissioned complete with lamps, poles and accessories per the lighting schedules and layout drawings, and positions scaled from the drawings unless dimensions or grids are specified.

Flood, area, street, exterior and feature lighting shall be subjected to night tests in the presence of the Employer/Engineer to ensure that the settings, coverage, etc. are adequate and acceptable

Emergency lighting shall be fed via a 3000VA Pure sine Wave inverter with enough battery capacity to run all the emergency lights for 3 hours and maximum drain on the batteries of not more than 50% during the 3 hours

Where luminaires cannot be installed per the lighting layout drawings due to beams, close proximity to walls, other services located in the same place, etc., the engineer shall be informed in writing immediately to review and make changes, if required.

No through-luminaire wiring is allowed unless silicone wiring is used and will be for the contractors account if silicon wiring is used. The installation cost for luminaires shall be inclusive of holes to be cut and/or mounting/equipment. / materials. Unused light outlet points shall be blanked off with the wiring terminated in a connector block

The luminaires shall be per the Schedule of Luminaires issued or alternative similar and equivalent product as approved by the engineer. The sample procedure shall be followed for approval of alternative equipment/luminaires.

38. light switches

Light switches shall be single pole with a minimum voltage rating of 240V and current rating of 16A and bear the SABS mark.

39. motion detectors and photocells

The motion detectors are referenced/specified in the Schedule of Luminaires. Unused light outlet points shall be blanked off with the wiring terminated in a connector clock.

40. bellpush

Bell press switches shall have a minimum voltage rating of 240V even if used for low voltage installations.

41. switched socket outlets

Switched socket outlets shall have a minimum voltage rating of 240V and current rating of 16A, shall comply with SANS 164 and bear the SABS mark.

42. isolators

Isolators installed/mounted inside buildings shall be of the double or triple pole light switch type. Any isolators mounted/installed on the outside of the building shall be the lockable rotary type and weatherproof and UV resistant.

19.7 OUTLET BOXES, DRAW BOXES AND COVER PLATES

All outlet boxes, draw boxes and inspection boxes shall match the conduits installed and comply with the requirements of SABS 162 and shall be provided with metal cover plates and rust-free screws. All cover plates shall be White to SANS 1091.

Telephone and IT outlets shall be provided with cover plates and cradles, which can accommodate a RJ11 and RJ45 outlet.

Install blank cover plates on the unused electrical draw boxes and outlets and on telephone, IT/Computers, security, access control, fire alarm, CATV, CCTV, communication and other electronic services outlets and draw boxes. Use oversize cover plates on all round outlet boxes.

All conduits in ceiling to be surface mounted, properly fixed to the underside of the slab/structure.

- In wet/damp areas: Screws on faceplates of switch sockets, outlets, switches, etc shall be plastic with plastic covers (or stainless steel but not chromed steel).

43. INSTALLATION AND CONNECTION OF ELECTRICAL APPLIANCES AND EQUIPMENT

Electric Water Heaters: supplied and installed by others, unless otherwise specified. The contractor shall be responsible for the final connections to the water heater terminals.

Electric Cooking Appliances: supplied and installed by others, unless otherwise specified. The contractor shall be responsible for the final connections to the appliances.

Machine or Motor Outlet Points: Supplied and installed by others, unless otherwise specified.

Air-conditioning Units: supplied and installed by others, unless otherwise specified. The contractor shall be responsible for the final connections to the appliances.

Extract Fans: supplied and installed by others, unless otherwise specified. The contractor shall be responsible for the final connections to the appliances.

Security: supplied and installed by others, unless otherwise specified. The contractor shall be responsible for the final connections of the power supply.

Fire detection and alarm: supplied and installed by others, unless otherwise specified. The contractor shall be responsible for the final connections of the power supply.

Telephones/PABX: supplied and installed by others. The contractor shall be responsible for pointing out conduit routes.

CCTV: supplied and installed by others. The contractor shall be responsible for pointing out conduit routes.

Communication/Intercom: supplied and installed by others. The contractor shall be responsible for pointing out conduit routes.

IT/Computers: supplied and installed by others. The contractor shall be responsible for pointing out conduit routes.

