



TENDER

MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DEPARTMENT OF SOCIAL DEVELOPMENT (DSD) PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS

SCMU5-22/23-0130

NAME OF COMPANY:						
CSD Nr:						
CRS Nr (CIDB):						
CLOSING DATE:	6 DECEMBER 2022	TIMF: 11:00 am				

Department of Public Works and Infrastructure

3rd Floor. Office 3-46

Independence Avenue

Qhasana Building

5605





T1.1 BID Notice and Invitation to BID

The Eastern Cape Department OF Public Works and Infrastructure with a CIDB Grading **4ME or higher** the following Class of works (ME) Bids for MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS.

The contract will be based on the **NEC 3 TERM SERVICE CONTRACT (TSC).** The Eastern Cape Department of Public Works and Infrastructure will enter into a contract with the successful Bidder.

Only tenderers who have suitable experience and suitably qualified personnel in providing similar services to those that are required are eligible to submit tenders.

Tender documents are downloadable for free of charge from National Treasury's eTender Portal: (http://www.etenders.gov.za/content/advertised-tenders) or from the Department of Public Works and Infrastructure website (www.ecdpw.gov.za/tenders) from the 04 November 2022.

Below is a link containing the Bill of Quantities SCMU5-22-23-0130

No briefing will be held

The closing time for receipt of tenders by the ECDPWI is 11:00 am on 06 December 2022 where tenders will be opened in public. Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted. Bids must be submitted in sealed envelopes clearly marked "SCMU5-22/23-0130": MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS" must be deposited in the bid box:

Physical Address of Bid Box: Department of Public Works and Infrastructure,
Department of Public Works
Independence Avenue
Qhasana Building
Bhisho
5605

It is the responsibility of the bidder/s to ensure that bid documents are submitted on or before closing time and the correct location as the department will not take responsibility of wrong delivery. Bidders using courier services for delivery of their bid documents must ensure the delivery is at the correct place / location and time as the department will not be held responsible for wrong delivery and not delivered to Departmental officials. The Department will not accept responsibility if Bids received by official if they are not timely deposited in the Bid Box.

Bids may only be submitted on the BID documentation that is issued. Requirements for sealing, addressing, delivery, opening and assessment of Bids are stated in the BID Data.





B. BID EVALUATION:

This bid will be evaluated in Three (3) phases as follows:

Phase 1: Local Content and Production - Designated sector: Steel Products and Components 100%, Valve

Products 100%, Wires and Termination kit 100%; Pumps, Motors and Associated Accessories 70%)

Phase 2: Administrative requirements and Mandatory requirements

Phase 3: Price and preference (80/20 system)

PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT (PPPFA) POINTS WILL BE AWARDED AS FOLLOWS:

Maximum points on price - 80 points

Maximum points for B-BBEE - 20 points

Maximum points - 100 points

C. BID SPECIFICATIONS, CONDITIONS AND RULES

- 1. The Department of Public Works SCM policy applies.
- 2. BID validity period is 120 days.
- 3. Bidders must ensure 2.3 of SBD4 (Declaration of interest) is completed correctly. Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract. such interest must be disclosed on question 2.3.1 of SBD 4.

D. TENDER SUBMISSIONS:

Bids must be submitted in sealed envelopes clearly marked "SCMU5-22/23-0130" MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS" Must be deposited in the bid box, DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE, INDEPENDENCE AVENUE, QHASANA BUILDING, BHISHO 5605

E. ENQUIRIES WITH REGARD TO THIS ADVERT MAY BE DIRECTED TO:

SCM RELATED ENQUIRIES

Tel No: 040 602 4000

Email Address: supply.chain@ecdpw.gov.za.

TECHNICAL ENQURIES

Mr B. Wambi

Tel No: 051 611 9800/ 078 232 8972

Email Address: <u>Baxolele.Wambi@ecdpw.gov.za</u>

FOR COMPLAINTS, FRAUD, & BID ABUSE:

Call: 0800 701 701





T1.2 BID Data

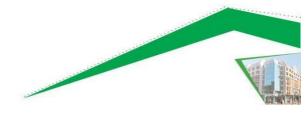
The conditions of BID are the latest edition of SANS 10845-3, Standard conditions of BID.

SANS 10845-3 makes several references to the BID Data for details that apply specifically to this BID. The BID Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the provisions of SANS 10845-3 and as contained in **Annexure F** of **Standard for Uniformity in Construction Procurement (Board Notice 136 Government Gazette No 38960 of 10 July 2015)**,

Each item of data given below is cross-referenced to the clause in SANS 10845-3 to which it mainly applies.

Clause number	BID Data	
3.1	The Employer is Public Works and Infrastructure	
3.2	The BID documents issued by the employer comprise the following documents: THE BID Part T1: Bidding procedures T1.1 - BID notice and invitation to BID T1.2 - BID data Part T2: Returnable documents T2.1 - List of returnable documents T2.2 - Returnable schedules THE CONTRACT Part C1: Agreements and Contract data C1.1 - Form of offer and acceptance C1.2 - Contract data C1.3 - Performance Bond Part C2: Scope of work C2.1 - Scope of work C2.2 - Technical specifications Part C3: Site information C3 - Site information Part C4: Pricing data C4 - Bill of Quantities	
3.3	The BID documents issued by the employer comprise the documents listed on the contents page	
3.4	The employer's agent is: Name: Baxolele Wambi Department of Public Works & Infrastructure Block F Bensonvale Office Complex Herschel Road Sterkspruit 9762 Tel:051 611 9800/ 078 232 8972 E-mail: Baxolele.Wambi@ecdpw.gov.za	
3.5	The language for communications is English.	
3.6	The competitive negotiation procedure shall be applied.	
3.7	Method 3: Three (3) stage procurement procedure shall be applied.	
4	BIDDER's obligations	
4.1	Only those Bidders who satisfy the following eligibility criteria and who provide the required evidence in their BID submissions are eligible to submit Bids and have their Bids evaluated:	





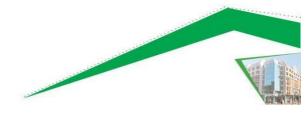
	It is estimated that tenderers must have a cidb contractor grading designation of CIDB Grade 4ME. or higher
4.2	Only those Bidders who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum bided, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, class of construction work, are eligible to have their Bids evaluated. Joint ventures are eligible to submit Bids provided that: 1. every member of the joint venture is registered with the CIDB; in the ME class of works. 2. the lead partner has a contractor grading designation in the CIDB Grade 4ME class of construction work; or not lower than one level below the required grading designation in the class of works construction works under considerations and possess the required recognition status. 3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a CIDB Grade 4ME or higher class of construction work or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations.
4.3	The employer will compensate the BID as follows as per the conditions of the Form of Contract signed or SLA. The employer will not compensate the Bidder for any costs incurred in attending interviews or making any submissions in the office of the employer.
4.4	It is the responsibility of the Bidder to check the BID documents on receipt for completeness and notify the employer of any discrepancy or omission.
4.5	Confidentiality and copyright of documents Treat as confidential all matters arising in connection with the BID. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a BID offer in response to the invitation.
4.6	Obtain, as necessary for submitting a BID offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are incorporated into the BID documents by reference.
4.7	Acknowledge receipt of addenda to the BID documents, which the employer may issue, and, if necessary, apply for an extension to the closing time stated in the BID data, in order to take the addenda into account.
4.8	The arrangements for a compulsory clarification meeting are as stated in the BID Notice and Invitation to BID. Bidders must sign the attendance list in the name of the Bidding entity. Addenda will be issued to and Bids will be received only from those Bidding entities appearing on the attendance list. BID documents will not be made available at the clarification meeting
4.9	Seek clarification Request clarification of the BID documents, if necessary, by notifying the employer at least 5 (Five) working days before the closing time stated in the BID data.
4.10	Bidders are required to state the rates and currencies in Rands. Include in the rates, prices, and the bided total of the prices (if any), all duties, taxes which the law requires to be paid [except value added tax (VAT)], and other levies payable by the successful Bidder, that are applicable 14 days before the closing time stated in the BID data. Show the VAT payable by the employer separately as an addition to the bided total of the prices. Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data. State the rates and prices in monetary value of the contract unless otherwise instructed in the BID data.





4.15.2	Placing of contractors under restrictions / withdrawal of Bids
4.15.1	The BID offer validity period is 120 days . Hold the BID offer(s) valid for acceptance by the employer at any time during the validity period stated in the BID data after the closing time stated in the BID data. If requested by the employer, consider extending the validity period stated in the BID data for an agreed additional period, with or without any conditions attached to such extension. Extend the period of the BID security, if any, to cover any agreed extension requested by the employer.
4.14	The closing time for submission of BID offers is as stated in the BID Notice and Invitation to BID. Ensure that the employer receives the BID offer at the address specified in the BID data not later than the closing time stated in the BID data. Proof of posting shall not be accepted as proof of delivery. Accept that, if the employer extends the closing time stated in the BID data for any reason, the requirements of the standard conditions of BID in this part of SANS 10845 apply equally to the extended deadline.
4.13.7	Telephonic, telegraphic, telex, facsimile or e-mailed BID offers will not be accepted. The Bidder accepts that the employer does not assume any responsibility for the misplacement or premature opening of the BID offer if the outer package is not sealed and marked as stated.
4.13.6	A two-envelope procedure will not be required.
4.13.5	The Bidder is required to submit with his BID the following certificates: 1) a copy of the CSD report showing, amongst other things, that tax matters of the service provider are in order the South African Revenue Services. In the case of a Joint Venture/Consortium/Subcontractors each party must submit a separate CSD report showing, amongst other things, that tax matters of the service provider are in order the South African Revenue Services. 2) CIDB Grading certificate or CRS number.
4.13.4	The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are: Location of tender box: DEPARTMENT OF PUBLIC WORKS & INFRASTRUCTURE, FRONT CORNER OF QHASANA BUILDING ON THE WAY TO CIDB OFFICES LABELLED "TENDERS", BISHO. Physical address: Independence avenue, Ground Floor, Qhasana Building, Bhisho 5605 Identification details "SCMU5-22/23-0130": MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS" CLOSING DATE AND TIME: 6 December 2022 at 11:00 am.
4.13.3	A BID security in the amount of N/A is required and shall remain valid for a period not exceeding N/A days after the closing date for BID offers. The form of the BID security shall not differ substantially from the sample provided in Annex D of SANS 10845-3.
4.13.2	Sign the original and all copies of the BID offer where required in terms of the BID data. State in the case of a joint venture which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the BID offer. NOTE The employer holds all authorized signatories liable on behalf of the Bidder.
4.13.1	Parts of each BID offer communicated on paper shall be submitted as an original. Submit a) the parts of the BID offer communicated on paper as an original plus the number of copies stated in the BID data, with a translation of any documentation in a language other than the language of communication established in 3.5, and b) the parts communicated electronically by the employer of its agents on paper format with the BID.
4.13	No alternative BID offers will be considered
4.12	Main BID offers are not required to be submitted together with alternative Bids.
4.11	Do not make any alterations or additions to the BID documents, except to comply with instructions issued by the employer or to correct errors made by the Bidder and ensure that all signatories to the BID offer initial all such alterations. Do not make erasures using masking fluid.





	If any Bidder who has submitted a BID offer or a contractor who has concluded a contract has, as relevant: withdrawn such BID or quotation after the advertised closing date and time for the receipt of submissions; after having been notified of the acceptance of his BID, failed or refused to commence the contract; had their contract terminated for reasons within their control without reasonable cause; offered, promised or given a bribe in relation to the obtaining or the execution of such contract; acted in a fraudulent, collusive or anti-competitive or improper manner or in bad faith towards the Provincial Government; or, made any incorrect statement in any affidavit or declaration with regard to a preference claimed and is unable to prove to the satisfaction of the Provincial Government that the statement was made in good faith or reasonable steps were taken to confirm the correctness of the statements, such Bidder/s may be placed under restriction from Bidding with the state. Procedures are outlined in the EC SCM Policy for Infrastructure procurement and Delivery Management and also on cidb Inform Practice Note #30. Excerpts of the policy can be availed on request of any interested Bidder.
4.16	The Conditions of Contract are on clauses of the NEC ® TERM SERVICE CONTRACT Copies of these conditions of contract may be obtained from the Association of South African Quantity Surveyors, Master Builders Association, South African Association of Consulting Engineers, South African Institute of Architects, Association of Construction Project Managers, Building Industries Federation South Africa, South African Property Owners Association or Specialist Engineering Contractors Committee.
4.17	the preferred Bidder will be required to submit an approved insurer undertaking to provide the Performance Bond / Guarantee / Surety / Security to the format and/or standard as per DPWI policy
5	Employer's undertakings
5.1	The Employer will respond to requests for clarification received up to Five (5) working days before the BID closing time. If, as a result of the issuing of addenda, it is necessary to extend the closing time stated in the BID data, grant such extension and notify all respondents accordingly.
5.2	The employer shall issue addenda until Five (5) working days before BID closing time.
5.4	Bids will be opened immediately after the closing time for Bids at 11:00am
5.6	Do not disclose to Bidders, or to any person not officially concerned with such processes, information relating to the evaluation and comparison of BID offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful Bidder.
5.7	Determine, after opening and before detailed evaluation, whether each BID offer that was properly received a) complies with the requirements of the standard conditions of BID in this part of SANS 10845, b) has been properly and fully completed and signed, and c) is responsive to the other requirements of the BID documents. A responsive BID is one that conforms to all the terms, conditions, and scope of work of the BID documents, without material deviation or qualification. A material deviation or qualification is one which, in the employer's opinion, would d) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the scope of work, e) significantly change the employer's or the Bidder's risks and responsibilities under the contract, or f) affect the competitive position of other Bidders presenting responsive Bids, if it were to be rectified. Reject a non-responsive BID offer, and do not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.
5.8	Arithmetical errors, omission and discrepancies Check responsive Bids for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern. For Vat related discrepancies, National and Provincial Treasury prescripts in relation to VAT procedures apply.
5.9.1	The financial offer will be reduced to a comparative basis using the BID Assessment Schedule.
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	Tau.						
	Formula Com-						
	1 Highest price or						
	2 Lowest price or percentage commission / 16-						
	A. C.						
	a P_m is the comparative offer of the most favourable comparative offer.						
	$oldsymbol{P}$ is the comparative offer of the tender offer under consideration.						
5.10.2	The procedure for the evaluation of responsive Bids is Method 3: Evaluation On Local Production and Content, Administrative requirement and Mandatory requirements, Price and Preference.						
	Phase 1: (Local Content and Production – Designated sector Steel Products and Components 100%, Valve Products 100%, Wires and Termination kit 100%; Pumps, Motors and Associated Accessories 70%.)						
	Phase 2: Administrative requirements and Mandatory requirements						
	Phase 3: Price and preference (80/20 system)						
5.10.3	STAGE 1: EVALUATION ON LOCAL PRODUCTION AND CONTENT						
	On local content designated items, only locally produced goods or services with a						
	stipulated minimum threshold for local production and content of 100% will be						
	considered.						
	2. The minimum threshold for local production and content for the relevant designated						
	sector: Steel Products and Components 100%, Valve Products 100%, Wires and Termination kit 100%; Pumps, Motors and Associated Accessories 70%.						
	3. Exchange rate to be used for the calculation of local content (local content and local						
	production are used interchangeably) must be the exchange rate published by the SARB at 12:00 on the date, one week (7 calendar days) prior to the closing date of						
	the bid. 4. Failure to indicate minimum percentage (%) or not meeting minimum percentage for						
	Failure to indicate minimum percentage (%) or not meeting minimum percentage for local content will automatically invalidate the bid for further consideration.						
	5. If the raw material or input to be used for a specific item is not available locally,						
	bidders should obtain written authorization from the DTI should there be a need to						
	import such raw material or input and a copy of this authorization letter must be						
	submitted together with the bid document at the closing date and time. 6. Bidders must complete SBD6.2 with annexure C and it must be submitted with the						
	bid at the closing date and time. Failure to submit will invalidate the bid .						
	7. The main contractor may not sub contract work to an extent that the local content and production is compromised. The conditions and rules applying to the main bidder on local production and content also apply to the sub-contractor(s).						
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E 40 4	CTAGE & DECRONON/ENEGO TO THE DID DECLUDEMENTS AND DIVISO						
5.10.4	STAGE 2: RESPONSIVENESS TO THE BID REQUIREMENTS AND RULES						
	A. Bidders' proposals must meet the following minimum requirements and supporting documents must be submitted with the completed bid document in a sealed envelope in the bid box at the closing date and time. Failure to comply will automatically eliminate the bid for further consideration:						
	eliminate the bid for further consideration: 1. Bid Document (This Document must be submitted in its original format).						
	 Bid bocument (mis bocument must be submitted in its original format). Bids which are late, incomplete, unsigned or submitted by facsimile or electronically, will not be accepted. 						





- Bidder must be registered with CIDB in the correct grading and class of works as per the BID notice and requirements. And the status on CIDB must be active during award stage. It is the responsibility of the bidder to keep the status on CIDB active throughout bidding process (advert till award stage).
- 4. Bidders must be a legal entity or partnership or consortia.
- 5. Form of offer and Acceptance (fully completed and signed).
- 6. SBD 4 Bidders Disclosure (fully completed and signed). SBD4 must be duly completed and signed. Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract, such interest must be disclosed on question 2.3.1.
- 7. Compulsory Enterprise Questionnaire (Completed and signed) (JV partners must complete separate Questionnaire forms and submit).
- 8. If the offer is "Vat Inclusive", the VAT registration number of service provider must be indicated and if a service provider is not a VAT Vendor but include VAT in its prices, the successful service provider will be given 21 days to register as a VAT Vendor with SARS, after the issuing of an appointment letter. If a bidder is a VAT vendor/registered, the bidder is required to explicitly state the VAT amount. VAT vendors must include VAT at 15% in the bid offer(s).
- 9. Resolution to Sign (if applicable)
- 10. Attendance of compulsory briefing meeting (Not applicable).
- 11. This tender will be awarded as a whole. All trades listed in the Bills of Quantities or Pricing schedule must be priced for (except provisional sums and allowances), failure to do so will result increase commercial risk of the bid and may lead to elimination or passing over of the bidder

A. Other Conditions of bid (Non eliminating unless expressly mentioned in the document):

- 1. DPWI Policy applies.
- 2. Returnable Schedule: SBD1-Invitation to bid must be completed and signed
- 3. The bidder must be registered on the Central Supplier Database (CSD) prior the award
- 4. All bidders' tax matters must be in order prior award. Bidders' tax matters will be verified through CSD.
- 5. Declaration of Employees of the State or other State Institutions.
- 6. Bidders must submit a minimum of three (3) written contactable references for projects successfully completed in the past (clearly indicating client name, contract value, contract term, contact person, contact details). Refer to Annexure I and Annexure M. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points.
- 7. Bidders must submit a list of projects where he or she has submitted tender offers but tender results have not been confirmed by the client. Refer to Annexure L. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points.
- 8. Bidders must submit their company profiles, list of available resources, plant and machinery and any other additional capacity with the bid. Refer to Annexure K and H. This is not an elimination factor, but important for the department to make a decision. Unless it is used for Quality/functionality Points.
- 9. The bidder must also list all projects where there are pending litigations or litigations have been concluded. The form for this is also attached after Annexure J.
- 10. Failure to complete section 6: B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED and
- 11. Failure to complete 7: SUB-CONTRACTING as per the SBD 6.1, will automatically results in the non-awarding of points for B-BBEE. (if applicable)

5.10.5

12. A valid original or certified copy of B-BBEE from a verification agency accredited by SANAS must be submitted with the bid OR a valid original or certified copy of a Sworn Affidavit attested by a commissioner of Oaths prepared and issued in terms of the amended B-BBEE Construction Sector Codes (CSC000) must be submitted in order to qualify for preference





