

PART A
INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE DEPARTMENT OF HOME AFFAIRS					
BID NUMBER:	DHA10-2021	CLOSING DATE:	27 AUGUST 2021	CLOSING TIME:	11:00
DESCRIPTION	APPOINTMENT OF A SERVICE PROVIDER FOR THE SUPPLY, INSTALLATION AND MAINTENANCE OF BACKUP GENERATORS, UNINTERRUPTED POWER SUPPLY UNITS (UPS), AIR-CONDITIONERS INCLUDING CONSEQUENTIAL GENERAL BUILDING, ELECTRICAL, MECHANICAL, CIVIL AND ENGINEERING WORK IN ALL NINE (9) PROVINCES AND PORTS OF ENTRY FOR A PERIOD OF THREE (3) YEARS				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
Department of Home Affairs,					
230 Johannes Ramokhoase Street,					
Cnr. Thabo Sehume and Johannes Ramokhoase Streets					
Hallmark Building, Pretoria					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Nico Masango / Lunga Njwabule		CONTACT PERSON	Chris Swart / Rita Prinsloo	
TELEPHONE NUMBER	(012) 406 2789 / (012) 406 4027		TELEPHONE NUMBER	(012) 402 4041 / (012) 406 2785	
E-MAIL ADDRESS	Nico.masango@dha.gov.za Lunga.njwabule@dha.gov.za		E-MAIL ADDRESS	Chris.swart@dha.gov.za rita.prinsloo@dha.gov.za	
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					

SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] ☐ Yes ☐ No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		[TICK APPLICABLE BOX] ☐ Yes ☐ No

[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
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QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? ☐ YES ☐ NO

DOES THE ENTITY HAVE A BRANCH IN THE RSA? ☐ YES ☐ NO

DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO

DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? ☐ YES ☐ NO

IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? ☐ YES ☐ NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

PART B
TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED – (NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.**
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. **THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).**

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:
(Proof of authority must be submitted e.g. company resolution)

DATE:

I INSTRUCTIONS TO BIDDERS

A THE TENDER DOCUMENTS

Rules for Bidding

- 1.1. The Department is not bound to accept any of the proposals submitted and reserves the right to call for presentations from short-listed bidders before final selection.
- 1.2. The Department reserves the right to terminate this appointment or temporarily defer the work, or any part thereof, at any stage of completion should the Department decide not to proceed with the tender.
- 1.3. The Department also reserves the right to appoint any other person to undertake any part of the tasks.
- 1.4. The service provider must be a single legal entity with all other necessary expertise secured via sub-contract, or under a joint venture arrangement. The Department will enter into a single contract with a single entity for the delivery of the work set out in these tender documents.
- 1.5. The bidding entity shall be the same entity that will execute the bid. Any bid found to be fronting for another entity or entities shall be disqualified immediately.
- 1.6. All South African firms submitting bids as part of a consortium or joint venture must submit a valid original tax clearance certificates.
- 1.7. Foreign firms providing proposals must become familiar with local conditions and laws and take them into account in preparing their proposals.
- 1.8. The service provider and its affiliates are disqualified from providing goods, works and services to any private party to this Agreement, or any eventual project that may result, directly or indirectly from these services.
- 1.9. Firms may ask for clarification on these tender documents or any part thereof up to close of business 1 week before the deadline for the submission of the bids.
- 1.10. The Department reserves the right to return late bid submission unopened.
- 1.11. Firms may not contact the Department on any matter pertaining to their bid from the time when the bids are submitted to the time the contract is awarded. Any effort by a bidder to influence bid evaluation, bid comparisons or bid award decisions in any manner, may result in rejection of the bid concerned.
- 1.12. Should the contract between the Department and the service provider be terminated by either party due to reasons not attributable to the service provider, the service provider will be remunerated for the appropriate portion of work completed up to a maximum amount of not more than the total fee bid by the service provider for the appropriate phase of the project during which the appointment was terminated.

Conditions of the Tender

- 1.13. The General Conditions of contract, as attached will apply.
- 1.14. The Department will become the owner of all information, documents, programmes, advice and reports collected and compiled by the service provider in the execution of this tender.

- 1.15. The copyright of all documents, programmes, and reports compiled by the service provider will vest in the Department and may not be reproduced or distributed or made available in any other way without the written consent of the Department.
- 1.16. All information, documents, programmes and reports must be regarded as confidential and may not be made available to any unauthorised person or institution without the written consent of the Department.
- 1.17. Bidders shall undertake to limit the number of copies of this document and destroy them in the event of their failure to secure the contract.
- 1.18. The service provider is entitled to general knowledge acquired in the execution of this agreement and may use it, provided that it shall not be to the detriment of the Department.

Cost of Bidding

- 1.19. The Bidder shall bear all costs associated with the preparation and submission of its bid and the Department, will in no case be held responsible or liable for these costs, regardless of the conduct or outcome of the tender process.

Content of Tender Documents

- 1.20. The services required, tender procedures and contract terms are prescribed in the tender documents, which include:
 - i. Instruction to Bidders;
 - ii. Technical Bid;
 - iii. Terms of Reference;
 - iv. Evaluation Criterion;
 - v. Financial Bid;
- 1.21. The Bidder is expected to examine all instructions, forms, terms and specifications in the tender documents. Failure to furnish all information required by the tender documents or submission of a bid not responsive to the tender documents in every respect will be at the Bidder's risk and may result in rejection of the bid.

Clarification of Tender Documents

- 1.22. The Department will respond in email to any request for clarification of the tender documents which it receives no later than 1 week prior to the deadline for submission of bids prescribed by the Department.
- 1.23. Bidders are invited to a non-compulsory virtual (Microsoft Teams) briefing session that will be held as follows:

Date and time: 30 July 2021 from 10h00 until 11:00.

Interested bidders must submit an email requesting the link to the virtual meeting on or before Wednesday, 28 July 2021.

Amendment of Tender Documents

- 1.24. At any time prior to the deadline for submission of bids, the Department may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the tender document by amendment.
- 1.25. All prospective bidders who have received the tender document will be notified of the amendment in writing or by fax, and same will be binding on them.
- 1.26. In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Department, at their discretion, may extend the deadline for the submission of bids.

B. PREPARATION OF BIDS

Language of Bid

- 1.1. The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Department shall be written in English.

Documents Constituting the Bid

- 1.2. The bid prepared by the Bidder shall comprise the following components:
 - **Technical Bid, including:**
 - i. Invitation to Bid (SBD 1)
 - ii. Original Tax Clearance Certificate
 - iii. Declaration of Interests(SBD4)
 - iv. Preferential Points Claim Forms (SBD 6.1)
 - v. Declaration of past Supply Chain Management practices (SBD8)
 - vi. Certificate of independent bid determination (SBD9)
 - vii. General Conditions of contract
 - viii. Completed Technical Specification Document
 - **Financial Bid, comprising:**
 - i. Price Schedule – Firm Prices (Purchases) (SBD 3.1)

Bid Prices

- 1.3. Prices indicated on the Price Schedule shall be the total price of services including, where applicable:
 - All duties and other taxes;
 - The price of transportation, insurance and other costs incidental to delivery of the services to their final destination;
 - The price of any other incidental services required in terms of the tender deliverables;
- 1.4. Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account.
- 1.5. A bid submitted with a variable price quotation will be treated as non-responsive and rejected.

- 1.6. Prices shall be quoted in South African Rands.
- 1.7. The Department has limited resources and bids must be competitive, with market related pricing, as this will be one of the deciding factors in the final award of the contract.

Period of Validity of Bids

- 1.8. Bids shall remain valid for 90 days after the closing date of bid prescribed by the Department. A bid valid for a shorter period shall be rejected by the Department as non-responsive.
- 1.9. In exceptional circumstances, the Department may solicit the Bidder's consent to an extension of the period of validity. The request and the response thereto shall be made in writing. A Bidder may refuse the request. A Bidder granting the request will not be required nor permitted to modify its bid.

Format and Signing of Bid

- 1.10. The Bidder shall prepare one copy of the Technical Bid and Financial Bid separately, Original Technical Bid" and "Original Financial Bid", as appropriate. **Apart from the original bid, a copy should also be provided on CD or USB.** In the event of any discrepancy between them, the original shall govern.
- 1.11. The original bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. All pages of the bid, except for un-amended printed literature, shall be initialled by the person or persons signing the bid.
- 1.12. Any interlineations, erasures or overwriting shall be valid only if they are initialled by the person or persons signing the bid.

Sealing and Marking of Bids

- 1.13. The original and copy of the Technical Bid shall be placed in a sealed envelope clearly marked Technical Bid and original and copy of the Financial Bid shall be placed in a sealed envelope clearly marked Financial Bid and warning "Do not open with Technical Bid". All the inner envelopes shall then be placed into an outer envelope. The inner and outer envelopes shall be addressed to the following address:

Department of Home Affairs
Private Bag X114
PRETORIA
0001
- 1.14. The inner envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared late.
- 1.15. If the outer envelope is not sealed and marked as required by the clause, the Department will assume no responsibility for the bid's misplacement or premature opening.
- 1.16. **Faxed or emailed bids will not be accepted.**

Closing Date of Bids

- 1.17. Bids (Technical and Financial) must be received by the Department at the address specified under clause 1.13 above. In the event of the specified date for the submission of Bids being declared a holiday for the Department, the Bids will be received up to the appointed time on the next working day.
- 1.18. The Department may, at its discretion, extend this deadline for submission of bids by amending the bid documents in which case all rights and obligations of the Department and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

Late Bids

- 1.19. Any bid received by the Department after the deadline for submission of bids prescribed by the Department, will be rejected and/or returned unopened to the Bidder.

Modification and Withdrawal of Bids

- 1.20. The Bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification or withdrawal is received by the Department prior to the deadline prescribed for submission of bids.
- 1.21. The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of clause 6. A withdrawal notice may also be sent by fax, followed by a signed confirmation copy, post marked not later than the deadline for submission of bids.
- 1.22. No bid may be modified subsequent to the deadline for submission of bids.
- 1.23. No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of period of bid validity specified by the Bidder on the Invitation to Bid form.

C. EVALUATION OF BIDS

Clarification of Bids

- 1.1. During evaluation of bids, the Department may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing.

Preliminary Examination

- 1.2. The Department will examine the bids to determine whether they are complete, whether they meet all the conditions of the Contract and Technical Specifications and whether any computational errors have been made, whether the documents have been properly signed, and whether the bids are generally in order.
- 1.3. Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words shall prevail. If the supplier does not accept the correction of errors, its bid may be rejected.

- 1.4. If a bid is not responsive and not fulfilling all the conditions of the Contract and not meeting Technical Specifications, it will be rejected by the Department and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

Evaluation and Comparison of Bids

- 1.5. The Department will evaluate and compare the financial bids only of those Bidders whose Technical Bid has been accepted by the Department.
- 1.6. The Department's evaluation of a financial bid will take into account information to be provided on the SBD 3.3.

Contacting the Department

- 1.7. Subject to clause 1.1 above, no Bidder shall contact the Department on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the Department, it should do so in writing.
- 1.8. Any effort by a Bidder to influence the Department in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.

D. AWARD OF CONTRACT

Post qualification

- 1.1. The Department will determine to its satisfaction whether the Bidder that is selected as having submitted the highest evaluated responsive bid meets the criteria specified in these documents, and is qualified to perform the contract satisfactorily.
- 1.2. The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the bidder, as well as such other information as the Department deems necessary and appropriate.
- 1.3. An affirmative determination will be a prerequisite for award of the Contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Department will proceed to the next highest evaluated bid to make a similar determination of that Bidder's capabilities to perform the contract satisfactorily.

Department's right to vary Quantities at Time of Award

- 1.4. The Department reserves the right at the time of Contract award to increase or decrease the quantity of the services originally specified in the Terms of Reference without any change in unit price or other terms and conditions.

Department's right to accept or reject any or all Bids

- 1.5. The Department reserves the right to:
 - Accept or reject all or individual items of this bid;
 - Accept one or more bids submissions reject individual items;

- Request clarification or further information regarding any item in the Proposal;
- Request further information from any bidder after the closing date;
- Accept a bid that may not reflect the lowest pricing;
- Consider any bid that may not conform to any aspect of this bid;
- Annul the tender process and reject all bids at any time prior to contract award;
- Consider such alternate services, terms or conditions that may be offered, whether such offer is contained in a Proposal or otherwise;
- Award the contract or any part thereof to one or more bidders; without thereby incurring any liability to the affected Bidder or bidders.

Notification of Award

- 1.6. Prior to the expiration of the period of bid validity, the Department will notify the successful bidder in writing by registered letter or by fax, to be confirmed in writing by registered letter, that its bid has been accepted.
- 1.7. The notification of award will constitute the formation of the Contract.

Signing of Contract

- 1.8. At the same time as the Department notifies the successful bidder that its bid has been accepted, the Department will send the bidder the Contract Form provided in the tender documents, incorporating all agreements between the parties.
- 1.9. Within 2 days of receipt of the Contract Form, the successful bidder shall sign and date the Contract Form and return it to the Department.

Termination of Service

- 1.10. In case of any failure to comply with any of the conditions of the contract or unsatisfactory rendering of service, the stipulation of the General Conditions of Contract and the Special Conditions of Contract, shall be applicable.
- 1.11. Should the Department, after a reasonable period of notice, of not less than seven days, in writing, depending upon the circumstances, call upon the service provider to comply with any of the conditions and should he/she fail to do so, the Department shall, without prejudice to any of its rights be entitled to cancel the contract, and to claim from the service provider any damage or loss that might have been suffered, including any additional expense incurred by it having either to invite fresh bids or to accept any less favourable bid.

Unsatisfactory Performance

- 1.12. Failure to comply with the conditions of the contract, the Department shall be entitled, without prejudice to its other rights, to cancel the contract in terms of the General Conditions of Contract. Delays beyond time limits and timeframes agreed upon between the parties. Failure to meet the performance standards indicated in the contract

Assignment

- 1.13. The contractor shall not, without prior written authority of the Department, cede, assign or transfer its rights or obligations in respect of this contract or any part thereof or any share of interests herein, directly or indirectly, to any person, firm or organization whatsoever.



home affairs

Department:
Home Affairs
REPUBLIC OF SOUTH AFRICA

TERMS OF REFERENCE

DHA10-2021

APPOINTMENT OF A SERVICE PROVIDER FOR THE SUPPLY, INSTALLATION AND MAINTENANCE OF BACKUP GENERATORS, UNINTERRUPTED POWER SUPPLY UNITS (UPS), AIR-CONDITIONERS INCLUDING CONSEQUENTIAL GENERAL BUILDING, ELECTRICAL, MECHANICAL, CIVIL AND ENGINEERING WORK IN ALL NINE (9) PROVINCES AND PORTS OF ENTRY FOR A PERIOD OF THREE (3) YEARS

CLOSING DATE AND TIME OF BID:

27 August 2021 at 11h00

Non-compulsory virtual (Microsoft Teams) briefing session that will be held on

Date and time: 30 July 2021 at 10h00.

Interested bidders must submit an email requesting the link to the virtual meeting on or before Wednesday, 28 July 2021.

BID VALIDITY PERIOD: 90 DAYS

**Department of Home Affairs
Supply Chain Management**

TERMS OF REFERENCE

OBJECTIVE

1. The objectives (aim) of this tender are:
 - To invite bids from suitable service provider(s) for the supply, installation and maintenance of backup generators, uninterrupted power supply units (UPS), air-conditioners including consequential general building, electrical, mechanical, civil and engineering work in all nine (9) provinces and Ports of Entry for a period of three (3) years, as and when needed.

BACKGROUND

2. In 2007 the Department of Home Affairs introduced a new corporate image as part of its turn-around strategy and as a way to improve its image. The Department endeavors to maintain this image.
3. Furthermore, from the year 2013, the Department also embarked on a project to modernise its business systems and processes to improve service delivery and move towards a paperless environment.
4. The successful implementation of this project requires the modification of all DHA offices and ports of entry. The envisaged modification requires the reconfiguration of layouts of the offices, the refurbishment and certain instances re-construction of offices to support the paperless environment. The remodeling of these offices includes the provision of server rooms which require air-conditioning, back-up generators and uninterrupted power supplies (UPS) units.
5. Based on the above, every year a number of offices are identified for infrastructure improvement projects.
6. The Department requires to appoint service providers for the supply, installation and maintenance of backup generators, uninterrupted power supply units (UPS), air-conditioners including consequential general building, electrical, mechanical, civil and engineering works for the execution of the Department of Home Affairs' infrastructure projects for a period of three (3) years in all nine (9) provinces and Ports of Entry, as and when needed.

SCOPE AND EXTENT OF THE TENDER

7. The successful bidder(s) will be expected to execute and conduct the following tasks for/ provide the following services / items to the Department:
 - a) Develop detailed project plans
 - b) Develop Architectural/Engineering drawings/layouts
 - c) Supply, install and maintain back-up generators, uninterrupted power supply (UPS) and air-conditioners.
 - d) General Construction of buildings
 - e) General Engineering (Electrical, Mechanical and Civil work)
 - f) Ensure that projects are delivered on time, within budget and meet the specified quality standards
 - g) Work under supervision of the appointed Project Manager and take instructions from her/him

- h) Submit progress reports on projects to DHA management weekly for consideration and verification
- i) Prepare presentations on projects when required
- j) Present payment claims to project manager for completed work
- k) Issue all legislated certificates at the completion of each project e.g. air conditioning and electrical

The detailed scope of work (Standard Specification) is attached as part of this bid document

SPECIAL CONDITIONS OF CONTRACT

8. To achieve the above the successful bidder will be required to meet the following requirements:
- a) Proof of registration with the CIDB.
 - b) Proof of standard warranty on all equipment (Air-conditioners, Generators and UPS.
 - c) A service provider may not recruit or shall not attempt to recruit an employee of the Department of Home Affairs for purposes of preparation of the bid or for the duration of the execution of this contract or any part thereof.
 - d) If at any time during the performance of the services by an appointed bidder, its agents or subcontractor(s), should encounter conditions impeding specific and/or timely delivery of services as prescribed by this bid or as agreed to between the Department and the appointed bidder, the said bidder shall within 24 hours notify the Department in writing of the fact, the likely duration and/or its cause(s). As soon as practicable after receipt of the bidder s' notice, the Department shall evaluate the situation and may, at its discretion;
 - i. Extend the appointed bidder's time for performance or opportunity to comply with specifications, with or without the imposition of penalties.
 - ii. Terminate the appointment of the said bidder on written notice of fourteen (14) days.
 - iii. The guideline scope of services and tariff of fees issued in terms of Government Gazette number 34510 dated 12/08/2011 of Project and Construction Management Profession will be considered.
 - e) The service provider will be required to provide a detailed pricing schedule aligned with the project activities/project phases to be undertaken for projects.
 - f) The total cost must be VAT inclusive and should be quoted in South African Rands.
 - g) DHA reserves the right to award the contract to multiple suppliers.
 - h) Only bidders who have experience in all three (3) areas mentioned below will be considered:
 - Supply, installation and maintenance of backup generators including consequential general building, electrical, mechanical, civil and engineering work.
 - Supply, installation and maintenance of uninterrupted power supply units (UPS) including consequential general building, electrical, mechanical, civil and engineering work.
 - Supply, installation and maintenance of air-conditioners including consequential general building, electrical, mechanical, civil and engineering work.

TENDER DELIVERABLES / OUTPUTS AND TIMEFRAMES

9. The primary deliverables to be achieved are as follows:

- The service provider should ensure that all work required is done according to specifications and standards.
- Ensure there is consistency in all offices and ports of entry as per DHA requirements.
- There is minimal interruption on service delivery while the contractor and any other service provider are executing the implementation.
- Where there are subcontractors, the service should ensure that there is constant co-ordination between the third (3) party service provider, the contractor and appointed project manager.
- The service provider should ensure that projects are executed within project timelines.
- The contract will be for a period of three years.
- It would be expected of the successful service provider to assume duty immediately upon appointment.

LOGISTICS AND TIMING

10. **Project location(s):**

National – all Home Affairs in the nine (9) provinces and Ports of Entry.

11. **Expected commencement date:**

The contract will commence on the signing of the contract form (SBD 7.2) by both parties.

12. **Project period:**

Three (3) years

13. **Bid Proposal**

The bid proposal must be completed in a professional manner using, but not limited to the following headings:

- Introduction
- Profile of the company.
- Understanding of the terms of reference
- Proposed approach and methodology.
- Indicate experience in work of a similar nature (with references).
- Each required service, its turn-around time and an inclusive quote for each service, per province
- The total bid price should be inclusive of VAT and per province.
- Annual fee escalations, if any.

EVALUATION STAGES

14. The bid evaluation process consists of several stages that are applicable as defined in the table below:

Stage	Description	Applicable for this bid
Stage 1A	Initial screening process / compliance with bid requirements	Yes
Stage 1B	Non-compulsory virtual (Microsoft Teams) briefing session	Yes
Stage 1C	Pre-qualification criteria	Yes
Stage 2	Mandatory requirement evaluation	Yes
Stage 3	Functionality requirement evaluation	Yes
Stage 4	Site Visits	No
Stage 5	Price / B-BBEE evaluation	Yes

Stage 1A:

- Verification of service provider(s) compliance with bid requirements / initial screening process.

Stage 1B:

- Non-compulsory virtual (Microsoft Teams) briefing session.

Stage 1C:

- Service provider(s) must indicate their compliance with the following pre-qualification requirements in terms of Regulation 4 of the Preferential Procurement Regulations 2017 and provide proof.
- Proof includes a valid SANAS B-BBEE Status Level Verification certificate or a B-BBEE certificate issued by the Companies and Intellectual Property Commission, with the exception of EME's and QSE's who are required to submit sworn affidavit in terms of Code of Good Practice. The sworn affidavit must be signed by the EME representative and attested by a Commissioner of oath.
- If a service provider is bidding as a consortium or joint venture (including unincorporated consortia and joint ventures) they must submit a consolidated B-BBEE Status Level Verification Certificate.
- Bidders who fail to meet the pre-qualification requirement will be disqualified.
- Only the following tenderers may respond to this request:

Pre-qualification criteria	Comply	Do not comply
A tenderer having a minimum level five (5) B-BBEE status.		
EVIDENCE: Bidders must submit a valid SANAS B-BBEE certificate or a valid B-BBEE certificate issued by the DTI & Companies and Intellectual Property Commission or a valid Sworn Affidavit signed by the representative and attested by a Commissioner of Oath		

Stage 2:

- Service provider(s) must indicate their compliance with the following mandatory requirements as required by the DHA.
- Bidders who fail to meet the mandatory requirements will be disqualified.

Mandatory requirement	Comply	Do not comply
The bidder must provide proof of Registration and Accreditation with the Construction Industry Development Board (CIDB) with a minimum of 6EB or 6EP or 6ME.		
EVIDENCE: Bidders must submit a copy of CIDB document/letter/certificate or a full copy of the application for registration to CIDB register of contractor or a CIDB registration. Verification will be conducted on the latest CIDB register available on the CIDB website by the Department.		

Stage 3:

- The Technical proposal will be evaluated out of 100 points with a threshold of 60 points. Bidders that score less than a minimum of 60 points for technical evaluation will be disqualified. Bidders must score a minimum of 60 points on functionality to qualify for further evaluation on price and preference points.
- Each panel member will rate each individual criterion on the score sheet using the criteria measure:

Evaluation Criteria	Minimum Requirements	Elimination Factor	Points Obtainable
RELEVANT EXPERIENCE AND EXPERTISE	The service provider must have relevant experience in similar projects. Signed and dated Reference letter/s with contact details and the breakdown of the services with the years must be clearly indicated (Letter head of client and the Department reserves the right to contact the clients).	1 Reference letter	10
		2 Reference letters	20
		3 Reference letters	30
		4 Reference letters	40
RELEVANT NUMBER OF YEARS OF EXPERIENCE	<i>The service provider must have the relevant number of years of experience</i> in the supply, installation and maintenance of backup generators, including consequential general building, electrical, mechanical, civil and engineering work, within the last five (5) years). <i>Bidders must complete, sign and date the table below:</i>	Less than 3 years' experience	0
		3 years' experience	10
		4 years' experience	15
		5 years' experience	20
	<i>The service provider must have the relevant number of years of experience</i> in the supply, installation and maintenance of uninterrupted power supply units (UPS), including consequential general building, electrical, mechanical, civil and engineering work, within the last five (5) years). <i>Bidders must complete, sign and date the table below:</i>	Less than 3 years' experience	0
		3 years' experience	10
		4 years' experience	15
		5 years' experience	20

RELEVANT NUMBER OF YEARS OF EXPERIENCE	<i>The service provider must have the relevant number of years of experience</i> in the supply, installation and maintenance of air-conditioners, including consequential general building, electrical, mechanical, civil and engineering work, within the last five (5) years). <i>Bidders must complete, sign and date the table below:</i>	Less than 3 years' experience	0
		3 years' experience	10
		4 years' experience	15
		5 years' experience	20
TOTAL			100

RELEVANT EXPERIENCE AND EXPERTISE	START DATE	END DATE	TOTAL START AND END DATE	CLIENT REFERENCE: CONTACT DETAILS
Installation and maintenance of backup generators, including consequential general building, electrical, mechanical, civil and engineering work				
Installation and maintenance of uninterrupted power supply units (UPS), including consequential general building, electrical, mechanical, civil and engineering work				

RELEVANT EXPERIENCE AND EXPERTISE	START DATE	END DATE	TOTAL START AND END DATE	CLIENT REFERENCE: CONTACT DETAILS
Installation and maintenance of air-conditioners, including consequential general building, electrical, mechanical, civil and engineering work				
Name: Signature: Date				

Stage 4: Site Visit: Not applicable

Stage 5: Price / B-BBEE evaluation

- Bids will then be evaluated in accordance with the prescripts of the Preferential Procurement Policy Framework Act (PPPFA) and the associated Preferential Procurement Regulations of 2017, which stipulate either a 80/20 preference point system is applicable up to a rand value of R50 million (all applicable taxes included) or a 90/10 preference point system is applicable above a rand value of R50 million (all applicable taxes included).
- The following criteria will be used in particular as the criteria for appointment, apart from those laid down in the Preferential Procurement Regulations, 2017, pertaining to the Preferential Procurement Policy Framework Act 5 of 2000.
- Where B-BBEE points are claimed, a valid SANAS B-BBEE Status Level Verification certificate or a B-BBEE certificate issued by the Companies and Intellectual Property Commission, with the exception of EME's and QSE's who are required to submit sworn affidavit in terms of Code of Good Practice. The sworn affidavit must be signed by the EME representative and attested by a Commissioner of oath.
- **The pricing schedule (Bill of Quantity) attached to be completed for price comparison.**
- The points for this bid are allocated either as follows:

DHA10-2021

No.	Components	Points
1.	Price	80
2.	Preferential points: B-BBEE	20
	Total	100

Or

SN	COMPONENT	POINTS
1.	Price:	90
2.	Preferential points: BBBEE	10
	TOTAL:	100

NB: The lowest acceptable tender will determine the preference point system to be used for the evaluation of the tenders.

**PRICING SCHEDULE – FIRM PRICES
(PURCHASES)**

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

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

Name of bidder.....

Bid number: **DHA10-2021**

Closing Time: **11:00 on 27 August 2021**

OFFER TO BE VALID FOR 90 DAYS FROM THE CLOSING DATE OF BID.

ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY (INCLUDING VAT)
-------------	----------	-------------	--

Required by:

At:

Brand and model

Country of origin

- Does offer comply with specification? *YES/NO

If not to specification, indicate deviation(s)

Period required for delivery

- *Delivery: Firm/not firm

Delivery basis (all delivery costs must be included in the bid price)

Note: All delivery costs must be included in the bid price, for delivery at the prescribed destination.

***Delete if not applicable**

DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes a price quotation, advertised competitive bid, limited bid or proposal). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-
- the bidder is employed by the state; and/or
 - the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.
2. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

2.1 Full Name of bidder or his or her representative:

2.2 Identity Number:

2.3 Position occupied in the Company (director, trustee, shareholder²):

2.4 Company Registration Number:

2.5 Tax Reference Number:.....

2.6 VAT Registration Number:

2.6.1 The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / persal numbers must be indicated in paragraph 3 below.

¹"State" means –

- (a) 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);
- (b) any municipality or municipal entity;
- (c) provincial legislature;
- (d) National Assembly or the National Council of Provinces; or
- (e) Parliament.

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

2.7 Are you or any person connected with the bidder presently employed by the state? **YES / NO**

2.7.1 If so, furnish the following particulars:

Name of person / director / trustee / shareholder/ member:

Name of state institution at which you or the person

connected to the bidder is employed :

Position occupied in the state institution:

Any other particulars:

.....

.....

.....

2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? YES / NO

2.7.2.1 If yes, did you attached proof of such authority to the bid document? YES / NO

(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.

2.7.2.2 If no, furnish reasons for non-submission of such proof:

.....

.....

.....

2.8 Did you or your spouse, or any of the company's directors / trustees / shareholders / members or their spouses conduct business with the state in the previous twelve months? YES / NO

2.8.1 If so, furnish particulars:

.....

.....

.....

2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid? YES / NO

2.9.1 If so, furnish particulars.

.....

.....

.....

2.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid? YES/NO

2.10.1 If so, furnish particulars.

.....

.....

.....

2.11 Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract? YES/NO

2.11.1 If so, furnish particulars:

.....