44. PLANT/FIELD-MOUNTED CONTROL AND SWITCHING EQUIPMENT

Plant/Field-mounted equipment shall be mounted:

- As recommended by the Supplier, and/or
- As specified, and/or
- As approved by the engineer

Equipment housings, mounting and fixing materials shall be selected for the environment they will be required to operate in. All circuits, equipment and mountings shall be earthed.

All equipment shall be identified by means of labels. The contractor shall submit workshop drawings of mounting details for scrutiny by the engineer.

45. samples

The contractor shall free issue, at no cost to the Employer as reasonably possible, samples of all electrical and electronic plant and equipment, and samples of colours, specified to be used on the project.

Once the Employer and the Architect have reviewed the samples for approvals, the samples will be returned to the contractor.

All equipment used shall bear the SABS mark and supporting documentation shall be made available, as required and/or requested.

Where alternative equipment is offered, the contractor shall submit samples for approval together with the following:

- Provide samples and documentation of plant/equipment/materials per the tender requirements AND of the alternative equipment offered.
- Provide the cost savings for each item and for the total installation.
- Demonstrate that the alternative equipment is of similar and equivalent or better quality than the equipment specified in the tender.

Where equivalent equipment is offered, the following information is also required to be issued to the engineer for review/consideration:

- Demonstrate that the offered equivalent equipment conforms to the relevant SANS documents and is of equivalent standard and quality and application.
- Where computer aided software/programs, such as Relux (for light level calculations) are required, the .rdf file of the project shall be issued to the engineer, including the lighting reports.

Where alternative and/or equivalent equipment are proposed, no extension of time will be granted for the review of the equipment by the engineer, ordering and procurement, as well as the installation of the equipment. No ordering of alternative and/or equivalent equipment shall be done/finalised without the formal approval for the engineer.

- The contractor shall plan/afford enough time for the engineer to review and provide feedback for review/consideration of alternative and/or equivalent equipment offered.

The engineer's scrutiny of shop drawings or samples shall not relieve the contractor of responsibility for any deviation from the requirements of this contract, unless the contractor has informed the engineer in writing of such deviations at the time of submission of shop drawings or samples and the engineer has given written approval for the specific deviation, nor shall this relieve the contractor of responsibility for errors or omissions in the shop drawings or samples.

46. lighting report

The contractor shall obtain a luminaire report from the supplier of the luminaires on the project. On completion or at any stage during the project, when power is supplied to luminaires in that area/room, the supplier of the luminaires shall measure the light levels in accordance with the method(s) provided in SANS 10114. The measurements shall be done with an instrument that has a calibration certificate no older than twelve (12) months.

The luminaire report shall indicate the average light levels, the minimum maintained lux level for each area/operation and shall be issued as part of the record information and user manual to the engineer.

47. testing, inspection and training

The contractor shall provide all labour, tools, and material required for inspections, testing and recording. The contractor shall ensure that all installed equipment is commissioned and tested prior to practical completion and handover. The engineer shall be informed when testing will be done and for which areas and equipment.

The contractor shall assist the Employer/ Engineer during any test carried out and must supply and operate/handle equipment, tools, instruments, and consumables for testing purposes.

All labour, power, fuel, dummy and test loads and all instruments and appliances that may be required for the tests and commissioning, shall be provided by the contractor.

The contractor shall provide dates for Employer/User training two weeks in advance to allow enough time for the engineer and Employer representative to arrange to attend the training.

Records shall be kept of all installation tests done, as well as of the training done and a signed attendance register of all who attended the training. and this shall be included in the manuals.

48. CERTIFICATE OF COMPLIANCE

The contractor timeously inspect/test and shall issue complete/valid certificates of compliance for the electrical installations, on completion of the works.

The installation shall not be deemed completed and ready for handover unless the certificates of compliance have been issued.

All electrical certificates of compliance shall be completed in accordance with the Electrical Installations Regulations of 2012 and the Test Report in accordance with SANS 10142.

49. manuals

50. general

The contractor shall on completion, prior to handover, handover three (3) hardcopy/printed sets, and one electronic copy/set, of operating and maintenance manuals to the engineer. The purpose of the manuals is to guide and assist the Owner/User/operator of the facility with operation/use, fault finding and maintenance.