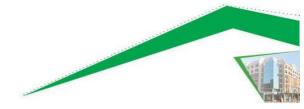
	points for B-BBEE. In case of a joint venture of B-BBEE Certificate must submit a consolic will automatically results in the non-award	ated B-BBEE certificate. Failure to comp	opy oly ,				
5.10.6	PHASE THREE: EVALUATION POINTS ON PRICE AND B-BBEE REGULATIONS OF 2017 The 80/20 preference point system shall be applied for the purposes of this bid as per the requirements of the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000) and B-BBEE/ PPPFA Regulations of 2017						
	Criteria	Points					
	POINTS ON PRICE	80					
	B-BBEE	20					
	TOTAL	100					
	The 80/20 preference point system for acquisition of R50 million: (a) The following formula must be used to calculate price quotation) with a Rand value equal to, or about (all applicable taxes included): The financial offer will be scored using the following A = (1 - (P - Pm)) Pm The value of value of W1 is: 1) 90 where the financial value inclusive of VAT excess of R50 000 000 or 2) 80 where the financial value inclusive of VAT of value that equals or is less than R 50 000 000.	e the points for price in respect of tenders (eve R 30 000 and up to Rand value of R 50 g formula:	(includ) 000 (value				
5.11	The prompts for judgment and the associated scores used in the evaluation of quality shall be as follows: N/A						
5.11.1	a) Adhere to EPWP specifications						
5.12	The number of paper copies of the signed contract to be provided by the employer is 1.						
5.12.1	The additional conditions of BID are: • Wherever a brand name is specified in this document (i.e. specifications, pricing schedule, bill of quantities or anywhere), the department requires an item similar/equivalent or better.						
T.2.1	List of returnable documents						
1	Documentation to demonstrate eligibility to had demonstrate eligibility to have a submission evalure. Appropriate CIDB grading suitable for the wore. The Attach a list of past projects (stating the number of duration, completion date) — reachable reference. Attach a Bank rating. (not an eliminating factor decision)	ated. ks (as stated in 4.1). ame, amount, client name, project manage rences.	er,				
2	Returnable Schedules required for BID evaluat The Bidder must fully and appropriately complet relevant: Record of Addenda to BID Documents Proposed amendments and qualifications		dules				





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	 Compulsory Enterprise Questionnaire SBD 1,4,6.1, 6.2 and Compulsory Declarations forms Sworn affidavit form Form of Offer and Acceptance Final Summary of Bills of Quantities or a complete Pricing Schedule
3	Other documents required for BID evaluation purposes The Bidder must provide the following returnable documents: And original or certified copy of a valid B-BBEE Verification certificate from a verification agency accredited by SANAS and recognized as an Accredited B-BBEE Verification Agencies (see www.sanas.co.za/directory/bbee_default.php) if preference points are claimed in respect of Broad-Based Black Economic Empowerment. A Bidder which is an EME or QSE can submit a duly signed a valid original or certified copy of a Sworn Affidavit attested by a Commissioner of Oaths. In order to be valid, the sworn affidavit must clearly state the financial year end period or date for an entity Bidding as a joint venture, a valid consolidated B-BBEE Certificate meeting same requirements must be submitted with the bid. In case of EMEs/QSEs submitting separate Sworn Affidavits, the EME or QSE with the lowest B-BBEE contributor will be used for purposes of calculating points. Bidders are encouraged to either consolidate their B-BBEE point calculations or form joint ventures with partners which have the same level of B-BEE contribution or higher. Failure to comply with this, will automatically results in the non-awarding of points for B-BBEE or eliminated in phase 1. A CSD Report for a contractor with valid and correct information.
4	Returnable Schedules that will be used for BID evaluation purposes and be incorporated into the contract The Bidder must complete the following returnable documents: • A duly completed form of Offer and Acceptance (and any revision of prices if there are any).
5	Only authorized signatories may sign the original and all copies of the BID offer where required. In the case of a ONE-PERSON CONCERN submitting a BID, this shall be clearly stated. In the case of a COMPANY submitting a BID, include a copy of a resolution by its board of directors authorizing a director or other official of the company to sign the documents on behalf of the company. In the case of a CLOSE CORPORATION submitting a BID, include a copy of a resolution by its members authorizing a member or other official of the corporation to sign the documents on each member's behalf.
	In the case of a PARTNERSHIP submitting a BID, <u>all the partners</u> shall sign the documents, unless one partner or a group of partners has been authorized to sign on behalf of each partner, in which case <u>proof of such authorization</u> shall be included in the BID. In the case of a JOINT VENTURE/CONSORTIUM submitting a BID, include <u>a resolution of each company</u> of the joint venture together with a <u>resolution by its members</u> authorizing a member of the joint venture to sign the documents on behalf of the joint venture. Accept that failure to submit proof of authorization to sign the BID shall result in the BID offer being regarded as non-responsive.
6	Information and data to be completed in all respects Accept that BID offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as nonresponsive.
7	Canvassing and obtaining of additional information by Bidders The Bidder shall not make any attempt either directly or indirectly to canvass any of the Employer's officials or the Employer's agent in respect of his BID, after the opening of the Bids but prior to the Employer arriving at a decision thereon. The Bidder shall not make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of Bids.
8	Prohibitions on awards to persons in service of the state The Employer is prohibited to award a BID to a person - a) who is in the service of the state; or





	 b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or c) a person who is an advisor or consultant contracted with the Department or municipal entity.
	In the service of the state means to be - a) a member of:- a any municipal council;
	b any provincial legislature; or
	c the National Assembly or the National Council of Provinces;
	d) a member of the board of directors of any municipal entity;
	e) an official of any Department or municipal entity;
	f) an employee of any national or provincial department;
	g) provincial public entity or constitutional institution within the meaning of the
	Public Finance Management Act, 1999 (Act No.1 of 1999); h) a member of the accounting authority of any national or provincial public entity; or i) an employee of Parliament or a provincial legislature.
	In order to give effect to the above, the questionnaire for the declaration of interests in the BID of persons in service of state in part T2 of this procurement document must be completed.
9	Awards to close family members of persons in the service of the state
	Accept that the notes to the Employer's annual financial statements must disclose particulars of any award of more than R2000 to a person who is a spouse, child or parent of a person in the service of the state (defined in clause 8 above), or has been in the service of the state in the previous twelve months, including - a) the name of that person; b) the capacity in which that person is in the service of the state; and
	c) the amount of the award.
	In order to give effect to the above, the questionnaire for the declaration of interests in the BID of persons in service of state in part T2 of this procurement document must be completed.
10	Respond to requests from the Bidder The employer will respond to requests for clarification up to 5 (five) working days before the BID closing time.
11	Opening of BID submissions Bids will be opened immediately after the closing time for Bids
12	Scoring quality / functionality: N/A
13	Cancellation and re-invitation of Bids An organ of state may, prior to the award of the BID, cancel the BID if-
	(a) due to changed circumstances, there is no longer a need for the services, works or goods requested; or
	(b) funds are no longer available to cover the total envisaged expenditure; or(c) no acceptable Bids are received.(d) BID validity period has expired.(e) Gross irregularities in the BID process and/or BID documents.
	Where applicable, the decision to cancel the BID will be published in the CIDB website and in the BID Bulletin or the media in which the original BID invitation as advertised.
14	Dispute resolution mechanism will be done through the Adjudication route.





15	The department must when acting against the Bidder or person awarded the contract on a fraudulent basis, consider the provisions of Regulation 14: The remedies provided for in Preferential Procurement Regulations 2017 do not prevent an institution from instituting remedies arising from any other prescripts or contract.
16	Where the employer terminates the contract due to default of the contractor in whole or in part, the employer may decide to: a) Refer the breach in contract to the cidb for investigation as a breach of the cidb Code of Conduct in terms of the cidb Regulations ; or b) may impose a restriction penalty on the contractor in terms of Section 14 of the Preferential Procurement Regulations. The outcomes of such investigations in terms of both the cidb Regulations and the Preferential Procurement Regulations may prohibit the contractor from doing business with the public sector for a period not exceeding 10 years.
17	The duration of the contract shall be Twenty four (24) months from the commencement date and the penalties will be based on the NEC 3 (Term Service Contract).





T2.1 List of Returnable Documents

The Bidder must complete the following returnable documents:

1 Returnable Schedules required for bid evaluation purposes

- Compulsory enterprise questionnaire
- Record of addenda issued (Only if addenda is issued)
- Certificate of authority for joint ventures (Only where the BID/ quotation is submitted by a joint venture)

2 Other documents required for bid evaluation purposes

- Form of Offer and Acceptance
- Final Summary and Bills of Quantities
- SBD 1, 4, 6.1 and 6.2 Annexure C
- Certified copy of B-BBEE Status Level Verification certificate OR a valid original or certified copy of a Sworn Affidavit attested by a Commissioner of Oaths (Annexure B)
- Project References at least 1 (if applicable)
- Record of projects: past

3 Returnable Schedules that will be incorporated into the contract

- Details of the Project Team and CV with Qualifications & Proof of Registration completed for each individual of proposed (where applicable)
- Schedule of Plant and Equipment*(where applicable)
- Record of projects: current on bid (where applicable).
- Sub contract agreement (where applicable





PART A

100 AKE HEKEBI	INVITED TO	שטר עום	KEQUIKEW	ENTS OF THE L	DEPARTMENT OF	PUBLIC WU	KNO AND INF	KASIKU	FIUKE	
BID NUMBER:	SCMU5-22	2/23-0130	CLOSI	NG DATE:	06 DECEMBE	R 2022	CLOSIN	IG TIME:	11:00)
DESCRIPTION					RICAL INSTALLA	TIONS AT D	SD PROPER	TIES IN	THE JOE	GQABI
DESCRIPTION REGION, FOR A PERIOD OF 24 MONTHS BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)										
DEPARTMENT OF P	DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE, INDEPENDENCE AVENUE, GROUND FLOOR, QHASANA BUILDING, BHISHO, 5605									
BIDDING PROCED	URF FNOUIR	IFS MAY	BE DIRECTI	FD TO	TECHNICAL	ENQUIRIES I	MAY BE DIRE	CTED TO		
CONTACT PERSON			DE DIRECTI		CONTACT PE		Mr B. Wam			
TELEPHONE NUME					TELEPHONE		051 611 980			
FACSIMILE NUMBE	:R				FACSIMILE N	IUMBER	N/A			
E-MAIL ADDRESS		supply.	.chain@ec	dpw.gov.za	E-MAIL ADDF	RESS	Baxolele.\	Wambi@	ecdpw.c	ov.za
SUPPLIER INFORM	MATION									
NAME OF BIDDER										
POSTAL ADDRESS	1									
STREET ADDRESS										
TELEPHONE NUME	BER	CODE			NUMBER					
CELLPHONE NUME	BER				<u>.</u>					
FACSIMILE NUMBE	:R	CODE		NUMBER	NUMBER					
E-MAIL ADDRESS										
VAT REGISTRATIO										
SUPPLIER COMPLIANCE STATUS			MPLIANCE TEM PIN:		OR	CENTRAL DATABASE	SUPPLIER No:	MAAA		
	ATUS LEVEL		TICK APPL	ICABLE BOX]		B-BBEE STATUS LEVEL [TICK APPLICA		APPLICA	BLE BOX	(]
VERIFICATION CERTIFICA		TE	☐ Yes	□No	SWORN AFFI	SWORN AFFIDAVIT		es	□No	
[A B-BBEE STATUS LEVEL VE			ATION CER	TIFICATE/ SW		(FOR EME				
ORDER TO QUAL	LIFY FOR P	REFERE	NCE POINT	TS FOR B-BBE	<i>E</i>]					
a) ARE YO	OU THE									
	DITED				b) 4D			. [Yes	□No
REPRESENTATIVE IN Yes				b) ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS [IF YES,			/ES			
THE GOODS		□No		(OFF) (IOFO (MODICO OFFFFFF)		COMPLE				
/SERVICES /WORKS OFFERED? IIF YES END		VES ENCLO	19E DD00E1	QUESTIO E REI (
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS [IF YES ENCLOSE PROOF] E BELOW						.000				
					CA (RSA)?		☐ YES ☐	1 NO		
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? DOES THE ENTITY HAVE A BRANCH IN THE RSA?				571 (11 5 11).		☐ YES ☐	_			
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA			E RSA?		☐ YES ☐	_				
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?			?		☐ YES ☐] NO				
IF THE ANSWER IS				NY FORM OF TAXATIO		TO REGIST	☐ YES ☐		LIANCE	STATUS
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 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 AD	OVE PARTICULARS MAT KENDER THE BID INVALIL
SIGNATURE OF BIDDER:	
CAPACITY UNDER WHICH THIS BID IS SIGNED: (Proof of authority must be submitted e.g. company resolution)	
DATE:	





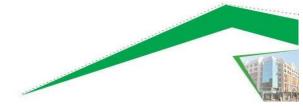
Compulsory Enterprise Questionnaire

Α

Compulsory Enterprise questionnaire

The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in			
respect of each partner must be completed and submitted. Section 1: Name of enterprise:			
Section 2: VAT registration numbers Section 3: cidb registration numbers			
	prietors and partners in partners		
Section 4. Faiticulars of sole pro	•	inips	
Name*	Identity number*	Personal income tax number*	
* Complete only if sole proprietor or		ge if more than 3 partners	
Section 5: Particulars of compan	•		
Company registration number			
Close corporation number		Tax	
reference number			
		d be attached as a BID requirement.	
Section 7: The attached SBD 6.1 n	nust be completed for each BID a	nd be attached as a requirement.	
The undersigned, who warrants that			
	n a tax clearance certificate from the	e South African Revenue Services that my /	
our tax matters are in order;	ne of the enterprise or the name of a	ny partner, manager, director or other	
		the enterprise appears on the Register of	
BID Defaulters established in ter	ms of the Prevention and Combating	g of Corrupt Activities	
		person, who wholly or partly exercises, or	
may exercise, control over the enter	prise appears, has within the last fiv	e years been convicted of fraud or	
corruption;	iated linked or involved with any of	her Ridding entities submitting RID offers and	
	iv) confirms that I / we are not associated, linked or involved with any other Bidding entities submitting BID offers and have no other relationship with any of the Bidders or those responsible for compiling the scope of work that could		
cause or be interpreted as a conflict of interest; and			
iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my			
belief both true and correct.			
Signed	Date _		
			
Name	Position		





SBD 4

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest1 in the enterprise, employed by the state?

YES/NO

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, stateemployee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2	Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? YES/NO
2.2.1	If so, furnish particulars:
2.3	Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? YES/NO
2.3.1	If so, furnish particulars:
	power, by one person or a group of persons holding the majority of the equity of an orise, alternatively, the person/s having the deciding vote or power to influence or to

direct the course and decisions of the enterprise.





3	DECLARATION	
	I, the undersigned, (name submitting the accompanying bid and complete in every respect:)in I, do hereby make the following statements that I certify to be true
3.1 3.2		contents of this disclosure; ring bid will be disqualified if this disclosure is found not to be true
3.3	The bidder has arrived at the a communication, agreement or	ccompanying bid independently from, and without consultation, arrangement with any competitor. However, communication re or consortium2 will not be construed as collusive bidding.
3.4	In addition, there have been no cany competitor regarding the quaformulas used to calculate price.	consultations, communications, agreements or arrangements with ality, quantity, specifications, prices, including methods, factors or s, market allocation, the intention or decision to submit or not to attention not to win the bid and conditions or delivery particulars of
3.4	The terms of the accompanying b	oid have not been, and will not be, disclosed by the bidder, directly prior to the date and time of the official bid opening or of the
3.5	bidder with any official of the pro and during the bidding process	ns, communications, agreements or arrangements made by the ocuring institution in relation to this procurement process prior to except to provide clarification on the bid submitted where so ne bidder was not involved in the drafting of the specifications or
3.6	restrictive practices related to bid Competition Commission for inviterms of section 59 of the Compe Prosecuting Authority (NPA) for business with the public sector for	without prejudice to any other remedy provided to combat any ds and contracts, bids that are suspicious will be reported to the estigation and possible imposition of administrative penalties in etition Act No 89 of 1998 and or may be reported to the National criminal investigation and or may be restricted from conducting r a period not exceeding ten (10) years in terms of the Prevention ites Act No 12 of 2004 or any other applicable legislation.
	CORRECT.	MATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS
	PARAGRAPH 6 OF PFMA SCM	MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF INSTRUCTION 03 OF 2021/22 ON ENHANCING COMPLIANCE, INTABILITY IN SUPPLY CHAIN MANAGEMENT SHOULD THIS FALSE.
	Signature	Date
	Position	Name of bidder

² 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.





SBD 6.1

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, ASPRESCRIBED 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 not to exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or
 - b) Either the 80/20 or 90/10 preference point system will be applicable to this BID (*delete Whichever is not applicable for this BID*).
- 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:

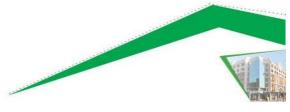
	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

- 1.5 Failure on the part of a 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 Bidder to provide goods or services in accordance with specifications as set out in the BID 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 $r = 80\left(1 - \frac{Pt - P\min}{r}\right)$

or

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

Where

Ps = Points scored for price of bid under consideration

Pt = Price of bid under consideration

Pmin = 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 (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	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)	
7.1.1	YES NO If yes, indicate:	
	i) What percentage of the contract will be subcontracted	
	k applicable box)	
	YES NO	





QSE

EME

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:

	congliated Group. All Line of QOL willon to at last 51 /8 owned by.	∠	\ \
Placi	<pre>c people</pre>	V	V
	k people who are youth		
	c people who are women		
	c people with disabilities		
	c people living in rural or underdeveloped areas or townships		
	perative owned by black people		
	k people who are military veterans		
OR	r people who are military veterans		
Any	EMF		
Any			
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:		
	22 D o c o		





- 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.

(c) Torward the matter for diffiling proceedation.			
WITNESSES			
1	SIGNATURE(S) OF BIDERS(S)		
2	DATE:		





VALID ORIGINAL OR CERTIFIED COPY OF B-BBEE CERTIFICATE

(IF APPLICABLE, ATTACH HERE)





SWORN AFFIDAVIT

(IF APPLICABLE, CHOOSE THE CORRECT FORM AND COMPLETE)

NB: CHOOSE ONLY ONE i.e EME or QSE!!!!)

PLEASE NOTE:

Before completing the following sworn affidavit forms Please read Bid data.