2. Full details of Directors / Trustees / Members / Shareholders.

Full Name	Identity Number	Personal Reference Number	Tax	State Number Number	Employee / Persal Number

3. DECLARATION

I, THE UNDERSIGNED (NAME).....

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT.
 I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 23 OF THE GENERAL CONDITIONS OF CONTRACT SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
 Signature

.....
 Date

.....
 Position

.....
 Name of bidder

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

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 MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2

- a) The value of this bid is estimated to **exceed/not exceed** R50 000 000 (all applicable taxes included) and therefore the preference point system shall be applicable; or
- b) Either the 80/20 or 90/10 preference point system will be applicable to this tender (*delete whichever is not applicable for this tender*).

1.3 Points for this bid shall be awarded for:

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

1.4 The maximum points for this bid are allocated as follows:

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

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.6 The purchaser reserves the right to require of a 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.

2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;

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

3. POINTS AWARDED FOR PRICE

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

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

80/20	or	90/10
$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$	or	$P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$

Where

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

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

- 4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a 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 (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

5. BID DECLARATION

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

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

6.1 B-BBEE Status Level of Contributor: . =(maximum of 10 or 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)

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

7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted.....%
- 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

(Tick applicable box)

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

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

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

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm:.....

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One person business/sole propriety
- ☐ Close corporation
- ☐ Company
- ☐ (Pty) Limited

[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

.....

.....

.....

8.6 COMPANY CLASSIFICATION

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional service provider
- ☐ Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

8.7 Total number of years the company/firm has been in business:.....

8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in

paragraph 1 of this form;

- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES

- 1.
- 2.

.....
SIGNATURE(S) OF BIDDERS(S)

DATE:
ADDRESS
.....
.....

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 institutions 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 disregarded if that bidder, or any of its directors have-
 - a. abused the institution's supply chain management system;
 - b. committed fraud or any other improper conduct in relation to such system; or
 - c. failed to perform on any previous contract.
- 4 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Item	Item	Item
4.1	Is the bidder or any of its directors listed on the National Treasury's database 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 National Treasury after the <i>audi alteram partem</i> rule was applied).	Yes ☐	No ☐
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)? 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.	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 outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
4.3.1	If so, furnish particulars:		

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Standard Bidding Document (SBD) must form part of all bids¹ 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).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Treasury Regulation 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:
 - a. 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.
 - b. 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.
- 4 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 submitted with the bid:

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

² 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.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Institution)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: _____ that:
(Name of Bidder)

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:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) 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 consortium³ 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:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid;or
 - (f) bidding with the intention not to win the bid.
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.

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

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

.....
Date

.....
Position

.....
Name of Bidder



home affairs

Department:
Home Affairs
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HOME AFFAIRS

GAUTENG PROVINCE

BILL OF QUANTITIES

NAME OF CONTRACTOR

BILL OF QUANTITIES

General Notes

Tenderers must complete the Bill of Quantities and detail the unit rate and total amount of each item.

Tenderers are advised to check their item extensions and total additions. Arithmetical errors occurring in the priced Bill of Quantities will be corrected and will have an effect on the tender amount.

No alterations, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bill of Quantities will be adhered to.

The quantities given in the Bill cannot be regarded as exact and are subject to remeasurement on site after completion of the service and adjustments will be made according to the unit rates given in the Bill.

The Bill of Quantities shall not be used for the ordering of material. The contractor shall ascertain the correct quantities before ordering.

The unit prices quoted in the Bill of Quantities must include for such small installation materials as are required for the complete installation in accordance with the Specification.

RATES SHOULD NOT INCLUDE VAT

All prices given in the Bill of Quantities are for supply, delivery, installation and commissioning.

All labour, supervision, transportation, tools and equipment must be allowed for in the rates

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES (NEW INSTALLTION)</u>			
	<u>BILL NO 1</u>			
	<u>FIXED CHARGE ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 2			
	VALUE RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
SECTION 1 SUMMARY - PRELIMINARIES				
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES (MAINTENANCE)			
	BILL NO 1			
	FIXED CHARGE ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 2			
	VALUE RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

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Item No	Description	Quantity	Rate	Amount
SECTION 2 MEASURED WORKS (NEW INSTALLATION) BILL NO 1				
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and Install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanised steel channel	m	30	
	b) Splice & sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
Carried Forward			R	R
Section No. 2				
Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm ² BCEW	m	175	
	b) 50 mm ² BCEW	m	150	
	c) 35 mm ² BCEW	m	125	
	d) 25 mm ² BCEW	m	75	
	e) 16 mm ² BCEW	m	50	
	f) 10 mm ² BCEW	m	20	
	g) 6 mm ² BCEW	m	20	
	h) 4 mm ² BCEW	m	15	
	i) 2.5 mm ² BCEW	m	15	
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No	10	
	b) 10-40A, 5kA single pole	No	25	
	c) 45-63A, 5kA triple pole, curve 1	No	10	
	d) 10-40A, 5kA triple pole	No	25	
	e) 45-63A, 5kA triple pole	No	10	
	f) 80-125A, 5kA triple pole	No	25	
	g) 150-200A, 10kA triple pole	No	50	
	h) 40-60A, 35kA triple pole	No	75	
	i) 80-125A, 25kA triple pole	No	80	
2.2.4	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No	15	
	b) 40-63A, 3 pole	No	15	
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No	15	
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No	175	
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175	
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150	
	d) Network point including 30m of cat 5 cable	No	200	
2.3	POWER POLES			
	a) 3500mm round power pole	No	15	
	b) Red 16 amp single socket on pole	No	50	
	c) Normal 16 amp single sockets on pole	No	50	
	d) Blank data box	No	50	
	e) Blank tel box	No	50	
	f) Red socket in roof with plug top and cable	No	15	
	g) Normal socket in roof with plug top and cable	No	15	
	h) 30 Amp Double Industrial pole Isolator	No	5	
	i) 60 Amp Triple pole Isolator including York box	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No	30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB				
	a) 24 way	No	20		
	b) 36 way	No	40		
	c) 48 way	No	60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES				
2.6.1	Circuit breaker blank covers	No	15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No	5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness a) Up to 75mm diameter holes b) 75mm to 100mm diameter holes c) 100mm to 150mm diameter holes	No No No	2 2 2		
2.8	LIGHTING INSTALLATION				
2.8.1	Re-lamp luminaire:				
	a) 36W Fluorescent	No	50		
	b) 36W Flameproof Fluorescent	No	50		
	c) 20W Fluorescent	No	50		
	d) 8W Fluorescent	No	50		
2.8.2	Replace diffuser or lens	No	20		
2.8.3	Supply and install new luminaire:				
	a) 36W Fluorescent	No	100		
	b) 36W Flameproof Fluorescent	No	150		
2.9	SERVER ROOM FLOOR				
	a) Remove existing floor covering	m ²	150		
	b) Prepare floor to receive new vinyl tiles	m ²	150		
	c) Supply and install anti-static vinyl tiles	m ²	150		
2.10	FIRE SUPPRESSION				
	a) Supply and Install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No	25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No	150		
	Carried Forward			R	R
	Section No. 2				
	Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0,8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Generator)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	Flat wrap 500mm diameter razor wire with and including 25 x 25 x 2 x 600mm Angle section Galvanised mild steel bracket at 2600mm centres			
2.13.11.15	Flat wrap 500mm diameter razor wire to top of walls	m 150		
2.13.11.16	Flat wrap 500mm diameter razor wire fixed to fencing	m 150		
2.13.11.17	25 x 25 x 2mm Angle section post x 600mm long	No 75		
2.13.11.18	Approved 500mm diameter flat wrap of galvanised razor barbed tape wire fixed vertically and secured to straining wires with and including 2.5mm diameter galvanised binding wire at 300mm centres	m 150		
Carried Forward to Final Summary			R	R
SECTION 2 - MEASURED WORKS (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	SECTION 2			
	MEASURED WORKS (MAINTENANCE)			
	BILL NO 1			
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanised steel channel	m	30	
	b) Splice & sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm ² BCEW	m	175	
	b) 50 mm ² BCEW	m	150	
	c) 35 mm ² BCEW	m	125	
	d) 25 mm ² BCEW	m	75	
	e) 16 mm ² BCEW	m	50	
	f) 10 mm ² BCEW	m	20	
	g) 6 mm ² BCEW	m	20	
	h) 4 mm ² BCEW	m	15	
	i) 2.5 mm ² BCEW	m	15	
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No	10	
	b) 10-40A, 5kA single pole	No	25	
	c) 45-63A, 5kA triple pole, curve 1	No	10	
	d) 10-40A, 5kA triple pole	No	25	
	e) 45-63A, 5kA triple pole	No	10	
	f) 80-125A, 5kA triple pole	No	25	
	g) 150-200A, 10kA triple pole	No	50	
	h) 40-60A, 35kA triple pole	No	75	
	i) 80-125A, 25kA triple pole	No	80	
2.2.4	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No	15	
	b) 40-63A, 3 pole	No	15	
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No	15	
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No	175	
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175	
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150	
	d) Network point including 30m of cat 5 cable	No	200	
2.3	POWER POLES			
	a) 3500mm round power pole	No	15	
	b) Red 16 amp single socket on pole	No	50	
	c) Normal 16 amp single sockets on pole	No	50	
	d) Blank data box	No	50	
	e) Blank tel box	No	50	
	f) Red socket in roof with plug top and cable	No	15	
	g) Normal socket in roof with plug top and cable	No	15	
	h) 30 Amp Double Industrial pole Isolator	No	5	
	i) 60 Amp Triple pole isolator including York box	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4 5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1.5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward Section No. 2 Bill No. 1		R	R

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0.8mm "IBR" A2150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Guard House/ Reception)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)	No		
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	Flat wrap 500mm diameter razor wire with and including 25 x 25 x 2 x 600mm Angle section Galvanised mild steel bracket at 2600mm centres				
2.13.11.15	Flat wrap 500mm diameter razor wire to top of walls	m	150		
2.13.11.16	Flat wrap 500mm diameter razor wire fixed to fencing	m	150		
2.13.11.17	25 x 25 x 2mm Angle section post x 600mm long	No	75		
2.13.11.18	Approved 500mm diameter flat wrap of galvanised razor barbed tape wire fixed vertically and secured to straining wires with and including 2.5mm diameter galvanised binding wire at 300mm centres	m	150		
Carried Forward to Final Summary				R	R
SECTION 2 - MEASURED WORKS (MAINTENANCE)					

Item No	Description	Quantity	Rate	Amount
	SECTION 3 GENERATORS (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements			
3.1	GENERATOR SETS			
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.1	Supply cost only	No	15	
3.1.2	Delivery, installation and commissioning	No	15	
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.3	Supply cost only	No	15	
3.1.4	Delivery, installation and commissioning	No	15	
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.5	Supply cost only	No	15	
3.1.6	Delivery, installation and commissioning	No	15	
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.7	Supply cost only	No	15	
3.1.8	Delivery, installation and commissioning	No	15	
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.9	Supply cost only	No	10	
3.1.10	Delivery, installation and commissioning	No	10	
	Carried Forward		R	R
	Section No. 3			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Supply cost only	No	10		
3.1.12	Delivery, installation and commissioning	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Supply cost only	No	10		
3.1.14	Delivery, installation and commissioning	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Supply cost only	No	10		
3.1.16	Delivery, installation and commissioning	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum			
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum			
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.22	Supply and install low fuel alarm and shut off system	No	15		
3.1.23	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	15		
3.1.24	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.25	Supply diesel fuel	Liter	10000		
3.1.26	Supply and install water separator in fuel line	No	15		
3.1.27	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Supply and install Fire Extinguisher for generator set, complete with wooden mounting block, hook, etc.	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary				R	R
SECTION 3 - GENERATORS (NEW INSTALLATION)					

Item No	Description		Quantity	Rate	Amount
	SECTION 3 GENERATORS (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements				
	3.1 GENERATOR SETS				
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.1	Delivery, installation and commissioning	No	15		
3.1.2	Routine servicing of generator	No	15		
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.3	Delivery, installation and commissioning	No	15		
3.1.4	Routine servicing of generator	No	15		
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.5	Delivery, installation and commissioning	No	15		
3.1.6	Routine servicing of generator	No	15		
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.7	Delivery, installation and commissioning	No	15		
3.1.8	Routine servicing of generator	No	15		
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.9	Delivery, installation and commissioning	No	10		
3.1.10	Routine servicing of generator	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete, with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Delivery, installation and commissioning	No	10		
3.1.12	Routine servicing of generator	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete, with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Delivery, installation and commissioning	No	10		
3.1.14	Routine servicing of generator	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete, with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Delivery, installation and commissioning	No	10		
3.1.16	Routine servicing of generator	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum	15		
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum	15		
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	Repair existing generator canopy	No	15		
3.1.22	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.23	Supply and install low fuel alarm and shut off system	No	15		
3.1.24	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	10		
3.1.25	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	5		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
3.1.26	Supply diesel fuel	Liter 10000		
3.1.27	Supply and install water separator in fuel line	No 15		
3.1.28	Supply and install padlocks	No 60		
3.2	LABELING			
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards · Robust steel Signage to be approved by the Engineer	No 15		
3.3	EARTHING AND BONDING			
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No 15		
3.4	FIRE PROTECTION			
3.4.1	Service Fire Extinguisher for generator set	No 15		
3.5	MAINTENANCE			
3.5.1	Call out fee	No 1		
Carried Forward to Final Summary			R	R
SECTION 3 - GENERATORS (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
SECTION 4 UNINTERRUPTED POWER SUPPLIES (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description. Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements.				
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Supply cost only	No	20	
4.1.2	Delivery, installation and commissioning	No	20	
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Supply cost only	No	20	
4.1.4	Delivery, installation and commissioning	No	20	
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Supply cost only	No	20	
4.1.6	Delivery, installation and commissioning	No	20	
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Supply cost only	No	20	
4.1.8	Delivery, installation and commissioning	No	20	
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Supply cost only	No	20	
4.1.10	Delivery, installation and commissioning	No	20	
	<u>Three Phase 50 kVA UPS as per technical and specific specifications</u>			
4.1.11	Supply cost only	No	20	
4.1.12	Delivery, installation and commissioning	No	20	
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Supply cost only	No	20	
4.1.14	Delivery, installation and commissioning	No	20	
Carried Forward			R	R
Section No. 4				
Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	Three Phase 100 kVA UPS as per technical and specific specifications			
4.1.15	Supply cost only	No 10		
4.1.16	Delivery, installation and commissioning	No 10		
4.2	SOLAR SYSTEM			
	Off grid Inverters			
4.2.1	<u>3KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25CVA-300 25C-2400W, 40C-2200, 65C-1700W -Peak power output; 6000W -Maximum efficiency; 94% -Maximum feed through current; 2x50A - 2 x AC inputs -DC input range - 24V			
4.2.2	<u>5KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-500VA, 25C-4000W, 40C-3700 65C-3000W -Peak power output; 10000W -Maximum efficiency; 95% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.3	<u>8KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-8000VA 25C-6500W, 40C-5500, 65C-3600W -Peak power output; 16000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.4	<u>10KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-10000VA 25C-8000W, 40C-6500, 65C-4500W -Peak power output; 20000W -Maximum efficiency; 96% -Maximum feed through current, 2x100A - 2 x AC inputs -DC input range - 48V			
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
4.2.5	<u>15KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-15000VA 25C-12000W, 40C-10000,65C-7000W -Peak power output; 25000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC Input range - 48V	No	15		
4.2.6	<u>MPPT SOLAR CHARGERS - supply, delivery and installation included</u>				
4.2.6.1	MPPT 250/70 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 70A -Nominal PV power; 48V - 4000W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.6.2	MPPT 250/85 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 85A -Nominal PV power; 48V - 4900W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.6.3	MPPT 250/100 with the following specs -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 100A -Nominal PV power; 48V - 5800W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.7	<u>LITHIUM ION BATTERY - supply, delivery and installation included</u>				
4.2.7.1	48/5kWh Li-ion battery -Total energy capacity; 5kWh -Energy, 80% DoD (kWh) - 4 -Energy, 90% DoD (kWh) - 4.5 -Current capacity; 100Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.2	48/10kWh Li-ion battery -Total energy capacity; 10kWh -Energy, 80% DoD (kWh) - 8 -Energy, 90% DoD (kWh) - 9 -Current capacity; 200Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.3	48/15kWh Li-ion battery -Total energy capacity; 15kWh -Energy, 80% DoD (kWh) - 12 -Energy, 90% DoD (kWh) - 13.5 -Current capacity; 300Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
	Carried Forward			R	R
	Section No. 4				
	Bill No. 1				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
4.2.7.4	48/20kWh Li-ion battery -Total energy capacity;20kWh -Energy, 80% DoD (kWh) - 16 -Energy, 90% DoD (kWh) - 18 -Current capacity; 400Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.5	48/30kWh Li-ion battery -Total energy capacity;30kWh -Energy, 80% DoD (kWh) - 24 -Energy, 90% DoD (kWh) - 27 -Current capacity; 600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.6	48/40kWh Li-ion battery -Total energy capacity;40kWh -Energy, 80% DoD (kWh) - 32 -Energy, 90% DoD (kWh) - 36 -Current capacity; 800Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.7	48/80kWh Li-ion battery -Total energy capacity;80kWh -Energy, 80% DoD (kWh) - 64 -Energy, 90% DoD (kWh) - 72 -Current capacity; 1600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.8	<u>SOLAR PANNELS - supply, delivery and installation included</u>				
4.2.8.1	330W Solar panel -Rated maximum power; 330W -Maximum efficiency; 19.3% Operating temp; -40 -80C	No	120		
4.2.8.2	390W Solar panel -Rated maximum power; 390W -Maximum efficiency; 19.6% Operating temp; -40 -85C	No	120		
4.2.9	<u>Roof mount structure for solar panels:</u>				
4.2.9.1	330W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No	480		
4.2.9.2	390W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No	480		
4.3	MAINTENANCE				
4.3.1	Call out fee	No	1		
	Carried Forward to Final Summary SECTION 4 - UPS (NEW INSTALLATION)			R	R

Item No	Description	Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Routine servicing of UPS	No	50	
4.1.2	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Routine servicing of UPS	No	50	
4.1.4	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Routine servicing of UPS	No	50	
4.1.6	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Routine servicing of UPS	No	50	
4.1.8	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Routine servicing of UPS	No	50	
4.1.10	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Routine servicing of UPS	No	50	
4.1.12	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Routine servicing of UPS	No	50	
4.1.14	Replacement battery - For replacing defective batteries of the same duty	Sum		
	Carried Forward		R	
	Section No. 4			R
	Bill No. 1			

[illegible]

Item No	Description	Quantity	Rate	Amount
SECTION 5 AIRCONDITIONING (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
5.1	AIR CONDITIONING			
	AC Ceiling Cassette Units			
	Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.			
	<u>18000 BTU Ceiling Cassette AC Unit</u>			
5.1.1	Supply cost only	No	60	
5.1.2	Delivery, installation and commissioning	No	60	
	<u>24000 BTU Ceiling Cassette AC Unit</u>			
5.1.3	Supply cost only	No	60	
5.1.4	Delivery, installation and commissioning	No	60	
	<u>36000 BTU Ceiling Cassette AC Unit</u>			
5.1.5	Supply cost only	No	45	
5.1.6	Delivery, installation and commissioning	No	45	
	<u>48000 BTU Ceiling Cassette AC Unit</u>			
5.1.7	Supply cost only	No	30	
5.1.8	Delivery, installation and commissioning	No	30	
	<u>9000 BTU Midwall Split AC Unit</u>			
5.1.9	Supply cost only	No	60	
5.1.10	Delivery, installation and commissioning	No	60	
	Carried Forward		R	R
	Section No. 5			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>12000 BTU Midwall Split AC Unit</u>				
5.1.11	Supply cost only	No	60		
5.1.12	Delivery, installation and commissioning	No	60		
	<u>18000 BTU Midwall Split AC Unit</u>				
5.1.13	Supply cost only	No	60		
5.1.14	Delivery, installation and commissioning	No	60		
	<u>24000 BTU Midwall Split AC Unit</u>				
5.1.15	Supply cost only	No	60		
5.1.16	Delivery, installation and commissioning	No	60		
	<u>36000 BTU Midwall Split AC Unit</u>				
5.1.17	Supply cost only	No	30		
5.1.18	Delivery, installation and commissioning	No	30		
	<u>48000 BTU Midwall Split AC Unit</u>				
5.1.19	Supply cost only	No	30		
5.1.20	Delivery, installation and commissioning	No	30		
5.2	FANS				
	Supply, deliver, install and commission extractor fans connected to luminaires complete with wiring, fixing materials, monthly maintenance for the guarantee/warranty period. Extractor fans to be installed in ceiling panels				
	300 l/s in line extractor fan				
5.2.1	Supply cost only	No	15		
5.2.2	Delivery, installation and commissioning	No	15		
5.3	Supply and install galvanised steel cages for the A/C compressors	No	60		
5.4	Additional pipe run including trunking and amourflex	m	150		
5.5	MAINTENANCE				
5.5.1	Call out fee	No	1		
	Carried Forward to Final Summary			R	R
	SECTION 5 - AIRCONDITIONING (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u>				
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No 5		
6.1.2	<u>75 kw PRESSURE PUMP</u> Supply, delivery and installation	No 5		
6.1.3	<u>75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No 5		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

Item No	Description		Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (NEW INSTALLATION)</u> <u>BILL NO 1</u>				
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description				
	<u>5000LT JOJO WATER TANK</u>				
6.1.1	Supply, delivery and installation	No	25		
	<u>.75 kw PRESSURE PUMP</u>				
6.1.2	Supply, delivery and installation	No	25		
	<u>.75 kw PRESSURE PUMP (VSD)</u>				
6.1.3	Supply, delivery and installation	No	25		
	<u>PLUMBING INSTALLATION</u>				
6.1.4	Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum			
				R	R
Carried Forward to Final Summary SECTION 6 - JOJO (NEW INSTALLATION)					

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 2</u>			
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No	5	
6.1.2	<u>75 kw PRESSURE PUMP</u> Supply, delivery and installation	No	5	
6.1.3	<u>75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No	5	
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

FINAL SUMMARY	AMOUNT
SECTION 1 - SUMMARY - PRELIMINARIES	R R
SECTION 1 - SUMMARY - PRELIMINARIES (MAINTENANCE)	R R
SECTION 2 - SUMMARY - MEASURED WORKS	R R
SECTION 2 - SUMMARY - MEASURED WORKS (MAINTENANCE)	R R
SECTION 3 - SUMMARY GENERATORS	R R
SECTION 3 - SUMMARY GENERATORS (MAINTENANCE)	R R
SECTION 4 - SUMMARY UPS	R R
SECTION 4 - SUMMARY UPS (MAINTENANCE)	R R
SECTION 5 - SUMMARY AIRCONDITIONING	R R
SECTION 5 - SUMMARY AIRCONDITIONING (MAINTENANCE)	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION (MAINTENANCE)	R R
SUB TOTAL	R
Add: 10% (Ten percent) Contingency (to be deducted if not utilised)	R
TOTAL	R
Add: VAT @ 15%	R
CARRIED TO QUOTATION SUMMARY	R



home affairs

Department:
Home Affairs
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HOME AFFAIRS

LIMPOPO PROVINCE

BILL OF QUANTITIES

NAME OF CONTRACTOR

BILL OF QUANTITIES

General Notes

Tenderers must complete the Bill of Quantities and detail the unit rate and total amount of each item.

Tenderers are advised to check their item extensions and total additions. Arithmetical errors occurring in the priced Bill of Quantities will be corrected and will have an effect on the tender amount.

No alterations, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bill of Quantities will be adhered to.

The quantities given in the Bill cannot be regarded as exact and are subject to remeasurement on site after completion of the service and adjustments will be made according to the unit rates given in the Bill.

The Bill of Quantities shall not be used for the ordering of material. The contractor shall ascertain the correct quantities before ordering.

The unit prices quoted in the Bill of Quantities must include for such small installation materials as are required for the complete installation in accordance with the Specification.

RATES SHOULD NOT INCLUDE VAT

All prices given in the Bill of Quantities are for supply, delivery, installation and commissioning.

All labour, supervision, transportation, tools and equipment must be allowed for in the rates

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES (NEW INSTALLTION)</u>			
	<u>BILL NO 1</u>			
	<u>FIXED CHARGE ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 2			
	VALUE RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 3			
	TIME RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
SECTION 1 SUMMARY - PRELIMINARIES				
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (NEW INSTALLATION)				

[illegible]

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 2			
	VALUE RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1 SUMMARY - PRELIMINARIES			
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
SECTION 2				
MEASURED WORKS (NEW INSTALLATION)				
BILL NO 1				
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanised steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
Carried Forward			R	R
Section No. 2				
Bill No. 1				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.2.2	Supply, install and terminate earth continuity conductor				
	a) 70 mm ² BCEW	m	175		
	b) 50 mm ² BCEW	m	150		
	c) 35 mm ² BCEW	m	125		
	d) 25 mm ² BCEW	m	75		
	e) 16 mm ² BCEW	m	50		
	f) 10 mm ² BCEW	m	20		
	g) 6 mm ² BCEW	m	20		
	h) 4 mm ² BCEW	m	15		
	i) 2.5 mm ² BCEW	m	15		
2.2.3	Supply and installation of circuit breakers (SABS approved):				
	a) 45-63A, 5kA single pole, curve 1	No	10		
	b) 10-40A, 5kA single pole	No	25		
	c) 45-63A, 5kA triple pole, curve 1	No	10		
	d) 10-40A, 5kA triple pole	No	25		
	e) 45-63A, 5kA triple pole	No	10		
	f) 80-125A, 5kA triple pole	No	25		
	g) 150-200A, 10kA triple pole	No	50		
	h) 40-60A, 35kA triple pole	No	75		
	i) 80-125A, 25kA triple pole	No	80		
2.2.4	Supply and install contactors (SABS)				
	a) 0-30A, 3 pole	No	15		
	b) 40-63A, 3 pole	No	15		
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):				
	a) 63A double pole	No	15		
2.2.6	Install socket outlet (SABS):				
	a) 16A, single SSO, WHITE	No	175		
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175		
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150		
	d) Network point including 30m of cat 5 cable	No	200		
2.3	POWER POLES				
	a) 3500mm round power pole	No	15		
	b) Red 16 amp single socket on pole	No	50		
	c) Normal 16 amp single sockets on pole	No	50		
	d) Blank data box	No	50		
	e) Blank tel box	No	50		
	f) Red socket in roof with plug top and cable	No	15		
	g) Normal socket in roof with plug top and cable	No	15		
	h) 30 Amp Double Industrial pole Isolator	No	5		
	i) 60 Amp Triple pole isolator including York box	No	5		
	Carried Forward			R	R
	Section No. 2				
	Bill No. 1				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No	30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB				
	a) 24 way	No	20		
	b) 36 way	No	40		
	c) 48 way	No	60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES				
2.6.1	Circuit breaker blank covers	No	15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No	5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness				
	a) Up to 75mm diameter holes	No	2		
	b) 75mm to 100mm diameter holes	No	2		
	c) 100mm to 150mm diameter holes	No	2		
2.8	LIGHTING INSTALLATION				
2.8.1	Re-lamp luminaire:				
	a) 36W Fluorescent	No	50		
	b) 36W Flameproof Fluorescent	No	50		
	c) 20W Fluorescent	No	50		
	d) 8W Fluorescent	No	50		
2.8.2	Replace diffuser or lens	No	20		
2.8.3	Supply and install new luminaire:				
	a) 36W Fluorescent	No	100		
	b) 36W Flameproof Fluorescent	No	150		
2.9	SERVER ROOM FLOOR				
	a) Remove existing floor covering	m ²	150		
	b) Prepare floor to receive new vinyl tiles	m ²	150		
	c) Supply and install anti-static vinyl tiles	m ²	150		
2.10	FIRE SUPPRESSION				
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No	25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No	150		
	Carried Forward			R	R
	Section No. 2				
	Bill No. 1				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.11	TELKOM EARTH BAR				
	a) Supply and install Telkom Earth Bar as per specification	No	1		
2.12	GENERAL ELECTRICAL				
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK				
	Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No	1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK				
	Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of:	No	1		
	a) Certificates of Compliance - original plus two certified copies each				
	b) Up-to-date single line diagrams + two copies each				
	c) Legend cards + two copies each				
	d) Reticulation drawings + two copies each				
	e) Labelling of circuit nodes and switches				
2.13	GENERAL BUILDING				
2.13.1	PAINTING				
	One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing)				
	a) On external walls	m ²	1,500		
	b) On internal walls	m ²	1,500		
	c) On ceilings	m ²	500		
	d) On drywalls	m ²	1,500		
2.13.2	ALTERATIONS				
2.13.2.1	Break down and remove brickwork, etc.				
	Half brick wall	m ²	350		
	One brick wall	m ²	350		
	Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ³	350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings (including making good plaster finish on both sides and into reveals (making good finishes elsewhere)				
	Timber door with steel frame size 813 x 2032mm high in half brick wall	No	20		
	Timber door with steel frame size 813 x 2032mm high in one brick wall	No	20		
	Glazed steel window size 1022 x 1254mm high from one brick wall	No	20		
	Glazed aluminium window size 1200 x 1200mm high from half brick wall	No	20		
2.13.2.3	Supply and Installation				
	Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m	200		
	Carried Forward			R	R
	Section No. 2				
	Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward Section No. 2 Bill No. 1		R	R

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0,8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Generator)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