Documentation shall include, but not limited to the following:

- Technical details and data sheet of the equipment used/installed.
- Maintenance requirements and manufacturer's documentation.
- List of manufacturers including contact details.
- Use and operations instructions.
- Record information and drawings including as-built marked-up cable routes and duplicates of distribution board legend cards.
- Factory acceptance tests certificates.
- Site test reports, including CoC's
- Certificates of compliance.
- Warrantees, guarantee periods

The contractor shall submit a draft operating and maintenance manual for review by the engineer prior to the submission of the final (updated) document (three hardcopies and one electronic) which the engineer will issue to the Employer.

51. preparation of manuals

The manuals shall be prepared within the contract period and shall be custom for/particular to the project. All charges that may be required by the manufacturers, suppliers and/or license holders for the provision of information and literature shall be included in the contract price.

The manuals shall be arranged with an index and referencing system.

A matching flysheet will specify the names, addresses and contact details of the principals involved on the project.

52. contents of operation and maintenance manuals

The format of the manual shall be in accordance with the following sections, after the preface and index.

53. Section 1

This section shall comprise the introduction, abbreviations and any advice/qualifications/warnings that may be required by the Occupational Health and Safety Act, Local Authorities and other such bodies.

54. Section 2

A full description of each installation section, together with the main plant/system components and locations, plus the mode of operation of automatic control systems associated with such system, shall be reflected in this section.

55. Section 3

This section shall comprise the complete plant technical data of each item of equipment (e.g. manufacturer's names and addresses, types and sizes of units, serial numbers, bearing, pulleys and belt details, unit performance and duty details.)

This information shall be derived from a site inspection of identification plates, together with information obtained from the manufacturers.

56. Section 4

This section shall describe in detail the operating procedures necessary for normal use, e.g. starting up, running and shutting down each individual system. This shall include the control panel, starter and selection facilities together with any alarm and safety interlocks as identified on the control panels.

57. Section 5

This section shall comprise the maintenance operations/duties to be undertaken on a daily, weekly, monthly, yearly, etc. basis for each item of plant/equipment. The preparation of this section shall be carried out by obtaining from the manufacturer, advice and recommendations for lubrication, adjustment and routine maintenance.

58. Section 6

This section shall comprise the emergency procedures to be adopted/implemented by personnel engaged on the operation and maintenance of the mechanical and electrical services, with respect to fire, first aid, general failures to water and electrical systems, gas lines, chiller refrigerant pipework, and call-out procedures for maintenance personnel during normal working hours, as well as after hours.

59. Section 7

A recommended action on plant malfunction shall be detailed in this section. This is to assist both the user and maintenance engineer in the event of a fault developing in a system, by indicating the nature of the fault and the recommended fault finding and safety/precautionary action and procedures.

60. Section 8

This section shall comprise a list of recommended spares and lubricants. The preparation of this section shall be carried out by obtaining and including the manufacturer's recommendations and also by incorporating the Employer's/User's requirements regarding spares.

61. Section 9

A schedule of the records, or record drawings, together with reduced copies (A4 size) of the record drawings, inserted in numerical order in this section.

62. Section 10

This section shall comprise the certificates of compliance, warranties and guarantees, test certificates and commissioning reports. It shall also give the manufacturer's list of (or their local representatives) names, addresses and telephone numbers.

63. PRINTED AND ELECTRONIC INFORMATION

In addition to the hard copies/printed record information and drawings required for the manuals, one electronic set of all information and drawings shall be provided within the manuals in the form of a USB memory stick with word, pdf, .dwg and .rvt document and drawing files.

C3.10 HEALTH AND SAFETY REQUIREMENTS AND PROCEDURES

C3.10.1 APPLICABLE SPECIFICATIONS

The Contractor shall comply with the Occupational Health and Safety Act (Act No. 85 of 1993) (OHS Act) and the Construction Regulations, 2014 as amended. In addition, the Contractor shall comply with the Employer's Health and Safety Specification.