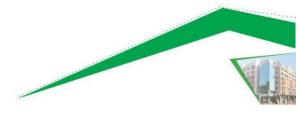


SWORN AFFIDAVIT - B-BBEE EXEMPTED MICRO ENTERPRISE (EME) - CONTRACTORS

No 53 of 2003 as Amended by Act No 46 of 2013, The Enterprise is% Black Woman Owned as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under		I, the undersigned,
Hereby declare under oath as follows: 1. The contents of this statement are to the best of my knowledge a true reflection of the facts. 2. I am a Member / Director / Owner of the following enterprise and am duly authorised to act on its behalf: Enterprise Name:	Full name & Surname	
1. The contents of this statement are to the best of my knowledge a true reflection of the facts. 2. I am a Member / Director / Owner of the following enterprise and am duly authorised to act on its behalf: Enterprise Name:	Identity number	
2. I am a Member / Director / Owner of the following enterprise and am duly authorised to act on its behalf: Enterprise Name:	Hereby declare under oat	h as follows:
act on its behalf: Enterprise Name:	1. The contents of t	his statement are to the best of my knowledge a true reflection of the facts.
Trading Name (If Applicable): Registration Number: Enterprise Physical Address: Type of Entity (CC, (Pty) Ltd, Sole Prop Nature of Business: Definition of "Black People" As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians – (a) Who are citizens of the Republic of South Africa by birth or descent; or (b) Who became citizens of the Republic of South Africa by naturalization— i. Before 27 April 1994; or ii. On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior 3. I hereby declare under Oath that: The Enterprise is % Black Owned as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013, The Enterprise is % Black Woman Owned as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under		Director / Owner of the following enterprise and am duly authorised to
Applicable): Registration Number: Enterprise Physical Address: Type of Entity (CC, (Pty) Ltd, Sole Prop Nature of Business: Definition of "Black People" As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians – (a) Who are citizens of the Republic of South Africa by birth or descent; or (b) Who became citizens of the Republic of South Africa by naturalization- i. Before 27 April 1994; or ii. On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior 3. I hereby declare under Oath that: The Enterprise is % Black Owned as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013, The Enterprise is % Black Woman Owned as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under	Enterprise Name:	
Enterprise Physical Address: Type of Entity (CC, (Pty) Ltd, Sole Prop Nature of Business: Definition of "Black People" As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians — (a) Who are citizens of the Republic of South Africa by birth or descent; or (b) Who became citizens of the Republic of South Africa by naturalization— i. Before 27 April 1994; or ii. On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior 3. I hereby declare under Oath that: The Enterprise is % Black Owned as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013, The Enterprise is % Black Woman Owned as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under		
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descent; or (b) Who became citizens of the Republic of South Africa by naturalization- i. Before 27 April 1994; or ii. On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior 3. I hereby declare under Oath that: The Enterprise is		2003 as Amended by Act No 46 of 2013 "Black People" is a generic
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 The Enterprise is		entitled to acquire citizenship by naturalization prior
Revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013, The Enterprise is		
No 53 of 2003 as Amended by Act No 46 of 2013, The Enterprise is		
Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under	No 53 of 2003 as	
	Series CSC000 o	f the Revised Construction Sector Codes of Good Practice issued under
section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013, The Enterprise is % Black Designated Group Owned as per Amended	` ,	·

Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,





☐ Based on the Financial Statementatest financial year-end of less than R10,000,000.00 (ten Million Ra	nts/Management Accounts and other inform(DD/MM/YYYY), the annual Total Revands or less),	
Please confirm on the table to the applicable box.	pelow the B-BBEE level contributor, by tic	king
100% Black Owned	Level One (135% B-BBEE procurement recognition level)	
At least 51% Black Owned but less than 100% black owned	Level Two (125% B-BBEE procurement recognition level)	
At least 30% Black Owned but less than 51% black owned	Level Four (100% B-BBEE procurement recognition level)	
Less than 30% Black Owned	Level Five (80% B-BBEE procurement recognition level)	
 3.6.2.4.1 An Exempted Micro En million in the case of BEPs and I of A) Not subject to the discussion (SE Skills Development of B) Not required to have an affidavit or a certificate Commission (CIPC), in resulting the Construction Sector Codes (Board No. NOTICE 931 OF 2011 Details are available on: www.the An electronic copy can also be resulted to take the prescribed oath an and on the owners of the entertails. 	an authorised B-BBEE verification certificate issued by the Companies and Intellectual respect of their ownership and annual turnor ent Professionals are encouraged to familiar CSC000) as issued through Government G7. edti.gov.za/economic_empowernment/bee_equested through DPW offices (Supply Chantents of this affidavit and I have no objected consider the oath binding on my conscient exprise which I represent in this matter.	e to comply with the e, and may present I Property ver. ize themselves with azette No. 41287, sector_charters.jsp in Offices)
Deponent Signature:	Date:	
Commissioner of Oaths Signature & stamp	Date:	





SWORN AFFIDAVIT - B-BBEE QUALIFYING SMALL ENTERPRISE (QSE) - CONTRACTORS

	I, the undersigned,
Full name & Surname	
Identity number	
Hereby declare under oath as f	ollows:
1. The contents of this s	tatement are to the best of my knowledge a true reflection of the facts.
2. I am a Member / Dire	ector / Owner of the following enterprise and am duly authorised to act on its behalf:
Enterprise Name:	
Trading Name (If Applicable):	
Registration Number:	
Enterprise Physical Address:	
Type of Entity (CC, (Pty) Ltd, Sole Prop	
Nature of Business:	
Definition of "Black People"	As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians — (a) Who are citizens of the Republic of South Africa by birth or descent; or (b) Who became citizens of the Republic of South Africa by naturalization— i. Before 27 April 1994; or ii. On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior
Revised Construction Sector 2003 as Amended by Act No 46 of 2	% Black Owned as per Amended Code Series CSC000 of the or Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 or 013,
CSC000 of the Revised Cor	
☐ The Enterprise is	% Black Designated Group Owned as per Amended Code

B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,

Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under section 9 (1) of



Commissioner of Oaths Signature & stamp



Based on the Financial Statements/Management Accounts and other information available on th latest financial year-end of (DD/MM/YYYY), the annual Total Revenue was between 10 million (ten Million Rands) and less than R50,000,000.00 (fifty Million Rands).
□ Please confirm on the table below the B-BBEE level contributor, by ticking the applicable box.
100% Black Owned Level One (135% B-BBEE procurement recognition level)
At least 51% Black Owned but less than 100% black owned
NB: KEY NOTES FOR QSE (extract from Gazette No. 41287)
 5.6.3 A QSE that is at least 51% Black Owned or 100% Black Owned that does not comply with paragraph 3.6.2.3 above, will be discounted by one level from that level awarded in paragraphs 5.3.1 and 5.3.2 respectively. 5.3.4 Despite paragraphs 5.2, 5.3.1 and 5.3.2, an at least 51% Black Owned QSE's B-BBEE Status Level and corresponding B-BBEE Recognition Level will be enhanced by one level if it achieves full points (excluding the bonus points) for the Skills Development element of the QSE Scorecard (paragraphs 1.1, 1.2 and 1.3 of Statement CSC603) or the Preferential Procurement and Supplier Development element of the QSE Scorecard (paragraphs 1.1, 1.2, 1.3 and 2.1 of CSC604). 5.3.5 For the avoidance of doubt, a Measured Entity that is measured in terms of the full QSE scorecard is not eligible for enhancement in terms of paragraph 5.3.4 above. Contractors and/Built Environment Professionals are encouraged to familiarize themselves with the Construction Sector Codes (CSC000) as issued through Government Gazette No. 41287, Board No. NOTICE 931 OF 2017. Details are available on: www.thedti.gov.za/economic_empowernment/bee_sector_charters.jsp An electronic copy can also be requested through DPW offices (Supply Chain Offices) I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.
Deponent Signature: Date:

Date:_____





SBD 6.2

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

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

Before completing this declaration, Bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8.(2) prescribes that in the case of designated sectors, organs of state must advertise such Bids with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for Bids referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

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

Where

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

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

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

1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content





Declaration: Summary Schedule) are not submitted as part of the bid documentation;

2. The stipulated minimum threshold(s) for local production and content (refer to Annexure A of SATS 1286:2011) for this bid is/are as follows:

Schedule No.	Description of services. works or goods	Unit (e.g. m2, m3, ton, etc)	Quantity	Stipulated minimum threshold %
Schedule 3	3-6m Streetlight poles	n	10	100%
Schedule 5 Valves products		n	10	100%
Schedule 3	Wires	m	1200	100%
Schedule 3	Termination kit	n	20	100%
Schedule 5	Pumps, Motor and Associated Accessories	n	2	70%

3. Does any portion of the goods or services offered? have any imported content? (*Tick applicable box*)

YES		NO	
	•		

3..1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date of advertisement of the bid.

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

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

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

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





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

PERSO	N NOMINATED	LARATION BY CHIE	IE CHIEF EXEC	UTIVE O	R SENIOR N	IEMBER/P	
IN RESPECT OF BID NO. ISSUED BY: (Procurement Authority / Name of Institution): NB 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the Bidder. 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thdti.gov.za/industrial development/ip.isp . Bidders should first complete Declaration D. After completing Declaration D, Bidders should complete Declaration E and then consolidate the information on Declaration C. Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below. Declarations D and E should be kept by the Bidders for verification purposes for a period of at least 5 years. The successful Bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract. I, the undersigned,							
						of	Institution):
		,	•		Name	UI	mstitution).
NB							
1	The obligation	n to complete, duly sig	n and submit this	declarati	on cannot be	transferred	to an external
2							
			•				
		_					
	-	•					
		•	•		•	ed to contin	uousiy update
	Dediarations	o, D and E with the dot	dai valdes for the t	adiation of	tilo contidot.		
I, the un	dersigned,				(full names)	,	
of				(na	me of Bidder	entity), the f	ollowing:
(a)	The facts contain	ined herein are within	my own personal k	knowledge).		
(b)	I have satisfied	myself that:					
(i)	•	ervices/works to be del			•		
	local cont and	ent requirements as s	pecified in the bio	, and as r	measured in to	erms of SA	TS 1286:2011;
(c)		nt percentage (%) indi			-	_	
		011, the rates of excha	•	• .		he informati	on contained in
D		nd E which has been c	onsolidated in Dec	laration C	:		
	ice, excluding VA						R
Impor	ted content (x), as	s calculated in terms of	f SATS 1286:2011				R
Stipula	ated minimum thr	eshold for local conten	t (paragraph 3 abo	ove)			
Local	content %, as cal	culated in terms of SA	TS 1286:2011				

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.

The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.





- (d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

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





ANNEXURE C, D, E

SATS 1286 2011

				l a sal-C	antant Ba	alawatia w	C	Cabaduda			_	
				Local C	ontent Dec	claration -	Summary	Schedule				
C1)	Tender No.											
C2)	Note: VAT to be a from all calculation:											
3)	Designated	*										
4)	Tender Aut	-										
.5)		Entity name:				[
6) 7)		hange Rate: Pula cal content %		EU) <u> </u>	GBP						
′)	Specified to	car content 76			Calculation of	local content				Tender	summary	
					Tender value					remater	Í	
nit	Tender item no's	List of items	Tender price - each (excl VAT)	Exempted imported value	net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
	(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
	4.02.08	3-6m Steel Streetlight poles							10			
	5.5	Valves products							10			
	3.01	Wires							1 200			
	5.5	Pumps, Motor and Associated Accessories							2			
	2.02	Termination kit							20			
			•					(C20) Total t				
	Signature o	f tenderer from Annex B								ported content		
						(<i>C22) Total</i> Ten	der value net o		ported content		
										(C23) Total Imp	orted content	
										<i>(C24)</i> Tota	l local content	

Tender item mo's Description of imported content Local supplier Overseas Supplier Commercial imports Commercial Commercia	SATS 1286.2											
Trender No. Substitution Subst												
Tender description: Description of Imported Content Description of I				nnex C	edule to A	orting Sch	ion - Supp	Content Declarat	Imported	_		
Part												Tender No.
A. Exempted imported content Tender tem Description of imported content Unit of measure Description of imported content Tonder tem Description of imported content Unit of measure Unit of measure Description of imported content Unit of measure Unit of measure Transfer			excluded from								on:	Tender descripti
Tender item Description of imported content Local supplier Coverseas Supplier Cover					l							
A. Exempted imported content Tender farm]		GBP] EU		Pula		
Tender later nors Description of imported content Local supplier Overseas Supplier O	Summary		nt_	fimported conten	Calculation of			•		ntent	ed imported co	A. Exempte
(07) (08) (09) (012) (012) (012) (012) (012) (012) (012) (012) (013) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (014) (015) (01	Exempted import		All locally incurred landing costs	Freight costs to	Local value of	Exchange	currency value as per Commercial	Overseas Supplier	Local supplier			Tender item
B. Imported directly by the Tenderer Tender item no's Description of imported content Unit of measure no's Description of imported content Unit of measure Noverseas Supplier Novice (2021) (2022) (2023) (2024) (2023) (2024) (2025) (2025) (2026) (2027) (2028) (2	(D17) (D18)	(D16)		(D14)	(D13)	(D12)		(D10)	(D9)		(D8)	(D7)
B. Imported directly by the Tenderer Tender item no's Description of imported content Unit of measure Overseas Supplier no's (222) (223) (224) (225) (225) (225) (227) (228) (228)												
B. Imported directly by the Tenderer Tender item no's Description of imported content Unit of measure no's (222) (223) (223) (224) (225) (225) (225) (227) (228) (227) (228) (227) (228) (228) (227) (228) (228) (227) (228)								ı				
B. Imported directly by the Tenderer Tender Rem no's Description of Imported content Unit of measure no's Description of Imported content Unit of measure (D22) (D22) (D23) (D24) (D25) (D25) (D26) (D27) (D28) (D28) (D27) (D28) (
B. Imported directly by the Tenderer Tender item no's Description of imported content Unit of measure (D20) (D21) (D22) (D23) (D23) (D24) (D25) (D26) (D27) (D28) (D27) (D28) (D27) (D28) (D27) (D28) (D28) (D28) (D27) (D28) (D28	n; orted value) Total exempt in	(D19									
Tender item no's Description of imported content unit of measure Overseas Supplier Currency value as per no's Description of imported content unit of measure Overseas Supplier Invoice of Exchange Invoice Invoice of Exchange Invoice Invo	This total must correspond with Annex C - C 21											
Tender item no's Description of imported content unit of measure no's Description of imported content no's Description not not not not not not not not not n	Summary			imported conten	Calculation of		Forign	I	r I	ne Tendere	d directly by th	B. Importe
C. Imported by a 3rd party and supplied to the Tenderer Calculation of imported content Unit of measure Unit of measure Local supplier Overseas Supplier Overse	Tender Qty Total imported va	cost excl VAT	incurred landing costs	port of entry	imports	of Exchange	currency value as per Commercial					
C. Imported by a 3rd party and supplied to the Tenderer Description of imported content	(D30) (D31)	(D29)	(D28)	(D27)	(D26)	(D25)	(D24)	(D23)	(D22))	(D21	(D20)
C. Imported by a 3rd party and supplied to the Tenderer Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Description of imported content Descripti												
C. Imported by a 3rd party and supplied to the Tenderer Description of imported content												
C. Imported by a 3rd party and supplied to the Tenderer Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Description of imported content Unit of measure Local supplier Commercial Invoice Tender Rate Local value of fexchange Freight costs to a landed landing costs Cost excl VAT Invoice Invo												
C. Imported by a 3rd party and supplied to the Tenderer Description of imported content											`	
Description of imported content Unit of measure Local supplier Overseas Supplier Commercial Invoice Tender Rate content (D33) (D34) (D35) (D36) (D37) (D38) (D39) (D40) (D41) (D42) (D43) D. Other foreign currency payments Tender Rate content (port of entry value as per commercial Invoice) Tender Rate (port of entry value as per commercial Invoice) Tender Rate (port of entry value as per content (port of entry value) (D43) (D44) (D42) (D43) (D43) (D44) (D42) (D43) D. Other foreign currency payments Type of payment Local supplier measure Doverseas beneficiary Description of imported content Unit of measure Overseas Supplier currency value as per commercial Invoice Tender Rate local value of preight costs to incurred landing costs & duties (D43) (D43) (D44) (D42) (D43) (D43) (D45) Total imported value by 3rd party Tender Rate of Exchange	-	otal imported valu						,				
Description of imported content Description of imported content Description of imported Description of imported content Description of imported content Description of imported content Description of imported Descripti	Summary		nt	imported conten	Calculation of			Tenderer Tenderer	lied to the T	y and supp	d by a 3rd part	C. Importe
D. Other foreign currency payments Calculation of foreign currency payments Calculation of foreign currency payments			incurred landing costs				currency value as per Commercial	Overseas Supplier	Local supplier		imported content	Description of
D. Other foreign currency payments Type of payment Local supplier making the payment Description Description Calculation of foreign currency payments Calculation of foreign currency payments Description Overseas beneficiary paid Tender Rate of Exchange	(D43) (D44)	(D42)	(D41)	(D40)	(D39)	(D38)	(D37)	(D36)	(D35)	(D34)	'D33)	
D. Other foreign currency payments Calculation of foreign currency payments Calculation of foreign currency payments												
D. Other foreign currency payments Calculation of foreign currency payments Calculation of foreign currency payments												
D. Other foreign currency payments Calculation of foreign currency payments Calculation of foreign currency payments												
D. Other foreign currency payments Type of payment Local supplier making the payment beneficiary paid Density payment Density payment Tender Rate of Exchange	e by 3rd party	tal imported valu	(D45) To									
Type of payment making the payment beneficiary beneficiary paid paid of Exchange	Summary of payments					•					reign currency	D. Other fo
(D46) (D47) (D48) (D49) (D50)	Local value of payments									making the	of payment	Туре с
	(D51)						(D50)	(D49)	(D48)	(D47)	D46)	
(D52) Total of foreign currency payments declared by tenderer and/or 3rd party Signature of tenderer from Annex B											derer from Annex B	Signature of ten
	A (D52) above This total must correspond with Annex C - C 23	ts - <i>(D32), (D45)</i> &	rrency paymen	ontent & foreign cu	l of imported co	<i>(D53)</i> Tota			-			

SATS 1286.2011

Annex E

Tender No.]		
Tender description:			Note: VAT to be excluded fro	m all calculations
Designated products: Tender Authority: Tendering Entity name:				
Local Products (Goods, Services and Works)	Descriptio	on of items purchased	Local suppliers	Value
		(E6)	(E7)	(E8)
_				
-				
_				
-				
		(E9) Total local product	ts (Goods, Services and Works)	
(E10) Manpower costs (T	enderer's manpow	ver cost)		
(E11) Factory overheads (R	ental, depreciation	& amortisation, utility costs, co	onsumables etc.)	
(E12) Administration overhead	ds and mark-up	(Marketing, insurance, financi	ng, interest etc.)	
			(E13) Total local content	I
			This total must correspond v	vith Annex C - C24





EXEMPTION LETTER





PROCESS WHEN REQUESTING EXEMPTION LETTERS

For exemption requests on designated products and the minimum threshold for local content cannot be met for various reasons, bidders must apply for exemption per tender. After checking with the industry, the **dti** will decide whether to grant an exemption or not.

In the official request (signed letter), the following information should be included:

- Procuring entity/government department/state owned company.
- Tender/bid number.
- Closing date.
- Item(s) for which the exemption is being requested for.
- Description of the goods, services or works for which the requested exemption item will be used for and the local content that can be met.
- Reason(s) for the request.
- Supporting letters from local manufacturers and suppliers.

NB - Exemption letters are tender specific and applications are not transferrable.

The turnaround time in response to exemption letters for all designated products is five working days with the exception of rail and boats/vessels which is seven working days.

Request for exemption letters are to be directed to:

Dr Tebogo Makube

Chief Director: Industrial Procurement

Tel: 012 394 3927

E-mail: tmakube@thedti.gov.za.

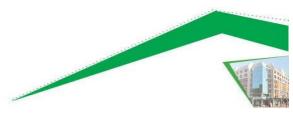
The turnaround time in response to textile, clothing, leather and footwear exemption letters request is two

working days and requests are to be directed to:

Patricia Khumalo Tel: 012 394 1390

E-mail: khumaloP@thedti.gov.za





EXAMPLE ANNEXURE C, D & E ON LOCAL CONTENT AND PRODUCTION





SBD 6.2

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

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

Before completing this declaration, bidders must study the lane all Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Pretz ential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved to the call specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of the Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Supporting Schedule to Annex C) and 5 cal Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regular 1.2 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8.(2) prescribes and in the case of designated sectors, organs of state must advertise such tenders with the secure oidding condition that only locally produced or manufactured goods, with a stipulated minim. Threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

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

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

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

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

1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;





- 2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:
- Does any portion of the goods or services offered have any imported content?

 (Tick applicable box)



3..1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date of advertisement of the bid.