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Item No	Description	Quantity	Rate	Amount
	SECTION 2			
	MEASURED WORKS (MAINTENANCE)			
	BILL NO 1			
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanised steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination, including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.2.2	Supply, install and terminate earth continuity conductor				
	a) 70 mm² BCEW	m	175		
	b) 50 mm² BCEW	m	150		
	c) 35 mm² BCEW	m	125		
	d) 25 mm² BCEW	m	75		
	e) 16 mm² BCEW	m	50		
	f) 10 mm² BCEW	m	20		
	g) 6 mm² BCEW	m	20		
	h) 4 mm² BCEW	m	15		
	i) 2.5 mm² BCEW	m	15		
2.2.3	Supply and installation of circuit breakers (SABS approved):				
	a) 45-63A, 5kA single pole, curve 1	No	10		
	b) 10-40A, 5kA single pole	No	25		
	c) 45-63A, 5kA triple pole, curve 1	No	10		
	d) 10-40A, 5kA triple pole	No	25		
	e) 45-63A, 5kA triple pole	No	10		
	f) 80-125A, 5kA triple pole	No	25		
	g) 150-200A, 10kA triple pole	No	50		
	h) 40-60A, 35kA triple pole	No	75		
	i) 80-125A, 25kA triple pole	No	80		
2.2.4	Supply and install contactors (SABS)				
	a) 0-30A, 3 pole	No	15		
	b) 40-63A, 3 pole	No	15		
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):				
	a) 63A double pole	No	15		
2.2.6	Install socket outlet (SABS):				
	a) 16A, single SSO, WHITE	No	175		
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175		
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150		
	d) Network point including 30m of cat 5 cable	No	200		
2.3	POWER POLES				
	a) 3500mm round power pole	No	15		
	b) Red 16 amp single socket on pole	No	50		
	c) Normal 16 amp single sockets on pole	No	50		
	d) Blank data box	No	50		
	e) Blank tel box	No	50		
	f) Red socket in roof with plug top and cable	No	15		
	g) Normal socket in roof with plug top and cable	No	15		
	h) 30 Amp Double Industrial pole isolator	No	5		
	i) 60 Amp Triple pole isolator including York box	No	5		
	Carried Forward			R	R
	Section No. 2				
	Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand S Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and Installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Rel 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0.8mm "18R" AZ150 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Guard House/ Reception)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)	No		
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	SECTION 3 GENERATORS (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements			
3.1	GENERATOR SETS			
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.1	Supply cost only	No	15	
3.1.2	Delivery, installation and commissioning	No	15	
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.3	Supply cost only	No	15	
3.1.4	Delivery, installation and commissioning	No	15	
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.5	Supply cost only	No	15	
3.1.6	Delivery, installation and commissioning	No	15	
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.7	Supply cost only	No	15	
3.1.8	Delivery, installation and commissioning	No	15	
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.9	Supply cost only	No	10	
3.1.10	Delivery, installation and commissioning	No	10	
	Carried Forward		R	R
	Section No. 3			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Supply cost only	No	10		
3.1.12	Delivery, installation and commissioning	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Supply cost only	No	10		
3.1.14	Delivery, installation and commissioning	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Supply cost only	No	10		
3.1.16	Delivery, installation and commissioning	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum			
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum			
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.22	Supply and install low fuel alarm and shut off system	No	15		
3.1.23	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	15		
3.1.24	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

[illegible]

Item No	Description		Quantity	Rate	Amount
	SECTION 3 GENERATORS (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements				
	3.1 GENERATOR SETS				
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.1	Delivery, installation and commissioning	No	15		
3.1.2	Routine servicing of generator	No	15		
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.3	Delivery, installation and commissioning	No	15		
3.1.4	Routine servicing of generator	No	15		
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.5	Delivery, installation and commissioning	No	15		
3.1.6	Routine servicing of generator	No	15		
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.7	Delivery, installation and commissioning	No	15		
3.1.8	Routine servicing of generator	No	15		
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.9	Delivery, installation and commissioning	No	10		
3.1.10	Routine servicing of generator	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Delivery, installation and commissioning	No	10		
3.1.12	Routine servicing of generator	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Delivery, installation and commissioning	No	10		
3.1.14	Routine servicing of generator	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Delivery, installation and commissioning	No	10		
3.1.16	Routine servicing of generator	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum	15		
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum	15		
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	Repair existing generator canopy	No	15		
3.1.22	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.23	Supply and install low fuel alarm and shut off system	No	15		
3.1.24	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	10		
3.1.25	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	5		
	Carried Forward			R	R
	Section No 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.26	Supply diesel fuel	Liter	10000		
3.1.27	Supply and install water separator in fuel line	No	15		
3.1.28	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Service Fire Extinguisher for generator set	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary SECTION 3 - GENERATORS (MAINTENANCE)				R	R

Item No	Description	Quantity	Rate	Amount
SECTION 4 UNINTERRUPTED POWER SUPPLIES (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
4.1	UPS			
<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>				
4.1.1	Supply cost only	No	20	
4.1.2	Delivery, installation and commissioning	No	20	
<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>				
4.1.3	Supply cost only	No	20	
4.1.4	Delivery, installation and commissioning	No	20	
<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>				
4.1.5	Supply cost only	No	20	
4.1.6	Delivery, installation and commissioning	No	20	
<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>				
4.1.7	Supply cost only	No	20	
4.1.8	Delivery, installation and commissioning	No	20	
<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>				
4.1.9	Supply cost only	No	20	
4.1.10	Delivery, installation and commissioning	No	20	
<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>				
4.1.11	Supply cost only	No	20	
4.1.12	Delivery, installation and commissioning	No	20	
<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>				
4.1.13	Supply cost only	No	20	
4.1.14	Delivery, installation and commissioning	No	20	
Carried Forward			R	R
Section No. 4				
Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	Three Phase 100 kVA UPS as per technical and specific specifications			
4.1.15	Supply cost only	No 10		
4.1.16	Delivery, installation and commissioning	No 10		
4.2	SOLAR SYSTEM			
	Off grid inverters			
4.2.1	<u>3KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25CVA-300 25C-2400W, 40C-2200, 65C-1700W -Peak power output; 6000W -Maximum efficiency; 94% -Maximum feed through current; 2x50A - 2 x AC inputs -DC input range - 24V	No 15		
4.2.2	<u>5KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-500VA, 25C-4000W, 40C-3700 65C-3000W -Peak power output; 10000W -Maximum efficiency; 95% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No 15		
4.2.3	<u>8KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-8000VA 25C-6500W, 40C-5500, 65C-3600W -Peak power output; 16000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No 15		
4.2.4	<u>10KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-10000VA 25C-8000W, 40C-6500, 65C-4500W -Peak power output; 20000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No 15		
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
4.2.5	<u>15kW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range: 9.5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-15000VA 25C-12000W, 40C-10000,65C-7000W -Peak power output; 25000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No	15		
4.2.6	<u>MPPT SOLAR CHARGERS - supply, delivery and installation included</u>				
4.2.6.1	MPPT 250/70 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 70A -Nominal PV power; 48V - 4000W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.6.2	MPPT 250/85 with the following specs: -Battery voltage, 12/24/36/48 Auto select -Rated charge current; 85A -Nominal PV power; 48V - 4900W -Maximum PV open circuit Voltage, 250V -Maximum efficiency; 99% -Self consumption, Less than 20mA @48V	No	50		
4.2.6.3	MPPT 250/100 with the following specs -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 100A -Nominal PV power; 48V - 5800W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.7	<u>LITHIUM ION BATTERY - supply, delivery and installation included</u>				
4.2.7.1	48/5kWh Li-ion battery -Total energy capacity; 5kWh -Energy, 80% DoD (kWh) - 4 -Energy, 90% DoD (kWh) - 4.5 -Current capacity; 100Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.2	48/10kWh Li-ion battery -Total energy capacity; 10kWh -Energy, 80% DoD (kWh) - 8 -Energy, 90% DoD (kWh) - 9 -Current capacity; 200Ah -Warranty, 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.3	48/15kWh Li-ion battery -Total energy capacity;15kWh -Energy, 80% DoD (kWh) - 12 -Energy, 90% DoD (kWh) - 13.5 -Current capacity; 300Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
	Carried Forward			R	R
	Section No. 4				
	Bill No. 1				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
4.2.7.4	48/20kWh Li-ion battery -Total energy capacity;20kWh -Energy, 80% DoD (kWh) - 16 -Energy, 90% DoD (kWh) - 18 -Current capacity; 400Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.5	48/30kWh Li-ion battery -Total energy capacity;30kWh -Energy, 80% DoD (kWh) - 24 -Energy, 90% DoD (kWh) - 27 -Current capacity; 600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.6	48/40kWh Li-ion battery -Total energy capacity;40kWh -Energy, 80% DoD (kWh) - 32 -Energy, 90% DoD (kWh) - 36 -Current capacity; 800Ah -Warranty, 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.7	48/80kWh Li-ion battery -Total energy capacity;80kWh -Energy, 80% DoD (kWh) - 64 -Energy, 90% DoD (kWh) - 72 -Current capacity; 1600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.8	<u>SOLAR PANNELLS - supply, delivery and installation included</u>				
4.2.8.1	330W Solar panel -Rated maximum power; 330W -Maximum efficiency; 19.3% Operating temp; -40 -80C	No	120		
4.2.8.2	390W Solar panel -Rated maximum power; 390W -Maximum efficiency; 19.6% Operating temp; -40 -85C	No	120		
4.2.9	<u>Roof mount structure for solar panels;</u>				
4.2.9.1	330W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No	480		
4.2.9.2	390W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No	480		
4.3	MAINTENANCE				
4.3.1	Call out fee	No	1		
	Carried Forward to Final Summary			R	R
	SECTION 4 - UPS (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements 4.1 UPS <u>Single Phase 10 kVA UPS as per technical and specific specifications</u> 4.1.1 Routine servicing of UPS No 50 4.1.2 Replacement battery - For replacing defective batteries of the same duty Sum <u>Single Phase 20 kVA UPS as per technical and specific specifications</u> 4.1.3 Routine servicing of UPS No 50 4.1.4 Replacement battery - For replacing defective batteries of the same duty Sum <u>Three Phase 10 kVA UPS as per technical and specific specifications</u> 4.1.5 Routine servicing of UPS No 50 4.1.6 Replacement battery - For replacing defective batteries of the same duty Sum <u>Three Phase 20 kVA UPS as per technical and specific specifications</u> 4.1.7 Routine servicing of UPS No 50 4.1.8 Replacement battery - For replacing defective batteries of the same duty Sum <u>Three Phase 40 kVA UPS as per technical and specific specifications</u> 4.1.9 Routine servicing of UPS No 50 4.1.10 Replacement battery - For replacing defective batteries of the same duty Sum <u>Three Phase 60 kVA UPS as per technical and specific specifications</u> 4.1.11 Routine servicing of UPS No 50 4.1.12 Replacement battery - For replacing defective batteries of the same duty Sum <u>Three Phase 80 kVA UPS as per technical and specific specifications</u> 4.1.13 Routine servicing of UPS No 50 4.1.14 Replacement battery - For replacing defective batteries of the same duty Sum Carried Forward R Section No. 4 R Bill No. 1			

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Item No	Description	Quantity	Rate	Amount
SECTION 5 AIRCONDITIONING (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
5.1	AIR CONDITIONING			
	AC Ceiling Cassette Units			
	Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.			
	<u>18000 BTU Ceiling Cassette AC Unit</u>			
5.1.1	Supply cost only	No	60	
5.1.2	Delivery, installation and commissioning	No	60	
	<u>24000 BTU Ceiling Cassette AC Unit</u>			
5.1.3	Supply cost only	No	60	
5.1.4	Delivery, installation and commissioning	No	60	
	<u>36000 BTU Ceiling Cassette AC Unit</u>			
5.1.5	Supply cost only	No	45	
5.1.6	Delivery, installation and commissioning	No	45	
	<u>48000 BTU Ceiling Cassette AC Unit</u>			
5.1.7	Supply cost only	No	30	
5.1.8	Delivery, installation and commissioning	No	30	
	<u>9000 BTU Midwall Split AC Unit</u>			
5.1.9	Supply cost only	No	60	
5.1.10	Delivery, installation and commissioning	No	60	
	Carried Forward		R	R
	Section No. 5			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>12000 BTU Midwall Split AC Unit</u>				
5.1.11	Supply cost only	No	60		
5.1.12	Delivery, installation and commissioning	No	60		
	<u>18000 BTU Midwall Split AC Unit</u>				
5.1.13	Supply cost only	No	60		
5.1.14	Delivery, installation and commissioning	No	60		
	<u>24000 BTU Midwall Split AC Unit</u>				
5.1.15	Supply cost only	No	60		
5.1.16	Delivery, installation and commissioning	No	60		
	<u>36000 BTU Midwall Split AC Unit</u>				
5.1.17	Supply cost only	No	30		
5.1.18	Delivery, installation and commissioning	No	30		
	<u>48000 BTU Midwall Split AC Unit</u>				
5.1.19	Supply cost only	No	30		
5.1.20	Delivery, installation and commissioning	No	30		
5.2	FANS				
	Supply, deliver, install and commission extractor fans connected to luminaires complete with wiring, fixing materials, monthly maintenance for the guarantee/warranty period. Extractor fans to be installed in ceiling panels				
	300 l/s in line extractor fan				
5.2.1	Supply cost only	No	15		
5.2.2	Delivery, installation and commissioning	No	15		
5.3	Supply and install galvanised steel cages for the A/C compressors	No	60		
5.4	Additional pipe run including trunking and amourflex	m	150		
5.5	MAINTENANCE				
5.5.1	Call out fee	No	1		
	Carried Forward to Final Summary			IR	R
	SECTION 5 - AIRCONDITIONING (NEW INSTALLATION)				

Item No	Description		Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u>				
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description				
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No	5		
6.1.2	<u>.75 kw PRESSURE PUMP</u> Supply, delivery and installation	No	5		
6.1.3	<u>.75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No	5		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum			
				R	R

Item No	Description		Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (NEW INSTALLATION)</u> <u>BILL NO 1</u>				
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description				
6.1.1	<u>5000LT JOJO WATER TANK</u> Supply, delivery and installation	No	25		
6.1.2	<u>.75 kw PRESSURE PUMP</u> Supply, delivery and installation	No	25		
6.1.3	<u>.75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No	25		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing Installation for the connection of JOJO tank, pressure pump and building related repairs	sum			
Carried Forward To Final Summary				R	R
SECTION 6 - JOJO (NEW INSTALLATION)					

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u> 6.1 <u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No 5		
6.1.2	<u>75 kw PRESSURE PUMP</u> Supply, delivery and installation	No 5		
6.1.3	<u>75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No 5		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

FINAL SUMMARY	AMOUNT
SECTION 1 - SUMMARY - PRELIMINARIES	R R
SECTION 1 - SUMMARY - PRELIMINARIES (MAINTENANCE)	R R
SECTION 2 - SUMMARY - MEASURED WORKS	R R
SECTION 2 - SUMMARY - MEASURED WORKS (MAINTENANCE)	R R
SECTION 3 - SUMMARY GENERATORS	R R
SECTION 3 - SUMMARY GENERATORS (MAINTENANCE)	R R
SECTION 4 - SUMMARY UPS	R R
SECTION 4 - SUMMARY UPS (MAINTENANCE)	R R
SECTION 5 - SUMMARY AIRCONDITIONING	R R
SECTION 5 - SUMMARY AIRCONDITIONING (MAINTENANCE)	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION (MAINTENANCE)	R R
SUB TOTAL	R
Add: 10% (Ten percent) Contingency (to be deducted if not utilised)	R
TOTAL	R
Add: VAT @ 15%	R
CARRIED TO QUOTATION SUMMARY	R



home affairs

Department:
Home Affairs
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HOME AFFAIRS

MPUMALANGA PROVINCE

BILL OF QUANTITIES

NAME OF CONTRACTOR

BILL OF QUANTITIES

General Notes

Tenderers must complete the Bill of Quantities and detail the unit rate and total amount of each item.

Tenderers are advised to check their item extensions and total additions. Arithmetical errors occurring in the priced Bill of Quantities will be corrected and will have an effect on the tender amount.

No alterations, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bill of Quantities will be adhered to.

The quantities given in the Bill cannot be regarded as exact and are subject to remeasurement on site after completion of the service and adjustments will be made according to the unit rates given in the Bill.

The Bill of Quantities shall not be used for the ordering of material. The contractor shall ascertain the correct quantities before ordering.

The unit prices quoted in the Bill of Quantities must include for such small installation materials as are required for the complete installation in accordance with the Specification.

RATES SHOULD NOT INCLUDE VAT

All prices given in the Bill of Quantities are for supply, delivery, installation and commissioning.

All labour, supervision, transportation, tools and equipment must be allowed for in the rates

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES (NEW INSTALLTION)			
	BILL NO 1			
	FIXED CHARGE ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 2</u>			
	<u>VALUE RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
SECTION 1 SUMMARY - PRELIMINARIES				
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
SECTION 1 PRELIMINARIES (MAINTENANCE) BILL NO 1 FIXED CHARGE ITEMS				
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details	Item		
16	Remove site establishment on completion	Item		
Carried Forward to Summary of Section No. 1			R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 2</u>			
	<u>VALUE RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1 SUMMARY - PRELIMINARIES			
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
SECTION 2 MEASURED WORKS (NEW INSTALLATION) BILL NO 1				
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanized steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
Carried Forward			R	R
Section No. 2				
Bill No. 1				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.2.2	Supply, install and terminate earth continuity conductor				
	a) 70 mm ² BCEW	m	175		
	b) 50 mm ² BCEW	m	150		
	c) 35 mm ² BCEW	m	125		
	d) 25 mm ² BCEW	m	75		
	e) 16 mm ² BCEW	m	50		
	f) 10 mm ² BCEW	m	20		
	g) 6 mm ² BCEW	m	20		
	h) 4 mm ² BCEW	m	15		
	i) 2.5 mm ² BCEW	m	15		
2.2.3	Supply and installation of circuit breakers (SABS approved):				
	a) 45-63A, 5kA single pole, curve 1	No	10		
	b) 10-40A, 5kA single pole	No	25		
	c) 45-63A, 5kA triple pole, curve 1	No	10		
	d) 10-40A, 5kA triple pole	No	25		
	e) 45-63A, 5kA triple pole	No	10		
	f) 80-125A, 5kA triple pole	No	25		
	g) 150-200A, 10kA triple pole	No	50		
	h) 40-60A, 35kA triple pole	No	75		
	i) 80-125A, 25kA triple pole	No	80		
2.2.4	Supply and install contactors (SABS)				
	a) 0-30A, 3 pole	No	15		
	b) 40-63A, 3 pole	No	15		
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):				
	a) 63A double pole	No	15		
2.2.6	Install socket outlet (SABS):				
	a) 16A, single SSO, WHITE	No	175		
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175		
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150		
	d) Network point including 30m of cat 5 cable	No	200		
2.3	POWER POLES				
	a) 3500mm round power pole	No	15		
	b) Red 16 amp single socket on pole	No	50		
	c) Normal 16 amp single sockets on pole	No	50		
	d) Blank data box	No	50		
	e) Blank tel box	No	50		
	f) Red socket in roof with plug top and cable	No	15		
	g) Normal socket in roof with plug top and cable	No	15		
	h) 30 Amp Double Industrial pole Isolator	No	5		
	i) 60 Amp Triple pole isolator including York box	No	5		
	Carried Forward			R	R
	Section No. 2				
	Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand S Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m2 350 m2 350 m3 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0,8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Generator)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	Flat wrap 500mm diameter razor wire with and including 25 x 25 x 2 x 600mm Angle section Galvanised mild steel bracket at 2600mm centres			
2.13.11.15	Flat wrap 500mm diameter razor wire to top of walls	m 150		
2.13.11.16	Flat wrap 500mm diameter razor wire fixed to fencing	m 150		
2.13.11.17	25 x 25 x 2mm Angle section post x 600mm long	No 75		
2.13.11.18	Approved 500mm diameter flat wrap of galvanised razor barbed tape wire fixed vertically and secured to straining wires with and including 2.5mm diameter galvanised binding wire at 300mm centres	m 150		
Carried Forward to Final Summary				R
SECTION 2 - MEASURED WORKS (NEW INSTALLATION)				R

Item No	Description	Quantity	Rate	Amount
	SECTION 2			
	MEASURED WORKS (MAINTENANCE)			
	BILL NO 1			
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanised steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination, including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	Carried Forward		R	R
	Section No 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm ² BCEW	m 175		
	b) 50 mm ² BCEW	m 150		
	c) 35 mm ² BCEW	m 125		
	d) 25 mm ² BCEW	m 75		
	e) 16 mm ² BCEW	m 50		
	f) 10 mm ² BCEW	m 20		
	g) 6 mm ² BCEW	m 20		
	h) 4 mm ² BCEW	m 15		
	i) 2.5 mm ² BCEW	m 15		
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No 10		
	b) 10-40A, 5kA single pole	No 25		
	c) 45-63A, 5kA triple pole, curve 1	No 10		
	d) 10-40A, 5kA triple pole	No 25		
	e) 45-63A, 5kA triple pole	No 10		
	f) 80-125A, 5kA triple pole	No 25		
	g) 150-200A, 10kA triple pole	No 50		
	h) 40-60A, 35kA triple pole	No 75		
	i) 80-125A, 25kA triple pole	No 80		
2.2.4	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No 15		
	b) 40-63A, 3 pole	No 15		
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No 15		
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No 175		
	b) 16A, single SSO Dedicated outlet, shaved, RED	No 175		
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No 150		
	d) Network point including 30m of cat 5 cable	No 200		
2.3	POWER POLES			
	a) 3500mm round power pole	No 15		
	b) Red 16 amp single socket on pole	No 50		
	c) Normal 16 amp single sockets on pole	No 50		
	d) Blank data box	No 50		
	e) Blank tel box	No 50		
	f) Red socket in roof with plug top and cable	No 15		
	g) Normal socket in roof with plug top and cable	No 15		
	h) 30 Amp Double Industrial pole Isolator	No 5		
	i) 60 Amp Triple pole Isolator including York box	No 5		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m² 150		
	b) Prepare floor to receive new vinyl tiles	m² 150		
	c) Supply and install anti-static vinyl tiles	m² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 50 m2 50		
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No 10 No 10 No 10 No 10 No 10		
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 60 m2 60		
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2 15		
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m 15		
2.13.4	FLOORING			
2.13.4.1	Supply and Installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 150 m2 150		
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No 15		
	Carried Forward		R	R
	Section No. 2 Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0,8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) Inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Guard House/ Reception)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2,4m high including locking recess mechanism at 3,382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1,2mm clearvu fence	m	150	
2.13.11.2	1,8mm clearvu fence	m	150	
2.13.11.3	2,4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)	No		
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

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Item No	Description	Quantity	Rate	Amount
	SECTION 3 GENERATORS (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements			
3.1	GENERATOR SETS			
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.1	Supply cost only	No	15	
3.1.2	Delivery, installation and commissioning	No	15	
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.3	Supply cost only	No	15	
3.1.4	Delivery, installation and commissioning	No	15	
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.5	Supply cost only	No	15	
3.1.6	Delivery, installation and commissioning	No	15	
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.7	Supply cost only	No	15	
3.1.8	Delivery, installation and commissioning	No	15	
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.9	Supply cost only	No	10	
3.1.10	Delivery, installation and commissioning	No	10	
	Carried Forward		R	R
	Section No. 3			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Supply cost only	No	10		
3.1.12	Delivery, installation and commissioning	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Supply cost only	No	10		
3.1.14	Delivery, installation and commissioning	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Supply cost only	No	10		
3.1.16	Delivery, installation and commissioning	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum			
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum			
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.22	Supply and install low fuel alarm and shut off system	No	15		
3.1.23	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	15		
3.1.24	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.25	Supply diesel fuel	Liter	10000		
3.1.26	Supply and install water separator in fuel line	No	15		
3.1.27	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Supply and install Fire Extinguisher for generator set, complete with wooden mounting block, hook, etc.	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary				R	R
SECTION 3 - GENERATORS (NEW INSTALLATION)					

Item No	Description		Quantity	Rate	Amount
	SECTION 3 GENERATORS (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements				
3.1	GENERATOR SETS				
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.1	Delivery, installation and commissioning	No	15		
3.1.2	Routine servicing of generator	No	15		
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.3	Delivery, installation and commissioning	No	15		
3.1.4	Routine servicing of generator	No	15		
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.5	Delivery, installation and commissioning	No	15		
3.1.6	Routine servicing of generator	No	15		
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.7	Delivery, installation and commissioning	No	15		
3.1.8	Routine servicing of generator	No	15		
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.9	Delivery, installation and commissioning	No	10		
3.1.10	Routine servicing of generator	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Delivery, installation and commissioning	No	10		
3.1.12	Routine servicing of generator	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Delivery, installation and commissioning	No	10		
3.1.14	Routine servicing of generator	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Delivery, installation and commissioning	No	10		
3.1.16	Routine servicing of generator	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum	15		
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum	15		
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	Repair existing generator canopy	No	15		
3.1.22	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.23	Supply and install low fuel alarm and shut off system	No	15		
3.1.24	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	10		
3.1.25	Supply and install wall mounted extractor fan (XPELAIR WGx9) or similar) complete with accessories, isolator and cabling.	No	5		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
3.1.26	Supply diesel fuel	Liter 10000		
3.1.27	Supply and install water separator in fuel line	No 15		
3.1.28	Supply and install padlocks	No 60		
3.2	LABELING			
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No 15		
3.3	EARTHING AND BONDING			
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No 15		
3.4	FIRE PROTECTION			
3.4.1	Service Fire Extinguisher for generator set	No 15		
3.5	MAINTENANCE			
3.5.1	Call out fee	No 1		
Carried Forward to Final Summary			R	R
SECTION 3 - GENERATORS (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Supply cost only	No	20	
4.1.2	Delivery, installation and commissioning	No	20	
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Supply cost only	No	20	
4.1.4	Delivery, installation and commissioning	No	20	
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Supply cost only	No	20	
4.1.6	Delivery, installation and commissioning	No	20	
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Supply cost only	No	20	
4.1.8	Delivery, installation and commissioning	No	20	
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Supply cost only	No	20	
4.1.10	Delivery, installation and commissioning	No	20	
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Supply cost only	No	20	
4.1.12	Delivery, installation and commissioning	No	20	
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Supply cost only	No	20	
4.1.14	Delivery, installation and commissioning	No	20	
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	<u>Three Phase 100 kVA UPS as per technical and specific specifications</u>			
4.1.15	Supply cost only	No 10		
4.1.16	Delivery, installation and commissioning	No 10		
4.2	SOLAR SYSTEM			
	Off grid inverters			
4.2.1	<u>3KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25CVA-300 25C-2400W, 40C-2200, 65C-1700W -Peak power output; 6000W -Maximum efficiency; 94% -Maximum feed through current; 2x50A - 2 x AC inputs -DC input range - 24V			
4.2.2	<u>5KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-500VA, 25C-4000W, 40C-3700, 65C-3000W -Peak power output; 10000W -Maximum efficiency; 95% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.3	<u>8KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-800VA 25C-6500W, 40C-5500, 65C-3600W -Peak power output; 16000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC Inputs -DC input range - 48V			
4.2.4	<u>10KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-1000VA 25C-8000W, 40C-6500, 65C-4500W -Peak power output; 20000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC Inputs -DC input range - 48V			
	Carried Forward		R	R
	Section No 4			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
4.2.5	<u>15KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9.5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-15000VA 25C-12000W, 40C-10000,65C-7000W -Peak power output; 25000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No	15		
4.2.6	<u>MPPT SOLAR CHARGERS - supply, delivery and installation included</u>				
4.2.6.1	MPPT 250/70 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 70A -Nominal PV power; 48V - 4000W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.6.2	MPPT 250/85 with the following specs -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 85A -Nominal PV power; 48V - 4900W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.6.3	MPPT 250/100 with the following specs -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 100A -Nominal PV power; 48V - 5800W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.7	<u>LITHIUM ION BATTERY - supply, delivery and installation included</u>				
4.2.7.1	48/5kWh Li-ion battery -Total energy capacity; 5kWh -Energy; 80% DoD (kWh) - 4 -Energy; 90% DoD (kWh) - 4.5 -Current capacity; 100Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.2	48/10kWh Li-ion battery -Total energy capacity; 10kWh -Energy; 80% DoD (kWh) - 8 -Energy; 90% DoD (kWh) - 9 -Current capacity; 200Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.3	48/15kWh Li-ion battery -Total energy capacity; 15kWh -Energy; 80% DoD (kWh) - 12 -Energy; 90% DoD (kWh) - 13.5 -Current capacity; 300Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
	Carried Forward			R	R
	Section No. 4				
	Bill No 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
4.2.7.4	48/20kWh Li-ion battery -Total energy capacity;20kWh -Energy, 80% DoD (kWh) - 16 -Energy, 90% DoD (kWh) - 18 -Current capacity; 400Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.5	48/30kWh Li-ion battery -Total energy capacity;30kWh -Energy, 80% DoD (kWh) - 24 -Energy, 90% DoD (kWh) - 27 -Current capacity; 600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.6	48/40kWh Li-ion battery -Total energy capacity;40kWh -Energy, 80% DoD (kWh) - 32 -Energy, 90% DoD (kWh) - 36 -Current capacity; 800Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.7	48/80kWh Li-ion battery -Total energy capacity;80kWh -Energy, 80% DoD (kWh) - 64 -Energy, 90% DoD (kWh) - 72 -Current capacity; 1600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.8	<u>SOLAR PANNELS - supply, delivery and installation included</u>			
4.2.8.1	330W Solar panel -Rated maximum power; 330W -Maximum efficiency; 19.3% Operating temp; -40 -80C	No 120		
4.2.8.2	390W Solar panel -Rated maximum power; 390W -Maximum efficiency; 19.6% Operating temp; -40 -85C	No 120		
4.2.9	<u>Roof mount structure for solar panels;</u>			
4.2.9.1	330W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No 480		
4.2.9.2	390W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No 480		
4.3	MAINTENANCE			
4.3.1	Call out fee	No 1		
	Carried Forward to Final Summary SECTION 4 - UPS (NEW INSTALLATION)		R	R