The following site-specific specifications shall apply:

| | | |
|------------|---|---|
| Annexure C | : | Site Specific Health & Safety Specification |
| Annexure C | : | Site Specific Baseline Risk Assessment |

C3.10.2 GENERAL PROVISIONS

In terms of the provisions of Section 37(2) of the Occupational Health and Safety Amendment Act, 1993 (Act 85 of 1993) hereinafter referred to as the Act, the following arrangements and procedures shall apply between the Contractor and the Employer to ensure compliance by the Contractor with the provisions of the Act:

- (i) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the Regulations promulgated in terms of the Act.
- (ii) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations on the Contractor will be fully complied with.
- (iii) The Contractor accepts liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations.
- (iv) The Contractor agrees that any duly authorised officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to monitor that the Contractor has conformed to his undertakings as described in paragraphs (i) and (ii) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or any appropriate records or safety plans held by the Contractor.
- (v) The Contractor shall be obliged to report forthwith to the Employer and Engineer any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing, to the Employer and Engineer, of such investigation, complaint or criminal charge.
- (vi) The Contractor shall furthermore, in compliance with Constructional Regulations 2014 to the Act acquaint himself with the requirements of the Employer's Health and Safety Specification, and prepare a suitably and sufficiently documented health and safety plan as contemplated the Construction Regulations 2014 for approval by the Employer or his assigned agent. The Contractor shall always be responsible for full compliance with the approved plan as well as with the Construction Regulations and no extension of time will be considered for delays due to non-compliance with the abovementioned plan or regulations.
- (vii) The Employer, or his assigned agent, reserves the right to conduct periodic audits, as contemplated in the Construction Regulations 2014, to monitor that the Contractor is compliant in respect of his obligations. Failure by the Contractor to comply with the

requirements of these Regulations shall entitle the Engineer, at the request of the Employer or his agent, to suspend all or any part of the Works, with no recourse whatsoever by the Contractor for any damages incurred as a result of such suspension, until such time that the Employer or his agents are satisfied that the issues in which the Contractor has been in default have been rectified.

- (viii) The proposed type of work, materials to be used and potential hazards likely to be encountered on this Contract are detailed in Volume 1 and 2, the Bill of Quantities, the Drawings, and in the Employers' Health and Safety Specification.
- (ix) The Contractor shall always ensure that his operations do not endanger any member of the public.

C3.10.3 PROTECTION OF THE PUBLIC

The Contractor shall always ensure that his operations do not endanger any member of the public. As the area is adjacent to a residential area the Contractor shall take special precautions to prevent public access to any danger areas on the Works, e.g. by temporary barricades and/or fencing.

C3.10.4 BARRICADES AND LIGHTING

The Contractor shall comply with the Occupational Health and Safety Act (1993), the Construction Regulations and the Employers Health and Safety specification provided in the Appendix.

C3.10.5 TRAFFIC CONTROL ON ROADS

Refer to PSA5.10.

C3.10.6 MEASURES AGAINST DISEASE AND EPIDEMICS

Refer to C3.4 and the Construction Regulations for sanitary requirements.

C3.10.7 AIDS AWARENESSS

Refer to the Health and Safety Specifications

C4 SITE INFORMATION

C4.1 SCOPE

The documentation included in this section describes the site as at the time of tender to enable the Tenderer to price his tender and to decide upon his method of working and programming. Only actual information about the physical conditions on the site and its surroundings has been included in this section, and the interpretation thereof is the responsibility of the Tenderer.

For the purposes of this Contract, the Contractor will be deemed to have carried out his own investigations at tender stage, and fully acquainted himself with the site conditions, whether such investigations have been carried out or not.

C4.2 GEOTECHNICAL INVESTIGATION

No Prior geotechnical investigation has been conducted.

C4.3 EXISTING SERVICES

Existing services are not known at this stage. The contract is to review existing services layouts prior to the commencement of works. Should this information be unavailable, this contractor is to prove for services. The contract will not be liable for any damaged services.

C5 ANNEXURES

| | |
|------------|---|
| Annexure A | Locality Plan |
| Annexure B | Contract Name Board |
| Annexure C | 1. Site Specific Baseline Risk Assessment 2. Site-Specific Health and Safety Specification |
| Annexure D | CD Containing: 1. Tender Drawings |

ANNEXURE A
LOCALITY PLAN

ANNEXURE B

CONTRACT NAME BOARD

ANNEXURE C

1. SITE SPECIFIC BASELINE RISK ASSESSMENT

2. SITE-SPECIFIC HEALTH AND SAFETY SPECIFICATION

ANNEXURE D

CD CONTAINING:

1. TENDER DRAWINGS