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

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

Currency	Rates of exchange
US Dollar	R14 / \$1
Pound Sterling	R19.50 / 1 pound
Euro	R14.10 / 1 Euro
Yen	R0.50/ 500Yens
Other	

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

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





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

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

IN RE	ESPECT OF BID NO. SCMU5-18/19-0888
	ED BY: (Procurement Authority / Name of Institution): ARTMENT OF PUBLIC WORKS
NB	
3	The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
4	Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thdti.gov.za/industrial_development/ip.jsp . Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below. Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

- (f) The facts contained herein are within my own personal knowledge.
- (g) I have satisfied myself that:
 - the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (h) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT (y)	R 370 940
Imported content (x), as calculated in terms of SATS 1286:2011	R 62 868
Stipulated minimum threshold for local content (paragraph 3 above)	100%+85%
Local content %, as calculated in terms of SATS 1286:2011	83.05%

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.

The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.





- (i) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 12.63:201
- I understand that the awarding of the Ld in the land of the accuracy of the information furnished in this application. Lally ander to dubof the submission of incorrect data, or data that are not verified as less that in SATS 1286:2011, may result in the Procurement Authority / Little Lin point act, or all of the remedies as provided for in Regulation 14 of the Prier and Procurement Regulations, 2017 promulgated under the Preferential Policy Lame On Act (LPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE:		DATE: 23 Oct 2018
WITNESS No. 1	Hold who	DATE: 23 Oct 2018
WITNESS No. 2		DATE: 23 Oct 2018





														SATS 1286.2011
					Annex	C								
			Lo	cal Content D	eclaration	- Summary	/ Schedule	2						
(C1)	Tender No.	SCMU5-18/19-0	000											
(C2)	Tender descrip			n of BHISHO JSS Sch	ool	1.							Note: VAT to be excalculations	cluded from all
(C3)	Designate d pr	oduct(s)	Steel Produ	cts and Structures a	nd Furnture 🛴									
(C4)	Tender Author	rity:	Department	t of Public Works (EC	C)	S //								
(C5)	Tendering Ent	ity name:	IPHONDO C	ONSTRUCTION (PTY)LTD									
(C6)	Tender Exchar	nge Rate:	Pula				GBP							
(C7)	Specifie d loca	l content %	100% and 85	5%	Un!									
				•		Calculation	n of local co	ntent		Te	nder summ	ary		
	Tenderitem no's	List of i	tems	Tender prive	xempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Unit of measurement	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
	(C8)	(C9		1-1-1	(C11)	(C12)	(C13)	(C14)	(C15)		(C16)	(C17)	(C18)	(C19)
	53,34,50	Mild steel reinforcen structural concrete v diameter bars		R 35.00	R 0.00	R 35.00	R 0.00	R 35.00	100%	ton nes	261.95	R 9168	R O	R O
	54,35	Mild steel reinforcen structural concrete v diameter bars		R 23.00	R 0.00	R 23.00	R 0.00	R 23.00	100%	ton nes	240.00	R 5520	R 0	R 0
	25	Furniture High back (thair	R 1600.00	R 0.00	R1600.00	R 240.00	R 1360.00	85%	No.	261.95	R 356252	R O	R 62 868
										(C20) Total ten		R 370940		
	Signature of te	enderer from An	nex B								-	imported content		
	\square								(C22) Tota	al Tendervalue r	net of exempt	imported content		
	L X												Imported content	R 62 868
												(C24)	Total local content	R 308 072
	Date:	24-Oct-18		-									ontent % of tender	83.05%





												SATS 1286.2
				Ann	nex D							
			Imported Cont	ent Declaration -	Supporti	ng Schedu	le to Anne	x C				
-												
Tender No.		SCMU5-18/19-08	88									
								Note: VAT to be				
Tender descri	ption:	Construction of E	BHISHO JSS School					from all calculat	lons			
Designate d Pr		Furniture produc										
Tender Autho Tendering Ent		Department of P	ublic Works (EC) FRUCTION (PTY) LTD		- 0							
Tendering Ent		Pula	1	EU	1	GBP		1				
TE HOLT EXCHO	ge rate.	1010				051						
A. Exemp	ted imported co	ontent			> //	C	alculation of	imported conte	ent			Summary
					Foreign				All locally			
Tender Item no's	Description of Im	ported content	Local supplier	Overse as logistr	currency value as per Commercial	Tender Exchange Rate	Local value of	Freight costs to port of entry	Incurred landing costs	Total landed cost excl VAT	Tender Qty	Exempted Impo value
					Invoke	Rate			& dutles	1 1		
(D7)	(DS	3)	(D9)	7(0)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
			. 6							,		,
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
			la V	<i>y</i>								
n/a	a n/a	n/a	\ ///a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
-	+		-		-		-	-		\vdash	-	
									(D19)	Total exempt Imp		
												ıst correspond v
											Ann	ex C - C 21
B. Import	ed directly by th	he Tenderer				C	alculation of	imported conte	ent			Summary
					Forlgn				All locally	1 1		
Tender Item	Description of im		Unit of manying	Ouere or Fundler	currency			Freight costs to	Incurred	Total landed	Tender	TotalImport
no's	Description of Im	ported content	Unit of measure	Overseas Supplier	value as per Commercial	of Exchange	lm ports	port of entry		cost excl VAT	Qty	value
					Involce				& dutles	1 1		
(D20)	(D2.	1)	(D22)	(D23)	(D24)	(D 25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-	
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a	n/a		
riy a	riy a	ny a	n/a	11/4	11/4	ny a	11/4	II/a	n/a (D32) Tota	n/a I Imported value	by tenderer	
									(222) .22	,	,	
C. Importe	ed by a 3rd part	y and supplie	ed to the Tender	er		C	alculation of	imported conte	ent			Summary
		ĺ			Forign							
					currency	Tandar Pata	Local value of	Freight costs to	All locally Incurred	Total landed	Quantity	TotalImport
Description	of Imported content	Unit of measure	Local supplier	Overseas Supplier	value as per	of Exchange		port of entry		cost excl VAT	Imported	value
					Commercial			,	& dutles			
-	(D33)	(D34)	(D35)	(D36)	(D37)	(D 38)	(D39)	(D40)	(D41)	(D4Z)	(D43)	(D44)
	2mm Material fabric											
25	chair (1m x 2m)		No.	Walton Chinese fabric	\$12.00	R 14.00	R 168.00	R 37.00	R 35.00	R 240.00	262	R 62
		-	-							-	-	
		-	+							\vdash	_	
		<u> </u>										
									(D45) Tota	I Imported value	by 3rd party	R 62
D Othor	oreign currency	/ navmonto		Calculation of foreig								Summary o
D. Other I	oreign currency	y payments		payment	5							payments
		Local supplier		Foreign currency	Tender Rate							Local value
Туре	of payment	making the	Overse as beneficiary	value pald	of Exchange							payments
	/Dasi	payment	/p.=1	•		-						
1	(D46)	(D47)	(D48) Walton Chinese	(D49)	(D50)	+						(D51)
		FNB	fabric	\$12	R 14.00							R
EFT				311								
EFT												
EFT			1							Indiana d		
EFT						(D52)	rotal of forels	gn currency payme	ents declared	by tenderer and	or 3rd party	
	Inderer from Anne v P											
	enderer from Annex E	8			(D	53) Total of Im	ported conten	nt & forelen curre	ncy payments	- (D32), (D45) &	(D52) above	R 62
	enderer from Annex B	B			(D:	53) Total of Im	ported conter	nt & foreign curre	ncy payments			
					(D	53) Total of Im	ported conter	nt & foreign curre	ncy payments		This total mu	ıst correspond w
	enderer from Annex B				(DS	53) Total of Im	ported conter	t & foreign curre	ncy payments		This total mu	





						S	ATS 1286.2011	
			T	Anne	хE			
		Local	Contont Doclar	ration S	upporting Co	chedule to Annex C		
		LOCAI	Content Decial	auon - s	upporting 30	nedule to Annex C		
E1)	Tender No.		SCMU5-18/19-0888					
E2)	Tender descrip	otion:	Construction of Bhis	sho JSS		N te: A' to be excluded for calculations	rom all	
E3)	Designated pro	oducts:	Steel Products and	Structures				
E4)	Tender Author		Department of Pub		C)			
-	Tendering Enti	-	Phondo Constructio					
					->//			
				<u> </u>	./			-
		Local Products (Goods, Services and Works)	Description	of items p	urchased	Local suppliers	Value	% of 10
				(E6)		(E7)	(E8)	
			Mild steel reinforce work: 12 mm diame		uctural concrete	RC Steel (Pty)Ltd	R 8 050	
			Mild steel reinforce	ment to str	uctural concrete	nosteer (regyeta		
			work: 10 mm diame	ter bars		RC Steel (Pty)Ltd	R 4 500	
			Furniture High back	Chair		Budget Joshua Home Furniture	R 289 166	
				(E9) Total	local products (G	oods, Services and Works)	R 301 716	
	(E10)	Manpower costs -	(Tenderer's manpo	wer cost)			R 2 500	
	(E11)	Factory overheads	(Rental, depreciation	on & amortis	sation, utility cost	ts, consumables etc.)	R 1500	
	(E12)	Administration over	rheads and mark-up	(Marketing	, insurance, finan	cing, interest etc.)	R 2 356	
						(E13) Total local content	R 308 072	
						This total must correspond C24		
	Signature of te	enderer from Annex	<u>B</u>					
		/						
	Datas	24.0-/ 42						
	Date:	24-Oct-18						





PROOF OF REGISTRATION ON THE NATIONAL TREASURY CENTRAL SUPPLIER DATABASE (CSD REPORT)

(ATTACH HERE)





VALID CIDB CERTIFICATE OF A BIDDER (ATTACH HERE)





Annexure F

(normative) FORM OF OFFER AND ACCEPTANCE

Project title	MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS
SCMU number	SCMU5-22/23-0130
OFFER The employer, identified for the procurement of:	ed in the acceptance signature block, has solicited offers to enter into a contract
	in the offer signature block, has examined the documents listed in the BID data s listed in the returnable schedules, and by submitting this offer has accepted the
and acceptance, the Bi the contract including meaning for an amoun contract data.	of the Bidder, deemed to be duly authorized, signing this part of this form of offer idder offers to perform all of the obligations and liabilities of the contractor under compliance with all its terms and conditions according to their true intent and it to be determined in accordance with the conditions of contract identified in the
THE OFFERED TOTA	L OF THE PRICES INCLUSIVE OF VALUE ADDED TAX ISRand (in
words);	
R	(in figures) (or
other suitable wording)	
acceptance and returning stated in the BID data	epted by the employer by signing the acceptance part of this form of offer and ing one copy of this document to the Bidder before the end of the period of validity a, whereupon the Bidder becomes the party named as the contractor in the dentified in the contract data.
Signature(s)	
BID'sName(s)	
AuthorizedPerson (Names	
Address of the	
<u>Bidder:</u>	
Witnesses (Signatures 1.	<u>):</u> Date:
<u>2.</u>	Date:





ACCEPTANCE

2

3

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

The terms of the contract, are contained in:

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

Part C2 Pricing data

Part C3 Scope of work.

Part C4 Site information and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

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

The Bidder shall within 3 weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the employer's agent (whose details are given in the contract data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the Bidder receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the Bidder (now contractor) within five working days of the date of such receipt notifies the employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.¹

Signature	
Name	
Capacity	
for the	
Employer	
(Name and a	address of organization)
Name and s	
of witness	Date
Schedule of	f Deviations
Schedule o	
Schedule o	f Deviations 1 Subject
Schedule o	1 Subject
Schedule o	1 Subject
Schedule o	1 Subject

Notwithstanding anything contained herein, this agreement comes into effect two working days after the submission by the employer of one fully completed original copy of this document including the schedule of deviations (if any), to a courier-to-

counter delivery / counter-to-counter delivery / door-to-counter delivery /door-to-door delivery /courier service (delete that which is not applicable), provided that the employer notifies the Bidder of the tracking number within 24 hours of such submission. Unless the Bidder (now contractor) within seven working days of the date of such submission notifies the

employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

¹As an alternative, the following wording may be used:



Bidder



C

RECORD OF ADDENDA TO BID DOCUMENTS

PROJECT TITLE MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DS PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS								
SCMU NUMBER SCMU5-22/23-0130								
submissi	on of this BID of	ollowing communications received from the Department of F ffer, amending the BID documents, have been taken into a if more space is required)						
Item	Date	Title or Details	No. of Pages					
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
		Attach additional pages if more space is required.						
s	igned	Date						
	Name	Position						





D

PROPOSED AMENDMENTS AND QUALIFICATIONS

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

The Bidder's attention is drawn to clause 5.8 of SANS 10845-3 regarding the employer's handling of material deviations and qualifications.

PROJECT TITLE	MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS
SCMU NUMBER	SCMU5-22/23-0130

Page	Clause /Item	Proposal

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the Bidder are within my personal knowledge and are to the best of my knowledge both true and correct

Signed	Date
Name	Position
Enterprise name	





E RESOLUTION FOR SIGNATORY

A: CERTIFICATE OF AUTHORITY FOR SIGNATORY

Signatory for companies shall confirm their authority hereto by attaching a duly signed and dated copy of the relevant resolution of the board of directors to this form or on company letter head.

An example is given below:

"By resolution of the board of directors passed at a meeting held on ______

Mr/Ms________, whose signature appears below, has been duly authorised to sign all documents in connection with the BID for Contract No. ______ and any Contract which may arise there from on behalf of (Block Capitals) ______

SIGNED ON BEHALF OF THE COMPANY: ________

IN HIS/HER CAPACITY AS: ________

DATE: _______

SIGNATURE OF SIGNATORY:

WITNESSES:

DIRECTOR (NAMES)	SIGNATURE	
DIRECTOR (NAMES)	SIGNATURE	

If you cannot complete this form, attach a separate sheet (in a company letter head, project specific and signed by all directors):





$\label{eq:F} \textbf{F}$ CERTIFICATE OF AUTHORITY FOR JOINT VENTURES -N/A

This	Returnable S	Schedule is to be completed	d by joint ventures.				
We, the undersigned, are submitting this BID offer in Joint Venture and hereby authorise Mr/Ms							
PROJECT TITLE	AT DSD PF	MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS					
SCMU NUMBER	SCMU5-22	/23-0130					
NAME OF FIRM		ADDRESS	DULY AUTHORISED SIGNATORY				
Lead partner:			Signature Name Designation				
			Signature Name Designation				
			Signature. Name Designation.				
			Signature. Name Designation.				



PROJECT TITLE



G

CAPACITY OF THE BIDDER

SCMU NUMB	ER	SCMU5-22/23-0130				
WORK CAPACITY: (The Bidder is requested to furnish the following capacity particulars and to attach additional pages if more space is required. (where applicable as per bid conditions) Artisans and Employees: (Artisans and Employees to be ,or are ,employed for this project)						
Quantity / No. of Resources	Categories of Employee - Key Personnel (part of Business Enterprise)		Professional Registration No		Date of Employment	
	Site Ager	ıt				
Project Manager						
Foreman						
	Quality Control & Safety Officer-Construction Supervisor					
	Artisans					
	Unskilled	employees				
	Others					
The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the Bidder are within my personal knowledge and are to the best of my knowledge both true and correct.						
Signed:			Date			
Name:			Position			
Enterprise						
Name:						

MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS





Н

RELEVANT PROJECT EXPERIENCE - COMPLETED PROJECTS

Bidders must submit a description of at least one project successfully completed

The description of each project must include the following information:

- 1. Essential introductory information:
 - 1.1. Name of project.
 - 1.2. Name of client.
 - 1.3. Contact details of client.
 - 1.4. Contact details (including telephone numbers and email addresses) of currently contactable references
 - 1.5. The period during which the project was performed, and also, if this is different, the period during which the Bidder's team members were contracted.
 - 1.6. Cost of works and/or contract value (making it clear in broad terms what this cost/value purchased, and to what extent (if any) this cost/value was part of a larger project budget or programme budget).

NO.	NAME OF PROJECT.	NAME OF CLIENT.	CONTACT DETAILS OF CLIENT.	PROJECT VALUE	DATE COMPLETED
1					
2					
3					

If there are more projects, attach a separate page to address this issue (the above table is just for reference purposes).

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the Bidder are within my personal knowledge and are to the best of my knowledge both true and correct.

Signed	Date
Name	Position
Enterprise name	





I

RELEVANT PROJECT EXPERIENCE - CURRENT PROJECTS IF APPLICABLE

Bidders must submit description of at least one project under construction/ on hold/ just handed over/ towards completion (if they exist).

The description of each project must include the following information:

- 2. Essential introductory information:
 - 2.1. Name of project.
 - 2.2. Name of client.
 - 2.3. Contact details of client.
 - 2.4. Contact details (including telephone numbers and email addresses) of currently contactable references.
 - 2.5. The period during which the project was performed, and also, if this is different, the period during which the Bidder's team members were contracted.
 - 2.6. Cost of works and/or contract value (making it clear in broad terms what this cost/value purchased, and to what extent (if any) this cost/value was part of a larger project budget or programme budget).

	1 - 3								
NO.		NAME PROJECT.	OF	NAME (CLIENT.	OF	CONTACT DETAILS OF CLIENT.	PROJECT VALUE	STAGE OF PROJECT	
1									
2									
3									

Attach a separate page to address this issue (the above table is just for reference purposes).

The undersigned, who warrants that she/ he is duly authorised to do so on behalf of the enterprise, confirms that the content of this schedule that presented by the Bidder are within my personal knowledge and are to the best of my knowledge both true and correct.

Signed	Date	
Name	 Position	
Enterprise name		
Enterprise name	 	





J

OTHER OFFERS SUBMITTED AT TIME OF THIS BID FOR WHICH RESULTS ARE PENDING (if they exist)

(Any other client's BID must also be included)

BID NO. / PROJECT NUMBER	PROJECT NAME	CLIENT NAME & CONTACT NO.	VALUE BIDDED IN RANDS	DATE SUBMITTED	CONTACT DETAILS (CLIENT)
1					
2					
3					
4					

If there are more projects, attach a separate page to address this issue (the above table is just for reference purposes).

Signed	Date	
Name	Position	
Enterprise name		





SCHEDULE OF BIDDER'S LITIGATION HISTORY

The Bidder shall list below details of any litigation with which the Bidder (including its directors, shareholders or other senior members in previous companies) has been involved with any organ of state or state department within the last ten years. The details must include the year, the litigating parties, the subject matter of the dispute, the value of any award or estimated award if the litigation is current and in whose favour the award, if any, was made.

NO.	NAME OF CLIENT.	OTHER LITIGATING PARTY	BRIEF DETAILS OF DISPUTE	PROJECT VALUE	DATE RESOLVED OR STATUS OF LITIGATION
1					
2					
3					
4					

Signed	Date	
Name	Position	
Bidder name		





K

Project Reference Forms - 1

Project title:	MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGIFOR A PERIOD OF 24 MONTHS					
Project Number:	SCMU5-22/23-	-0130				
OTE: This returnable on the desired of the desired						
l,				(ı	name and surn	ame) of
					company name	
that I was the Project N						
executed by Project name:					(name or	Diddei).
B : (1 (:						
Construction period:		C	ompletic	n date:		
·	cipal agent, by	inserting "	Yes" in th	ne relevant	box below:	·
Key Performance Indicat	ors Very Poor 1		Fair 3	Good 4	Excellent 5	Total
Project performance / tirmanagement / programment / p						
2. Quality of workmansh	ip					
3. Resources: Personne	el					
4. Resources: Plant						
5. Financial management payment of subcontractor cash flow, etc						
payment of subcontracto	ors /	TAL				





D. My contact details are:

Telephone:	Cellphone:	F	ax:
E-mail: _			
Thus signed at	on this	day of	20
	Signature of principal age		MPANY STAMP
If reference cannot be verified due respond to a written request to do of the Bi		core any point	
Name of Bidder			
Signature of Bidder		Da	te .