Item No	Description	Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Routine servicing of UPS	No	50	
4.1.2	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Routine servicing of UPS	No	50	
4.1.4	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Routine servicing of UPS	No	50	
4.1.6	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Routine servicing of UPS	No	50	
4.1.8	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Routine servicing of UPS	No	50	
4.1.10	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Routine servicing of UPS	No	50	
4.1.12	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Routine servicing of UPS	No	50	
4.1.14	Replacement battery - For replacing defective batteries of the same duty	Sum		
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 100 KVA UPS as per technical and specific specifications</u>				
4.1.15	Routine servicing of UPS	No	50		
4.1.16	Replacement battery - For replacing defective batteries of the same duty	Sum			
4.2	MAINTENANCE				
4.2.1	Call out fee	No	1		
				R	R
Carried Forward to Final Summary					
SECTION 4 - UPS (MAINTENANCE)					

Item No	Description	Quantity	Rate	Amount
	SECTION 5 AIRCONDITIONING (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
5.1	AIR CONDITIONING			
	AC Ceiling Cassette Units			
	Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.			
	<u>18000 BTU Ceiling Cassette AC Unit</u>			
5.1.1	Supply cost only	No	60	
5.1.2	Delivery, installation and commissioning	No	60	
	<u>24000 BTU Ceiling Cassette AC Unit</u>			
5.1.3	Supply cost only	No	60	
5.1.4	Delivery, installation and commissioning	No	60	
	<u>36000 BTU Ceiling Cassette AC Unit</u>			
5.1.5	Supply cost only	No	45	
5.1.6	Delivery, installation and commissioning	No	45	
	<u>48000 BTU Ceiling Cassette AC Unit</u>			
5.1.7	Supply cost only	No	30	
5.1.8	Delivery, installation and commissioning	No	30	
	<u>9000 BTU Midwall Split AC Unit</u>			
5.1.9	Supply cost only	No	60	
5.1.10	Delivery, installation and commissioning	No	60	
	Carried Forward		R	R
	Section No. 5			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>12000 BTU Midwall Split AC Unit</u>				
5.1.11	Supply cost only	No	60		
5.1.12	Delivery, installation and commissioning	No	60		
	<u>18000 BTU Midwall Split AC Unit</u>				
5.1.13	Supply cost only	No	60		
5.1.14	Delivery, installation and commissioning	No	60		
	<u>24000 BTU Midwall Split AC Unit</u>				
5.1.15	Supply cost only	No	60		
5.1.16	Delivery, installation and commissioning	No	60		
	<u>36000 BTU Midwall Split AC Unit</u>				
5.1.17	Supply cost only	No	30		
5.1.18	Delivery, installation and commissioning	No	30		
	<u>48000 BTU Midwall Split AC Unit</u>				
5.1.19	Supply cost only	No	30		
5.1.20	Delivery, installation and commissioning	No	30		
5.2	FANS				
	Supply, deliver, install and commission extractor fans connected to luminaires complete with wiring, fixing materials, monthly maintenance for the guarantee/warranty period. Extractor fans to be installed in ceiling panels				
	300 l/s in line extractor fan				
5.2.1	Supply cost only	No	15		
5.2.2	Delivery, installation and commissioning	No	15		
5.3	Supply and install galvanised steel cages for the A/C compressors	No	60		
5.4	Additional pipe run including trunking and amourflex	m	150		
5.5	MAINTENANCE				
5.5.1	Call out fee	No	1		
	Carried Forward to Final Summary			R	R
	SECTION 5 - AIRCONDITIONING (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u> 6.1 <u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No 5		
6.1.2	<u>.75 kw PRESSURE PUMP</u> Supply, delivery and installation	No 5		
6.1.3	<u>.75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No 5		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (NEW INSTALLATION)</u> <u>BILL NO 1</u> 6.1 <u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description <u>5000LT JOJO WATER TANK</u> 6.1.1 Supply, delivery and installation No 25 <u>.75 kw PRESSURE PUMP</u> 6.1.2 Supply, delivery and installation No 25 <u>.75 kw PRESSURE PUMP (VSD)</u> 6.1.3 Supply, delivery and installation No 25 <u>PLUMBING INSTALLATION</u> 6.1.4 Plumbing Installation for the connection of JOJO tank, pressure pump and building related repairs sum			
	Carried Forward to Final Summary		R	R
	SECTION 6 - JOJO (NEW INSTALLATION)			

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u>			
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc , everything necessary or the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No 5		
6.1.2	<u>75 kw PRESSURE PUMP</u> Supply, delivery and installation	No 5		
6.1.3	<u>75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No 5		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

FINAL SUMMARY	AMOUNT
SECTION 1 - SUMMARY - PRELIMINARIES	R R
SECTION 1 - SUMMARY - PRELIMINARIES (MAINTENANCE)	R R
SECTION 2 - SUMMARY - MEASURED WORKS	R R
SECTION 2 - SUMMARY - MEASURED WORKS (MAINTENANCE)	R R
SECTION 3 - SUMMARY GENERATORS	R R
SECTION 3 - SUMMARY GENERATORS (MAINTENANCE)	R R
SECTION 4 - SUMMARY UPS	R R
SECTION 4 - SUMMARY UPS (MAINTENANCE)	R R
SECTION 5 - SUMMARY AIRCONDITIONING	R R
SECTION 5 - SUMMARY AIRCONDITIONING (MAINTENANCE)	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION (MAINTENANCE)	R R
SUB TOTAL	R
Add: 10% (Ten percent) Contingency (to be deducted if not utilised)	R
TOTAL	R
Add: VAT @ 15%	R
CARRIED TO QUOTATION SUMMARY	R



home affairs

Department:
Home Affairs
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HOME AFFAIRS

NORTH WEST PROVINCE

BILL OF QUANTITIES

NAME OF CONTRACTOR

BILL OF QUANTITIES

General Notes

Tenderers must complete the Bill of Quantities and detail the unit rate and total amount of each item.

Tenderers are advised to check their item extensions and total additions. Arithmetical errors occurring in the priced Bill of Quantities will be corrected and will have an effect on the tender amount.

No alterations, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bill of Quantities will be adhered to.

The quantities given in the Bill cannot be regarded as exact and are subject to remeasurement on site after completion of the service and adjustments will be made according to the unit rates given in the Bill.

The Bill of Quantities shall not be used for the ordering of material. The contractor shall ascertain the correct quantities before ordering.

The unit prices quoted in the Bill of Quantities must include for such small installation materials as are required for the complete installation in accordance with the Specification.

RATES SHOULD NOT INCLUDE VAT

All prices given in the Bill of Quantities are for supply, delivery, installation and commissioning.

All labour, supervision, transportation, tools and equipment must be allowed for in the rates

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES (NEW INSTALLTION)</u>			
	<u>BILL NO 1</u>			
	<u>FIXED CHARGE ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 2</u>			
	<u>VALUE RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 3			
	TIME RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
SECTION 1 SUMMARY - PRELIMINARIES				
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES (MAINTENANCE)</u>			
	<u>BILL NO 1</u>			
	<u>FIXED CHARGE ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 2</u>			
	<u>VALUE RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

[illegible]

Item No	Description	Quantity	Rate	Amount
SECTION 2 MEASURED WORKS (NEW INSTALLATION) BILL NO 1				
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors { 2 / 3m length }	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanized steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors { 2 / 3m length }	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
Carried Forward			R	R
Section No. 2				
Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm ² BCEW	m	175	
	b) 50 mm ² BCEW	m	150	
	c) 35 mm ² BCEW	m	125	
	d) 25 mm ² BCEW	m	75	
	e) 16 mm ² BCEW	m	50	
	f) 10 mm ² BCEW	m	20	
	g) 6 mm ² BCEW	m	20	
	h) 4 mm ² BCEW	m	15	
	i) 2.5 mm ² BCEW	m	15	
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No	10	
	b) 10-40A, 5kA single pole	No	25	
	c) 45-63A, 5kA triple pole, curve 1	No	10	
	d) 10-40A, 5kA triple pole	No	25	
	e) 45-63A, 5kA triple pole	No	10	
	f) 80-125A, 5kA triple pole	No	25	
	g) 150-200A, 10kA triple pole	No	50	
	h) 40-60A, 35kA triple pole	No	75	
	i) 80-125A, 25kA triple pole	No	80	
2.2.4	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No	15	
	b) 40-63A, 3 pole	No	15	
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No	15	
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No	175	
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175	
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150	
	d) Network point including 30m of cat 5 cable	No	200	
2.3	POWER POLES			
	a) 3500mm round power pole	No	15	
	b) Red 16 amp single socket on pole	No	50	
	c) Normal 16 amp single sockets on pole	No	50	
	d) Blank data box	No	50	
	e) Blank tel box	No	50	
	f) Red socket in roof with plug top and cable	No	15	
	g) Normal socket in roof with plug top and cable	No	15	
	h) 30 Amp Double Industrial pole Isolator	No	5	
	i) 60 Amp Triple pole isolator including York box	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No	30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB				
	a) 24 way	No	20		
	b) 36 way	No	40		
	c) 48 way	No	60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES				
2.6.1	Circuit breaker blank covers	No	15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No	5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness				
	a) Up to 75mm diameter holes	No	2		
	b) 75mm to 100mm diameter holes	No	2		
	c) 100mm to 150mm diameter holes	No	2		
2.8	LIGHTING INSTALLATION				
2.8.1	Re-lamp luminaire:				
	a) 36W Fluorescent	No	50		
	b) 36W Flameproof Fluorescent	No	50		
	c) 20W Fluorescent	No	50		
	d) 8W Fluorescent	No	50		
2.8.2	Replace diffuser or lens	No	20		
2.8.3	Supply and install new luminaire:				
	a) 36W Fluorescent	No	100		
	b) 36W Flameproof Fluorescent	No	150		
2.9	SERVER ROOM FLOOR				
	a) Remove existing floor covering	m ²	150		
	b) Prepare floor to receive new vinyl tiles	m ²	150		
	c) Supply and install anti-static vinyl tiles	m ²	150		
2.10	FIRE SUPPRESSION				
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No	25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No	150		
	Carried Forward			R	R
	Section No. 2				
	Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0.8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Generator)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	Flat wrap 500mm diameter razor wire with and including 25 x 25 x 2 x 600mm Angle section Galvanised mild steel bracket at 2600mm centres				
2.13.11.15	Flat wrap 500mm diameter razor wire to top of walls	m	150		
2.13.11.16	Flat wrap 500mm diameter razor wire fixed to fencing	m	150		
2.13.11.17	25 x 25 x 2mm Angle section post x 600mm long	No	75		
2.13.11.18	Approved 500mm diameter flat wrap of galvanised razor barbed tape wire fixed vertically and secured to straining wires with and including 2.5mm diameter galvanised binding wire at 300mm centres	m	150		
Carried Forward to Final Summary				R	R
SECTION 2 - MEASURED WORKS (NEW INSTALLATION)					

Item No	Description	Quantity	Rate	Amount
	SECTION 2			
	MEASURED WORKS (MAINTENANCE)			
	BILL NO 1			
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors { 2 / 3m length }	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanized steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors { 2 / 3m length }	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.2.2	Supply, install and terminate earth continuity conductor				
	a) 70 mm² BCEW	m	175		
	b) 50 mm² BCEW	m	150		
	c) 35 mm² BCEW	m	125		
	d) 25 mm² BCEW	m	75		
	e) 16 mm² BCEW	m	50		
	f) 10 mm² BCEW	m	20		
	g) 6 mm² BCEW	m	20		
	h) 4 mm² BCEW	m	15		
	i) 2.5 mm² BCEW	m	15		
2.2.3	Supply and installation of circuit breakers (SABS approved):				
	a) 45-63A, 5kA single pole, curve 1	No	10		
	b) 10-40A, 5kA single pole	No	25		
	c) 45-63A, 5kA triple pole, curve 1	No	10		
	d) 10-40A, 5kA triple pole	No	25		
	e) 45-63A, 5kA triple pole	No	10		
	f) 80-125A, 5kA triple pole	No	25		
	g) 150-200A, 10kA triple pole	No	50		
	h) 40-60A, 35kA triple pole	No	75		
	i) 80-125A, 25kA triple pole	No	80		
2.2.4	Supply and install contactors (SABS)				
	a) 0-30A, 3 pole	No	15		
	b) 40-63A, 3 pole	No	15		
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):				
	a) 63A double pole	No	15		
2.2.6	Install socket outlet (SABS):				
	a) 16A, single SSO, WHITE	No	175		
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175		
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150		
	d) Network point including 30m of cat 5 cable	No	200		
2.3	POWER POLES				
	a) 3500mm round power pole	No	15		
	b) Red 16 amp single socket on pole	No	50		
	c) Normal 16 amp single sockets on pole	No	50		
	d) Blank data box	No	50		
	e) Blank tel box	No	50		
	f) Red socket in roof with plug top and cable	No	15		
	g) Normal socket in roof with plug top and cable	No	15		
	h) 30 Amp Double Industrial pole Isolator	No	5		
	i) 50 Amp Triple pole Isolator including York box	No	5		
	Carried Forward			R	R
	Section No. 2				
	Bill No 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4 5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. Including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 50 m2 50		
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No 10 No 10 No 10 No 10 No 10		
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 60 m2 60		
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2 15		
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m 15		
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 150 m2 150		
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No 15		
	Carried Forward Section No. 2 Bill No. 1		R	R

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0.8mm "18R" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) Inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Guard House/ Reception)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2,4m high including locking recess mechanism at 3,382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdrg. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)	No		
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	SECTION 3 GENERATORS (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements			
3.1	GENERATOR SETS			
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.1	Supply cost only	No	15	
3.1.2	Delivery, installation and commissioning	No	15	
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.3	Supply cost only	No	15	
3.1.4	Delivery, installation and commissioning	No	15	
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.5	Supply cost only	No	15	
3.1.6	Delivery, installation and commissioning	No	15	
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.7	Supply cost only	No	15	
3.1.8	Delivery, installation and commissioning	No	15	
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.9	Supply cost only	No	10	
3.1.10	Delivery, installation and commissioning	No	10	
	Carried Forward		R	R
	Section No. 3			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Supply cost only	No	10		
3.1.12	Delivery, installation and commissioning	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Supply cost only	No	10		
3.1.14	Delivery, installation and commissioning	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Supply cost only	No	10		
3.1.16	Delivery, installation and commissioning	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum			
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum			
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.22	Supply and install low fuel alarm and shut off system	No	15		
3.1.23	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	15		
3.1.24	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
3.1.25	Supply diesel fuel	Liter 10000		
3.1.26	Supply and install water separator in fuel line	No 15		
3.1.27	Supply and install padlocks	No 60		
3.2	LABELING			
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No 15		
3.3	EARTHING AND BONDING			
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No 15		
3.4	FIRE PROTECTION			
3.4.1	Supply and install Fire Extinguisher for generator set, complete with wooden mounting block, hook, etc.	No 15		
3.5	MAINTENANCE			
3.5.1	Call out fee	No 1		
	Carried Forward to Final Summary		R	R
	SECTION 3 - GENERATORS (NEW INSTALLATION)			

Item No	Description		Quantity	Rate	Amount
	SECTION 3 GENERATORS (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements				
3.1	GENERATOR SETS				
	<u>Single Phase 70 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.1	Delivery, installation and commissioning	No	15		
3.1.2	Routine servicing of generator	No	15		
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.3	Delivery, installation and commissioning	No	15		
3.1.4	Routine servicing of generator	No	15		
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.5	Delivery, installation and commissioning	No	15		
3.1.6	Routine servicing of generator	No	15		
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.7	Delivery, installation and commissioning	No	15		
3.1.8	Routine servicing of generator	No	15		
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.9	Delivery, installation and commissioning	No	10		
3.1.10	Routine servicing of generator	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Delivery, installation and commissioning	No	10		
3.1.12	Routine servicing of generator	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Delivery, installation and commissioning	No	10		
3.1.14	Routine servicing of generator	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Delivery, installation and commissioning	No	10		
3.1.16	Routine servicing of generator	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum	15		
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum	15		
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	Repair existing generator canopy	No	15		
3.1.22	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.23	Supply and install low fuel alarm and shut off system	No	15		
3.1.24	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	10		
3.1.25	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	5		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.26	Supply diesel fuel	Liter	10000		
3.1.27	Supply and install water separator in fuel line	No	15		
3.1.28	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Service Fire Extinguisher for generator set	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary SECTION 3 - GENERATORS (MAINTENANCE)				R	R

Item No	Description	Quantity	Rate	Amount
SECTION 4 UNINTERRUPTED POWER SUPPLIES (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Supply cost only	No	20	
4.1.2	Delivery, installation and commissioning	No	20	
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Supply cost only	No	20	
4.1.4	Delivery, installation and commissioning	No	20	
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Supply cost only	No	20	
4.1.6	Delivery, installation and commissioning	No	20	
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Supply cost only	No	20	
4.1.8	Delivery, installation and commissioning	No	20	
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Supply cost only	No	20	
4.1.10	Delivery, installation and commissioning	No	20	
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Supply cost only	No	20	
4.1.12	Delivery, installation and commissioning	No	20	
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Supply cost only	No	20	
4.1.14	Delivery, installation and commissioning	No	20	
Carried Forward			R	R
Section No. 4				
Bill No 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	<u>Three Phase 100 kVA UPS as per technical and specific specifications</u>			
4.1.15	Supply cost only	No 10		
4.1.16	Delivery, installation and commissioning	No 10		
4.2	SOLAR SYSTEM			
	Off grid inverters			
4.2.1	<u>3KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25CVA-300 25C-2400W, 40C-2200, 65C-1700W -Peak power output; 6000W -Maximum efficiency; 94% -Maximum feed through current, 2x50A - 2 x AC inputs -DC input range - 24V			
4.2.2	<u>5KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-500VA, 25C-4000W, 40C-3700 65C-3000W -Peak power output; 10000W -Maximum efficiency; 95% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.3	<u>8KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-8000VA 25C-6500W, 40C-5500, 65C-3600W -Peak power output; 16000W -Maximum efficiency; 96% -Maximum feed through current, 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.4	<u>10KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-10000VA 25C-8000W, 40C-6500, 65C-4500W -Peak power output, 20000W -Maximum efficiency; 96% -Maximum feed through current, 2x100A - 2 x AC inputs -DC input range - 48V			
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
4.2.5	<u>15KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-15000VA 25C-12000W, 40C-10000,65C-7000W -Peak power output; 25000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No	15		
4.2.6	<u>MPPT SOLAR CHARGERS - supply, delivery and installation included</u>				
4.2.6.1	MPPT 250/70 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 70A -Nominal PV power; 48V - 4000W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.6.2	MPPT 250/85 with the following specs. -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 85A -Nominal PV power; 48V - 4900W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.6.3	MPPT 250/100 with the following specs -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 100A -Nominal PV power; 48V - 5800W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption, Less than 20mA @48V	No	50		
4.2.7	<u>LITHIUM ION BATTERY - supply, delivery and installation included</u>				
4.2.7.1	48/5kWh Li-Ion battery -Total energy capacity; 5kWh -Energy, 80% DoD (kWh) - 4 -Energy, 90% DoD (kWh) - 4.5 -Current capacity; 100Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.2	48/10kWh Li-Ion battery -Total energy capacity; 10kWh -Energy, 80% DoD (kWh) - 8 -Energy, 90% DoD (kWh) - 9 -Current capacity; 200Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.3	48/15kWh Li-Ion battery -Total energy capacity; 15kWh -Energy, 80% DoD (kWh) - 12 -Energy, 90% DoD (kWh) - 13.5 -Current capacity; 300Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
	Carried Forward			R	R
	Section No. 4				
	Bill No. 1				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
4.2.7.4	48/20kWh Li-ion battery -Total energy capacity;20kWh -Energy, 80% DoD (kWh) - 16 -Energy, 90% DoD (kWh) - 18 -Current capacity; 400Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.5	48/30kWh Li-ion battery -Total energy capacity;30kWh -Energy, 80% DoD (kWh) - 24 -Energy, 90% DoD (kWh) - 27 -Current capacity; 600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.6	48/40kWh Li-ion battery -Total energy capacity;40kWh -Energy, 80% DoD (kWh) - 32 -Energy, 90% DoD (kWh) - 36 -Current capacity; 800Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.7	48/80kWh Li-ion battery -Total energy capacity;80kWh -Energy, 80% DoD (kWh) - 64 -Energy, 90% DoD (kWh) - 72 -Current capacity; 1600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.8	<u>SOLAR PANNELLS - supply, delivery and installation included</u>				
4.2.8.1	330W Solar panel -Rated maximum power; 330W -Maximum efficiency; 19.3% Operating temp; -40 -80C	No	120		
4.2.8.2	390W Solar panel -Rated maximum power; 390W -Maximum efficiency; 19.6% Operating temp; -40 -85C	No	120		
4.2.9	<u>Roof mount structure for solar panels:</u>				
4.2.9.1	330W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No	480		
4.2.9.2	390W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No	480		
4.3	MAINTENANCE				
4.3.1	Call out fee	No	1		
	Carried Forward to Final Summary			R	R
	SECTION 4 - UPS (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Routine servicing of UPS	No	50	
4.1.2	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Routine servicing of UPS	No	50	
4.1.4	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Routine servicing of UPS	No	50	
4.1.6	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Routine servicing of UPS	No	50	
4.1.8	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Routine servicing of UPS	No	50	
4.1.10	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Routine servicing of UPS	No	50	
4.1.12	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Routine servicing of UPS	No	50	
4.1.14	Replacement battery - For replacing defective batteries of the same duty	Sum		
	Carried Forward		R	R
	Section No. 4			
	Bill No 1			

[illegible]

Item No	Description	Quantity	Rate	Amount
	SECTION 5 AIRCONDITIONING [NEW INSTALLATION] BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
5.1	AIR CONDITIONING			
	AC Ceiling Cassette Units			
	Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.			
	<u>18000 BTU Ceiling Cassette AC Unit</u>			
5.1.1	Supply cost only	No	60	
5.1.2	Delivery, installation and commissioning	No	60	
	<u>24000 BTU Ceiling Cassette AC Unit</u>			
5.1.3	Supply cost only	No	60	
5.1.4	Delivery, installation and commissioning	No	60	
	<u>36000 BTU Ceiling Cassette AC Unit</u>			
5.1.5	Supply cost only	No	45	
5.1.6	Delivery, installation and commissioning	No	45	
	<u>48000 BTU Ceiling Cassette AC Unit</u>			
5.1.7	Supply cost only	No	30	
5.1.8	Delivery, installation and commissioning	No	30	
	<u>9000 BTU Midwall Split AC Unit</u>			
5.1.9	Supply cost only	No	60	
5.1.10	Delivery, installation and commissioning	No	60	
	Carried Forward		R	R
	Section No. 5			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>12000 BTU Midwall Split AC Unit</u>				
5.1.11	Supply cost only	No	60		
5.1.12	Delivery, installation and commissioning	No	60		
	<u>18000 BTU Midwall Split AC Unit</u>				
5.1.13	Supply cost only	No	60		
5.1.14	Delivery, installation and commissioning	No	60		
	<u>24000 BTU Midwall Split AC Unit</u>				
5.1.15	Supply cost only	No	60		
5.1.16	Delivery, installation and commissioning	No	60		
	<u>36000 BTU Midwall Split AC Unit</u>				
5.1.17	Supply cost only	No	30		
5.1.18	Delivery, installation and commissioning	No	30		
	<u>48000 BTU Midwall Split AC Unit</u>				
5.1.19	Supply cost only	No	30		
5.1.20	Delivery, installation and commissioning	No	30		
5.2	FANS Supply, deliver, install and commission extractor fans connected to luminaires complete with wiring, fixing materials, monthly maintenance for the guarantee/warranty period. Extractor fans to be installed in ceiling panels				
	300 l/s in line extractor fan				
5.2.1	Supply cost only	No	15		
5.2.2	Delivery, installation and commissioning	No	15		
5.3	Supply and install galvanised steel cages for the A/C compressors	No	60		
5.4	Additional pipe run including trunking and amourflex	m	150		
5.5	MAINTENANCE				
5.5.1	Call out fee	No	1		
	Carried Forward to Final Summary			R	R
	SECTION 5 - AIRCONDITIONING (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u>			
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No 5		
6.1.2	<u>.75 kw PRESSURE PUMP</u> Supply, delivery and installation	No 5		
6.1.3	<u>.75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No 5		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (NEW INSTALLATION)</u> <u>BILL NO 1</u> 6.1 <u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description <u>5000LT JOJO WATER TANK</u> 6.1.1 Supply, delivery and installation No 25 <u>.75 kw PRESSURE PUMP</u> 6.1.2 Supply, delivery and installation No 25 <u>.75 kw PRESSURE PUMP (VSD)</u> 6.1.3 Supply, delivery and installation No 25 <u>PLUMBING INSTALLATION</u> 6.1.4 Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs sum			
	Carried Forward to Final Summary		R	R
	SECTION 6 - JOJO (NEW INSTALLATION)			

Item No	Description	Quantity	Rate	Amount
SECTION 6 JOJO TANK (MAINTENANCE) BILL NO 1				
6.1	JOJO TANK INSTALLATION The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description			
6.1.1	5000LT JOJO WATER TANK Replace damaged tank	No	5	
6.1.2	75 kw PRESSURE PUMP Supply, delivery and installation	No	5	
6.1.3	75 kw PRESSURE PUMP (VSD) Supply, delivery and installation	No	5	
6.1.4	PLUMBING INSTALLATION Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

FINAL SUMMARY	AMOUNT
SECTION 1 - SUMMARY - PRELIMINARIES	R R
SECTION 1 - SUMMARY - PRELIMINARIES (MAINTENANCE)	R R
SECTION 2 - SUMMARY - MEASURED WORKS	R R
SECTION 2 - SUMMARY - MEASURED WORKS (MAINTENANCE)	R R
SECTION 3 - SUMMARY GENERATORS	R R
SECTION 3 - SUMMARY GENERATORS (MAINTENANCE)	R R
SECTION 4 - SUMMARY UPS	R R
SECTION 4 - SUMMARY UPS (MAINTENANCE)	R R
SECTION 5 - SUMMARY AIRCONDITIONING	R R
SECTION 5 - SUMMARY AIRCONDITIONING (MAINTENANCE)	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION (MAINTENANCE)	R R
SUB TOTAL	R
Add: 10% (Ten percent) Contingency (to be deducted if not utilised)	R
TOTAL	R
Add: VAT @ 15%	R
CARRIED TO QUOTATION SUMMARY	R



home affairs

Department:
Home Affairs
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HOME AFFAIRS

FREE STATE PROVINCE

BILL OF QUANTITIES

NAME OF CONTRACTOR

BILL OF QUANTITIES

General Notes

Tenderers must complete the Bill of Quantities and detail the unit rate and total amount of each item.

Tenderers are advised to check their item extensions and total additions. Arithmetical errors occurring in the priced Bill of Quantities will be corrected and will have an effect on the tender amount.

No alterations, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bill of Quantities will be adhered to.

The quantities given in the Bill cannot be regarded as exact and are subject to remeasurement on site after completion of the service and adjustments will be made according to the unit rates given in the Bill.

The Bill of Quantities shall not be used for the ordering of material. The contractor shall ascertain the correct quantities before ordering.

The unit prices quoted in the Bill of Quantities must include for such small installation materials as are required for the complete installation in accordance with the Specification.

RATES SHOULD NOT INCLUDE VAT

All prices given in the Bill of Quantities are for supply, delivery, installation and commissioning.

All labour, supervision, transportation, tools and equipment must be allowed for in the rates

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES (NEW INSTALLTION)			
	BILL NO 1			
	FIXED CHARGE ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 2			
	VALUE RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 3			
	TIME RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
SECTION 1 SUMMARY - PRELIMINARIES				
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES (MAINTENANCE)			
	BILL NO 1			
	FIXED CHARGE ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 2</u>			
	<u>VALUE RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
<u>SECTION 1</u> <u>PRELIMINARIES</u> <u>BILL NO 3</u> <u>TIME RELATED ITEMS</u>				
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
Carried Forward to Summary of Section No. 1			R	

[illegible]

Item No	Description	Quantity	Rate	Amount
SECTION 2 MEASURED WORKS (NEW INSTALLATION) BILL NO 1				
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanised steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
Carried Forward			R	R
Section No. 2				
Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm ² BCEW	m	175	
	b) 50 mm ² BCEW	m	150	
	c) 35 mm ² BCEW	m	125	
	d) 25 mm ² BCEW	m	75	
	e) 16 mm ² BCEW	m	50	
	f) 10 mm ² BCEW	m	20	
	g) 6 mm ² BCEW	m	20	
	h) 4 mm ² BCEW	m	15	
	i) 2.5 mm ² BCEW	m	15	
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No	10	
	b) 10-40A, 5kA single pole	No	25	
	c) 45-63A, 5kA triple pole, curve 1	No	10	
	d) 10-40A, 5kA triple pole	No	25	
	e) 45-63A, 5kA triple pole	No	10	
	f) 80-125A, 5kA triple pole	No	25	
	g) 150-200A, 10kA triple pole	No	50	
	h) 40-60A, 35kA triple pole	No	75	
	i) 80-125A, 25kA triple pole	No	80	
2.2.4	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No	15	
	b) 40-63A, 3 pole	No	15	
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No	15	
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No	175	
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175	
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150	
	d) Network point including 30m of cat 5 cable	No	200	
2.3	POWER POLES			
	a) 3500mm round power pole	No	15	
	b) Red 16 amp single socket on pole	No	50	
	c) Normal 16 amp single sockets on pole	No	50	
	d) Blank data box	No	50	
	e) Blank tel box	No	50	
	f) Red socket in roof with plug top and cable	No	15	
	g) Normal socket in roof with plug top and cable	No	15	
	h) 30 Amp Double Industrial pole Isolator	No	5	
	i) 60 Amp Triple pole isolator including York box	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0,8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Generator)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	Flat wrap 500mm diameter razor wire with and including 25 x 25 x 2 x 600mm Angle section Galvanised mild steel bracket at 2600mm centres			
2.13.11.15	Flat wrap 500mm diameter razor wire to top of walls	m 150		
2.13.11.16	Flat wrap 500mm diameter razor wire fixed to fencing	m 150		
2.13.11.17	25 x 25 x 2mm Angle section post x 600mm long	No 75		
2.13.11.18	Approved 500mm diameter flat wrap of galvanised razor barbed tape wire fixed vertically and secured to straining wires with and including 2.5mm diameter galvanised binding wire at 300mm centres	m 150		
Carried Forward to Final Summary			R	R
SECTION 2 - MEASURED WORKS (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	SECTION 2			
	MEASURED WORKS (MAINTENANCE)			
	BILL NO 1			
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel.			
	a) P 9000 galvanized steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm ² BCEW	m	175	
	b) 50 mm ² BCEW	m	150	
	c) 35 mm ² BCEW	m	125	
	d) 25 mm ² BCEW	m	75	
	e) 16 mm ² BCEW	m	50	
	f) 10 mm ² BCEW	m	20	
	g) 6 mm ² BCEW	m	20	
	h) 4 mm ² BCEW	m	15	
	i) 2.5 mm ² BCEW	m	15	
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No	10	
	b) 10-40A, 5kA single pole	No	25	
	c) 45-63A, 5kA triple pole, curve 1	No	10	
	d) 10-40A, 5kA triple pole	No	25	
	e) 45-63A, 5kA triple pole	No	10	
	f) 80-125A, 5kA triple pole	No	25	
	g) 150-200A, 10kA triple pole	No	50	
	h) 40-60A, 35kA triple pole	No	75	
	i) 80-125A, 25kA triple pole	No	80	
2.2.4	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No	15	
	b) 40-63A, 3 pole	No	15	
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No	15	
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No	175	
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175	
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150	
	d) Network point including 30m of cat 5 cable	No	200	
2.3	POWER POLES			
	a) 3500mm round power pole	No	15	
	b) Red 16 amp single socket on pole	No	50	
	c) Normal 16 amp single sockets on pole	No	50	
	d) Blank data box	No	50	
	e) Blank tel box	No	50	
	f) Red socket in roof with plug top and cable	No	15	
	g) Normal socket in roof with plug top and cable	No	15	
	h) 30 Amp Double Industrial pole isolator	No	5	
	i) 60 Amp Triple pole isolator including York box	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, Insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and Installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1.5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0.8mm "18R" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Guard House/ Reception)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)	No		
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	Flat wrap 500mm diameter razor wire with and including 25 x 25 x 2 x 600mm Angle section Galvanised mild steel bracket at 2600mm centres			
2.13.11.15	Flat wrap 500mm diameter razor wire to top of walls	m	150	
2.13.11.16	Flat wrap 500mm diameter razor wire fixed to fencing	m	150	
2.13.11.17	25 x 25 x 2mm Angle section post x 600mm long	No	75	
2.13.11.18	Approved 500mm diameter flat wrap of galvanised razor barbed tape wire fixed vertically and secured to straining wires with and including 2.5mm diameter galvanised binding wire at 300mm centres	m	150	
Carried Forward to Final Summary			R	R
SECTION 2 - MEASURED WORKS (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
	SECTION 3 GENERATORS (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements			
3.1	GENERATOR SETS			
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.1	Supply cost only	No	15	
3.1.2	Delivery, installation and commissioning	No	15	
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.3	Supply cost only	No	15	
3.1.4	Delivery, installation and commissioning	No	15	
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.5	Supply cost only	No	15	
3.1.6	Delivery, installation and commissioning	No	15	
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.7	Supply cost only	No	15	
3.1.8	Delivery, installation and commissioning	No	15	
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.9	Supply cost only	No	10	
3.1.10	Delivery, installation and commissioning	No	10	
	Carried Forward		R	R
	Section No. 3			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Supply cost only	No	10		
3.1.12	Delivery, installation and commissioning	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Supply cost only	No	10		
3.1.14	Delivery, installation and commissioning	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Supply cost only	No	10		
3.1.16	Delivery, installation and commissioning	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum			
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum			
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.22	Supply and install low fuel alarm and shut off system	No	15		
3.1.23	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	15		
3.1.24	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.25	Supply diesel fuel	Liter	10000		
3.1.26	Supply and install water separator in fuel line	No	15		
3.1.27	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Supply and install Fire Extinguisher for generator set, complete with wooden mounting block, hook, etc.	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary SECTION 3 - GENERATORS (NEW INSTALLATION)				R	R

Item No	Description	Quantity	Rate	Amount
	SECTION 3 GENERATORS (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements			
3.1	GENERATOR SETS			
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.1	Delivery, installation and commissioning	No	15	
3.1.2	Routine servicing of generator	No	15	
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.3	Delivery, installation and commissioning	No	15	
3.1.4	Routine servicing of generator	No	15	
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.5	Delivery, installation and commissioning	No	15	
3.1.6	Routine servicing of generator	No	15	
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.7	Delivery, installation and commissioning	No	15	
3.1.8	Routine servicing of generator	No	15	
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.9	Delivery, installation and commissioning	No	10	
3.1.10	Routine servicing of generator	No	10	
	Carried Forward		R	R
	Section No. 3			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Delivery, installation and commissioning	No	10		
3.1.12	Routine servicing of generator	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Delivery, installation and commissioning	No	10		
3.1.14	Routine servicing of generator	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Delivery, installation and commissioning	No	10		
3.1.16	Routine servicing of generator	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum	15		
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report	Sum	15		
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	Repair existing generator canopy	No	15		
3.1.22	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.23	Supply and install low fuel alarm and shut off system	No	15		
3.1.24	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	10		
3.1.25	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	5		
	Carried Forward			R	R
	Section No. 3				
	Bill No 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.26	Supply diesel fuel	Liter	10000		
3.1.27	Supply and install water separator in fuel line	No	15		
3.1.28	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Service Fire Extinguisher for generator set	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary SECTION 3 - GENERATORS (MAINTENANCE)				R	R

Item No	Description	Quantity	Rate	Amount
SECTION 4 UNINTERRUPTED POWER SUPPLIES (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Supply cost only	No	20	
4.1.2	Delivery, installation and commissioning	No	20	
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Supply cost only	No	20	
4.1.4	Delivery, installation and commissioning	No	20	
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Supply cost only	No	20	
4.1.6	Delivery, installation and commissioning	No	20	
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Supply cost only	No	20	
4.1.8	Delivery, installation and commissioning	No	20	
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Supply cost only	No	20	
4.1.10	Delivery, installation and commissioning	No	20	
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Supply cost only	No	20	
4.1.12	Delivery, installation and commissioning	No	20	
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Supply cost only	No	20	
4.1.14	Delivery, installation and commissioning	No	20	
Carried Forward			R	R
Section No. 4				
Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	<u>Three Phase 100 kVA UPS as per technical and specific specifications</u>			
4.1.15	Supply cost only	No 10		
4.1.16	Delivery, installation and commissioning	No 10		
4.2	SOLAR SYSTEM			
	Off grid inverters			
4.2.1	<u>3KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25CVA-300 25C-2400W, 40C-2200, 65C-1700W -Peak power output; 6000W -Maximum efficiency; 94% -Maximum feed through current; 2x50A - 2 x AC inputs -DC input range - 24V	No 15		
4.2.2	<u>5KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-500VA, 25C-4000W, 40C-370065C-3000W -Peak power output; 10000W -Maximum efficiency; 95% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No 15		
4.2.3	<u>8KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-8000VA 25C-6500W, 40C-5500,65C-3600W -Peak power output; 16000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No 15		
4.2.4	<u>10KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-10000VA 25C-8000W, 40C-6500,65C-4500W -Peak power output; 20000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No 15		
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
4.2.5	<u>15kW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range, 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency, 50Hz +/- 0.1% -Cont. output power at 25C-15000VA 25C-12000W, 40C-10000,65C-7000W -Peak power output, 25000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC Input range - 48V	No 15		
4.2.6	<u>MPPT SOLAR CHARGERS - supply, delivery and installation included</u>			
4.2.6.1	MPPT 250/70 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current, 70A -Nominal PV power; 48V - 4000W -Maximum PV open circuit Voltage, 250V -Maximum efficiency, 99% -Self consumption; Less than 20mA @48V	No 50		
4.2.6.2	MPPT 250/85 with the following specs. -Battery voltage, 12/24/36/48 Auto select -Rated charge current; 85A -Nominal PV power; 48V - 4900W -Maximum PV open circuit Voltage; 250V -Maximum efficiency, 99% -Self consumption, Less than 20mA @48V	No 50		
4.2.6.3	MPPT 250/100 with the following specs -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 100A -Nominal PV power, 48V - 5800W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption, Less than 20mA @48V	No 50		
4.2.7	<u>LITHIUM ION BATTERY - supply, delivery and installation included</u>			
4.2.7.1	48/5kWh Li-ion battery -Total energy capacity, 5kWh -Energy, 80% DoD (kWh) - 4 -Energy, 90% DoD (kWh) - 4.5 -Current capacity; 100Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.2	48/10kWh Li-ion battery -Total energy capacity, 10kWh -Energy, 80% DoD (kWh) - 8 -Energy, 90% DoD (kWh) - 9 -Current capacity; 200Ah -Warranty, 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.3	48/15kWh Li-ion battery -Total energy capacity;15kWh -Energy, 80% DoD (kWh) - 12 -Energy, 90% DoD (kWh) - 13.5 -Current capacity, 300Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
4.2.7.4	48/20kWh Li-ion battery -Total energy capacity;20kWh -Energy, 80% DoD (kWh) - 16 -Energy, 90% DoD (kWh) - 18 -Current capacity; 400Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.5	48/30kWh Li-ion battery -Total energy capacity;30kWh -Energy, 80% DoD (kWh) - 24 -Energy, 90% DoD (kWh) - 27 -Current capacity; 600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.6	48/40kWh Li-ion battery -Total energy capacity;40kWh -Energy, 80% DoD (kWh) - 32 -Energy, 90% DoD (kWh) - 36 -Current capacity; 800Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.7	48/80kWh Li-ion battery -Total energy capacity;80kWh -Energy, 80% DoD (kWh) - 64 -Energy, 90% DoD (kWh) - 72 -Current capacity; 1600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.8	<u>SOLAR PANNELS - supply, delivery and installation included</u>			
4.2.8.1	330W Solar panel -Rated maximum power; 330W -Maximum efficiency; 19.3% Operating temp; -40 -80C	No 120		
4.2.8.2	390W Solar panel -Rated maximum power; 390W -Maximum efficiency; 19.6% Operating temp; -40 -85C	No 120		
4.2.9	<u>Roof mount structure for solar panels:</u>			
4.2.9.1	330W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No 480		
4.2.9.2	390W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No 480		
4.3	MAINTENANCE			
4.3.1	Call out fee	No 1		
	Carried Forward to Final Summary SECTION 4 - UPS (NEW INSTALLATION)		R	R

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 4</u> <u>UNINTERRUPTED POWER SUPPLIES (MAINTENANCE)</u> <u>BILL NO 1</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Routine servicing of UPS	No	50	
4.1.2	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Routine servicing of UPS	No	50	
4.1.4	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Routine servicing of UPS	No	50	
4.1.6	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Routine servicing of UPS	No	50	
4.1.8	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Routine servicing of UPS	No	50	
4.1.10	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Routine servicing of UPS	No	50	
4.1.12	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Routine servicing of UPS	No	50	
4.1.14	Replacement battery - For replacing defective batteries of the same duty	Sum		
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

[illegible]

Item No	Description	Quantity	Rate	Amount
	SECTION 5 AIRCONDITIONING (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
5.1	AIR CONDITIONING			
	AC Ceiling Cassette Units			
	Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and Indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.			
	<u>18000 BTU Ceiling Cassette AC Unit</u>			
5.1.1	Supply cost only	No	60	
5.1.2	Delivery, installation and commissioning	No	60	
	<u>24000 BTU Ceiling Cassette AC Unit</u>			
5.1.3	Supply cost only	No	60	
5.1.4	Delivery, installation and commissioning	No	60	
	<u>36000 BTU Ceiling Cassette AC Unit</u>			
5.1.5	Supply cost only	No	45	
5.1.6	Delivery, installation and commissioning	No	45	
	<u>48000 BTU Ceiling Cassette AC Unit</u>			
5.1.7	Supply cost only	No	30	
5.1.8	Delivery, installation and commissioning	No	30	
	<u>9000 BTU Midwall Split AC Unit</u>			
5.1.9	Supply cost only	No	60	
5.1.10	Delivery, installation and commissioning	No	60	
	Carried Forward		R	R
	Section No. 5			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>12000 BTU Midwall Split AC Unit</u>				
5.1.11	Supply cost only	No	60		
5.1.12	Delivery, installation and commissioning	No	60		
	<u>18000 BTU Midwall Split AC Unit</u>				
5.1.13	Supply cost only	No	60		
5.1.14	Delivery, installation and commissioning	No	60		
	<u>24000 BTU Midwall Split AC Unit</u>				
5.1.15	Supply cost only	No	60		
5.1.16	Delivery, installation and commissioning	No	60		
	<u>36000 BTU Midwall Split AC Unit</u>				
5.1.17	Supply cost only	No	30		
5.1.18	Delivery, installation and commissioning	No	30		
	<u>48000 BTU Midwall Split AC Unit</u>				
5.1.19	Supply cost only	No	30		
5.1.20	Delivery, installation and commissioning	No	30		
5.2	FANS				
	Supply, deliver, install and commission extractor fans connected to luminaires complete with wiring, fixing materials, monthly maintenance for the guarantee/warranty period. Extractor fans to be installed in ceiling panels				
	<u>300 l/s in line extractor fan</u>				
5.2.1	Supply cost only	No	15		
5.2.2	Delivery, installation and commissioning	No	15		
5.3	Supply and install galvanised steel cages for the A/C compressors	No	60		
5.4	Additional pipe run including trunking and amourflex	m	150		
5.5	MAINTENANCE				
5.5.1	Call out fee	No	1		
	Carried Forward to Final Summary			R	R
	SECTION 5 - AIRCONDITIONING (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u>			
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each Item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No	S	
6.1.2	<u>75 kw PRESSURE PUMP</u> Supply, delivery and installation	No	S	
6.1.3	<u>75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No	S	
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (NEW INSTALLATION)</u> <u>BILL NO 1</u>			
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Supply, delivery and installation	No 25		
6.1.2	<u>.75 kw PRESSURE PUMP</u> Supply, delivery and installation	No 25		
6.1.3	<u>.75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No 25		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
	Carried Forward to Final Summary		R	R
	SECTION 6 - JOJO (NEW INSTALLATION)			

Item No	Description	Quantity	Rate	Amount
<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u>				
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No 5		
6.1.2	<u>75 kw PRESSURE PUMP</u> Supply, delivery and installation	No 5		
6.1.3	<u>75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No 5		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

FINAL SUMMARY	AMOUNT
SECTION 1 - SUMMARY - PRELIMINARIES	R R
SECTION 1 - SUMMARY - PRELIMINARIES (MAINTENANCE)	R R
SECTION 2 - SUMMARY - MEASURED WORKS	R R
SECTION 2 - SUMMARY - MEASURED WORKS (MAINTENANCE)	R R
SECTION 3 - SUMMARY GENERATORS	R R
SECTION 3 - SUMMARY GENERATORS (MAINTENANCE)	R R
SECTION 4 - SUMMARY UPS	R R
SECTION 4 - SUMMARY UPS (MAINTENANCE)	R R
SECTION 5 - SUMMARY AIRCONDITIONING	R R
SECTION 5 - SUMMARY AIRCONDITIONING (MAINTENANCE)	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION (MAINTENANCE)	R R
SUB TOTAL	R
Add: 10% (Ten percent) Contingency (to be deducted if not utilised)	R
TOTAL	R
Add: VAT @ 15%	R
CARRIED TO QUOTATION SUMMARY	R



home affairs

Department:
Home Affairs
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HOME AFFAIRS

WESTERN CAPE PROVINCE

BILL OF QUANTITIES

NAME OF CONTRACTOR

BILL OF QUANTITIES

General Notes

Tenderers must complete the Bill of Quantities and detail the unit rate and total amount of each item.

Tenderers are advised to check their item extensions and total additions. Arithmetical errors occurring in the priced Bill of Quantities will be corrected and will have an effect on the tender amount.

No alterations, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bill of Quantities will be adhered to.

The quantities given in the Bill cannot be regarded as exact and are subject to remeasurement on site after completion of the service and adjustments will be made according to the unit rates given in the Bill.

The Bill of Quantities shall not be used for the ordering of material. The contractor shall ascertain the correct quantities before ordering.

The unit prices quoted in the Bill of Quantities must include for such small installation materials as are required for the complete installation in accordance with the Specification.

RATES SHOULD NOT INCLUDE VAT

All prices given in the Bill of Quantities are for supply, delivery, installation and commissioning.

All labour, supervision, transportation, tools and equipment must be allowed for in the rates

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES (NEW INSTALLTION)			
	BILL NO 1			
	FIXED CHARGE ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 2			
	VALUE RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
Carried Forward to Summary of Section No. 1			R	

Item No	Description	Quantity	Rate	Amount
SECTION 1 SUMMARY - PRELIMINARIES				
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES (MAINTENANCE)			
	BILL NO 1			
	FIXED CHARGE ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 2</u>			
	<u>VALUE RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

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Item No	Description	Quantity	Rate	Amount
SECTION 2				
MEASURED WORKS (NEW INSTALLATION)				
BILL NO 1				
2.1 WIRE WAYS, CONDUITS AND ACCESSORIES				
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanized steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2 WIRING				
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
Carried Forward			R	R
Section No. 2				
Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm ² BCEW	m	175	
	b) 50 mm ² BCEW	m	150	
	c) 35 mm ² BCEW	m	125	
	d) 25 mm ² BCEW	m	75	
	e) 16 mm ² BCEW	m	50	
	f) 10 mm ² BCEW	m	20	
	g) 6 mm ² BCEW	m	20	
	h) 4 mm ² BCEW	m	15	
	i) 2.5 mm ² BCEW	m	15	
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No	10	
	b) 10-40A, 5kA single pole	No	25	
	c) 45-63A, 5kA triple pole, curve 1	No	10	
	d) 10-40A, 5kA triple pole	No	25	
	e) 45-63A, 5kA triple pole	No	10	
	f) 80-125A, 5kA triple pole	No	25	
	g) 150-200A, 10kA triple pole	No	50	
	h) 40-60A, 35kA triple pole	No	75	
	i) 80-125A, 25kA triple pole	No	80	
2.2.4	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No	15	
	b) 40-63A, 3 pole	No	15	
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No	15	
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No	175	
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175	
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150	
	d) Network point including 30m of cat 5 cable	No	200	
2.3	POWER POLES			
	a) 3500mm round power pole	No	15	
	b) Red 16 amp single socket on pole	No	50	
	c) Normal 16 amp single sockets on pole	No	50	
	d) Blank data box	No	50	
	e) Blank tel box	No	50	
	f) Red socket in roof with plug top and cable	No	15	
	g) Normal socket in roof with plug top and cable	No	15	
	h) 30 Amp Double Industrial pole Isolator	No	5	
	i) 60 Amp Triple pole isolator including York box	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m2 350 m2 350 m3 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and Installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES 0,8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Generator)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	Flat wrap 500mm diameter razor wire with and including 25 x 25 x 2 x 600mm Angle section Galvanised mild steel bracket at 2600mm centres			
2.13.11.15	Flat wrap 500mm diameter razor wire to top of walls	m 150		
2.13.11.16	Flat wrap 500mm diameter razor wire fixed to fencing	m 150		
2.13.11.17	25 x 25 x 2mm Angle section post x 600mm long	No 75		
2.13.11.18	Approved 500mm diameter flat wrap of galvanised razor barbed tape wire fixed vertically and secured to straining wires with and including 2.5mm diameter galvanised binding wire at 300mm centres	m 150		
Carried Forward to Final Summary				R
SECTION 2 - MEASURED WORKS (NEW INSTALLATION)				R

Item No	Description	Quantity	Rate	Amount
	SECTION 2			
	MEASURED WORKS (MAINTENANCE)			
	BILL NO 1			
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanized steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm ² BCEW	m 175		
	b) 50 mm ² BCEW	m 150		
	c) 35 mm ² BCEW	m 125		
	d) 25 mm ² BCEW	m 75		
	e) 16 mm ² BCEW	m 50		
	f) 10 mm ² BCEW	m 20		
	g) 6 mm ² BCEW	m 20		
	h) 4 mm ² BCEW	m 15		
	i) 2.5 mm ² BCEW	m 15		
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No 10		
	b) 10-40A, 5kA single pole	No 25		
	c) 45-63A, 5kA triple pole, curve 1	No 10		
	d) 10-40A, 5kA triple pole	No 25		
	e) 45-63A, 5kA triple pole	No 10		
	f) 80-125A, 5kA triple pole	No 25		
	g) 150-200A, 10kA triple pole	No 50		
	h) 40-60A, 35kA triple pole	No 75		
	i) 80-125A, 25kA triple pole	No 80		
2.2.4	Supply and install contactors (SABS)			
	a) D-30A, 3 pole	No 15		
	b) 40-63A, 3 pole	No 15		
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No 15		
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No 175		
	b) 16A, single SSO Dedicated outlet, shaved, RED	No 175		
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No 150		
	d) Network point including 30m of cat 5 cable	No 200		
2.3	POWER POLES			
	a) 3500mm round power pole	No 15		
	b) Red 16 amp single socket on pole	No 50		
	c) Normal 16 amp single sockets on pole	No 50		
	d) Blank data box	No 50		
	e) Blank tel box	No 50		
	f) Red socket in roof with plug top and cable	No 15		
	g) Normal socket in roof with plug top and cable	No 15		
	h) 30 Amp Double Industrial pole Isolator	No 5		
	i) 60 Amp Triple pole isolator including York box	No 5		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of. a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand S Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and Installation Drywall partitioning 3,0m high including doors, ironmongery, glazing	m ² 200		
	Carried Forward		R	R
	Section No 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and Installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0.8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Guard House/ Reception)	t 0.75		
	Carried forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,7mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2,4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)	No		
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

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Item No	Description	Quantity	Rate	Amount
SECTION 3 GENERATORS (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements				
3.1	GENERATOR SETS			
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.1	Supply cost only	No	15	
3.1.2	Delivery, installation and commissioning	No	15	
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.3	Supply cost only	No	15	
3.1.4	Delivery, installation and commissioning	No	15	
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.5	Supply cost only	No	15	
3.1.6	Delivery, installation and commissioning	No	15	
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.7	Supply cost only	No	15	
3.1.8	Delivery, installation and commissioning	No	15	
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.9	Supply cost only	No	10	
3.1.10	Delivery, installation and commissioning	No	10	
	Carried Forward		R	R
	Section No. 3			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Supply cost only	No	10		
3.1.12	Delivery, installation and commissioning	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Supply cost only	No	10		
3.1.14	Delivery, installation and commissioning	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Supply cost only	No	10		
3.1.16	Delivery, installation and commissioning	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum			
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum			
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.22	Supply and install low fuel alarm and shut off system	No	15		
3.1.23	Supply and install lockable Emergency stop system thar trips the genset and fuel supply in an Emergency	No	15		
3.1.24	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.25	Supply diesel fuel	Liter	10000		
3.1.26	Supply and install water separator in fuel line	No	15		
3.1.27	Supply and install padlocks	No	.60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Supply and install Fire Extinguisher for generator set, complete with wooden mounting block, hook, etc.	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary				R	R
SECTION 3 - GENERATORS (NEW INSTALLATION)					

Item No	Description	Quantity	Rate	Amount
	SECTION 3 GENERATORS (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements			
3.1	GENERATOR SETS			
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.1	Delivery, installation and commissioning	No	15	
3.1.2	Routine servicing of generator	No	15	
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.3	Delivery, installation and commissioning	No	15	
3.1.4	Routine servicing of generator	No	15	
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.5	Delivery, installation and commissioning	No	15	
3.1.6	Routine servicing of generator	No	15	
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.7	Delivery, installation and commissioning	No	15	
3.1.8	Routine servicing of generator	No	15	
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.9	Delivery, installation and commissioning	No	10	
3.1.10	Routine servicing of generator	No	10	
	Carried Forward		R	R
	Section No. 3			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Delivery, installation and commissioning	No	10		
3.1.12	Routine servicing of generator	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Delivery, installation and commissioning	No	10		
3.1.14	Routine servicing of generator	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Delivery, installation and commissioning	No	10		
3.1.16	Routine servicing of generator	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum	15		
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum	15		
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	Repair existing generator canopy	No	15		
3.1.22	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.23	Supply and install low fuel alarm and shut off system	No	15		
3.1.24	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	10		
3.1.25	Supply and install wall mounted extractor fan (XPELAIR WG9) or similar) complete with accessories, isolator and cabling.	No	5		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.26	Supply diesel fuel	Liter	10000		
3.1.27	Supply and install water separator in fuel line	No	15		
3.1.28	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Service Fire Extinguisher for generator set	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary				R	R
SECTION 3 - GENERATORS (MAINTENANCE)					

Item No	Description	Quantity	Rate	Amount
SECTION 4 UNINTERRUPTED POWER SUPPLIES (NEW INSTALLATION) BILL NO 1				
The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
4.1	UPS			
<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>				
4.1.1	Supply cost only	No	20	
4.1.2	Delivery, installation and commissioning	No	20	
<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>				
4.1.3	Supply cost only	No	20	
4.1.4	Delivery, installation and commissioning	No	20	
<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>				
4.1.5	Supply cost only	No	20	
4.1.6	Delivery, installation and commissioning	No	20	
<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>				
4.1.7	Supply cost only	No	20	
4.1.8	Delivery, installation and commissioning	No	20	
<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>				
4.1.9	Supply cost only	No	20	
4.1.10	Delivery, installation and commissioning	No	20	
<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>				
4.1.11	Supply cost only	No	20	
4.1.12	Delivery, installation and commissioning	No	20	
<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>				
4.1.13	Supply cost only	No	20	
4.1.14	Delivery, installation and commissioning	No	20	
Carried Forward			R	R
Section No. 4				
Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	<u>Three Phase 100 KVA UPS as per technical and specific specifications</u>			
4.1.15	Supply cost only	No 10		
4.1.16	Delivery, installation and commissioning	No 10		
4.2	SOLAR SYSTEM			
	Off grid Inverters			
4.2.1	<u>3KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25CVA-300 25C-2400W, 40C-2200, 65C-1700W -Peak power output; 6000W -Maximum efficiency; 94% -Maximum feed through current, 2x50A - 2 x AC inputs -DC input range - 24V			
4.2.2	<u>5KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-500VA, 25C-4000W, 40C-370065C-3000W -Peak power output; 10000W -Maximum efficiency; 95% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.3	<u>8KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-8000VA 25C-6500W, 40C-5500,65C-3600W -Peak power output; 16000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.4	<u>10KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-10000VA 25C-8000W, 40C-6500,65C-4500W -Peak power output; 20000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
4.2.5	<u>15kW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-15000VA 25C-12000W, 40C-10000,65C-7000W -Peak power output; 25000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No 15		
4.2.6	<u>MPPT SOLAR CHARGERS - supply, delivery and installation included</u>			
4.2.6.1	MPPT 250/70 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 70A -Nominal PV power; 48V - 4000W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 50		
4.2.6.2	MPPT 250/85 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 85A -Nominal PV power; 48V - 4900W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 50		
4.2.6.3	MPPT 250/100 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 100A -Nominal PV power; 48V - 5800W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 50		
4.2.7	<u>LITHIUM ION BATTERY - supply, delivery and installation included</u>			
4.2.7.1	48/5kWh Li-ion battery -Total energy capacity; 5kWh -Energy, 80% DoD (kWh) - 4 -Energy, 90% DoD (kWh) - 4.5 -Current capacity; 100Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.2	48/10kWh Li-Ion battery -Total energy capacity; 10kWh -Energy, 80% DoD (kWh) - 8 -Energy, 90% DoD (kWh) - 9 -Current capacity; 200Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.3	48/15kWh Li-Ion battery -Total energy capacity; 15kWh -Energy, 80% DoD (kWh) - 12 -Energy, 90% DoD (kWh) - 13.5 -Current capacity; 300Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
4.2.7.4	48/20kWh Li-ion battery -Total energy capacity:20kWh -Energy, 80% DoD (kWh) - 16 -Energy, 90% DoD (kWh) - 18 -Current capacity; 400Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.5	48/30kWh Li-ion battery -Total energy capacity:30kWh -Energy, 80% DoD (kWh) - 24 -Energy, 90% DoD (kWh) - 27 -Current capacity; 600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.6	48/40kWh Li-ion battery -Total energy capacity;40kWh -Energy, 80% DoD (kWh) - 32 -Energy, 90% DoD (kWh) - 36 -Current capacity; 800Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.7	48/80kWh Li-ion battery -Total energy capacity;80kWh -Energy, 80% DoD (kWh) - 64 -Energy, 90% DoD (kWh) - 72 -Current capacity; 1600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.8	<u>SOLAR PANNELS - supply, delivery and installation included</u>				
4.2.8.1	330W Solar panel -Rated maximum power; 330W -Maximum efficiency; 19.3% Operating temp; -40 -80C	No	120		
4.2.8.2	390W Solar panel -Rated maximum power; 390W -Maximum efficiency; 19.6% Operating temp; -40 -85C	No	120		
4.2.9	<u>Roof mount structure for solar panels.</u>				
4.2.9.1	330W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No	480		
4.2.9.2	390W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No	480		
4.3	MAINTENANCE				
4.3.1	Call out fee	No	1		
	Carried Forward to Final Summary SECTION 4 - UPS (NEW INSTALLATION)			R	R