N

BASELINE RISK ASSESSMENT

PROJECT TITLE	MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSI PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS
SCMU NUMBER	SCMU5-22/23-0130
SCIVIU NUIVIBER	SCIVIUS-22/23-0130

PLEASE NOTE THAT THIS IS A BASELINE RISK ASSESSMENT AND NOT A DETAILED RISK ASSESSMENT OF ALL ANTICIPATED ACTIVITIES ON SITE

Activity	Risk to Safety	Risk to Health	Risk to Environmental	Risk to Public Safety	Control Measures
New Installation	Implementation of the approved risk assessment and employees	Electric Shock	N/A	N/A	PPE, Use of Scaffolding
Installation	Working on heights	Falling from Heights	N/A	N/A	PPE, Use of Scaffolding
Installation	Fire and explosion	Live lost and injuries	Smoke, Damage to property and environment	Dust inhalation	Use of PPE, guarding off site on work areas
Location, exposing& protection of the unknown existing services	Exposure to water, electrical, HVAC services	Long term breathing problems	Construction activities, vibration, dust	Air pollution	Use of PPE, guarding off site on work areas

You can list all activities on a separate page to address this issue (the above table is just for reference purposes). The contractor acknowledges and confirms that the above mentioned points will be observed when undertaking safety requirements.

Signed	Date	
Name	Position	
Enterprise name		





PART C1.2 CONTRACT DATA

Tender No : SCMU5-22/23-0130

Project title:	MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS
Tender No:	SCMU5-22/23-0130

Part 1- Data provided by the Employer

Clause	Statement		Data		
1. Ger	neral				
The conditions of contract are the core clauses and the clauses for main Option:		А	Priced contract with price list		
1	dispute resolution Option and secondary Options		Dispute resolution procedure		
		X1 X13	Price adjustment for inflation Performance Bond		
			Low service damages		
		X18 Limitation of liability			
		X19 Task Order			
_		X20 Key Performance Indicators			
	he NEC3 Term Service Contract oril 2013)				





10.1 The Employer is (name): Eastern Cape Department of Public Works

& Infrastructure

Address Department of Public Works and

Infrastructure

3rd Floor. Office 3-46 Independence Avenue Qhasana Building

5605

Represented By:

The Service Manager is (name):

The law of the contract is the law of

The language of this contract is

The period for reply is

Tel No. Fax No.

10.1

12.2

13.1

13.2

	manager is (manie).	
	Address	
	Tel	
	e-mail	
	The Service Manager is (name):	
11.2(2)	The Affected Property is	Various DSD Facilities in the Eastern Cape Joe Gqabi
		Burgersdorp and Aliwal North
11.2(13)	The service is	Scheduled and re-active Maintenance and new Installations of Mechanical and Electrical Systems
11.2(14	The following matters will be included in Risk register	N/A
11.2(15)	The Service Information is in	The Contract Part 1: Service Information - Scope of Works. Works Information and all documents and drawings to which it makes reference.

The Contractor's responsibility (If the optional statement for this section is not used, no data will be required for this section)

English

7 days

the Republic of South Africa



21.1

The Contractor submits a first Plan for



	acceptance within	
3. 7	Гіте	
30.1	The starting date is	at the Site Handover Meeting Date
30.2	The service period is	24 Months
4. 7	Testing and defects	Special testing may be requested by the Service Manager.
		Corvice Manager.
	Payment	NA - or the broad
50.1	The assessment interval is	Monthly
51 1	The currency of this contract is the	South African Rand

2 weeks of the Contract Date

5. Payment					
50.1	The assessment interval is	Monthly			
51.1	The currency of this contract is the	South African Rand			
51.2	The period with which payments are made is	30 Days after submission of a valid TAX Invoice to the Employer			
51.4	The interest rate is	(i) zero percent above the publicly quoted prime rate of interest (calculated on a 365-day year) charged by from time to time by the South African Reserve Bank (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands			
6. Compensation Events		(if the optional statement for this section is not used, no data will be required for this section			
	These are additional compensation N/A events				

	0000
These are additional compensation N/A events	
7. Use of Equipment Plant and Materials	No data is required for this section of the conditions of contract.

8. F	8. Risks and Insurance		
80.1	These are additional Employer's risks	N/A	
83.1	The Employer provides these insurances from the Insurance Table	N/A	
83.1	The Employer provides these additional insurances	N/A	





83.1	The minimum amount of cover for insurance against loss and damage caused by the Contractor to the Employer's property is	
83.1	The insurance against loss of or damage to the works, Plant and Materials is to include cover for Plant and Materials provided by the Employer to an amount of	
83.1	The minimum amount of cover for insurance in respect of loss of or damage to property (except the Employer's property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the Contractor) arising from or in connection with the Contractor's Providing the Service for any one event is:	
83.1	The Minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the Contractor arising out of and in course of their employment in connection with this contract for any one event is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the Contractor's common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than
9. T	ermination	No data is required for this section of the conditions of contract.

Option A

4 Weeks

11. Data for Option W1

Α

20.5

of the final

10. Data for main Option Clauses

Priced Contract with Price List

The Contractor prepares forecasts

total of the Prices for the whole of the service at intervals of no longer than





W1.1	The Adjudicator is (Name)	The person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the party intending to refer a dispute to him. (See www.icesa.org.za)
	Address	
	Tel. No,	
	Fax No.	
	Email	
W1.2(3)	The Adjudicator nominating body is:	The Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering
W1.4(2)	The Tribunal is:	Arbitration
W1.4(5)	The Arbitration Procedure is	The latest edition of Rules for the Conduct of
		Arbitrations published by the Association of Arbitrators (South Africa) or its successor body.
	The place where arbitration is to be held is	South Africa
	The person or organization who will choose an arbitrator -If the Parties cannot agree a choice or -If the procedure does not state who selects an arbitrator, is	The Chairman for the time being or his nominee of the Association of Arbitrators (South Africa) or its successor body.

12. L	ata for Secondary Option	Clauses
X1 X1.1	Price Adjustment for Inflation The base date for indices is	on Tender Closing Date
	The proportions used to ca the Price Adjustment Facto	





Note: Requirements for CPA/Price inflation is that Prices must		Proportion	Linked to Index for	Index prepared by (Source)
	be Fixed and Firm for the First 12 months of the contract and only subject to escalation thereafter. A			
	minimum of 10% of the			
	contract price / prices is not		.	
	adjustable throughout the life of the contract		Non- Adjustable**	
	or the contract	100%	Aujustable	
		100 /6		
X13	Performance Bond			
	The Contractor gives the Emp	oloyer a	The Tenderer m	ust provide a
	Performance Bond in the perf	ormance bon	d	·
	a Fixed Performance Guarante	ee by means	of a Bank Guarar	ntee, or from an Insurer
approve	ed by the			
			2.5% of the A once the Cont to him. This Bo	ger, in the amount of warded Contract Value, ract has been awarded and must be given to the in four (4) weeks of the
X17	Low Service Damages		Contract Date.	
X17.1	The service level table is in		As ner Demeri	t Table in Contact Data
X17.1	The service level table le in		Annexure CE	
X18	Limitation of Liability			
X18.1	The Contractor's liability to the for indirect or consequential to	•	R0.0 (zero Rar	nd)
X18.2	For any one event, the Control to the Employer for loss of or	r damage to	у	
	the Employer's property is lin			
X18.3	The Contractor's liability for I		•	the Driese of the
	his design of an item of Equi limited to	pment is	the total of Contract Da	the Prices at the ate And
	minod to		•	-





X18.4	The Contractor's liability to the Employer for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	N/A
X18.5	The end of liability date is	3 Months after the end of the Service Period.
X19	Task Order	
	The Contractor submits a Task Order programme to the Service Manager within	Authorization to commence with any Task will be done by Task Order. This Task Order will be issued to the Contractor by the Service Manager. Maintenance Turn- around times are stated in the Works Instructions under specification clause GM7.





Part Two – Data provided by the *Contractor*

Clause	Statement	Data
10.1	The Contractor is (Name):	
	Address:	
	Tel No.	
	Fax No.	
11.2(8)	The Direct Fee Percentage is	%
	The Subcontracted Fee Percentage Is	%
11.2(14)	The following matters will be included in the	
	Risk Register	
11.2(15) TI	ne Service Information for the Contractor's plan is in:	
21.1	The plan identified in the Contract Data is	
	contained in:	
24.1	The Key Persons are:	
	Name :	
	Job:	
	Responsibilities :	
	Qualifications :	
	Experience	
	Name :	
	Job:	
	Responsibilities :	
	Qualifications :	
	Experience	
		CV's and further key person's data are in
A	Priced Contract with Price List	
11.2(12)	The price list is in	





	Price adjustment fo	or inflation	
1.1			
	Proportion	Linked to Index for	Index prepared by (Source)
		Non-Adjustable**	
		, ron rajustable	
	100%		





Annexure CD1 – Demerit Table and Penalty Calculation System

Project title:	MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS
Bid No:	SCMU5-22/23-0130

Attach document here





<u>ANNEXURE CD1:</u> DEMERIT TABLE AND PENALTY CALCULATION SYSTEM

If the Contractor fails to remedy any sub-standard work within the time frame stipulated by the Service Manager, the conditions as per GM 3.1 will apply.

The contractor will incur demerit points for specific measurable poor performance incidents which can lead to the early termination of the Contract as described below.

DESCRIPTION	DEMERIT POINT
Failure to submit the Functional Condition Assessment Report by the due date	1 point/ week that the report is late
Exceeding the maximum allowable response and resolve time for a P1 Breakdown	3 points/ incident
Exceeding the maximum allowable response and resolve time for a P2 Breakdown	2 points/ incident
Exceeding the maximum allowable response and resolve time for a P3 or P4 Breakdown	1 point/ incident
Not meeting the Planned Maintenance Performance KPI	1 point/ incident
Not meeting the Rework Rate KPI	1 point/ incident
Not meeting the Contractor Contactability KPI	1 point/ incident





The demerit points will accumulate and trigger the following actions:

ACCUMULATED DEMERIT POINTS	ACTION
6	Service Manager to discuss Contractor's performance deviation and agree on improvement measures. If improvement measures are successful and the Contractor has been consistently meeting the required KPI targets for the following two months, the demerit points can be cancelled by the Service Manager.

12	Service Manager to issue notice that Contractor is in Breach of Contract and that Contract Can be terminated if the Contractor does not improve his performance in line with the agreed improvement measures.
15	Service Manager to Terminate Contract as per Clause 9 of the NEC3 Term Service Contract.

Poor performance by the Contractor due to late payments by the Employer will not incur demerit points.

Financial penalties, as per the requirements of Secondary Options Clause X17, will be applied on the effected payments at 1% penalty per demerit point by the Service Manager, in the month that the demerit points are allocated to the Contractor.





Annexure CD2 – Key Performance Indicator Listing

Project title:	MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS
Bid No:	SCMU5-22/23-0130





ANNEXURE CD2: KEY PERFORMANCE INDICATOR LISTING

The following Key Performance Indicators (KPI's) will be applicable to this Contract and must be monthly updated and reported on by the Service Manager:

KPI Name		KPI Equation		Frequency	Target
Emergency Job Rate	=	Total Number of Emergency Jobs Done Total Number of Jobs Done	X 100%	Monthly	<10%
Planned Maintenance Performance	=	Total Number of Scheduled Planned Maintenance Jobs Completed Total Number of Planned Maintenance Jobs Scheduled	- X 100%	Monthly	100%
Cost Estimation Accuracy	=	Total Actual Cost of Work Total Estimated Cost Of Work	X 100%	Monthly	100%
Response Performance	=	Number of Service Calls Completed within Targeted Response Time Total Number of Service Calls	-X 100%	Monthly	100%
Rework Rate	=	Number of Jobs Requiring Rework Total Number of Jobs Done	-X 100%	Monthly	0%
SHEQ	=	Number of SHEQ Incidents Involving the Contractor		Monthly	0
Contractor Contactability	=	Number of Times that Contractor was not Contactable by the Call Centre		Monthly	0

The Service Manager must also ensure that the following items are routinely inspected and reported on by the Site Representative for each Health Facility:

- 1. Compliance with general maintenance requirements as specified in the Service Information.
- 2. Manner in which preventative and corrective maintenance is carried out.
- 3. Manner in which the Maintenance Control Plan is implemented and updated.
- 4. Manner in which Task Orders received from the Service Manager is dealt with.





- 5. Manner in which records are kept as required by the Service Information as well as the Occupational Health and Safety Act, Act No 85 of 1993 as amended.
- 6. Quality of services carried out for the month prior to the inspection.

Note: The aim of the above inspection is to determine that all the requirements of the specification have been complied with. Should the Service Manager believe that one or more maintenance items referred to above, have been neglected or totally ignored by the Contractor he may decide to implement demerit points as penalty as per X17 for each type of non-compliance found during the inspection.





PART C2 C2 - SCOPE OF WORKS





C2.1 SCOPE OF WORK (TERMS OF REFERENCE)

1.1 OVERVIEW OF THE WORKS

MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS

1.2 EXTENT OF THE WORKS

The execution of works shall include, but not be limited to, all the items listed in the schedules below under each heading. These action and findings shall be logged and be reported to the department for assessment as to be carried out under provisional funding.

HEATING VENTILATION AND AIR CONDITIONING UNITS

- Extractor fan and ventilation system
- · Air Conditioning units
- Package type Roof Top Units and Ventilation

REFRIGIRATION

- Replacement or Servicing Compressor
- · Refilling of Gas
- Replacement of Thermostat if damaged
- Replacement of filter driers

PLATFORM STAIR LIFT

Provide/facilitate maintenance and training

FIRE PROTECTION AND DETECTION SYSTEMS

- Fire hose reel
- Hand held extinguisher
- Fire hydrant service
- Inspection and testing of the fire detection system

SERVICING OF GENERATORS

- Servicing of generator engine
- Refilling of Diesel on Demand

MAINTENANCE OF PUMP ROOM WITH ACCASSORIES

MOTOR GATE TO BE REPLACED

- Motor gate should be replaced
- Purchasing and programming of remotes

REPAIR/SERVICING OF ELECTRICAL WORKS

- Distribution boards and KIOSK
- Luminaires
- Light switches and Photocells
- Power outlets and appliances





- Powerskirting and fittings
- Solid top Stove and Food Warmer
- Geysers

C2.2 TECHNICAL SPECIFICATIONS - HVAC SYSTEM AND ASSOCIATED EQUIPMENT

Project title:	MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION, FOR A PERIOD OF 24 MONTHS
Tender No:	SCMU5-22/23-0130

TECHNICAL SPECIFICATION FD - HEATING, VENTILATION AND AIR-CONDITIONING SYSTEMS

CONTENTS

- SCOPE
- STANDARD SPECIFICATIONS
- VARIATIONS AND ADDITIONS TO STANDARD SPECIFICATIONS
- OPERATING AND MAINTENANCE MANUALS
- TRAINING OF OPERATORS FOR THE OPERATION OF THE INSTALLATION AND EQUIPMENT
- LOGGING AND RECORDING PROCEDURES
- TESTS AND INSPECTIONS ON COMPLETION OF REPAIR WORK
- QUALITY ASSURANCE SYSTEM
- COMMISSIONING AND RE-COMMISSIONING OF PLANT AND INSTALLATION
- GUARANTEE OF INSTALLATION AND EQUIPMENT
- MAINTENANCE TOOLS AND SPARES
- REPAIR WORK TO INSTALLATION SYSTEMS AND EQUIPMENT
- MAINTENANCE TO INSTALLATION AND EQUIPMENT

FD 02 STANDARD SPECIFICATIONS

FD 02.01 GENERAL STANDARD SPECIFICATIONS, REGULATIONS AND CODES

The latest edition, including all amendments up to date of tender of the following specifications, publications and codes of practice shall be read in conjunction with this specification and shall deemed to form part thereof:

FD 02.01.01 SABS and other specifications and codes

SABS 046	-	Copper tube manufacturing code of practice
SABS 0400	-	The applications of building regulations
SABS 0103	-	The measurement and rating of environmental noise with respect to annoyance and

speech communication

speech communication

SABS 0139 - The prevention, automatic detection and extinguishing of fire in buildings

SABS 0140 - Identification colour marketing

SABS 0142 - Code of practice for the wiring of premises

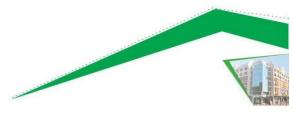
SABS 0147 - Refrigerating systems, including plants associated with air-conditioning systems

SABS 0173 - Installation, testing and balancing of duct work

SABS 630 - Decorative high-gloss enamel paint for interior and exterior

SABS 763 - General coating thickness





SABS 1238 - HVAC duct construction standards

Act 103 - National Building Regulations and Building Standard Act, 1977 (Act No 103 of 1977) as amended

FD 02.01.02 Department of Public Works Specifications

STD.PWD.VIII - Standard specification for refrigeration services (Issue VII 1995) Standard Specification for Air Conditioning and Ventilation Installations

FD 02.01.03 Occupational Health and Safety Act of 1993

All regulations and statutory requirements as laid down in the latest edition of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) shall be adhered to.

FD 02.01.04 Manufacturers' specifications, codes of practice and installation instructions

All equipment and materials shall be installed, serviced and repaired strictly in accordance with the manufacturers' specifications, instructions and codes of practice.

FD 02.01.05 Municipal regulations, laws and by-laws

All municipal regulations, laws, by-laws and special requirements of the Local Authority shall be adhered to unless otherwise specified.

FD 03 VARIATIONS AND ADDITIONS TO STANDARD SPECIFICATIONS

The following additional general specifications and requirements shall be read in conjunction with this specification and shall be adhered to unless otherwise specified in the Particular Specification.

FD 03.01 GENERAL REPAIR AND INSTALLATION REQUIREMENTS

All materials and equipment supplied and installed shall be of new high quality, design and manufactured to the relevant specifications, suitable for providing efficient, reliable and trouble-free service.

All work shall be executed in a first-class workman-like manner by qualified tradesmen.

All equipment, component parts, fittings and materials supplied and/or installed, shall conform in respect of quality, manufacture, test and performance to the requirements of the applicable current SABS specifications and codes, except where otherwise specified or approved by the Engineer in writing.

All materials and workmanship which, in the opinion of the Engineer, is inferior to that specified for the work will be condemned. All condemned material and workmanship shall be replaced or rectified as directed and approved by the Engineer.

The Contractor shall submit a detailed list of the equipment and material to be used to the Engineer for approval before placing orders or commencing installation.

All new equipment, materials and systems shall be installed and positioned such as to not impede on access routes, entrances and other services. The Contractor shall coordinate these items taking other services and equipment into account.





All control equipment and serviceable items shall be installed and positioned such that they will be accessible and maintainable.

The Contractor shall make sure that all safety regulations and measures are applied and enforced during the repair and construction periods to ensure the safety of the public and User Client.

Repair work shall be programmed in accordance with Additional Specification SC: General Decommissioning, Testing and Commissioning Procedures, to ensure the shortest possible downtime of any service and the least inconvenience to the User Client and public. The Contractor shall make sure that the necessary notifications and notices are timeously put into place for these activities.

FD 03.02 TESTING OF REFRIGERATION PIPING AND EQUIPMENT

All new refrigerant pipe installations shall be thoroughly tested to be sure that they are absolutely tight. Nitrogen must be used to pressure test the system at 1,5 times the working pressure. A pressure-reducing valve must be used to set the test pressure. A leak test must be carried out on the entire system.

All new refrigerant pipe installations shall be vacuum pumped by means of a suitable vacuum pump. An absolute pressure of 2500 micron must be reached. Allow the system to stand under vacuum for a minimum of 12 hours. If no noticeable rise in pressure has taken place after 12 hours, the system may be charged.

The dryness of the refrigeration system shall be indicated by an approved moisture indicator.

Should moisture be present, the system shall be leak tested and the leak repaired. Should no leak be present, the system shall be flushed with dry nitrogen and vacuum pumped again as described above.