Item No	Description	Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Routine servicing of UPS	No	50	
4.1.2	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Routine servicing of UPS	No	50	
4.1.4	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Routine servicing of UPS	No	50	
4.1.6	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Routine servicing of UPS	No	50	
4.1.8	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Routine servicing of UPS	No	50	
4.1.10	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Routine servicing of UPS	No	50	
4.1.12	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Routine servicing of UPS	No	50	
4.1.14	Replacement battery - For replacing defective batteries of the same duty	Sum		
	Carried Forward		R	R
	Section No. 4			
	Bill No 1			

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Item No	Description	Quantity	Rate	Amount
SECTION 5 AIRCONDITIONING (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
5.1	AIR CONDITIONING			
	AC Ceiling Cassette Units			
	Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.			
	<u>18000 BTU Ceiling Cassette AC Unit</u>			
5.1.1	Supply cost only	No	60	
5.1.2	Delivery, installation and commissioning	No	60	
	<u>24000 BTU Ceiling Cassette AC Unit</u>			
5.1.3	Supply cost only	No	60	
5.1.4	Delivery, installation and commissioning	No	60	
	<u>36000 BTU Ceiling Cassette AC Unit</u>			
5.1.5	Supply cost only	No	45	
5.1.6	Delivery, installation and commissioning	No	45	
	<u>48000 BTU Ceiling Cassette AC Unit</u>			
5.1.7	Supply cost only	No	30	
5.1.8	Delivery, installation and commissioning	No	30	
	<u>9000 BTU Midwall Split AC Unit</u>			
5.1.9	Supply cost only	No	60	
5.1.10	Delivery, installation and commissioning	No	60	
	Carried Forward		R	R
	Section No. 5			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>12000 BTU Midwall Split AC Unit</u>				
5.1.11	Supply cost only	No	60		
5.1.12	Delivery, installation and commissioning	No	60		
	<u>18000 BTU Midwall Split AC Unit</u>				
5.1.13	Supply cost only	No	60		
5.1.14	Delivery, installation and commissioning	No	60		
	<u>24000 BTU Midwall Split AC Unit</u>				
5.1.15	Supply cost only	No	60		
5.1.16	Delivery, installation and commissioning	No	60		
	<u>36000 BTU Midwall Split AC Unit</u>				
5.1.17	Supply cost only	No	30		
5.1.18	Delivery, installation and commissioning	No	30		
	<u>48000 BTU Midwall Split AC Unit</u>				
5.1.19	Supply cost only	No	30		
5.1.20	Delivery, installation and commissioning	No	30		
5.2	FANS				
	Supply, deliver, install and commission extractor fans connected to luminaires complete with wiring, fixing materials, monthly maintenance for the guarantee/warranty period. Extractor fans to be installed in ceiling panels				
	300 l/s in line extractor fan				
5.2.1	Supply cost only	No	15		
5.2.2	Delivery, installation and commissioning	No	15		
5.3	Supply and install galvanised steel cages for the A/C compressors	No	60		
5.4	Additional pipe run including trunking and amourflex	m	150		
5.5	MAINTENANCE				
5.5.1	Call out fee	No	1		
	Carried Forward to Final Summary			R	R
	SECTION 5 - AIRCONDITIONING (NEW INSTALLATION)				

Item No	Description		Quantity	Rate	Amount
	SECTION 6 JOJO TANK (MAINTENANCE) BILL NO 1				
6.1	JOJO TANK INSTALLATION The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description				
6.1.1	500LT JOJO WATER TANK Replace damaged tank	No	5		
6.1.2	75 kw PRESSURE PUMP Supply, delivery and installation	No	5		
6.1.3	75 kw PRESSURE PUMP (VSD) Supply, delivery and installation	No	5		
6.1.4	PLUMBING INSTALLATION Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum			
Carried Forward to Final Summary SECTION 6 - JOJO (MAINTENANCE)				R	R

Item No	Description	Quantity	Rate	Amount
	SECTION 6 JOJO TANK (NEW INSTALLATION) BILL NO 1			
6.1	JOJO TANK INSTALLATION The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	5000LT JOJO WATER TANK Supply, delivery and installation	No 25		
6.1.2	75 kw PRESSURE PUMP Supply, delivery and installation	No 25		
6.1.3	75 kw PRESSURE PUMP (VSD) Supply, delivery and installation	No 25		
6.1.4	PLUMBING INSTALLATION Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
	Carried Forward to Final Summary		R	R
	SECTION 6 - JOJO (NEW INSTALLATION)			

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FINAL SUMMARY	AMOUNT
SECTION 1 - SUMMARY - PRELIMINARIES	R R
SECTION 1 - SUMMARY - PRELIMINARIES (MAINTENANCE)	R R
SECTION 2 - SUMMARY - MEASURED WORKS	R R
SECTION 2 - SUMMARY - MEASURED WORKS (MAINTENANCE)	R R
SECTION 3 - SUMMARY GENERATORS	R R
SECTION 3 - SUMMARY GENERATORS (MAINTENANCE)	R R
SECTION 4 - SUMMARY UPS	R R
SECTION 4 - SUMMARY UPS (MAINTENANCE)	R R
SECTION 5 - SUMMARY AIRCONDITIONING	R R
SECTION 5 - SUMMARY AIRCONDITIONING (MAINTENANCE)	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION (MAINTENANCE)	R R
SUB TOTAL	R
Add: 10% (Ten percent) Contingency (to be deducted if not utilised)	R
TOTAL	R
Add: VAT @ 15%	R
CARRIED TO QUOTATION SUMMARY	R



home affairs

Department:
Home Affairs
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HOME AFFAIRS

NORTHERN CAPE PROVINCE

BILL OF QUANTITIES

NAME OF CONTRACTOR

BILL OF QUANTITIES

General Notes

Tenderers must complete the Bill of Quantities and detail the unit rate and total amount of each item.

Tenderers are advised to check their item extensions and total additions. Arithmetical errors occurring in the priced Bill of Quantities will be corrected and will have an effect on the tender amount.

No alterations, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bill of Quantities will be adhered to.

The quantities given in the Bill cannot be regarded as exact and are subject to remeasurement on site after completion of the service and adjustments will be made according to the unit rates given in the Bill.

The Bill of Quantities shall not be used for the ordering of material. The contractor shall ascertain the correct quantities before ordering.

The unit prices quoted in the Bill of Quantities must include for such small installation materials as are required for the complete installation in accordance with the Specification.

RATES SHOULD NOT INCLUDE VAT

All prices given in the Bill of Quantities are for supply, delivery, installation and commissioning.

All labour, supervision, transportation, tools and equipment must be allowed for in the rates

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES (NEW INSTALLTION)</u>			
	<u>BILL NO 1</u>			
	<u>FIXED CHARGE ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 2			
	VALUE RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
SECTION 1 SUMMARY - PRELIMINARIES				
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
SECTION 1				
PRELIMINARIES (MAINTENANCE)				
BILL NO 1				
FIXED CHARGE ITEMS				
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
Carried Forward to Summary of Section No. 1			R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 2</u>			
	<u>VALUE RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

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Item No	Description	Quantity	Rate	Amount
	SECTION 2			
	MEASURED WORKS (NEW INSTALLATION)			
	BILL NO 1			
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanised steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.2.2	Supply, install and terminate earth continuity conductor				
	a) 70 mm ² BCEW	m	175		
	b) 50 mm ² BCEW	m	150		
	c) 35 mm ² BCEW	m	125		
	d) 25 mm ² BCEW	m	75		
	e) 16 mm ² BCEW	m	50		
	f) 10 mm ² BCEW	m	20		
	g) 6 mm ² BCEW	m	20		
	h) 4 mm ² BCEW	m	15		
	i) 2.5 mm ² BCEW	m	15		
2.2.3	Supply and installation of circuit breakers (SABS approved):				
	a) 45-63A, 5kA single pole, curve 1	No	10		
	b) 10-40A, 5kA single pole	No	25		
	c) 45-63A, 5kA triple pole, curve 1	No	10		
	d) 10-40A, 5kA triple pole	No	25		
	e) 45-63A, 5kA triple pole	No	10		
	f) 80-125A, 5kA triple pole	No	25		
	g) 150-200A, 10kA triple pole	No	50		
	h) 40-60A, 35kA triple pole	No	75		
	i) 80-125A, 25kA triple pole	No	80		
2.2.4	Supply and install contactors (SABS)				
	a) 0-30A, 3 pole	No	15		
	b) 40-63A, 3 pole	No	15		
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):				
	a) 63A double pole	No	15		
2.2.6	Install socket outlet (SABS):				
	a) 16A, single SSO, WHITE	No	175		
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175		
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150		
	d) Network point including 30m of cat 5 cable	No	200		
2.3	POWER POLES				
	a) 3500mm round power pole	No	15		
	b) Red 16 amp single socket on pole	No	50		
	c) Normal 16 amp single sockets on pole	No	50		
	d) Blank data box	No	50		
	e) Blank tel box	No	50		
	f) Red socket in roof with plug top and cable	No	15		
	g) Normal socket in roof with plug top and cable	No	15		
	h) 30 Amp Double Industrial pole Isolator	No	5		
	i) 60 Amp Triple pole Isolator including York box	No	5		
	Carried Forward			R	R
	Section No. 2				
	Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and Installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0,8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Generator)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

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Item No	Description	Quantity	Rate	Amount
	SECTION 2			
	MEASURED WORKS (MAINTENANCE)			
	BILL NO 1			
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanised steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm ² BCEW	m	175	
	b) 50 mm ² BCEW	m	150	
	c) 35 mm ² BCEW	m	125	
	d) 25 mm ² BCEW	m	75	
	e) 16 mm ² BCEW	m	50	
	f) 10 mm ² BCEW	m	20	
	g) 6 mm ² BCEW	m	20	
	h) 4 mm ² BCEW	m	15	
	i) 2.5 mm ² BCEW	m	15	
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No	10	
	b) 10-40A, 5kA single pole	No	25	
	c) 45-63A, 5kA triple pole, curve 1	No	10	
	d) 10-40A, 5kA triple pole	No	25	
	e) 45-63A, 5kA triple pole	No	10	
	f) 80-125A, 5kA triple pole	No	25	
	g) 150-200A, 10kA triple pole	No	50	
	h) 40-60A, 35kA triple pole	No	75	
	i) 80-125A, 25kA triple pole	No	80	
2.2.4	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No	15	
	b) 40-63A, 3 pole	No	15	
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No	15	
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No	175	
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175	
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150	
	d) Network point including 30m of cat 5 cable	No	200	
2.3	POWER POLES			
	a) 3500mm round power pole	No	15	
	b) Red 16 amp single socket on pole	No	50	
	c) Normal 16 amp single sockets on pole	No	50	
	d) Blank data box	No	50	
	e) Blank tel box	No	50	
	f) Red socket in roof with plug top and cable	No	15	
	g) Normal socket in roof with plug top and cable	No	15	
	h) 30 Amp Double Industrial pole Isolator	No	5	
	i) 60 Amp Triple pole isolator including York box	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and Installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 50 m2 50		
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No 10 No 10 No 10 No 10 No 10		
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 60 m2 60		
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2 15		
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m 15		
2.13.4	FLOORING			
2.13.4.1	Supply and Installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 150 m2 150		
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No 15		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0.8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) Inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Guard House/ Reception)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PA LISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)	No		
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	SECTION 3 GENERATORS (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements			
3.1	GENERATOR SETS			
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.1	Supply cost only	No	15	
3.1.2	Delivery, installation and commissioning	No	15	
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.3	Supply cost only	No	15	
3.1.4	Delivery, installation and commissioning	No	15	
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.5	Supply cost only	No	15	
3.1.6	Delivery, installation and commissioning	No	15	
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.7	Supply cost only	No	15	
3.1.8	Delivery, installation and commissioning	No	15	
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.9	Supply cost only	No	10	
3.1.10	Delivery, installation and commissioning	No	10	
	Carried Forward		R	R
	Section No. 3			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Supply cost only	No	10		
3.1.12	Delivery, installation and commissioning	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Supply cost only	No	10		
3.1.14	Delivery, installation and commissioning	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Supply cost only	No	10		
3.1.16	Delivery, installation and commissioning	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum			
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum			
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.22	Supply and install low fuel alarm and shut off system	No	15		
3.1.23	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	15		
3.1.24	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.25	Supply diesel fuel	Liter	10000		
3.1.26	Supply and install water separator in fuel line	No	15		
3.1.27	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Supply and install Fire Extinguisher for generator set, complete with wooden mounting block, hook, etc.	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary SECTION 3 - GENERATORS (NEW INSTALLATION)				R	R

Item No	Description		Quantity	Rate	Amount
	SECTION 3 GENERATORS (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements 3.1 GENERATOR SETS <u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u> 3.1.1 Delivery, installation and commissioning No 15 3.1.2 Routine servicing of generator No 15 <u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u> 3.1.3 Delivery, installation and commissioning No 15 3.1.4 Routine servicing of generator No 15 <u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u> 3.1.5 Delivery, installation and commissioning No 15 3.1.6 Routine servicing of generator No 15 <u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u> 3.1.7 Delivery, installation and commissioning No 15 3.1.8 Routine servicing of generator No 15 <u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u> 3.1.9 Delivery, installation and commissioning No 10 3.1.10 Routine servicing of generator No 10 Carried Forward R Section No. 3 Bill No. 1 GENERATORS				
					R

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Delivery, installation and commissioning	No	10		
3.1.12	Routine servicing of generator	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Delivery, installation and commissioning	No	10		
3.1.14	Routine servicing of generator	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Delivery, installation and commissioning	No	10		
3.1.16	Routine servicing of generator	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum	15		
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum	15		
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	Repair existing generator canopy	No	15		
3.1.22	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.23	Supply and install low fuel alarm and shut off system	No	15		
3.1.24	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	10		
3.1.25	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	5		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.26	Supply diesel fuel	Liter	10000		
3.1.27	Supply and install water separator in fuel line	No	15		
3.1.28	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Service Fire Extinguisher for generator set	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary SECTION 3 - GENERATORS (MAINTENANCE)				R	R

Item No	Description	Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Supply cost only	No	20	
4.1.2	Delivery, installation and commissioning	No	20	
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Supply cost only	No	20	
4.1.4	Delivery, installation and commissioning	No	20	
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Supply cost only	No	20	
4.1.6	Delivery, installation and commissioning	No	20	
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Supply cost only	No	20	
4.1.8	Delivery, installation and commissioning	No	20	
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Supply cost only	No	20	
4.1.10	Delivery, installation and commissioning	No	20	
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Supply cost only	No	20	
4.1.12	Delivery, installation and commissioning	No	20	
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Supply cost only	No	20	
4.1.14	Delivery, installation and commissioning	No	20	
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	<u>Three Phase 100 kVA UPS as per technical and specific specifications</u>			
4.1.15	Supply cost only	No 10		
4.1.16	Delivery, installation and commissioning	No 10		
4.2	SOLAR SYSTEM			
	Off grid inverters			
4.2.1	<u>3KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% Cont. output power at 25CVA-300 25C-2400W, 40C-2200, 65C-1700W -Peak power output; 6000W -Maximum efficiency, 94% -Maximum feed through current, 2x50A - 2 x AC inputs -DC input range - 24V			
4.2.2	<u>5KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-500VA, 25C-4000W, 40C-3700, 65C-3000W -Peak power output, 10000W -Maximum efficiency; 95% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.3	<u>8KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-8000VA 25C-6500W, 40C-5500, 65C-3600W -Peak power output; 16000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.4	<u>10KW inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-10000VA 25C-8000W, 40C-6500, 65C-4500W -Peak power output; 20000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
4.2.5	15KW Inverter with the following specifications - supply, delivery and installation included INVERTER -Input voltage range; 9,5 - 17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% Cont. output power at 25C-15000VA 25C-12000W, 40C-10000,65C-7000W -Peak power output; 25000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No	15		
4.2.6	MPPT SOLAR CHARGERS - supply, delivery and installation included				
4.2.6.1	MPPT 250/70 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 70A -Nominal PV power; 48V - 4000W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.6.2	MPPT 250/85 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 85A -Nominal PV power; 48V - 4900W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.6.3	MPPT 250/100 with the following specs -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 100A -Nominal PV power; 48V - 5800W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No	50		
4.2.7	LITHIUM ION BATTERY - supply, delivery and installation included				
4.2.7.1	48/5kWh Li-ion battery -Total energy capacity; 5kWh -Energy, 80% DoD (kWh) - 4 -Energy, 90% DoD (kWh) - 4.5 -Current capacity; 100Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.2	48/10kWh Li-ion battery -Total energy capacity; 10kWh -Energy, 80% DoD (kWh) - 8 -Energy, 90% DoD (kWh) - 9 -Current capacity; 200Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.3	48/15kWh Li-ion battery -Total energy capacity;15kWh -Energy, 80% DoD (kWh) - 12 -Energy, 90% DoD (kWh) - 13.5 -Current capacity; 300Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
	Carried Forward			R	R
	Section No. 4				
	Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
4.2.7.4	48/20kWh Li-ion battery -Total energy capacity;20kWh -Energy, 80% DoD (kWh) - 16 -Energy, 90% DoD (kWh) - 18 -Current capacity; 400Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.5	48/30kWh Li-ion battery -Total energy capacity;30kWh -Energy, 80% DoD (kWh) - 24 -Energy, 90% DoD (kWh) - 27 -Current capacity; 600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.6	48/40kWh Li-ion battery -Total energy capacity;40kWh -Energy, 80% DoD (kWh) - 32 -Energy, 90% DoD (kWh) - 36 -Current capacity; 800Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.7	48/80kWh Li-ion battery -Total energy capacity;80kWh -Energy, 80% DoD (kWh) - 64 -Energy, 90% DoD (kWh) - 72 -Current capacity; 1600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.8	<u>SOLAR PANNELS - supply, delivery and installation included</u>			
4.2.8.1	330W Solar panel -Rated maximum power; 330W -Maximum efficiency; 19.3% Operating temp; -40 -80C	No 120		
4.2.8.2	390W Solar panel -Rated maximum power; 390W -Maximum efficiency; 19.6% Operating temp; -40 -85C	No 120		
4.2.9	<u>Roof mount structure for solar panels:</u>			
4.2.9.1	330W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No 480		
4.2.9.2	390W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No 480		
4.3	MAINTENANCE			
4.3.1	Call out fee	No 1		
	Carried Forward to Final Summary SECTION 4 - UPS (NEW INSTALLATION)		R	R

Item No	Description	Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (MAINTENANCE) BILL NO. 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
4.1	UPS			
	<u>Single Phase 10 KVA UPS as per technical and specific specifications</u>			
4.1.1	Routine servicing of UPS	No	50	
4.1.2	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Single Phase 20 KVA UPS as per technical and specific specifications</u>			
4.1.3	Routine servicing of UPS	No	50	
4.1.4	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 10 KVA UPS as per technical and specific specifications</u>			
4.1.5	Routine servicing of UPS	No	50	
4.1.6	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 20 KVA UPS as per technical and specific specifications</u>			
4.1.7	Routine servicing of UPS	No	50	
4.1.8	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 40 KVA UPS as per technical and specific specifications</u>			
4.1.9	Routine servicing of UPS	No	50	
4.1.10	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 60 KVA UPS as per technical and specific specifications</u>			
4.1.11	Routine servicing of UPS	No	50	
4.1.12	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 80 KVA UPS as per technical and specific specifications</u>			
4.1.13	Routine servicing of UPS	No	50	
4.1.14	Replacement battery - For replacing defective batteries of the same duty	Sum		
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

[illegible]

Item No	Description	Quantity	Rate	Amount
SECTION 5 AIRCONDITIONING (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
5.1	AIR CONDITIONING			
	AC Ceiling Cassette Units			
	Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.			
	<u>18000 BTU Ceiling Cassette AC Unit</u>			
5.1.1	Supply cost only	No	60	
5.1.2	Delivery, installation and commissioning	No	60	
	<u>24000 BTU Ceiling Cassette AC Unit</u>			
5.1.3	Supply cost only	No	60	
5.1.4	Delivery, installation and commissioning	No	60	
	<u>36000 BTU Ceiling Cassette AC Unit</u>			
5.1.5	Supply cost only	No	45	
5.1.6	Delivery, installation and commissioning	No	45	
	<u>48000 BTU Ceiling Cassette AC Unit</u>			
5.1.7	Supply cost only	No	30	
5.1.8	Delivery, installation and commissioning	No	30	
	<u>9000 BTU Midwall Split AC Unit</u>			
5.1.9	Supply cost only	No	60	
5.1.10	Delivery, installation and commissioning	No	60	
	Carried Forward		R	R
	Section No. 5			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>12000 BTU Midwall Split AC Unit</u>				
5.1.11	Supply cost only	No	60		
5.1.12	Delivery, installation and commissioning	No	60		
	<u>18000 BTU Midwall Split AC Unit</u>				
5.1.13	Supply cost only	No	60		
5.1.14	Delivery, installation and commissioning	No	60		
	<u>24000 BTU Midwall Split AC Unit</u>				
5.1.15	Supply cost only	No	60		
5.1.16	Delivery, installation and commissioning	No	60		
	<u>36000 BTU Midwall Split AC Unit</u>				
5.1.17	Supply cost only	No	30		
5.1.18	Delivery, installation and commissioning	No	30		
	<u>48000 BTU Midwall Split AC Unit</u>				
5.1.19	Supply cost only	No	30		
5.1.20	Delivery, installation and commissioning	No	30		
5.2	FANS				
	Supply, deliver, install and commission extractor fans connected to luminaires complete with wiring, fixing materials, monthly maintenance for the guarantee/warranty period. Extractor fans to be installed in ceiling panels				
	300 l/s in line extractor fan				
5.2.1	Supply cost only	No	15		
5.2.2	Delivery, installation and commissioning	No	15		
5.3	Supply and install galvanised steel cages for the A/C compressors	No	60		
5.4	Additional pipe run including trunking and armourflex	m	150		
5.5	MAINTENANCE				
5.5.1	Call out fee	No	1		
	Carried Forward to Final Summary			R	R
	SECTION 5 - AIRCONDITIONING (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u> 6.1 <u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No	5	
6.1.2	<u>75 kw PRESSURE PUMP</u> Supply, delivery and installation	No	5	
6.1.3	<u>75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No	5	
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (NEW INSTALLATION)</u> <u>BILL NO 1</u>			
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Supply, delivery and installation	No 25		
6.1.2	<u>.75 kw PRESSURE PUMP</u> Supply, delivery and installation	No 25		
6.1.3	<u>.75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No 25		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
	Carried Forward to Final Summary		R	R
	SECTION 6 - JOJO (NEW INSTALLATION)			

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u>			
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No	5	
6.1.2	<u>75 kw PRESSURE PUMP</u> Supply, delivery and installation	No	5	
6.1.3	<u>75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No	5	
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

<u>FINAL SUMMARY</u>		<u>AMOUNT</u>	
SECTION 1 - SUMMARY - PRELIMINARIES		R	R
SECTION 1 - SUMMARY - PRELIMINARIES (MAINTENANCE)		R	R
SECTION 2 - SUMMARY - MEASURED WORKS		R	R
SECTION 2 - SUMMARY - MEASURED WORKS (MAINTENANCE)		R	R
SECTION 3 - SUMMARY GENERATORS		R	R
SECTION 3 - SUMMARY GENERATORS (MAINTENANCE)		R	R
SECTION 4 - SUMMARY UPS		R	R
SECTION 4 - SUMMARY UPS (MAINTENANCE)		R	R
SECTION 5 - SUMMARY AIRCONDITIONING		R	R
SECTION 5 - SUMMARY AIRCONDITIONING (MAINTENANCE)		R	R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION		R	R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION (MAINTENANCE)		R	R
SUB TOTAL		R	
Add: 10% (Ten percent) Contingency (to be deducted if not utilised)		R	
TOTAL		R	
Add: VAT @ 15%		R	
CARRIED TO QUOTATION SUMMARY		R	



home affairs

Department:
Home Affairs
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HOME AFFAIRS

EASTERN CAPE PROVINCE

BILL OF QUANTITIES

NAME OF CONTRACTOR

BILL OF QUANTITIES

General Notes

Tenderers must complete the Bill of Quantities and detail the unit rate and total amount of each item.

Tenderers are advised to check their item extensions and total additions. Arithmetical errors occurring in the priced Bill of Quantities will be corrected and will have an effect on the tender amount.

No alterations, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bill of Quantities will be adhered to.

The quantities given in the Bill cannot be regarded as exact and are subject to remeasurement on site after completion of the service and adjustments will be made according to the unit rates given in the Bill.

The Bill of Quantities shall not be used for the ordering of material. The contractor shall ascertain the correct quantities before ordering.

The unit prices quoted in the Bill of Quantities must include for such small installation materials as are required for the complete installation in accordance with the Specification.

RATES SHOULD NOT INCLUDE VAT

All prices given in the Bill of Quantities are for supply, delivery, installation and commissioning.

All labour, supervision, transportation, tools and equipment must be allowed for in the rates

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES (NEW INSTALLTION)			
	BILL NO 1			
	FIXED CHARGE ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
<u>SECTION 1</u>				
<u>PRELIMINARIES</u>				
<u>BILL NO 2</u>				
<u>VALUE RELATED ITEMS</u>				
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
Carried Forward to Summary of Section No. 1			R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 3			
	TIME RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
SECTION 1 SUMMARY - PRELIMINARIES				
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES (MAINTENANCE)			
	BILL NO 1			
	FIXED CHARGE ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and Inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
<u>SECTION 1</u>				
<u>PRELIMINARIES</u>				
<u>BILL NO 2</u>				
<u>VALUE RELATED ITEMS</u>				
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
Carried Forward to Summary of Section No. 1			R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

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Item No	Description	Quantity	Rate	Amount
SECTION 2 MEASURED WORKS (NEW INSTALLATION) BILL NO 1				
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizntal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanized steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
Carried Forward			R	R
Section No. 2				
Bill No. 1				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.2.2	Supply, install and terminate earth continuity conductor				
	a) 70 mm ² BCEW	m	175		
	b) 50 mm ² BCEW	m	150		
	c) 35 mm ² BCEW	m	125		
	d) 25 mm ² BCEW	m	75		
	e) 16 mm ² BCEW	m	50		
	f) 10 mm ² BCEW	m	20		
	g) 6 mm ² BCEW	m	20		
	h) 4 mm ² BCEW	m	15		
	i) 2.5 mm ² BCEW	m	15		
2.2.3	Supply and installation of circuit breakers (SABS approved):				
	a) 45-63A, 5kA single pole, curve 1	No	10		
	b) 10-40A, 5kA single pole	No	25		
	c) 45-63A, 5kA triple pole, curve 1	No	10		
	d) 10-40A, 5kA triple pole	No	25		
	e) 45-63A, 5kA triple pole	No	10		
	f) 80-125A, 5kA triple pole	No	25		
	g) 150-200A, 10kA triple pole	No	50		
	h) 40-60A, 35kA triple pole	No	75		
	i) 80-125A, 25kA triple pole	No	80		
2.2.4	Supply and install contactors (SABS)				
	a) 0-30A, 3 pole	No	15		
	b) 40-63A, 3 pole	No	15		
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):				
	a) 63A double pole	No	15		
2.2.6	Install socket outlet (SABS):				
	a) 16A, single SSO, WHITE	No	175		
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175		
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150		
	d) Network point including 30m of cat 5 cable	No	200		
2.3	POWER POLES				
	a) 3500mm round power pole	No	15		
	b) Red 16 amp single socket on pole	No	50		
	c) Normal 16 amp single sockets on pole	No	50		
	d) Blank data box	No	50		
	e) Blank tel box	No	50		
	f) Red socket in roof with plug top and cable	No	15		
	g) Normal socket in roof with plug top and cable	No	15		
	h) 30 Amp Double Industrial pole Isolator	No	5		
	i) 60 Amp Triple pole isolator including York box	No	5		
	Carried Forward			R	R
	Section No. 2				
	Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and Install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR			
	a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK			
	Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK			
	Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of:	No 1		
	a) Certificates of Compliance - original plus two certified copies each			
	b) Up-to-date single line diagrams + two copies each			
	c) Legend cards + two copies each			
	d) Reticulation drawings + two copies each			
	e) Labelling of circuit nodes and switches			
2.13	GENERAL BUILDING			
2.13.1	PAINTING			
	One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing)			
	a) On external walls	m ² 1,500		
	b) On internal walls	m ² 1,500		
	c) On ceilings	m ² 500		
	d) On drywalls	m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc.			
	Half brick wall	m ² 350		
	One brick wall	m ² 350		
	Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. Including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere)			
	Timber door with steel frame size 813 x 2032mm high in half brick wall	No 20		
	Timber door with steel frame size 813 x 2032mm high in one brick wall	No 20		
	Glazed steel window size 1022 x 1254mm high from one brick wall	No 20		
	Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20		
2.13.2.3	Supply and Installation			
	Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES 0,8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) Inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Generator)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

[illegible]

Item No	Description	Quantity	Rate	Amount
	SECTION 2			
	MEASURED WORKS (MAINTENANCE)			
	BILL NO 1			
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanised steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following.			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm² BCEW	m	175	
	b) 50 mm² BCEW	m	150	
	c) 35 mm² BCEW	m	125	
	d) 25 mm² BCEW	m	75	
	e) 16 mm² BCEW	m	50	
	f) 10 mm² BCEW	m	20	
	g) 6 mm² BCEW	m	20	
	h) 4 mm² BCEW	m	15	
	i) 2.5 mm² BCEW	m	15	
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No	10	
	b) 10-40A, 5kA single pole	No	25	
	c) 45-63A, 5kA triple pole, curve 1	No	10	
	d) 10-40A, 5kA triple pole	No	25	
	e) 45-63A, 5kA triple pole	No	10	
	f) 80-125A, 5kA triple pole	No	25	
	g) 150-200A, 10kA triple pole	No	50	
	h) 40-60A, 35kA triple pole	No	75	
	i) 80-125A, 25kA triple pole	No	80	
2.2.4	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No	15	
	b) 40-63A, 3 pole	No	15	
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No	15	
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No	175	
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175	
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150	
	d) Network point including 30m of cat 5 cable	No	200	
2.3	POWER POLES			
	a) 3500mm round power pole	No	15	
	b) Red 16 amp single socket on pole	No	50	
	c) Normal 16 amp single sockets on pole	No	50	
	d) Blank data box	No	50	
	e) Blank tel box	No	50	
	f) Red socket in roof with plug top and cable	No	15	
	g) Normal socket in roof with plug top and cable	No	15	
	h) 30 Amp Double Industrial pole Isolator	No	5	
	i) 60 Amp Triple pole isolator including York box	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ³ 500 m ³ 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc.			
	Vinyl tile floor covering including preparing screed for new anti-static tiles	m2 50		
	Carpet tile floor covering including preparing screed for new carpet tiles	m2 50		
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC			
	Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere)			
	Opening for cashier window size 600 x 800mm high through half brick wall	No 10		
	Opening for door with steel frame size 813 x 2032mm high through half brick wall	No 10		
	Opening for door with steel frame size 813 x 2032mm high through one brick wall	No 10		
	Opening for window size 1200 x 1200mm high through half brick wall	No 10		
	Opening for window size 1200 x 1200mm high through one brick wall	No 10		
2.13.3	MASONRY			
	SUPPLEMENTARY PREAMBLES			
	Sizes in descriptions			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar			
	Half brick walls	m2 60		
	One brick walls	m2 60		
2.13.2.2	Brickwork Sundries			
	Cutting toothings and bonding new brickwork to existing	m2 15		
2.13.2.3	Approved prestressed fabricated lintels			
	110 x 75mm Lintels in lengths not exceeding 1,5m	m 15		
2.13.4	FLOORING			
2.13.4.1	Supply and Installation of new floor covering			
	Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive	m2 150		
	Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 150		
2.13.5	METALWORK			
	Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete			
	Standard security gate for door size 813mm x 2032mm high	No 15		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0.8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Guard House/ Reception)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)	No		
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	Flat wrap 500mm diameter razor wire with and including 25 x 25 x 2 x 500mm Angle section Galvanised mild steel bracket at 2600mm centres			
2.13.11.15	Flat wrap 500mm diameter razor wire to top of walls	m 150		
2.13.11.16	Flat wrap 500mm diameter razor wire fixed to fencing	m 150		
2.13.11.17	25 x 25 x 2mm Angle section post x 600mm long	No 75		
2.13.11.18	Approved 500mm diameter flat wrap of galvanised razor barbed tape wire fixed vertically and secured to straining wires with and including 2.5mm diameter galvanised binding wire at 300mm centres	m 150		
Carried Forward to Final Summary				R
SECTION 2 - MEASURED WORKS (MAINTENANCE)				R

Item No	Description	Quantity	Rate	Amount
	SECTION 3 GENERATORS (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements 3.1 GENERATOR SETS <u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u> 3.1.1 Supply cost only No 15 3.1.2 Delivery, installation and commissioning No 15 <u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u> 3.1.3 Supply cost only No 15 3.1.4 Delivery, installation and commissioning No 15 <u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u> 3.1.5 Supply cost only No 15 3.1.6 Delivery, installation and commissioning No 15 <u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u> 3.1.7 Supply cost only No 15 3.1.8 Delivery, installation and commissioning No 15 <u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u> 3.1.9 Supply cost only No 10 3.1.10 Delivery, installation and commissioning No 10 Carried Forward Section No. 3 Bill No. 1 GENERATORS			
			R	R

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Supply cost only	No	10		
3.1.12	Delivery, installation and commissioning	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Supply cost only	No	10		
3.1.14	Delivery, installation and commissioning	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Supply cost only	No	10		
3.1.16	Delivery, installation and commissioning	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum			
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum			
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.22	Supply and install low fuel alarm and shut off system	No	15		
3.1.23	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	15		
3.1.24	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.25	Supply diesel fuel	Liter	10000		
3.1.26	Supply and install water separator in fuel line	No	15		
3.1.27	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Supply and install Fire Extinguisher for generator set, complete with wooden mounting block, hook, etc.	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary				R	R
SECTION 3 - GENERATORS (NEW INSTALLATION)					

Item No	Description		Quantity	Rate	Amount
	SECTION 3 GENERATORS (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements				
3.1	GENERATOR SETS				
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.1	Delivery, installation and commissioning	No	15		
3.1.2	Routine servicing of generator	No	15		
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.3	Delivery, installation and commissioning	No	15		
3.1.4	Routine servicing of generator	No	15		
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.5	Delivery, installation and commissioning	No	15		
3.1.6	Routine servicing of generator	No	15		
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.7	Delivery, installation and commissioning	No	15		
3.1.8	Routine servicing of generator	No	15		
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.9	Delivery, installation and commissioning	No	10		
3.1.10	Routine servicing of generator	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Delivery, installation and commissioning	No	10		
3.1.12	Routine servicing of generator	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Delivery, installation and commissioning	No	10		
3.1.14	Routine servicing of generator	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Delivery, installation and commissioning	No	10		
3.1.16	Routine servicing of generator	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum	15		
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum	15		
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	Repair existing generator canopy	No	15		
3.1.22	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.23	Supply and install low fuel alarm and shut off system	No	15		
3.1.24	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	10		
3.1.25	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	5		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.26	Supply diesel fuel	Liter	10000		
3.1.27	Supply and install water separator in fuel line	No	15		
3.1.28	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Service Fire Extinguisher for generator set	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary SECTION 3 - GENERATORS (MAINTENANCE)				R	R

Item No	Description	Quantity	Rate	Amount
SECTION 4 UNINTERRUPTED POWER SUPPLIES (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Supply cost only	No	20	
4.1.2	Delivery, installation and commissioning	No	20	
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Supply cost only	No	20	
4.1.4	Delivery, installation and commissioning	No	20	
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Supply cost only	No	20	
4.1.6	Delivery, installation and commissioning	No	20	
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Supply cost only	No	20	
4.1.8	Delivery, installation and commissioning	No	20	
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Supply cost only	No	20	
4.1.10	Delivery, installation and commissioning	No	20	
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Supply cost only	No	20	
4.1.12	Delivery, installation and commissioning	No	20	
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Supply cost only	No	20	
4.1.14	Delivery, installation and commissioning	No	20	
Carried Forward			R	R
Section No. 4				
Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	Three Phase 100 kVA UPS as per technical and specific specifications			
4.1.15	Supply cost only	No 10		
4.1.16	Delivery, installation and commissioning	No 10		
4.2	SOLAR SYSTEM			
	Off grid inverters			
4.2.1	<u>3KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25CVA-300 25C-2400W, 40C-2200, 65C-1700W -Peak power output; 6000W -Maximum efficiency; 94% -Maximum feed through current; 2x50A - 2 x AC inputs -DC input range - 24V			
4.2.2	<u>5KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-500VA, 25C-4000W, 40C-3700, 65C-3000W -Peak power output; 10000W -Maximum efficiency; 95% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.3	<u>8KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-8000VA 25C-6500W, 40C-5500, 65C-3600W -Peak power output; 16000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.4	<u>10KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-10000VA 25C-8000W, 40C-6500, 65C-4500W -Peak power output; 20000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
4.2.5	<u>15KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-15000VA 25C-12000W, 40C-10000,65C-7000W -Peak power output; 25000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC Input range - 48V	No 15		
4.2.6	<u>MPPT SOLAR CHARGERS - supply, delivery and installation included</u>			
4.2.6.1	MPPT 250/70 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 70A -Nominal PV power; 48V - 4060W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 50		
4.2.6.2	MPPT 250/85 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 85A -Nominal PV power; 48V - 4900W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 50		
4.2.6.3	MPPT 250/100 with the following specs -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 100A -Nominal PV power; 48V - 5800W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 50		
4.2.7	<u>LITHIUM ION BATTERY - supply, delivery and installation included</u>			
4.2.7.1	48/5kWh Li-ion battery -Total energy capacity; 5kWh -Energy, 80% DoD (kWh) - 4 -Energy, 90% DoD (kWh) - 4.5 -Current capacity; 100Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.2	48/10kWh Li-ion battery -Total energy capacity; 10kWh -Energy, 80% DoD (kWh) - 8 -Energy, 90% DoD (kWh) - 9 -Current capacity; 200Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.3	48/15kWh Li-ion battery -Total energy capacity; 15kWh -Energy, 80% DoD (kWh) - 12 -Energy, 90% DoD (kWh) - 13.5 -Current capacity; 300Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
4.2.7.4	48/20kWh Li-ion battery -Total energy capacity;20kWh -Energy, 80% DoD (kWh) - 16 -Energy, 90% DoD (kWh) - 18 -Current capacity; 400Ah -Warranty, 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.5	48/30kWh Li-ion battery -Total energy capacity;30kWh -Energy, 80% DoD (kWh) - 24 -Energy, 90% DoD (kWh) - 27 -Current capacity; 600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.6	48/40kWh Li-ion battery -Total energy capacity;40kWh -Energy, 80% DoD (kWh) - 32 -Energy, 90% DoD (kWh) - 36 -Current capacity; 800Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.7.7	48/80kWh Li-ion battery -Total energy capacity;80kWh -Energy, 80% DoD (kWh) - 64 -Energy, 90% DoD (kWh) - 72 -Current capacity; 1600Ah -Warranty, 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No	60		
4.2.8	<u>SOLAR PANNELS - supply, delivery and installation included</u>				
4.2.8.1	330W Solar panel -Rated maximum power; 330W -Maximum efficiency; 19.3% Operating temp, -40 -80C	No	120		
4.2.8.2	390W Solar panel -Rated maximum power; 390W -Maximum efficiency; 19.6% Operating temp; -40 -85C	No	120		
4.2.9	<u>Roof mount structure for solar panels:</u>				
4.2.9.1	330W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No	480		
4.2.9.2	390W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No	480		
4.3	MAINTENANCE				
4.3.1	Call out fee	No	1		
	Carried Forward to Final Summary SECTION 4 - UPS (NEW INSTALLATION)			R	R

Item No	Description		Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
4.1	UPS				
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>				
4.1.1	Routine servicing of UPS	No	50		
4.1.2	Replacement battery - For replacing defective batteries of the same duty	Sum			
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>				
4.1.3	Routine servicing of UPS	No	50		
4.1.4	Replacement battery - For replacing defective batteries of the same duty	Sum			
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>				
4.1.5	Routine servicing of UPS	No	50		
4.1.6	Replacement battery - For replacing defective batteries of the same duty	Sum			
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>				
4.1.7	Routine servicing of UPS	No	50		
4.1.8	Replacement battery - For replacing defective batteries of the same duty	Sum			
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>				
4.1.9	Routine servicing of UPS	No	50		
4.1.10	Replacement battery - For replacing defective batteries of the same duty	Sum			
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>				
4.1.11	Routine servicing of UPS	No	50		
4.1.12	Replacement battery - For replacing defective batteries of the same duty	Sum			
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>				
4.1.13	Routine servicing of UPS	No	50		
4.1.14	Replacement battery - For replacing defective batteries of the same duty	Sum			
	Carried Forward			R	
	Section No. 4				R
	Bill No 1				

[illegible]

Item No	Description	Quantity	Rate	Amount
	SECTION 5 AIRCONDITIONING (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
5.1	AIR CONDITIONING			
	AC Ceiling Cassette Units			
	Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.			
	<u>18000 BTU Ceiling Cassette AC Unit</u>			
5.1.1	Supply cost only	No	60	
5.1.2	Delivery, installation and commissioning	No	60	
	<u>24000 BTU Ceiling Cassette AC Unit</u>			
5.1.3	Supply cost only	No	60	
5.1.4	Delivery, installation and commissioning	No	60	
	<u>36000 BTU Ceiling Cassette AC Unit</u>			
5.1.5	Supply cost only	No	45	
5.1.6	Delivery, installation and commissioning	No	45	
	<u>48000 BTU Ceiling Cassette AC Unit</u>			
5.1.7	Supply cost only	No	30	
5.1.8	Delivery, installation and commissioning	No	30	
	<u>9000 BTU Midwall Split AC Unit</u>			
5.1.9	Supply cost only	No	60	
5.1.10	Delivery, installation and commissioning	No	60	
	Carried Forward		R	R
	Section No. 5			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>12000 BTU Midwall Split AC Unit</u>				
5.1.11	Supply cost only	No	60		
5.1.12	Delivery, installation and commissioning	No	60		
	<u>18000 BTU Midwall Split AC Unit</u>				
5.1.13	Supply cost only	No	60		
5.1.14	Delivery, installation and commissioning	No	60		
	<u>24000 BTU Midwall Split AC Unit</u>				
5.1.15	Supply cost only	No	60		
5.1.16	Delivery, installation and commissioning	No	60		
	<u>36000 BTU Midwall Split AC Unit</u>				
5.1.17	Supply cost only	No	30		
5.1.18	Delivery, installation and commissioning	No	30		
	<u>48000 BTU Midwall Split AC Unit</u>				
5.1.19	Supply cost only	No	30		
5.1.20	Delivery, installation and commissioning	No	30		
5.2	FANS				
	Supply, deliver, install and commission extractor fans connected to luminaires complete with wiring, fixing materials, monthly maintenance for the guarantee/warranty period. Extractor fans to be installed in ceiling panels				
	300 l/s in line extractor fan				
5.2.1	Supply cost only	No	15		
5.2.2	Delivery, installation and commissioning	No	15		
5.3	Supply and install galvanised steel cages for the A/C compressors	No	60		
5.4	Additional pipe run including trunking and amourflex	m	150		
5.5	MAINTENANCE				
5.5.1	Call out fee	No	1		
	Carried Forward to Final Summary			R	R
	SECTION 5 - AIRCONDITIONING (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	SECTION 6 JOJO TANK (MAINTENANCE) BILL NO 1			
6.1	JOJO TANK INSTALLATION The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	5000LT JOJO WATER TANK Replace damaged tank	No	S	
6.1.2	75 kw PRESSURE PUMP Supply, delivery and installation	No	S	
6.1.3	75 kw PRESSURE PUMP (VSD) Supply, delivery and installation	No	S	
6.1.4	PLUMBING INSTALLATION Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
	Carried Forward to Final Summary SECTION 6 - JOJO (MAINTENANCE)		R	R

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (NEW INSTALLATION)</u> <u>BILL NO 1</u> 6.1 <u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description			
6.1.1	<u>500LIT JOJO WATER TANK</u> Supply, delivery and installation	No	25	
6.1.2	<u>.75 kw PRESSURE PUMP</u> Supply, delivery and installation	No	25	
6.1.3	<u>.75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No	25	
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing Installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
	Carried Forward to Final Summary		R	R
	SECTION 6 - JOJO (NEW INSTALLATION)			

Item No	Description	Quantity	Rate	Amount
	SECTION 6 JOJO TANK (MAINTENANCE) BILL NO 1			
6.1	JOJO TANK INSTALLATION The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	5000LT JOJO WATER TANK Replace damaged tank	No 5		
6.1.2	.75 kw PRESSURE PUMP Supply, delivery and installation	No 5		
6.1.3	.75 kw PRESSURE PUMP (VSD) Supply, delivery and installation	No 5		
6.1.4	PLUMBING INSTALLATION Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary SECTION 6 JOJO (MAINTENANCE)			R	R

FINAL SUMMARY	AMOUNT
SECTION 1 - SUMMARY - PRELIMINARIES	R R
SECTION 1 - SUMMARY - PRELIMINARIES (MAINTENANCE)	R R
SECTION 2 - SUMMARY - MEASURED WORKS	R R
SECTION 2 - SUMMARY - MEASURED WORKS (MAINTENANCE)	R R
SECTION 3 - SUMMARY GENERATORS	R R
SECTION 3 - SUMMARY GENERATORS (MAINTENANCE)	R R
SECTION 4 - SUMMARY UPS	R R
SECTION 4 - SUMMARY UPS (MAINTENANCE)	R R
SECTION 5 - SUMMARY AIRCONDITIONING	R R
SECTION 5 - SUMMARY AIRCONDITIONING (MAINTENANCE)	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION	R R
SECTION 6 - SUMMARY JOJO TANK INSTALLATION (MAINTENANCE)	R R
SUB TOTAL	R
Add: 10% (Ten percent) Contingency (to be deducted if not utilised)	R
TOTAL	R
Add: VAT @ 15%	R
CARRIED TO QUOTATION SUMMARY	R



home affairs

Department:
Home Affairs
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HOME AFFAIRS

KWAZULU NATAL PROVINCE

BILL OF QUANTITIES

NAME OF CONTRACTOR

BILL OF QUANTITIES

General Notes

Tenderers must complete the Bill of Quantities and detail the unit rate and total amount of each item.

Tenderers are advised to check their item extensions and total additions. Arithmetical errors occurring in the priced Bill of Quantities will be corrected and will have an effect on the tender amount.

No alterations, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognised but the original wording of the Bill of Quantities will be adhered to.

The quantities given in the Bill cannot be regarded as exact and are subject to remeasurement on site after completion of the service and adjustments will be made according to the unit rates given in the Bill.

The Bill of Quantities shall not be used for the ordering of material. The contractor shall ascertain the correct quantities before ordering.

The unit prices quoted in the Bill of Quantities must include for such small installation materials as are required for the complete installation in accordance with the Specification.

RATES SHOULD NOT INCLUDE VAT

All prices given in the Bill of Quantities are for supply, delivery, installation and commissioning.

All labour, supervision, transportation, tools and equipment must be allowed for in the rates

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES (NEW INSTALLTION)			
	BILL NO 1			
	FIXED CHARGE ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 2</u>			
	<u>VALUE RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
SECTION 1 SUMMARY - PRELIMINARIES				
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES (MAINTENANCE)</u>			
	<u>BILL NO 1</u>			
	<u>FIXED CHARGE ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1			
	PRELIMINARIES			
	BILL NO 2			
	VALUE RELATED ITEMS			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 1</u>			
	<u>PRELIMINARIES</u>			
	<u>BILL NO 3</u>			
	<u>TIME RELATED ITEMS</u>			
1	Offices and storage sheds	Item		
2	Ablution and latrine facilities	Item		
3	Tools and equipment	Item		
4	Water supplies	Item		
5	Electric power	Item		
6	Communications	Item		
7	Security	Item		
8	Safety	Item		
9	Testing authority	Item		
10	Quality assurance	Item		
11	Transport	Item		
12	Medical and inductions	Item		
13	HIV Aids awareness and access to condoms	Item		
14	Site supervision	Item		
15	Other Fixed charged obligations -Contractor to submit details.	Item		
16	Remove site establishment on completion	Item		
	Carried Forward to Summary of Section No. 1		R	

Item No	Description	Quantity	Rate	Amount
	SECTION 1 SUMMARY - PRELIMINARIES			
Bill No		Page No		Amount
1	Fixed Charged Items	1		R
2	Value Related Items	2		R
3	Time Related Items	3		R
Carried to Final Summary				R
SECTION 1 SUMMARY - PRELIMINARIES (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
SECTION 2 MEASURED WORKS (NEW INSTALLATION) BILL NO 1				
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanized steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination ,including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
Carried Forward			R	R
Section No. 2				
Bill No. 1				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
2.2.2	Supply, install and terminate earth continuity conductor				
	a) 70 mm ² BCEW	m	175		
	b) 50 mm ² BCEW	m	150		
	c) 35 mm ² BCEW	m	125		
	d) 25 mm ² BCEW	m	75		
	e) 16 mm ² BCEW	m	50		
	f) 10 mm ² BCEW	m	20		
	g) 6 mm ² BCEW	m	20		
	h) 4 mm ² BCEW	m	15		
	i) 2.5 mm ² BCEW	m	15		
2.2.3	Supply and installation of circuit breakers (SABS approved):				
	a) 45-63A, 5kA single pole, curve 1	No	10		
	b) 10-40A, 5kA single pole	No	25		
	c) 45-63A, 5kA triple pole, curve 1	No	10		
	d) 10-40A, 5kA triple pole	No	25		
	e) 45-63A, 5kA triple pole	No	10		
	f) 80-125A, 5kA triple pole	No	25		
	g) 150-200A, 10kA triple pole	No	50		
	h) 40-60A, 35kA triple pole	No	75		
	i) 80-125A, 25kA triple pole	No	80		
2.2.4	Supply and install contactors (SABS)				
	a) 0-30A, 3 pole	No	15		
	b) 40-63A, 3 pole	No	15		
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):				
	a) 63A double pole	No	15		
2.2.6	Install socket outlet (SABS):				
	a) 16A, single SSO, WHITE	No	175		
	b) 16A, single SSO Dedicated outlet, shaved, RED	No	175		
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No	150		
	d) Network point including 30m of cat 5 cable	No	200		
2.3	POWER POLES				
	a) 3500mm round power pole	No	15		
	b) Red 16 amp single socket on pole	No	50		
	c) Normal 16 amp single sockets on pole	No	50		
	d) Blank data box	No	50		
	e) Blank tel box	No	50		
	f) Red socket in roof with plug top and cable	No	15		
	g) Normal socket in roof with plug top and cable	No	15		
	h) 30 Amp Double Industrial pole Isolator	No	5		
	i) 60 Amp Triple pole isolator including York box	No	5		
	Carried Forward			R	R
	Section No. 2				
	Bill No. 1				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc. 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m ² 150		
	b) Prepare floor to receive new vinyl tiles	m ² 150		
	c) Supply and install anti-static vinyl tiles	m ² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and Installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0,8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Generator)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2.4m high including locking recess mechanism at 3.382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)			
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