If the completed system complies with all the Specifications and passes the test and inspection, it can be approved and the Contractor may be instructed to recharge the system with the correct refrigerant and refrigerant charge.

Under no circumstances shall the refrigerant piping/installation be purged.

FD 03.03 REFRIGERANTS

No CFC refrigerant shall be used in new installations.

Equipment still running on CFC shall be maintained until such time that a leak occurs or the system has to be decanted. The system shall then be converted to a compatible HCFC or HFC as described in the Montreal Protocol and recommended by the compressor manufacturer.

Any CFC refrigerant that has to be discharged, shall be decanted by means of an approved reclaiming system, and not discharged to the atmosphere. Should the Contractor not comply with this requirement, full statutory action shall be taken against him.

Any refrigeration system not supplied with three-way service valves, shall be provided with Schreuder type service valves. These valves shall be installed on both suction and discharge lines of the compressors. Tap-o-line valves shall not be fitted or used on the systems. In the event of an electrical motor burn-out in a hermetic or semi-hermetic compressor, a burn-out drier shall be used and the system re-instated as set out hereafter. Note that purging only of the system is prohibited. The burn-out drier shall be installed and removed as per the manufacturer's instructions.





Prior to recharging the system with refrigerant, it must be subjected to a triple evacuation process. During each of the first two evacuations the pressure in the system must be brought down to an absolute pressure of 200 Pa (1500 microns.) In the final evacuation the pressure must be brought down to 66,5 Pa (500 microns.) At each evacuation cycle the pressure must be held constant at the above values for a period of a least two hours after which the vacuum must be broken with the refrigerant to be used in the system and the pressure raised to 14 Pa gauge (2 psig.).

After the final vacuum cycle the system must be re-charged with refrigerant.

Note that the evacuation process must be witnessed by the Engineer or his duly appointed representative. All safety controls and interlocks must be correctly adjusted and their proper operation demonstrated to the Engineer or his representative.

In the case of a system being re-charged after a compressor burn-out samples of the compressor oil must be taken before and after the cleaning and evacuation processes and again after the plant has run for a period of between 8 and 24 hours and kept in marked bottles for comparison purposes. The final sample must be tested for acid content. If this sample indicates that the oil is dirty or acidic (more than 0,05 acid number) the filter/drier elements must be changed and the plant left to run for another 24 hours after which another oil sample must be taken and tested for acid content. If the oil is clean and free of acid (less than 0,05 acid number) the suction line filter/drier may be removed and a new element fitted to the liquid line filter/drier. Note that all oil sampling and testing must be done in the presence of the Engineer or his duly appointed representative.

No synthetic components or solutions shall be used to repair leaks in refrigeration piping, on coils or evaporators. Only approved gas welding shall be used. Should the leak be of such nature that repair is not possible, the item should be replaced.

FD 03.04 FANS AND ATTENUATORS

FD 03.04.01 General

Requirements under this heading apply to fans that are not integral parts of complete units supplied by recognised suppliers. Selected fans shall be such that the operating point is as close as possible to maximum efficiency.

Fan motors selected must be capable of supplying not less than 10 % above the specified air quantity without overloading.

The system resistance must be calculated and the fan selected to meet the required static pressure, taking into consideration the site altitude, system air temperature and air density at which the system duty shall be met. The selection must be submitted to the Engineer for approval before ordering the equipment.

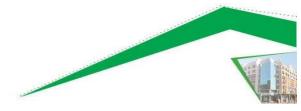
Belt drives shall be designed for a minimum overload of 25 % and not less than two matched belts may be used. Belts shall be selected and installed according to BS 790.

Pulleys shall be of the adjustable speed taper-lock type and shall be accurately keyed to the shafts and aligned before the system is put into operation. Belt guards shall be supplied in accordance with Occupational Health and Safety Act, No 85 of 1993. The guards shall have an expanded metal front and shall allow oiling and the use of a tachometer without removal of the guard.

Bearings shall be selected for a minimum life expectancy of 200 000 hours at the given duty.

Lubrication points shall be readily accessible and shall be extended to the outside to permit lubrication without removal of the fan. Fan shafts shall be suitably protected from rust and corrosion.





FD 03.04.02 Axial flow fans

Axial flow fans shall be in-line direct-driven type with the motor mounted inside the fan housing. Fans shall be of the multi-bladed aerofoil type of a non-ferrous construction. The number of blades will vary according to the application. The fans shall be provided with adjustable blade pitch indexed to permit field adjustment.

Fan casings shall be constructed of hot-dip galvanized mild steel with a minimum thickness of 3 mm and mild steel galvanized flanges on each side drilled for connections to matching flanges on ducting.

FD 03.04.03 Sound attenuators

Sound attenuators shall be installed in the positions indicated on the drawings and shall be selected to provide the noise criteria levels as specified. All sound attenuators shall be products of an accredited manufacturer who publishes selection data on these products. Data shall be submitted to the Engineer for approval before ordering.

Metalwork shall be galvanized steel and acoustic insulation shall be non-combustible material, properly bonded and covered so as not to permit particles to be eroded by air moving over it.

Sound absorbing lining material shall have a density not less than 48 kg/m3 and thickness of not less than 50 mm.

FD 03.05 CANOPIES AND GREASE ELIMINATORS

Kitchen canopies shall be connected to the extract fan by means of ducts of which the joints and seams are of the welded or soldered construction and shall be watertight. Cleaning openings shall be provided at such intervals on the ducting that the inside of the ducting can be reached for cleaning purposes. The fan shall be provided with a cleaning access door, as well as a drain point at the bottom.

Fire dampers, operated with fusible links, shall be provided in each air outlet connection and shall form an integral part of the canopy construction.

Lights shall be fitted into the canopy by the manufacturer. Access to the tube for tube replacement shall be through the face of the fittings without the use of tools.

Grease filters shall contain a series of vertical baffles to change the direction of the air flow and efficiently divert grease particles out of the air stream by centrifugal action. Each filter bank shall contain a condensate trough and removable grease storage container.

FD 03.06 ELECTRIC MOTORS

All electric motors shall be of one make, unless integral with the equipment, and shall not operate in excess of 1500 r/min unless previously approved by the Engineer for specific reasons. Motors, unless otherwise specified, shall be 380 volt, three-phase, 50 hertz for all sizes from and including 0,37 kW upwards. Smaller motors may be 220 volt, single-phase, 50 hertz.

All motors shall be totally enclosed, fan-cooled and have metric frame dimensions. Motors shall be quiet in operation to the full acceptance of the Engineer.

Three-phase motors shall all be squirrel cage induction type, special high torque motors being used on high inertia loads such as centrifugal fans, where otherwise excessively large motors, necessary





to overcome driven equipment inertia, cause operation BHP to be less than 70 % of motor nameplate kW.

Starting methods for three-phase motors shall be as follows:

Motors up to 5,5 kW - DOL

Above 5,5 kW - Star-delta started, provided that the starting current does

not

exceed three times the full load amps. Frequency controlled soft start systems are also acceptable.

Single-phase motors shall be capacitor started, induction run type with built-in manual reset overload protection.

Nameplate rating of electric motors shall be at least 15 % larger than the required driven equipment brake drive losses duly accounted for, on motors below 15 kW. On larger motors a 10 % margin shall suffice.

All switch panels shall have a phase failure and low voltage protection with automatic reset adjustable to a maximum period of 10 minutes.

FD 03.07 DUCT WORK

This specification covers the air distribution system as shown on the drawings. Duct work shall be manufactured in accordance with the standard specification for air-conditioning duct work, SABS 1238. Duct work shall be erected in accordance with the code of practice for the installation, testing and balancing of duct work, SABS 0173.

Fittings such as elbows, parallel flow branches, branch connections, off-sets and transitions shall be manufactured and installed in accordance with the SMACNA standards.

All ducting shall be sufficiently airtight to ensure economical and quiet performance of the system, and joints shall be suitably sealed in accordance with the relevant SMACNA standard with suitable non-combustible filler compound.

The Contractor shall provide all hangers and supports which are to be hot-dip galvanized after fabrication to SABS 193. No explosive fasteners to the building structure shall be allowed, only approved expanding bolts or clamps are permissible.

The duct work shall be connected to the air terminals by means of flexible ducting. Flexible ducting shall be coated fibreglass fabric with a mineral base. Flexible ducting shall be installed with "easy" bends of not less than one duct diameter centre line and shall be supported to SMACNA specification to ensure that the ducting does not kink. The length of the flexible duct shall be kept to a minimum and shall not exceed lengths of 1200 mm.

FD 03.08 AIR TERMINALS

Air distribution shall be effected by means of the supply air grilles as indicated on the drawing. The finish of the grilles shall be epoxy powder-coated, the colour of which shall be advised and approved by the Engineer. Supply air grilles shall be of the double defection type, consisting of two rows of individually adjustable aerofoil section vanes, front vanes horizontal rear vanes vertical, all vanes housed in a surrounding fixing flange with neat mitred joints in the corner.

Supply air grilles shall be of steel construction and shall be provided with burglar bars. The inner section will be only accessible from above and the face plate of the grille is fixed from above. No screws or fixing devices are accessible from below.





Supply grilles are supplied with a plenum box with spigot and connected to the spigot on the ducting by means of flexible ducting.

Transfer grilles shall be of steel construction and be provided with burglar bars. Standard door grilles may be installed with a burglar bar assembly in between.

FD 03.09 AIR FILTERS

FD 03.09.01 General

Provide and install air filters in the positions as indicated on the drawings.

Filters shall be standard products of a reputable manufacturer regularly engaged in the manufacture of the particular filter. The manufacturer shall submit evidence to the satisfaction of the Engineer that the filters have been tested by an independent authority and that they meet the minimum arrestance, efficiency and dust holding capacity.

Filters shall be tested in accordance with ASHRAE test standard 52 - 76.

A Magnahelic gauge calibrated from zero to 500 Pa shall be installed, connected with copper tubing to static pressure tips complete with isolating valves.

FD 03.09.02 Primary filters

Primary filters shall, unless otherwise stated, be washable on woven polyester material, pleated to provide an extended surface with a dust spot efficiency of minimum 95 % at a particle size of 5 microns and an arrestance of 85 % (or the equivalent ASHRAE specification). The filter media shall be of a glass or synthetic fibre material. The filter material shall be at least 50 mm thick.

Media shall be firmly held in place by rustproof wire screens to maintain pleat strength and spacing.

Media and support screens shall be continuously bonded into aluminium support.

Frames shall be folded to form a robust media support frame. The bonding between media and frame shall be continuous to prevent leakage.

Each filter shall be provided with a factory made holding frame, constructed of not less than 1,0 mm thick galvanized mild steel provided with suitable seals and quick release spring type clips to securely hold the filter cell in place without permitting leakage of air.

The holding frames of multiple cell filter banks shall be suitably joined and sealed so as to prevent leakage of air between the frames.

Where air filters of the washable type are specified in the particular specification, a suitable galvanised sheet steel wash tank with water feed line, over flow and drain shall be provided in each plant room.

FD 03.09.03 Secondary Filters

Secondary filters shall have an efficiency of not less than 99,9% based on the removal of dust particles down to and including 5 microns in size (or the equivalent ASHRAE specification).

Filters shall be of AAF "Varicel" manufacture (or similar, equal and approved) and of a front withdrawal configuration. Note that slide in type filter arrangements are generally not acceptable and to be discouraged.





The face velocity across the filter bank may not exceed the manufacturer's rating.

A pressure differential gauge (manometer) as described in clause 21.2.4 shall be fitted across each filter bank. Note, though, that the pressure range shall exceed the maximum pressure drop as specified by the manufacturer of the filters by 40 - 50%

The pressure drops when the filters are clean and when they are due for renewal must be clearly and indelibly marked on the manometer.

A pressure switch and warning light shall be installed to indicate when the air resistance over the secondary filters only reaches 200 Pa.

FD 03.09.04 Automatic Filters

The filters shall be of the single stage automatic, renewable media type in which the filtering curtain is a thick blanket of bonded and coated glass fibre or other approved material supplied in rolls. The supply roll shall be at the top, and the re-wind spool at the bottom of the curtain.

A media run-out warning indicator shall be provided with each filter. Power to the re-wind motor shall be cut off when the end of the roll is reached. A differential pressure controller shall be provided to actuate the

curtain re-wind motor when the air resistance over the filter reaches a pre-set level of between 90 and 130 Pa. The pressure differential shall be 25 Pa.

The control shall be set up in such a way that a complete clean face of filter material is exposed each time the re-wind motor is actuated by the pressure differential switch.

In addition, a push button shall be provided which will activate the re-wind motor for as long as the button is depressed.

The filter efficiency shall be not less than 36% on the NBS (Atmospheric) type test or as specified in clause FD 03.09.02.

A differential pressure gauge shall be provided to check the function of the differential pressure controller. It shall be similar or equal to the "Dwyer Magnehelic" pressure gauge with a scale range of 0-250 Pa.

The filter face velocity shall not exceed 2,5 m/s.

FD 03.10 LABELLING AND IDENTIFICATION

All equipment shall be labelled and identified using black Traffolite labels with 10 mm high white lettering on the labels. Labels will be secured using epoxy base glue.

The identification number used on these labels shall correspond with the equipment number on the complete inventory list.

FD 03.11 NOISE AND VIBRATION

Particular care shall be taken in the selection, application and installation of all equipment used to ensure that the equipment will operate below the required noise level for public areas of NC 35 and with the least vibration possible, all to the satisfaction of the Engineer.





Equipment shall be mounted on vibration isolators of the correct type and selection depending on deflection requirement and vibrating frequency.

Anti-vibration connections shall be used on duct work where it joins vibrating equipment such as fans and air-conditioning units.

Suitable sound attenuating devices shall be incorporated within the duct work to reduce airborne noise to acceptable levels as specified.

The subcontractor shall provide sound level data to the Engineer on the completion of the installation detailing the noise levels in NC level for each separate area. No measurement shall be taken closer than 1 metre from any outlet.

FD 03.12 PAINTING AND CLEANING

No untreated metal surfaces shall be allowed on the project. Items which are not galvanized or similarly protected against rust and corrosion shall be painted as detailed below. No equipment, hangers, brackets, etc, shall be delivered to site in unprotected condition; they shall be factory coated with an approved zinc-rich prime coat before being despatched.

Painting shall comprise the following consecutive processes. Thoroughly clean, descale and degrease all surfaces, apply one coat of approved zinc-rich primer and one coat of universal undercoat, and finish off with two coats of quality high-gloss enamel. Final finish shall be to the full approval of the Engineer.

Items with galvanized finish, such as cable trays, need not be painted but shall be properly cleaned with suitable galvanized iron cleaning fluid. Where galvanized finish is painted, it shall be primed with a calcium plumbate primer.

It is not a requirement to paint duct work, conduits or pipework installed in roof voids and shafts, where they are not visible, if they are galvanized. Items as mentioned above shall be properly cleaned and painted as specified above.

Visible sections of the inside of ducting through grilles shall be painted matt black after degreasing and priming as specified above.

Plant and equipment shall be painted with the relevant colour in accordance with SABS.

FD 03.13 AIR-CONDITIONING UNITS

The self-contained packaged unit shall be a fully catalogued product and documentation shall include performance curves and selection tables.

Self-contained room air-conditioning units consist of unit casing, compressor, evaporator and fan, condenser and fan, refrigerant pipework with expansion device and the relevant controls. The condenser unit shall form an integral part of the unit or be separate for split applications.

Unit casings shall be of sheet metal construction with a baked enamel finish to give a corrosion resistance. Units shall be suitably insulated to ensure quiet operation.

Evaporator fans shall be of the double inlet centrifugal type with integral motor or belt-driven. The fan assembly shall be isolated from the unit by means of rubber mounts and the unit shall operate without vibration.

Condensate trays shall be manufactured of non-corrosive materials and shall be insulated and condensate shall be piped to the nearest drain point.





Washable WP 77 filters shall be provided and installed behind the inlet grille and shall be easily removable. (Refer to paragraph FD 03.09.01 & 02)

Compressors shall be of the hermetically sealed dome type with crankcase heaters and suitable vibration isolators.

Condenser coils shall be copper tubes with aluminium fins for inland use. Condenser fans shall be propeller fans or of the centrifugal type.

Refrigerant piping shall be installed and repaired as specified in FD 03.

FD 04 AS-BUILT INFORMATION AND OPERATING AND MAINTENANCE MANUALS

The Contractor shall be responsible for the compilation of an inventory list and operating and maintenance manuals and system data sheets.

This shall be done in accordance with Additional Specification SB: Operating and Maintenance Manuals.

The Contractor shall allow for the required equipment and facilities to establish the correct as-built information.

All information shall be recorded and reproduced in electronic format, as well as three sets of hard copies to be supplied to the Department.

Over and above what is specified in Additional Specification SB: Operating and Maintenance Manuals, the operating and maintenance manual to be compiled shall be structured to include at least the following:

- (a) System description
 - (i) Complete system description and the working of the plant.
- (b) Commissioning data
 - (i) Complete commissioning, test and inspection data of plant.
- (c) Operating data
 - (i) Plant running check list and frequency of servicing required;
 - (ii) Safety precautions to be implemented;
 - (iii) Manual and automatic operation;
 - (iv) Maintenance duties and logging required;
 - (v) Lubricating oils and service instructions;
 - (vi) Pre-start checklist for each system;
 - (vii) Starting and stopping procedures.
- (d) Mechanical equipment
- (i) Description of all major items with the make, model number, names, addresses and telephone numbers of the suppliers, manufacturers or their agents;
- (ii) Design capacities of all equipment, including selection parameters, selection curves, capacity tables, etc;
 - (iii) Manufacturers' brochures and pamphlets;
 - (iv) Schedule of spares with part numbers recommended to be held as stock.





- (e) Maintenance instructions
 - (i) Schedule of maintenance particulars, frequency of services and replacements;
 - (ii) Trouble-shooting guide;
 - (iii) Part number of all replacement items and spares;
 - (iv) Capacity curves of pumps, fans and compressors;
 - (v) Serial numbers of all items of equipment.
- (f) Electrical equipment
- (i) Schedule of equipment, indicating manufacturer, type, model number, capacity and addresses and telephone numbers of suppliers;
 - (ii) Maintenance instructions:
 - (iii) Manufacturers' brochures and pamphlets;
- (iv) Complete as-built circuit diagrams and diagrammatic representation of interconnections of all electrical equipment.
- (g) Instrumentation and control
 - (i) Description of each control system;
- (ii) Schedule of control equipment indicating manufacturer, type, model number, capacity and addresses and telephone numbers of suppliers;
 - (iii) Maintenance instructions:
 - (iv) Manufacturers' brochures and pamphlets.
- (h) Drawings
 - (i) Paper prints of all as-built mechanical and electrical drawings;
- (ii) Wiring diagrams framed behind glass shall be mounted adjacent to each relevant control panel.

FD 05 TRAINING OF OPERATORS FOR THE OPERATION OF THE INSTALLATION AND EQUIPMENT

In addition to the requirements of Additional Specification SD: General Training, the Contractor shall allow and provide for additional training of the HVAC maintenance staff as specified and set out in this specification. The objective of this training will be to ensure that the following is achieved:

- (a) Understanding of equipment;
- (b) High plant operating efficiencies to reduce operating costs;
- (c) Reduce the maintenance cost of the plant to an acceptable level, and maintain the cost at this level in so far as they are affected by the operating conditions;
- (d) Prevent the maloperation of the plant and its associated equipment.

In the event of the designated staff not achieving the set goals the Contractor shall be responsible to ensure that these personnel attend an approved maintenance course as available from the Department or manufacturer.

The Contractor shall, in collaboration with the Engineer, ensure that the maintenance personnel be re-evaluated on an annual basis by means of a set examination, to ensure the upkeep of skill level and knowledge.

The evaluation and training course to be utilised for the evaluation of the HVAC maintenance staff shall include at least the following:





- (a) Equipment and component recognition;
- (b) Emergency procedures to be followed in the event of power failure, water shortage, and accidents related to refrigerator systems:
- (c) Safety precautions to be followed and implemented;
- (d) The identification, reporting and recording of faults and operation of equipment;
- (e) The logging of boiler plant operation, readings and setting;
- (f) In the event of plant running on ammonia, the full SAIRAC course on handling ammonia as refrigerant shall be attended by the maintenance staff.

FD 06 LOGGING AND RECORDING PROCEDURES

The Contractor shall under this repair and maintenance contract institute a logging and recording system as part of his maintenance control plan as defined in Additional Specification SA: General Maintenance. This shall consist of a log and record book which shall be utilised to log and record all operations, faults, system checks, breakdowns, maintenance visits, inspections, etc.

The logbook shall be kept in a safe place at the maintenance section and shall only be utilised by the boiler house supervisor, the Contractor and the Engineer. A copy of the monthly entries and recordings into this logbook shall be submitted by the Contractor together with this monthly report to the Engineer.

The logbook shall be structured to include at least the following:

- (a) Daily inspection and maintenance actions;
- (b) 3rd Monthly inspection and maintenance actions;
- (c) Six-monthly inspection and maintenance actions;
- (d) Breakdown reports;
- (e) Statutory inspection and test comments and reports.

The Contractor shall also institute an attendance register, which shall be kept in a safe place at the maintenance section. This register shall be completed by all persons visiting the relevant plants, including:

- (a) Contractor and maintenance personnel;
- (b) Inspectors:
- (c) User Client and associates;
- (d) Engineer.

This register shall state the date, time-in, time-out, name, company and reason for visit. A copy of the register shall be submitted by the Contractor together with his monthly report.

On completion of repair work and/or the installation of new equipment the plant and equipment shall be put into operation after all tests and adjustments have been carried out to the satisfaction of the Engineer. Where new plant is installed the Contractor shall run and operate the system for a period of time specified by the Engineer and train the staff of the User Client to operate and maintain the system. This operation shall be done strictly in accordance with Clause SC 11 of the Additional Specification SC: General Decommissioning, Testing and Commissioning Procedures.

Logging of the operation of the installations shall commence immediately upon start-up.

The Contractor shall submit a full commissioning report as per attached commissioning data sheet.

FD 07 TESTS AND INSPECTIONS ON COMPLETION OF REPAIR WORK





On completion of repair work the Contractor shall prior to re-commissioning test the plant and its equipment. This operation shall be done strictly in accordance with Clause SC 08 of Additional Specification SC: General Decommissioning, Testing and Commissioning Procedures.

Except where otherwise provided in the Contract, the Contractor shall provide labour, materials, power, fuel, accessories and properly calibrated and certified instruments necessary for carrying out such tests. Arrangements for these tests shall be made by the Contractor and he shall give at least 72 hours written notice to the Engineer before commencing the test.

In the event of the plant or installation not passing the test, the Employer shall be at liberty to deduct from the Contract amount all reasonable expenses incurred by the Employer or the Engineer attending the repeated test.

Whenever any installation or equipment is to be operated for testing or adjusting as provided for above, the Contractor shall operate the entire system for as long a period as may be required to prove satisfactory performance at all times in the occupies space served by that system for up to twenty-four hours a day continuously until the certificate of practical completion of repair work is handed over.

The Contractor shall provide all labour and supervision required for such operation and the Department may assign staff as observers, but such observation time shall not be counted as instruction time.

After complete installation of the system all equipment shall be tested, adjusted and readjusted until it operates to the satisfaction and approval of the Engineer.

The Contractor shall submit certificates of tests carried out to prove the performance of all equipment, as well as certificates obtained from all the relevant authorities and statutory bodies, etc.

The Contractor shall only utilise Departmental approved inspection authorities for all inspections and tests to be conducted. This will be done and approved in writing among the relevant parties.

FD 08 QUALITY ASSURANCE SYSTEM

The Contractor shall institute an approved quality assurance (QA) system, which shall be submitted to the Engineer for his approval. The records of this QA system shall be kept throughout the duration of the Contract and be submitted to the Engineer at regular intervals as required.

FD 09 COMMISSIONING AND RE-COMMISSIONING OF PLANT AND INSTALLATION

FD 09.01 GENERAL

On completion of repair work and/or the installation of new equipment the plant and equipment shall be put into operation after all tests and adjustments have been carried out to the satisfaction of the Engineer. Where new plant is installed the Contractor shall run and operate the system for a period of time as specified by the Engineer and train the staff of the User Client to operate and maintain the system. This operation shall be done strictly in accordance with Clause SC 11 of Additional Specification SC: General Decommissioning, Testing and Commissioning Procedures.

Logging of the operation of the installations shall commence immediately upon start-up.

The Contractor shall submit a full commissioning report as per attached commissioning data sheet.





On completion of repair work the Contractor shall re-commission the plant and its equipment. This operation shall be done strictly in accordance with Clause SC 11 of Additional Specification SC: General Decommissioning, Testing and Commissioning Procedures. This operation shall also be carried out strictly in accordance with the manufacturer's specification and shall be witnessed by the Engineer.

Re-commissioning checks to be carried out shall be categorised under the following headings:

- (a) Mechanical checks
- (b) Electrical and control checks.

On completion of repair work the Contractor shall re-commission the plant and its ancillary equipment. This operation shall be done strictly in accordance with the manufacturer's specification and shall be witnessed by the Engineer. This shall include but not be limited to the following:

- (a) All required re-commissioning mechanical checks
 - (i) Check system for leaks;
 - (ii) Check rotation of all fans;
 - (iii) Check mountings of all equipment.
- (b) All required re-commissioning electrical and control checks
 - (i) Check all wiring connections for tightness and repair any hot connections.
- (ii) Check that all electrical equipment have been properly reconnected in accordance with the manufacturer's specification.
 - (iii) Perform and record all required electrical insulation tests on equipment.
 - (iv) Check and test all controls with main circuits isolated.
 - (v) Check all motor-driven equipment for correct rotational directions.
 - (vi) Check and test the operation of all indication and warning lights.
 - (vii) Check, set, record and readjust all equipment control and set points in accordance manufacturer's specification.
- (viii) Run all motor-driven equipment for a period to ensure free movement and correct operation, feed pumps only to be operated for a short interval to check rotation.

FD 09.03 COMMISSIONING AND COMPLETION OF REPAIRS

On completion of the re-commissioning checks the Contractor shall proceed with the commissioning. This operation shall be done strictly in accordance with Clause SC 11.02 of Additional Specification SC: General Decommissioning, Testing and Commissioning Procedures. This operation shall also be carried out in accordance with the manufacturer's specification and shall include but not be limited to the following for the different types of equipment:

FD 09.03.01 Air-conditioning units

with

- (a) Check evaporator and condenser pressures and superheat.
- (b) If the unit needs charging, find leak, decant, repair leak and recharge unit.
- (c) Check fans, fan speed control and fan motors.
- (d) Check entering and leaving air temperatures over evaporator coil.
- (e) Check operation of all safeties:
 - (i) LP cut-out pressure
 - (ii) HP cut-out pressure
 - (iii) Low on-coil thermostat
 - (iv) Set point of oil pressure safety





- (v) Oil pressure trip.
- (f) Check anti-recycle timer.
- (g) Check all running amps of fans and compressors.
- (h) Check compressor unloading mechanism if applicable.
- (i) Complete commissioning data sheet.

FD 09.03.02 Ventilation system

- (a) Check fans, fan speed control and fan motors.
- (b) Check running amps of fans.
- (c) Check pressure drop over filters.
- (d) Check air quantity over filters or canopy face velocity.
- (e) Check outlet air quantities.

The Contractor shall visit, inspect, test and readjust the plant during the 30-day period following the re-commissioning to ensure the correct functioning of the plant and its associated equipment.

FD 10 GUARANTEE OF INSTALLATION AND EQUIPMENT

The Contractor shall provide and obtain guarantees from the manufacturer(s) and/or supplier(s) to the effect that each piece of new equipment, supplied and installed under the repair contract, will comply with the required performance and will function as part of the complete system.

All new equipment, including the complete new installations and the systems as a whole, shall be guaranteed for a period of 12 (twelve) months commencing on the day of issue of a certificate of completion for repair work of the installation.

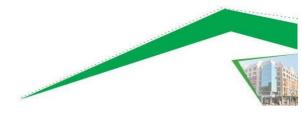
FD 11 MAINTENANCE TOOLS AND SPARES

Each maintenance workshop shall be equipped with the necessary maintenance tools and spares as required by the specific type of plants and installation for the daily operation and maintenance of the plant. At the start of the repair and maintenance contract the Contractor shall make an inventory of the existing tools and spares in the presence of the User Client, and any shortfall or damaged tools and spares shall be replaced with new. All replacement tools and spares shall be as specified by the boiler and equipment manufacturers. These tools and spares shall be kept in a lockable room or cabinet of which the maintenance supervisor and the Contractor shall carry keys. The Contractor shall on a monthly basis take stock of these items in the presence of the maintenance supervisor and shall record and report to the Engineer. Any shortfall shall be replaced by the Contractor as part of his responsibility under this Contract.

The tools and spares to be carried shall include, but not be limited to at least the following:

- (a) Tools
 - (i) Electric welding (arc welder)
 - (ii) Oxy-acetylene welding set
 - (iii) Soldering iron
 - (iv) Pipe cutter
 - (v) Swaging tool set
 - (vi) Flaring tool set
 - (vii) Leak detector (electronic or leak torch or Spectro light)
 - (viii) Vacuum pump
 - (ix) Service valve ratchet
 - (x) Refrigerant reclaim unit
 - (xi) Flow measuring hood





- (xii) Pitot tube
- (xiii) Vacuum gauge
- (xiv) Digital thermos anemometer
- (xv) Hygrometer
- (xvi) Tong tester
- (xvii) Coil comb
- (xviii) Multi-meter
- (xix) Amp meter
- (xx) Combination spanner set
- (xxi) Combination socket set
- (xxii) Allen keys
- (xxiii) Screwdriver set
- (xxiv) Drill set
- (xxv) Drilling (arc welder)
- (xxvi) Pop rivet gun
- (xxvii) Tab and die set
- (xxviii) Three-jaw gear pulley
- (xxix) Hacksaw
- (xxx) Level
- (xxxi) Bench vice
- (xxxii) Assorted files
- (xxxiii) Tape 5 m
- (xxxiv) Torch.

(b) Spares

It is recommended that essential parts be maintained in inventory. Essential parts are those parts used frequently in responding to routine and urgent work requests. Consider the accessibility to spares and the time it takes to obtain them. The goal is to avoid stockpiling parts, as well as to avoid being without a needed part. The following parts are regarded as essential spares:

- (a) Schrader valves
- (b) Relevant refrigerants
- (c) Relevant refrigeration compressor oil
- (d) Filter/dryers
- (e) Expansion valves
- (f) Filter sets
- (g) Relevant V-belts
- (h) Lubricants and greases.

FD 12 REPAIR WORK TO INSTALLATION SYSTEMS AND EQUIPMENT

FD 12.01 GENERAL

At the start of the repair and maintenance contract all the systems, installations and equipment shall be repaired as specified in the Particular Specification. This repair work shall include but not be limited to the specified Particular Specification details.

All repair work shall be executed using approved materials and equipment suitable to the systems and/or installations they serve. The said repair work shall be executed in accordance with the relevant codes of practice, standard, regulations, municipal laws and by-laws, manufacturer's specifications and codes of practice and all additional and particular specifications included in this document.

The repair work items shall be listed in tabular form in the Particular Specification with all relevant details, such as capacity, size, manufacturer, model number, etc.





All repair work shall be executed within the approved period for repairs to be agreed at the start of the Contract period. All new equipment, materials and systems shall be furnished with a written guarantee of a defects liability period of 12 months from date of issue of a certificate for completion of the repair work. These guarantees shall be furnished in favour of the Department of Public Works. On completion of the required and specified repair work the systems, installations and equipment shall be commissioned and handed over to the satisfaction of the Engineer.

Repair work items shall be categorised for the following installations:

- (a) Ventilation systems including canopies
- (b) Air-conditioning units.

FD 12.02 VENTILATION SYSTEMS

- (a) Replace fresh air intake screen.
- (b) Inspect and clean all duct work and canopy.
- (c) De-rust, neutralise and touch up paint work on ducting and canopy.
- (d) Check tightness of all securing bolts.
- (e) Replace all canvas collars with new.
- (f) Replace all filters.
- (g) Check bearings of fan motors and lubricate.
- (h) Check whether all duct supports are still in position and replace missing supports.
- (i) Check duct work for leaks and repair defects.
- (j) Replace all joint seal and gaskets with new.
- (k) Check all fire dampers for correct operation and reset.
- (I) Clean fan blades and check for unbalance.
- (m) Check fans, speed control and fan motor.
- (n) Check running amps of fan.
- (o) Reseal penetrations through roof.

FD 12.03 AIR-CONDITIONING UNITS

- (a) Clean air intake screen.
- (b) Replace filters.
- (c) De-rust, neutralise and touch up paintwork.
- (d) Replace canvas collars.
- (e) Clean housing, ensure all panels are properly secured and door panels close properly.
- (f) Check setting and operation of all pressure switches, reset if required.
- (g) Check setting and operation of all safety switches, i.e. LP and HP switches, oil pressure switch.
- (h) Check setting and operation of thermostats.
- (i) Check timers and reset if required.
- (j) Check operation of seven-day timer.
- (k) Check running current of fans and compressor and settings and operation of overloads.
- (I) Check tightness of all electrical terminals.
- (m) Ensure operation of local and remote isolators.
- (n) Check condition of all cables and whether cables are neatly strapped and reposition and strap if required.
- (o) Ensure correct operation of emergency stop.
- (p) Carry out a leak test on all refrigeration piping and components inclusive of evaporator and condenser.
- (q) All leaks shall be repaired. Should a leak on a component be of such a nature that it cannot be repaired, the component shall be replaced. The procedure to follow is as set out in FD 03.





- (r) The superheat setting of the thermostatic expansion valve shall be checked and adjusted if required (setting approximately 8°C).
- (s) The filter dryer shall be replaced.
- (t) Check compressor vibration mounts.
- (u) Test oil acidity.
- (v) Check refrigerant charge sight glass being clear or flashing.
- (x) Check moisture indication being dry.
- (y) Clean condensate tray and test drainage operation.
- (z) Clean evaporator and condenser blades and check unbalance.
- (aa) Replace suction line insulation.
- (ab) Check all service valves for full operation, replace caps if missing.

Note the following as appropriate:

(a)	Compressor suction/discharge pressures
(b)	Compressor motor amperages
(c)	Supply fan motor amperages
(d)	Outdoor Db/wb temperatures
(e)	Indoor Db/wb temperatures
(f)	Thermostat setting(s)
(g)	DX valve superheat setting
(h)	HP and LP cut-out settings
(i)	Chilled water inlet/outlet temp
(j)	Chilled water inlet/outlet pressures
(k)	Condenser water entering/leaving temps
(I)	Condenser water entering/leaving pressures
(m)	Ambient temperature: i) Dry bulbii) Wet bulbiii)

FD 13 MAINTENANCE TO INSTALLATION AND EQUIPMENT

FD 13.01 GENERAL

Monthly maintenance responsibilities for each installation including all units and components as specified, shall commence with commencement of the Contract. A difference shall be made in payment for the maintenance prior to and after practical completion of repair work.

Maintenance responsibilities of the completed installation shall commence upon the issue of a certificate of practical completion for repair work, and shall continue for the remainder of the 36-month contract period.

This part of the Contract shall include:

- (a) Routine preventative maintenance;
- (b) Corrective maintenance; and
- (c) Breakdown maintenance,

as defined in Additional Specification SA: General Maintenance, for the specified installations described under FD 01 of this specification.

The maintenance work to be performed and executed shall be done strictly in accordance with Additional Specification SA: General Maintenance, and as specified in Particular Specification PFD and this specification.

The said maintenance work shall be executed in accordance with the relevant codes of practice, statutory regulations, standards, regulations, municipal laws and by-laws and the manufacturers' specifications and codes of practice.





The maintenance schedules and frequency shall be developed under the maintenance control plan to be instituted by the Contractor, as specified in Additional Specification SA: General Maintenance.

All new equipment, components and materials supplied and installed under the maintenance contract shall be furnished with prescribed manufacturer's guarantees.

The maintenance work and items are to be categorised by the Contractor for each maintenance activity under the following headings:

- (a) Ventilation systems
- (b) Air-conditioning units.

The Contractor shall be remunerated monthly, based on his performance, for maintaining the complete installation in a perfect functional condition.

FD 13.02 **DEFINITION AND QUALIFICATION OF ACTIONS**

FD 13.02.01 Daily maintenance actions

Daily actions are the responsibility of the User Client. These checks are to be performed by staff responsible of the facility. The air-conditioning units and ventilation systems should run during working hours and/or continuously. The status of these systems can thus be monitored by observation on a daily routine.

Ventilation systems:

- Are the systems running and is the operation guiet?
- Is the kitchen hood removing vapour from the kitchen?

Air-conditioning units:

- Does the unit perform and maintain temperature?
- Is the temperature in the areas concerned satisfactory?
- Is the condensate drain working properly?

These daily checks shall be logged at the facility, i.e. by the kitchen manager and the maintenance personnel.

FD 13.02.02 Change of Season or 3rd Monthly maintenance actions

FD 13.02.02/1: Ventilation Systems

- 1 Inspect air intake for blockages
- 2 Check all accessible duct work for leakages, damages, and damages supports
- 3 Clean filters
- 4 Check electric motor running temperature
- 5 Check electric connections for tightness
- 6 Check operation of relief air grilles and check that they are not blocked
- 7 Check for motor noise and check bearings
- 8 Check for leaks on canvas collars

FD 13.02.02/2: Air-conditioning Units





- 1. Check for undue noise or vibration.
- 2. Check sight glasses for refrigerant condition and correct level
- 3. Check for oil/refrigerant leaks
- 4. Check suction line insulation
- 5. Check and clean filters and seals
- 6. Check belt tension and condition and
- 7. Check that belt guard is secure and in place
- 8. Check that condensate flows through drain piping
- 9. Check and note outdoor db/wb temps
- 10. Check and note indoor db/wb temps
- 11. Check and note thermostat setting(s). Adjust if necessary
- 12. Check operation of heating coils as applicable
- 13. Check for loose components
- 14. Clean plant and plant room
- 15. Check and clean condenser coil
- 16. Check condenser fan/motor bearings for undue noise or end play
- 17. Check compressor, condenser fan mountings
- 18. Check and clean cooling coil(s) and drain pan
- 19. Clean rust spots and touch up with paint
- 20. Clean out fan and coil compartments
- 21. Check for rust and corrosion

Note the following:

- a) Outdoor Db/wb temperatures.....
- b) Indoor Db/wb temperatures
- c) Thermostat setting(s)

FD 13.02.03 six monthly maintenance actions

FD 13.02.03/1: Ventilation Systems

- 1 Inspect air intake for blockages
- 2 Check all accessible duct work for leakages, damages, and damages supports
- 3 Clean filters
- 4 Check electric motor running temperature
- 5 Check electric connections for tightness
- 6 Check operation of relief air grilles and check that they are not blocked
- 7 Check for motor noise and check bearings
- 8 Check for leaks on canvas collars
- 9 Clean fan blades and check for unbalance
- 10 Clean exterior casing
- 11 Clean all grilles
- De-rust, neutralise and touch up paint work
- 13 Check vibration mounts of fan and tightness of mounting bolts





FD 13.02.03/2: Air-conditioning Units

- Check for undue noise or vibration.
- 2. Check sight glasses for refrigerant condition and correct level
- 3. Test for oil/refrigerant leaks
- 4. Check suction line insulation
- 5. Check and clean filters and seals
- 6. Replace drive belts
- 7. Check that belt guard is secure and in place
- 8. Check that condensate flows through drain piping
- 9. Check and note compressor suction/discharge pressures
- 10. Check and note compressor and fan motor amperages
- 11. Check and note outdoor db/wb temps
- 12. Check and note indoor db/wb temps
- 13. Check and note thermostat setting(s). Adjust if necessary
- 14. Check operation of heating coils as applicable
- 15. Check for loose components
- 16. Clean plant and plant room
- 17. Check and clean condenser coil
- 18. Check condenser fan/motor bearings for undue noise or end play
- 19. Check compressor, condenser fan mountings
- 20. Check and clean cooling coil(s) and drain
- 21. Lubricate supply fan bearings as required
- 22. Clean rust spots and touch up with paint
- 23. Tighten all electrical terminals and check all switchgear and inter-locks
- 24. Clean out fan and coil compartments, fan scroll and impeller
- 25. Remove motor end covers and clean out air ways
- 26. Check drive motor bearings
- 27. Tighten impeller, fan and motor pulley grub screws
- 28. Check DX valve superheat setting. Adjust if required
- 29. Check for rust and corrosion. Treat as necessary
- 30. Clean and remove loose paint, scale and repaint as required
- 31. Check and note HP and LP cut-out settings. Adjust if necessary
- 32. Check control thermostat calibration. Adjust if necessary

Note the following:

- a) Compressor suction/discharge pressures.....
- b) Compressor motor amperages.....
- c) Supply fan motor amperages.....
- d) Outdoor Db/wb temperatures.....