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Item No	Description	Quantity	Rate	Amount
	SECTION 2			
	MEASURED WORKS (MAINTENANCE)			
	BILL NO 1			
2.1	WIRE WAYS, CONDUITS AND ACCESSORIES			
2.1.1	Supply and install conduit, to include all tees, bends and sundries required for installation			
	a) 20 mm dia PVC	m	30	
	b) 25 mm dia PVC	m	150	
	c) 20 mm dia galvanised steel	m	30	
	d) 25 mm dia galvanised steel	m	150	
2.1.2	Supply and Install cable tray:			
	a) 300mmx50mm wire mesh basket medium duty 3meter length	m	300	
	b) Basket joiner clips	No	25	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	25	
	d) 300x50mm Horizontal 90 bend	No	25	
	e) 300x50mm Tee	No	25	
	f) 300x50mm Dropper	No	25	
2.1.3	Supply and Install power skirting:			
	a) Double tier powder coated galvanised (three compartment)	m	300	
	b) End plate	No	25	
	c) External bend	No	25	
	d) Internal bend	No	25	
	e) Flat Elbow	No	25	
	f) Flat Tee	No	25	
2.1.4	Install wiring channel:			
	a) P 9000 galvanised steel channel	m	30	
	b) Splice + sundries	No	5	
	c) Clip on support with thread rod & drop-in anchors (2 / 3m length)	No	5	
	d) End cap P9000	No	5	
	e) Tee P9000	No	5	
	f) Ext elbow P9000	No	5	
2.2	WIRING			
2.2.1	Supply, install and termination, including glands and sundries of the following:			
	a) 120 mm ² x 4-core PVC/SWA/PVC CU	m	250	
	b) 95 mm ² x 4-core PVC/SWA/PVC CU	m	200	
	c) 70 mm ² x 4-core PVC/SWA/PVC CU	m	175	
	d) 50 mm ² x 4-core PVC/SWA/PVC CU	m	150	
	e) 25 mm ² x 4-core PVC/SWA/PVC CU	m	125	
	f) 16 mm ² x 4-core PVC/SWA/PVC CU	m	75	
	g) 16 mm ² x 3-core PVC/SWA/PVC CU	m	50	
	h) 10 mm ² x 4-core PVC/SWA/PVC CU	m	20	
	i) 10 mm ² x 3-core PVC/SWA/PVC CU	m	20	
	j) 6 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	k) 4 mm ² x 3-core PVC/SWA/PVC CU	m	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.2.2	Supply, install and terminate earth continuity conductor			
	a) 70 mm ² BCEW	m 175		
	b) 50 mm ² BCEW	m 150		
	c) 35 mm ² BCEW	m 125		
	d) 25 mm ² BCEW	m 75		
	e) 16 mm ² BCEW	m 50		
	f) 10 mm ² BCEW	m 20		
	g) 6 mm ² BCEW	m 20		
	h) 4 mm ² BCEW	m 15		
	i) 2.5 mm ² BCEW	m 15		
2.2.3	Supply and installation of circuit breakers (SABS approved):			
	a) 45-63A, 5kA single pole, curve 1	No 10		
	b) 10-40A, 5kA single pole	No 25		
	c) 45-63A, 5kA triple pole, curve 1	No 10		
	d) 10-40A, 5kA triple pole	No 25		
	e) 45-63A, 5kA triple pole	No 10		
	f) 80-125A, 5kA triple pole	No 25		
	g) 150-200A, 10kA triple pole	No 50		
	h) 40-60A, 35kA triple pole	No 75		
	i) 80-125A, 25kA triple pole	No 80		
2.2.4	Supply and install contactors (SABS)			
	a) 0-30A, 3 pole	No 15		
	b) 40-63A, 3 pole	No 15		
2.2.5	Supply and install earth leakage units (SABS approved, including box, cover plates, accessories and fixing material):			
	a) 63A double pole	No 15		
2.2.6	Install socket outlet (SABS):			
	a) 16A, single SSO, WHITE	No 175		
	b) 16A, single SSO Dedicated outlet, shaved, RED	No 175		
	c) 32A Dedicated caravan plug / welding socket for server cabinets, each connected to its own circuit breaker	No 150		
	d) Network point including 30m of cat 5 cable	No 200		
2.3	POWER POLES			
	a) 3500mm round power pole	No 15		
	b) Red 16 amp single socket on pole	No 50		
	c) Normal 16 amp single sockets on pole	No 50		
	d) Blank data box	No 50		
	e) Blank tel box	No 50		
	f) Red socket in roof with plug top and cable	No 15		
	g) Normal socket in roof with plug top and cable	No 15		
	h) 30 Amp Double Industrial pole Isolator	No 5		
	i) 60 Amp Triple pole isolator including York box	No 5		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.4	SERVICE EXISTING BUILDING DB: Existing Building DB's	No 30		
2.5	DESIGN AND SUPPLY DISTRIBUTION BOARD INCLUDING ALL INTERNAL WIRING: Two compartment DB			
	a) 24 way	No 20		
	b) 36 way	No 40		
	c) 48 way	No 60		
2.6	SUPPLY AND INSTALL DB ACCESSORIES			
2.6.1	Circuit breaker blank covers	No 15		
2.6.2	Trace all circuits and compile legend chart per DB (to correspond with layout plan)	No 5		
2.7	CORE DRILLING Drilling positions shall be verified on site and/or as per layout as shown in the documents. Prices for core drilling is average for installation in any of the following positions including water supply, finishes through structures, vermin proofing, etc 1) through brick walls - 110 to 230mm thickness 2) through re-inforced concrete - 110 to 330mm thickness			
	a) Up to 75mm diameter holes	No 2		
	b) 75mm to 100mm diameter holes	No 2		
	c) 100mm to 150mm diameter holes	No 2		
2.8	LIGHTING INSTALLATION			
2.8.1	Re-lamp luminaire:			
	a) 36W Fluorescent	No 50		
	b) 36W Flameproof Fluorescent	No 50		
	c) 20W Fluorescent	No 50		
	d) 8W Fluorescent	No 50		
2.8.2	Replace diffuser or lens	No 20		
2.8.3	Supply and install new luminaire:			
	a) 36W Fluorescent	No 100		
	b) 36W Flameproof Fluorescent	No 150		
2.9	SERVER ROOM FLOOR			
	a) Remove existing floor covering	m² 150		
	b) Prepare floor to receive new vinyl tiles	m² 150		
	c) Supply and install anti-static vinyl tiles	m² 150		
2.10	FIRE SUPPRESSION			
	a) Supply and install fire extinguishers (4.5 kg STP) with wooden backing board and signage	No 25		
	b) Blank off and remove water sprinklers in ceiling of Server Room	No 150		
	Carried Forward		R	R
	Section No. 2			
	Bill No 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.11	TELKOM EARTH BAR a) Supply and Install Telkom Earth Bar as per specification	No 1		
2.12	GENERAL ELECTRICAL			
2.12.1	TESTS AND INSPECTIONS ON COMMENCEMENT OF WORK Test, inspect and provide a comprehensive report on the complete building electrical installation as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. before commencing with any repair work to the Engineer	No 1		
2.12.2	TESTS AND INSPECTIONS ON COMPLETION OF THE WORK Test, inspect and provide a comprehensive report on the complete standby generator installation at all facilities as per scope of work, including earth test results, load tests, phase balance, insulation levels, Polarity, condition of equipment etc. on completion of the contract to the Engineer including handing over of: a) Certificates of Compliance - original plus two certified copies each b) Up-to-date single line diagrams + two copies each c) Legend cards + two copies each d) Reticulation drawings + two copies each e) Labelling of circuit nodes and switches	No 1		
2.13	GENERAL BUILDING			
2.13.1	PAINTING One coat primer and two coats Dulux Caramel Sand 5 Double velvet (or similar as per engineer approved or to match existing) a) On external walls b) On internal walls c) On ceilings d) On drywalls	m ² 1,500 m ² 1,500 m ² 500 m ² 1,500		
2.13.2	ALTERATIONS			
2.13.2.1	Break down and remove brickwork, etc. Half brick wall One brick wall Drywall partitioning 3,0m high including doors, ironmongery and glazing	m ² 350 m ² 350 m ³ 350		
2.13.2.2	Take out and remove doors, windows, etc. including thresholds, sills, etc. and brick up openings including making good plaster finish on both sides and into reveals (making good finishes elsewhere) Timber door with steel frame size 813 x 2032mm high in half brick wall Timber door with steel frame size 813 x 2032mm high in one brick wall Glazed steel window size 1022 x 1254mm high from one brick wall Glazed aluminium window size 1200 x 1200mm high from half brick wall	No 20 No 20 No 20 No 20		
2.13.2.3	Supply and installation Drywall partitioning 3,0m high including doors, ironmongery, glazing.	m 200		
	Carried Forward		R	R
	Section No 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.2.4	Take up and remove vinyl floor coverings, carpeting, etc. Vinyl tile floor covering including preparing screed for new anti-static tiles Carpet tile floor covering including preparing screed for new carpet tiles	m2 m2	50 50	
2.13.2.5	OPENINGS THROUGH EXISTING WALLS ETC Break out for and form openings through brick walls for new doors and frames and or windows including necessary precast concrete lintels and making good cement plaster on both sides and into reveals (new doors and frames or windows and making good paint work elsewhere) Opening for cashier window size 600 x 800mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through half brick wall Opening for door with steel frame size 813 x 2032mm high through one brick wall Opening for window size 1200 x 1200mm high through half brick wall Opening for window size 1200 x 1200mm high through one brick wall	No No No No No	10 10 10 10 10	
2.13.3	MASONRY SUPPLEMENTARY PREAMBLES Sizes in descriptions Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
2.13.3.1	Brickwork of clay bricks in 6:1 cement mortar Half brick walls One brick walls	m2 m2	60 60	
2.13.2.2	Brickwork Sundries Cutting toothings and bonding new brickwork to existing	m2	15	
2.13.2.3	Approved prestressed fabricated lintels 110 x 75mm Lintels in lengths not exceeding 1,5m	m	15	
2.13.4	FLOORING			
2.13.4.1	Supply and installation of new floor covering Supply 2,5mm thick fully flexible vinyl floor tile, manufactured in accordance with SANS 786 laid in on acrylic adhesive Belgotex floors Miracle fibre (Polypropylene) tufted Multi-Scroll Loop Pile Nexbac Eco SABS Class 3 fire rating grade general/medium commercial carpet tiles, size 500 x 500 x 7mm Thick	m2 m2	150 150	
2.13.5	METALWORK Prices shall include manufacturing-, delivery- and installation costs.			
2.13.5.1	"Trellidor" security doors, complete with frames, locksets, etc fixed to brickwork or concrete Standard security gate for door size 813mm x 2032mm high	No	15	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.6	PLASTERING AND FLOOR SCREEDS			
	INTERNAL PLASTER			
2.13.6.1	One coat 1:5 cement plaster on brickwork On walls	m2 600		
2.13.6.2	Screeds steel floated, on concrete 35mm Thick screeds	m2 300		
2.13.7	EARTHWORKS			
	EXCAVATION, FILLING, ETC			
	Excavation in earth not exceeding 2m deep	m3 450		
2.13.8	REINFORCED CONCRETE			
2.13.8.1	20MPa/19mm concrete			
	Bases	m3 85		
	Strip footings	m3 150		
	Surface beds on waterproofing	m2 60		
	Ramps	m2 80		
2.13.8.2	Fabric reinforcement			
	Ref 245 fabric reinforcement in concrete surface beds, slabs, etc	m2 90		
2.13.9	ROOF COVERINGS, ETC			
2.13.9.1	PROFILED METAL SHEETING AND ACCESSORIES			
	0.8mm "IBR" AZ150" 890 roll formed sheet from clean colour-bond volcanic grey G550 sheet fixed to existing structural steel purlin "all in accordance to the manufacturer's specifications"			
	Roof covering with pitches not exceeding 25 degrees	m2 160		
	Ridge covering with serrated closer 550mm girth	m 15		
	Hip covering with serrated closer 550mm girth	m 15		
	Gutters and downpipe installation	m 30		
2.13.10	STRUCTURAL STEELWORK			
	Canopy consisting of welded structural steel sections (30kg/m2 measured on flat) inclusive of beams, columns, rails, struts, braces, cleats, etc and flat section bearer, gusset and connection plates bolted to concrete or brickwork			
2.13.10.1	Under cover parking	t 2.8		
2.13.10.2	Under cover canopy (Guard House/ Reception)	t 0.75		
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
2.13.11	FENCING			
	CLEARVU FENCING High density anti-climbing and anti-cut pressed mesh panel fencing, formed of 4mm diameter horizontal and 4mm diameter vertical high tensile wires galvanised with alu-galv coating with aperture size 76,2mm x 12,7mm reinforcing V-section ribs bolted with vandal resistant bolts and clamping plates to 85-45mm taper locking posts 2,4m high including locking recess mechanism at 3,382m centres with sealed end caps and 30 x 3mm x 250mm long angle section base anchors with posts bedded in 15MPa concrete bases size 400 x 400 x 600mm deep with bitumen coated 400mm clearvu underdig. Top of fence fitted with galvanised ribbon mesh strip 300mm high with 50mm x 100mm aperture size			
2.13.11.1	1.2mm clearvu fence	m	150	
2.13.11.2	1.8mm clearvu fence	m	150	
2.13.11.3	2.4mm clearvu fence	m	150	
2.13.11.4	6000 x 2400mm clear vu type or similar approved sliding gate to manufacturers' specifications	No	6	
2.13.11.5	1200 x 2400mm clear vu type or similar approved pedestrian gate to manufacturers' specifications	No	6	
	PALISADE FENCING Approved galvanised welded slotted and bolted palisade fence, from 40 x 40 x 2,0mm Angle section pales at 160mm centres, multi spike, two 40 x 40 x 4,0mm angle section cross rails, bolted to fixing lugs with and including tamper proof sheer bolts and nuts			
2.13.11.6	3000 x 1800mm Panel	No	50	
2.13.11.7	3000 x 2000mm Panel	No	150	
2.13.11.8	3000 x 2400mm Panel	No	250	
2.13.11.9	76 x 76 x 4mm Thick post 2600mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.10	100 x 100 x 4mm Thick post 2800mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.11	100 x 100 x 4mm Thick post 3200mm long with mushroom cap welded onto top and with 200 x 200 x 3mm base plate welded onto bottom end including setting up post with and including bitumen paint to embedded portion in and including 450 x 450 x 600mm concrete bases excavations, backfilling and making good	No	250	
2.13.11.12	Pedestrian gate, size 1 200mm wide x 2400mm high, formed of 76 x 38 x 2,5mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles, with 40 x 40 x 2,0mm angle section pales at 160mm, fitted with three 24mm hinges and barrel bolt including all holes, etc., welded or bolted to adjoining galvanised gatepost with and including Union type 3142 padlock with two keys	No	20	
	Sliding gate, size 6 000mm wide x 2400mm high, formed of 120 x 60 x 3mm wall thickness hot dip galvanised mild steel framing and middle rail with mitred and welded angles including gate post/guide post, gate wheels, roller guides and gate track complete (concrete beam and motor elsewhere)	No		
2.13.11.13	Sliding gate, size 4000mm wide x 2400mm high, ditto	No	5	
2.13.11.14	Sliding gate, size 6000mm wide x 2400mm high, ditto	No	5	
	Carried Forward		R	R
	Section No. 2			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	SECTION 3 GENERATORS (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary or the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements			
3.1	GENERATOR SETS			
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.1	Supply cost only	No	15	
3.1.2	Delivery, installation and commissioning	No	15	
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.3	Supply cost only	No	15	
3.1.4	Delivery, installation and commissioning	No	15	
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.5	Supply cost only	No	15	
3.1.6	Delivery, installation and commissioning	No	15	
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.7	Supply cost only	No	15	
3.1.8	Delivery, installation and commissioning	No	15	
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>			
3.1.9	Supply cost only	No	10	
3.1.10	Delivery, installation and commissioning	No	10	
	Carried Forward		R	R
	Section No. 3			
	Bill No. 1			
	GENERATORS			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Supply cost only	No	10		
3.1.12	Delivery, installation and commissioning	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Supply cost only	No	10		
3.1.14	Delivery, installation and commissioning	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Supply cost only	No	10		
3.1.16	Delivery, installation and commissioning	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum			
3.1.19	Inspect Electrical Integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report.	Sum			
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.22	Supply and install low fuel alarm and shut off system	No	15		
3.1.23	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	15		
3.1.24	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
3.1.25	Supply diesel fuel	Liter	10000		
3.1.26	Supply and install water separator in fuel line	No	15		
3.1.27	Supply and install padlocks	No	60		
3.2	LABELING				
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No	15		
3.3	EARTHING AND BONDING				
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No	15		
3.4	FIRE PROTECTION				
3.4.1	Supply and install Fire Extinguisher for generator set, complete with wooden mounting block, hook, etc.	No	15		
3.5	MAINTENANCE				
3.5.1	Call out fee	No	1		
Carried Forward to Final Summary SECTION 3 - GENERATORS (NEW INSTALLATION)				R	R

Item No	Description		Quantity	Rate	Amount
	SECTION 3 GENERATORS (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of generators refers to the servicing of the generator after the 12 months' free maintenance period. May include servicing of existing generator installations of the same size, excluding replacement parts but including all consumables like filters, lubricants, etc. Excludes travel and disbursements				
3.1	GENERATOR SETS				
	<u>Single Phase 20 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.1	Delivery, installation and commissioning	No	15		
3.1.2	Routine servicing of generator	No	15		
	<u>Single Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.3	Delivery, installation and commissioning	No	15		
3.1.4	Routine servicing of generator	No	15		
	<u>Three Phase 30 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.5	Delivery, installation and commissioning	No	15		
3.1.6	Routine servicing of generator	No	15		
	<u>Three Phase 40 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.7	Delivery, installation and commissioning	No	15		
3.1.8	Routine servicing of generator	No	15		
	<u>Three Phase 60 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.9	Delivery, installation and commissioning	No	10		
3.1.10	Routine servicing of generator	No	10		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>Three Phase 80 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.11	Delivery, installation and commissioning	No	10		
3.1.12	Routine servicing of generator	No	10		
	<u>Three Phase 100 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.13	Delivery, installation and commissioning	No	10		
3.1.14	Routine servicing of generator	No	10		
	<u>Three Phase 150 kW Genset as per technical and specific specifications complete with plinth, canopy, control panel, change over unit, enter locks, starter, batteries and fuel tank.</u>				
3.1.15	Delivery, installation and commissioning	No	10		
3.1.16	Routine servicing of generator	No	10		
3.1.17	Load test Gen set	No	15		
3.1.18	Connect Genset to main Emergency DB on approval of Engineer	Sum	15		
3.1.19	Inspect Electrical integrity of Emergency power reticulation, including DBs, cabling, wiring and supply outlets and provide comprehensive report	Sum	15		
3.1.20	Exhaust System - Extend exhaust system to expell outside of plant room.	No	10		
3.1.21	Repair existing generator canopy	No	15		
3.1.22	1000LTR SKID WITH 12V ADAMS PUMP WITH ALL LOCKABLE FITTINGS - ROOF BUILT TO COVER ENTIRE TANKER - PALISADE SURROUNDING THE RETAINING WALL WITH GATE TO ENTER AREA - X2 9KG FIRE EXTINGUISHERS MOUNTED ON THE FRAME - VIEW TUBE WITH LOCKABLE BALL VALVE FOR CONTENT MEASUREMENT - 1000LTR DIPSTICK FOR MANUAL MEASURING	No	15		
3.1.23	Supply and install low fuel alarm and shut off system	No	15		
3.1.24	Supply and install lockable Emergency stop system that trips the genset and fuel supply in an Emergency	No	10		
3.1.25	Supply and install wall mounted extractor fan (XPELAIR WGX9) or similar) complete with accessories, isolator and cabling.	No	5		
	Carried Forward			R	R
	Section No. 3				
	Bill No. 1				
	GENERATORS				

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
3.1.26	Supply diesel fuel	Liter 10000		
3.1.27	Supply and install water separator in fuel line	No 15		
3.1.28	Supply and install padlocks	No 60		
3.2	LABELING			
3.2.1	Supply and install labels, markers and signage as per regulations for each of the generator sets and switch boards - Robust steel Signage to be approved by the Engineer	No 15		
3.3	EARTHING AND BONDING			
3.3.1	Install earthing and bonding to each of the generator sets, switch over panels and switch boards as per specifications and regulations and provide test results	No 15		
3.4	FIRE PROTECTION			
3.4.1	Service Fire Extinguisher for generator set	No 15		
3.5	MAINTENANCE			
3.5.1	Call out fee	No 1		
Carried Forward to Final Summary			R	R
SECTION 3 - GENERATORS (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Supply cost only	No	20	
4.1.2	Delivery, installation and commissioning	No	20	
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Supply cost only	No	20	
4.1.4	Delivery, installation and commissioning	No	20	
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Supply cost only	No	20	
4.1.6	Delivery, installation and commissioning	No	20	
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Supply cost only	No	20	
4.1.8	Delivery, installation and commissioning	No	20	
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Supply cost only	No	20	
4.1.10	Delivery, installation and commissioning	No	20	
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Supply cost only	No	20	
4.1.12	Delivery, installation and commissioning	No	20	
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Supply cost only	No	20	
4.1.14	Delivery, installation and commissioning	No	20	
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
	<u>Three Phase 100 kVA UPS as per technical and specific specifications</u>			
4.1.15	Supply cost only	No 10		
4.1.16	Delivery, installation and commissioning	No 10		
4.2	SOLAR SYSTEM			
	Off grid inverters			
4.2.1	<u>3KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25CVA-300 25C-2400W, 40C-2700, 65C-1700W -Peak power output; 6000W -Maximum efficiency; 94% -Maximum feed through current; 2x50A - 2 x AC inputs -DC input range - 24V			
4.2.2	<u>5KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-500VA, 25C-4000W, 40C-3700, 65C-3000W -Peak power output; 10000W -Maximum efficiency; 95% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.3	<u>8KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-8000VA 25C-6500W, 40C-5500, 65C-3600W -Peak power output; 16000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
4.2.4	<u>10KW Inverter with the following specifications - supply, delivery and installation included</u>	No 15		
	INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-10000VA 25C-8000W, 40C-6500, 65C-4500W -Peak power output; 20000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V			
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
4.2.5	<u>15KW Inverter with the following specifications - supply, delivery and installation included</u> INVERTER -Input voltage range; 9,5 -17V, 19-33V, 38-66V -Output Voltage; 230V +/- 2% -Output frequency; 50Hz +/- 0.1% -Cont. output power at 25C-15000VA 25C-12000W, 40C-10000,65C-7000W -Peak power output; 25000W -Maximum efficiency; 96% -Maximum feed through current; 2x100A - 2 x AC inputs -DC input range - 48V	No 15		
4.2.6	<u>MPPT SOLAR CHARGERS - supply, delivery and installation included</u>			
4.2.6.1	MPPT 250/70 with the following specs: -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 70A -Nominal PV power; 48V - 4000W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 50		
4.2.6.2	MPPT 250/85 with the following specs. -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 85A -Nominal PV power; 48V - 4900W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 50		
4.2.6.3	MPPT 250/100 with the following specs -Battery voltage; 12/24/36/48 Auto select -Rated charge current; 100A -Nominal PV power; 48V - 5800W -Maximum PV open circuit Voltage; 250V -Maximum efficiency; 99% -Self consumption; Less than 20mA @48V	No 50		
4.2.7	<u>LITHIUM ION BATTERY - supply, delivery and installation included</u>			
4.2.7.1	48/5kWh Li-ion battery -Total energy capacity; 5kWh -Energy, 80% DoD (kWh) - 4 -Energy, 90% DoD (kWh) - 4.5 -Current capacity; 100Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.2	48/10kWh Li-ion battery -Total energy capacity; 10kWh -Energy, 80% DoD (kWh) - 8 -Energy, 90% DoD (kWh) - 9 -Current capacity; 200Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.3	48/15kWh Li-ion battery -Total energy capacity; 15kWh -Energy, 80% DoD (kWh) - 12 -Energy, 90% DoD (kWh) - 13.5 -Current capacity; 300Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
	Carried Forward		R	R
	Section No. 4			
	Bill No. 1			

Item No	Description	Quantity	Rate	Amount
	Brought Forward		R	R
4.2.7.4	48/20kWh Li-ion battery -Total energy capacity;20kWh -Energy, 80% DoD (kWh) - 16 -Energy, 90% DoD (kWh) - 18 -Current capacity; 400Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.5	48/30kWh Li-ion battery -Total energy capacity;30kWh -Energy, 80% DoD (kWh) - 24 -Energy, 90% DoD (kWh) - 27 -Current capacity; 600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.6	48/40kWh Li-ion battery -Total energy capacity;40kWh -Energy, 80% DoD (kWh) - 32 -Energy, 90% DoD (kWh) - 36 -Current capacity; 800Ah -Warranty, 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.7.7	48/80kWh Li-ion battery -Total energy capacity;80kWh -Energy, 80% DoD (kWh) - 64 -Energy, 90% DoD (kWh) - 72 -Current capacity; 1600Ah -Warranty; 10 years or 4000 cycles warranty for average 80%DoD and max 90% DoD	No 60		
4.2.8	<u>SOLAR PANNELS - supply, delivery and installation included</u>			
4.2.8.1	330W Solar panel -Rated maximum power; 330W -Maximum efficiency; 19.3% Operating temp; -40 -80C	No 120		
4.2.8.2	390W Solar panel -Rated maximum power; 390W -Maximum efficiency; 19.6% Operating temp, -40 -85C	No 120		
4.2.9	<u>Roof mount structure for solar panels:</u>			
4.2.9.1	330W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No 480		
4.2.9.2	390W Panels IBR Roof mount Clip lock roof mount Tile roof mount Triangle structure	No 480		
4.3	MAINTENANCE			
4.3.1	Call out fee	No 1		
	Carried Forward to Final Summary SECTION 4 - UPS (NEW INSTALLATION)		R	R

Item No	Description	Quantity	Rate	Amount
	SECTION 4 UNINTERRUPTED POWER SUPPLIES (MAINTENANCE) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services refers to the servicing of the equipment after the 12 months' free maintenance period. May include servicing of existing equipment installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements			
4.1	UPS			
	<u>Single Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.1	Routine servicing of UPS	No	50	
4.1.2	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Single Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.3	Routine servicing of UPS	No	50	
4.1.4	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 10 kVA UPS as per technical and specific specifications</u>			
4.1.5	Routine servicing of UPS	No	50	
4.1.6	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 20 kVA UPS as per technical and specific specifications</u>			
4.1.7	Routine servicing of UPS	No	50	
4.1.8	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 40 kVA UPS as per technical and specific specifications</u>			
4.1.9	Routine servicing of UPS	No	50	
4.1.10	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 60 kVA UPS as per technical and specific specifications</u>			
4.1.11	Routine servicing of UPS	No	50	
4.1.12	Replacement battery - For replacing defective batteries of the same duty	Sum		
	<u>Three Phase 80 kVA UPS as per technical and specific specifications</u>			
4.1.13	Routine servicing of UPS	No	50	
4.1.14	Replacement battery - For replacing defective batteries of the same duty	Sum		
	Carried Forward		R	
	Section No. 4			R
	Bill No. 1			

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Item No	Description	Quantity	Rate	Amount
SECTION 5 AIRCONDITIONING (NEW INSTALLATION) BILL NO 1 The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description Routine services of air conditioning units refers to the servicing of the units after the 12 months' free maintenance period. May include servicing of existing units installations of the same size, excluding replacement parts but including all consumables. Excludes travel and disbursements				
5.1	AIR CONDITIONING			
	AC Ceiling Cassette Units			
	Supply, deliver, install and commission the following HVAC equipment including fixing of hardwired remote against walls, wiring from isolators to outdoor and indoor units, glands, shrouds, monthly maintenance for the guarantee/warranty period, pumps, temperature indicator, on console, quiet running, energy efficient, etc.			
	<u>18000 BTU Ceiling Cassette AC Unit</u>			
5.1.1	Supply cost only	No	60	
5.1.2	Delivery, installation and commissioning	No	60	
	<u>24000 BTU Ceiling Cassette AC Unit</u>			
5.1.3	Supply cost only	No	60	
5.1.4	Delivery, installation and commissioning	No	60	
	<u>36000 BTU Ceiling Cassette AC Unit</u>			
5.1.5	Supply cost only	No	45	
5.1.6	Delivery, installation and commissioning	No	45	
	<u>48000 BTU Ceiling Cassette AC Unit</u>			
5.1.7	Supply cost only	No	30	
5.1.8	Delivery, installation and commissioning	No	30	
	<u>9000 BTU Midwall Split AC Unit</u>			
5.1.9	Supply cost only	No	60	
5.1.10	Delivery, installation and commissioning	No	60	
	Carried Forward		R	R
	Section No. 5			
	Bill No. 1			

Item No	Description		Quantity	Rate	Amount
	Brought Forward			R	R
	<u>12000 BTU Midwall Split AC Unit</u>				
5.1.11	Supply cost only	No	60		
5.1.12	Delivery, installation and commissioning	No	60		
	<u>18000 BTU Midwall Split AC Unit</u>				
5.1.13	Supply cost only	No	60		
5.1.14	Delivery, installation and commissioning	No	60		
	<u>24000 BTU Midwall Split AC Unit</u>				
5.1.15	Supply cost only	No	60		
5.1.16	Delivery, installation and commissioning	No	60		
	<u>36000 BTU Midwall Split AC Unit</u>				
5.1.17	Supply cost only	No	30		
5.1.18	Delivery, installation and commissioning	No	30		
	<u>48000 BTU Midwall Split AC Unit</u>				
5.1.19	Supply cost only	No	30		
5.1.20	Delivery, installation and commissioning	No	30		
5.2	FANS				
	Supply, deliver, install and commission extractor fans connected to luminaires complete with wiring, fixing materials, monthly maintenance for the guarantee/warranty period. Extractor fans to be installed in ceiling panels				
	300 l/s in line extractor fan				
5.2.1	Supply cost only	No	15		
5.2.2	Delivery, installation and commissioning	No	15		
5.3	Supply and install galvanised steel cages for the A/C compressors	No	60		
5.4	Additional pipe run including trunking and amouflex	m	150		
5.5	MAINTENANCE				
5.5.1	Call out fee	No	1		
	Carried Forward to Final Summary			R	R
	SECTION 5 - AIRCONDITIONING (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u>			
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No	5	
6.1.2	<u>75 kw PRESSURE PUMP</u> Supply, delivery and installation	No	5	
6.1.3	<u>75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No	5	
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

Item No	Description	Quantity	Rate	Amount
<u>SECTION 6</u> <u>JOJO TANK (NEW INSTALLATION)</u> <u>BILL NO 1</u>				
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Supply, delivery and installation	No	25	
6.1.2	<u>.75 kw PRESSURE PUMP</u> Supply, delivery and installation	No	25	
6.1.3	<u>.75 kw PRESSURE PUMP (VSD)</u> Supply, delivery and installation	No	25	
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (NEW INSTALLATION)				

Item No	Description	Quantity	Rate	Amount
	<u>SECTION 6</u> <u>JOJO TANK (MAINTENANCE)</u> <u>BILL NO 1</u>			
6.1	<u>JOJO TANK INSTALLATION</u> The descriptions in this Price Schedule shall be read in conjunction with the specification. The unit rate for each item in the Price Schedules shall include for all materials, labour, transport, etc., everything necessary for the execution and complete installation of the work in accordance with the description			
6.1.1	<u>5000LT JOJO WATER TANK</u> Replace damaged tank	No 5		
6.1.2	<u>.75 kw PRESSURE PUMP</u> Supply, delivery and installation	No 5		
6.1.3	<u>.75 kw PRESSURE PUMP [VSD]</u> Supply, delivery and installation	No 5		
6.1.4	<u>PLUMBING INSTALLATION</u> Plumbing installation for the connection of JOJO tank, pressure pump and building related repairs	sum		
Carried Forward to Final Summary			R	R
SECTION 6 - JOJO (MAINTENANCE)				

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THE NATIONAL TREASURY

Republic of South Africa



GOVERNMENT PROCUREMENT: GENERAL CONDITIONS OF CONTRACT

July 2010

GOVERNMENT PROCUREMENT
GENERAL CONDITIONS OF CONTRACT
July 2010

NOTES

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- The General Conditions of Contract will form part of all bid documents and may not be amended.
- Special Conditions of Contract (SCC) relevant to a specific bid, should be compiled separately for every bid (if applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

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General Conditions of Contract

1. Definitions

1. The following terms shall be interpreted as indicated:
 - 1.1 “Closing time” means the date and hour specified in the bidding documents for the receipt of bids.
 - 1.2 “Contract” means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - 1.3 “Contract price” means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
 - 1.4 “Corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
 - 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
 - 1.6 “Country of origin” means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
 - 1.7 “Day” means calendar day.
 - 1.8 “Delivery” means delivery in compliance of the conditions of the contract or order.
 - 1.9 “Delivery ex stock” means immediate delivery directly from stock actually on hand.
 - 1.10 “Delivery into consignees store or to his site” means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
 - 1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the

RSA.

- 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 "GCC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such

obligations of the supplier covered under the contract.

- 1.25 “Written” or “in writing” means handwritten in ink or any form of electronic or mechanical writing.

2. Application

- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
- 2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

- 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za

4. Standards

- 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

5. Use of contract documents and information; inspection.

- 5.1 The supplier shall not, without the purchaser’s prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchaser’s prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier’s performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier’s records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent rights

- 6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

7. Performance security

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
 - (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1 All pre-bidding testing will be for the account of the bidder.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or

analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.

- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

- 10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
- 10.2 Documents to be submitted by the supplier are specified in SCC.

11. Insurance

- 11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

12. Transportation

- 12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;

- (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
- (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.

13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
- (b) in the event of termination of production of the spare parts:
 - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.

15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.

15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take

such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

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| 16. Payment | <p>16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.</p> <p>16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.</p> <p>16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.</p> <p>16.4 Payment will be made in Rand unless otherwise stipulated in SCC.</p> |
| 17. Prices | <p>17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.</p> |
| 18. Contract amendments | <p>18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.</p> |
| 19. Assignment | <p>19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.</p> |
| 20. Subcontracts | <p>20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.</p> |
| 21. Delays in the supplier's performance | <p>21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.</p> <p>21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.</p> <p>21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.</p> <p>21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the</p> |

supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.

21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.

21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without canceling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
- (b) if the Supplier fails to perform any other obligation(s) under the contract; or
- (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.

23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.

23.4 If a purchaser intends imposing a restriction on a supplier or any

person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.

23.5 Any restriction imposed on any person by the Accounting Officer / Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.

23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:

- (i) the name and address of the supplier and / or person restricted by the purchaser;
- (ii) the date of commencement of the restriction
- (iii) the period of restriction; and
- (iv) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Anti-dumping and countervailing duties and rights

24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which

may be due to him

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

- 26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 27.5 Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
 - (b) the purchaser shall pay the supplier any monies due the supplier.

28. Limitation of liability

- 28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and

	(b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
29. Governing language	29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
30. Applicable law	30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
31. Notices	31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice 31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.
32. Taxes and duties	32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country. 32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser. 32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.
33. National Industrial Participation Programme (NIP)	33.1 The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.
34 Prohibition of Restrictive practices	34.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging). 34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.

- 34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.