PARTICULAR SPECIFICATION PFD - HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

CONTENTS

PFD 01	SCOPE
PFD 05	DETAILS OF MAINTENANCE
PFD 04	DETAILS OF REPAIR WORK
PFD 03	TECHNICAL DETAILS OF EXISTING INSTALLATION
PFD 02	GENERAL DESCRIPTION OF INSTALLATION
PFD 01	SCOPE

This specification encompasses all aspects regarding the particulars of the repair and maintenance work to the Heating, Ventilation and Air-conditioning systems at the following regions:

• Joe Gqabi Region

This particular Specification shall be read in conjunction with the Technical Specification FD: Heating Ventilation and Air-conditioning systems and all additional and technical specifications compiled as part of this document, and in particular the following Additional Specifications

- SA General Maintenance
- SB Operating and Maintenance Manuals
- SC General Decommissioning, Testing and Commissioning Procedures
- SD General Training

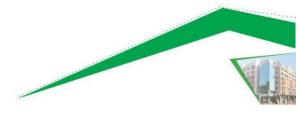
The intended repair and maintenance work to this installation will restore the existing installation to a safe, efficiently functional system that complies with all the statutory regulations and applicable standards, in the process repairing all defects and shortfalls. Monthly maintenance responsibilities for each installation shall commence with access to the site.

- a) The equipment and services to be maintained are listed in Appendix A Plant Inventory Air Conditioning Equipment attached to this specification.
- b) The plant inventory is not complete in every detail. It will be required of the contractor to barcode and capture the missing information and to update the data base from which the inventory was extracted. Bar-coding equipment required for this function will be supplied on loan by the Eastern Cape Department of Health

Each building could typically contain all or some of the following types of equipment:

- (i) Split and/or packaged type air conditioners
- (ii) Ventilation/extract fans and ducting





PFD 03 TECHNICAL DETAILS OF INSTALLATION

At the time of compilation of this document the existing installations consisted of the equipment, plant and technical details listed in Section 3 of this document.

PFD 04 **DETAILS OF REPAIR WORK**

PFD 04.01 GENERAL DESCRIPTION OF REPAIR WORK

PFD 04.01.01 The Contractor shall at the start of the Contract inspect the items, systems, equipment, components and installations listed below. This inspection shall include the establishing of any defects, leaks, conditions, damages, shortfalls, structural soundness, repairs required, details of existing equipment, suitability of equipment for the purpose it serves, etc. The Contractor shall report back to the Engineer in writing on all the above and the following items. No repair work shall commence prior to approval by the Engineer:

- (a) Air conditioning units (split/packaged units, air handling units, pumps etc.)
- (b) Ventilation systems, excluding kitchen extract canopies and fans;
- (c) Support and bracketing system;
- (d) Drainage installations to equipment;
- (e) Electrical supply, wiring to and control of equipment.

PFD 04.01.02 The general scope of repair work to this installation shall at least include, but not be limited to the following:

- (a) Any items, components, installations and systems not detailed in the Particular Specification shall on receipt of and instruction by the engineer or his duly appointed representative be repaired and/or replaced if found to be defective or/and inoperative.
- (b) All statutory inspections required for rotating equipment shall be inspected, tested and certified by an approved third party inspection authority where required by the Occupational Health and Safety Act as amended:
- (c) Dismantling, stripping, overhauling, repair, service, reassembling, testing and commissioning of all equipment that form part of this installation;
- (d) Implementation of a maintenance control plan;
- (e) Supplying as-built information and drawings, as well as operating and maintenance manuals for all equipment that form part of this installation.

PFD 04.02 **DETAILS OF REPAIR WORK TO EQUIPMENT**

The following work shall form part of the repair work to the heating, Ventilation and Air Conditioning Systems. This work shall be done in accordance with the relevant regulations, codes of practice, specifications and Technical Specification FD: Heating Ventilation and Air conditioning, as set out in this document. The following work shall be included.

PFD 04.02.01 AIR CONDITIONING INSTALLATIONS

PFD 04.02.01 HVAC Plant

Refer to paragraph FD 12.03 and carry out the actions listed there together with the following:

- (a) Clean air intake screens (fresh and return air)
- (b) Replace filters
- (c) De-rust, neutralize and touch up paintwork
- (d) Replace canvas collars





- (e) Clean housing, ensure all panels are properly secured and door panels close properly. Replace panel seals.
- (f) Check setting and operation of all pressure switches, reset if required
- (g) Check setting and operation of all safety switches, i.a. LP&HP switches, oil pressure switch
- (h) Check setting and operation of thermostats
- (i) Check timers and reset if required
- (j) Check operation of seven-day timer (if fitted)
- (k) Check running current of fans and compressor and settings and operation of overloads
- (I) Check tightness of all electrical terminals
- (m) Ensure operation of local and remote isolators
- (n) Check condition of all cables and whether cables are neatly strapped and reposition and strap if required
- (o) Ensure correct operation of emergency stop
- (p) Carry out a leak test on all refrigeration piping and components inclusive of evaporator and condenser. All leaks shall be repaired. Should a leak on a component be of such a nature that it cannot be repaired, the component shall be replaced.
- (q) The superheat setting of the thermostatic expansion valve shall be checked and adjusted if required (setting approximately 8°C)
- (r) The filter dryer shall be replaced.
- (s) Check compressor vibration mounts
- (t) Test oil acidity
- (u) Check refrigerant charge sight glass being clear or flashing
- (v) Check moisture indication being dry
- (w) Clean condensate tray and test drainage operation
- (x) Clean evaporator and condenser fan blades and check unbalance
- (y) Replace suction line insulation
- (z) Check all service valves for full operation, replace caps if missing

PFD 04.02.02 Ducting and Diffusers

- (a) Inspect and clean all ductwork
- (b) De-rust, neutralize and touch up paint work of ductwork
- (c) Check tightness of all securing bolts
- (d) Check whether all duct supports are still in position and replace missing supports
- (e) Check ductwork for leaks and repair defects
- (f) Check duct insulation for defects and repair
- (g) Check vapour barrier for defects and repair as required
- (h) Replace all joint seal and gaskets with new
- (i) Check for operation and reset all fire dampers
- (j) Check and clean diffusers.

PFD 04.02.04 VENTILATION SYSTEM

- (a) Inspect and clean all ductwork, grilles and diffusers
- (b) De-rust, neutralize and touch up paint work of ductwork, grilles and diffusers
- (c) Check tightness of all securing bolts
- (d) Replace all canvas collars with new
- (e) Replace all filters
- (f) Check bearings of fan motors and lubricate
- (g) Check whether all duct supports are still in position and replace missing supports
- (h) Check ductwork for leaks and repair defects
- (i) Replace all joint seal and gaskets with new
- (j) Check for operation and reset all fire dampers
- (k) Clean fan-blades and check for unbalance





- (I) Check fans, speed control and fan motor
- (m) Check running amps of fan
- (n) Reseal penetrations through roof.

PFD 04.03 DETAIL WORK

PFD 04.03.01 **PAINTING**

The Contractor shall prepare, clean and paint all steel surfaces and equipment where directed by the Engineer in accordance with Specification OWG 371: Specification of Materials and Methods to be used (Fourth edition, October 1993).

PFD 05.03 NEW EQUIPMENT

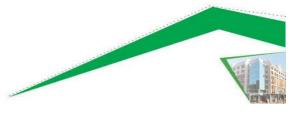
Where new equipment is called for it shall comply with the requirements listed hereafter. Note that rates for some replacement items are called for in the schedules of quantities and these rates shall be for the supply, delivery, installation, commissioning and 12 month guarantee of equipment conforming to these specifications.

PFD 05.03.01 Condensing Units

Replacement condensing units is shall in all respects match the existing units and comply with the following:

- (a) Air cooled condensing units shall be factory produced and shall consist of compressor(s) and air cooled condenser mounted in one compact unit.
- (b) The unit shall be neat in appearance and shall be fully weather proof and suitable for outdoor installation.
- (c) Balance curves for the condensing unit/evaporator combination which clearly indicates the operating point must be included with tenders. The unit shall be correctly rated for its duty, be quiet in operation, and shall comply in all respects with the Machinery and Occupational Safety Act of 1983 as amended.
- (d) The compressor(s) shall be of the hermetic or semi-hermetic type and preferably equipped with a force feed lubrication system.
- (e) The refrigerant used shall be of a suitable new generation, CFC free, environment friendly type.
- (f) Provision shall be made to prevent excessive accumulation of liquid refrigerant in the crankcase during off cycles.
- (g) Operating and safety controls shall be provided on either a control panel supplied with the unit or on the switchboard. The following controls and instruments shall be provided:
 - (i) Suction and discharge pressure gauge
 - (ii) Oil pressure gauge on large compressors
 - (iii) High and low refrigerant pressure safety switches.
 - (iv) Low oil pressure safety switch on large compressors.
 - (v) Non-recycling pump down relay.
 - (vi) Control voltage pilot light.
 - (vii) Manual/automatic switch.
- (h) The condenser casings shall be rigidly constructed of epoxy powder coated steel. All steel parts internally and externally shall be adequately protected against corrosion. Access panels or doors shall be provided in the sides for repairs and maintenance.
- (i) The condensing coils shall be of seamless copper tubing with copper or aluminium fins treated with a protective corrosion protective finish. Inlet headers shall be designed for uniform gas distribution through all individual circuits. Headers shall be arranged to prevent trapping of oil.





- (j) The fan shall be of the propeller type rated to handle the air flow required for the heat rejection capacity of the unit when operating at ambient temperatures of up to 35 deg C.
- (k) The successful tenderer and/or supplier will be required to carry in stock a complete line of spare parts which are subject to normal wear and tear. Tenderers must state in their tenders the extent of spares stocked by them and also where this stock of spares may be inspected.
- (I) The refrigerant piping shall be of seamless, cold drawn, copper tubing with silver soldered copper fittings. For small lines, under 15 mm outside diameter, soft copper tubing with flared fittings may be used. Ordinary soft solder shall not be used. All soldered joints on factory supplied equipment shall be checked carefully and remade if found damaged in transit. Silver solders shall be type 97/3 (tin/silver) in accordance with SABS 23.
- (m) Sizes of tubing shall match the existing piping. Tubing shall be so installed that oil return to the compressor is ensured at all times.
- (n) The refrigerant charging connection shall be between the receiver or condenser and the refrigerant drier in the liquid line. Before charging the system with refrigerant the following procedure shall be carried out:
- (i) It is required that the refrigeration system be tested for leaks. All leaks found must be repaired and the system re-tested. The leak tests must be witnessed by the Engineer or his representative.
 - (ii) The compressor must be charged with new oil.
 - (i) The refrigeration system must be thoroughly cleaned and flushed out with dry nitrogen.
 - (ii) New liquid line filter/drier elements and suction line filters must be fitted.
- (iv) Prior to recharging the system with refrigerant, it must be subjected to a triple evacuation process. During each of the first two evacuations the pressure in the system must be brought down to an absolute pressure of 200 Pa (1500 microns.) In the final evacuation the pressure must be brought down to 66,5 Pa (500 microns.) At each evacuation cycle the pressure must be held constant at the above values for a period of a least two hours after which the vacuum must be broken with the refrigerant to be used in the system and the pressure raised to 14 Pa gauge (2 psig.)
 - (v) After the final vacuum cycle the system must be re-charged with refrigerant.
- (vi) Note that evacuation process must be witnessed by the Engineer or his duly appointed representative. All safety controls and interlocks must be correctly adjusted and their proper operation demonstrated to the Engineer or his representative.
- (o) Maintenance and servicing of the unit during the twelve month guarantee period shall be included in the cost of the unit. After the expiry of the guarantee period maintenance and servicing shall be carried out as per clause PFD 06.





PFD 06 **DETAILS OF MAINTENANCE**

PFF 06.01 GENERAL

The Contractor shall be responsible for the complete maintenance of all the equipment, components, installations and systems forming part of this Repair and Maintenance Contract Installation A. The contractor shall strictly adhere to the Additional Specification SA: General Maintenance and Technical Specification FD: HVAC with regards to the maintenance period, obligations, responsibilities, actions and activities etc., which shall also include the following maintenance actions:

- (a) Routine Preventative Maintenance. A guideline to the required actions is provided in specification FD. The actions will not be limited to these guidelines, but shall include all additional actions work materials, etc., necessarily to maintain this installation at an acceptable level.
- (b) Corrective Maintenance as described and defined in the Additional Specification SA: General Maintenance.
- (c) Breakdown Maintenance as described and defined in the Additional Specification SA: General Maintenance.

For this particular installation a fatal breakdown shall be defined as a breakdown, resulting in non-operation of HVAC equipment.

(d) Emergency breakdown shall be defined as failures to any equipment, resulting in the room conditions exceeding the temperature norms as defined by the Occupational Health and Safety Act as amended.

2. C3.6 ADDITIONAL SPECIFICATIONS

SA GENERAL MAINTENANCE

3. CONTENTS

SA 01	SCOPE
SA 02	MAINTENANCE REQUIREMENTS
SA 03	MAINTENANCE CONTROL
SA 04	COMMUNICATION
SA 05	PERFORMANCE MEASUREMENT
SA 06	MEASUREMENT AND PAYMENT

SA 01 SCOPE

Maintenance of the specified systems, services and/or parts of buildings and infrastructure shall all be referred to as "Maintenance of an Installation". Maintenance of all completed installations shall ensure reliable functioning and optimum service life thereof. Monthly maintenance responsibilities for each installation including all units and components as specified, shall commence with access to the Site. Commencement of maintenance after practical completion of repair work to an installation shall mean that the installation has been repaired to an acceptable level of serviceability and shall leave the Contractor with a functional installation to maintain for the remaining period of the 36-month Contract. Maintenance of an installation shall be performed in accordance with the Technical and Particular Specifications, the Operating and Maintenance Manuals (where applicable) and the Maintenance Control Plan.

Remuneration for maintaining "installations" (systems, services and/or buildings and parts of the infrastructure) in good functional condition is provided for in the Schedules of Quantities by means of monthly payment items.





This Additional Specification covers maintenance requirements, development of a maintenance control plan, identification of equipment, site maintenance administration, maintenance performance measurement, as well as the items for measurement of the Contractor's service level and resulting payment.

4. SA 02 MAINTENANCE REQUIREMENTS

SA 02.01 CONTRACTOR'S RESPONSIBILITIES

The Contractor shall maintain the complete installations for the 24 months Contract period.

Maintenance implies and shall include quarterly preventative maintenance, corrective maintenance, as well as breakdown maintenance on all components of the specified installations.

The maintenance control plan (specified in Clause SA 03) will be developed by the Contractor, to schedule the frequency of routine inspections and format of reports. The Contractor shall carry out inspections on the equipment as detailed in the Technical and Particular Specifications and the maintenance control plan. Each inspection, test or breakdown shall be recorded in an approved format and listed in a quarterly report (part of the maintenance control plan).

As part of repair of each installation, the Contractor shall submit a set of Operating and Maintenance Manuals where applicable. The Contractor shall ensure through training that the operating and maintenance personnel are conversant with the instructions as presented in the Operating and Maintenance Manuals. Continued training shall be included in the scope of maintenance work for the duration of the 24-month Contract, in accordance with Additional Specification SD: General Training.

The Operating and Maintenance Manuals, as approved by the Engineer / Representative, shall be used as a basis of preventative maintenance. The Contractor shall perform all preventative and corrective maintenance as described in the Operating and Maintenance Manuals. This shall be in accordance with the Technical and Particular Specifications.

The Contractor shall, as part of his maintenance responsibilities repair or replace faulty equipment upon logging of a breakdown, within the down-time as defined in Clause SA 05.02 at the Contractor's cost, except in the event of replacement being labelled as exceeding liability as specified in Clause SA 02.03, in which case the Department of Public Works and Infrastructure will bear part of the costs.

The Contractor shall rectify any faulty condition of which he becomes aware, even if it has not been logged. Such rectification shall also be logged and listed in the quarterly report.

SA 02.02 <u>CONDITIONS FOR EXCEEDING THE CONTRACTOR'S LIABILITY DUE TO OPERATIONAL DAMAGE BREAKDOWNS</u>

Operational damage shall be defined for the purpose of this clause as being any damage caused on purpose or through negligence by the User Client's employees, inmates (where applicable), suppliers, subcontractors, etc. for any reason whatsoever. For the purpose of this clause, operational damage and vandalism shall have the same meaning. Where repair work is necessitated as a result of operational damage caused by User Clients or their associates, the Contractor will be requested to:

- a) perform work, using tendered rates for the supply, delivery and installation of material forming part of the repair work schedule, within the maximum down-time allowed for operational damage, where the Engineer rules that the damage has been caused by incorrect operation;
- b) submit three (3) quotations for repair and/or replacement of the damaged unit, where tendered rates are not available and where the Engineer rules that the damage has been caused by incorrect operation;





- c) perform the work on receipt of an order from the Engineer, within the time offered as part of the quotation, and
- d) notify the Engineer well in advance of completion of the repair work in order to enable inspection.

The responsibility of determining whether damage to the installation was caused by people other than employees or associates of the Contractor shall rest with the Engineer.

Operational damage caused by the employees, suppliers, subcontractors, etc. of the Contractor, shall be repaired by the Contractor at his own cost.

SA 02.03 <u>CONDITIONS FOR EXCEEDING THE CONTRACTOR'S LIABILITY ABOVE MARGINAL BREAKDOWN COST</u>

In the event where the cost for the repair or replacement of any single component/subassembly where a breakdown has occurred due to a single failure, or where the cost for replacing a single item of equipment completely, exceeds the value of R15 000.00 (transport, accommodation and travelling cost excluded), the liability of the Contractor is limited to the value of R15 000.00. The additional cost above the value of R15 000,00 will be paid for by the Employer provided that conditions 1, 2 and 3 below have been met.

1. The defective part/component/subassembly or machine must be identifiable as a single subassembly or component and not the total of a number of small defects or breakdowns on subassemblies/components on any one or more machines.

Examples of subassemblies/components are the following:

- a) Should the wiring or bearings on an electric motor fail, the complete motor must be removed for repairs and the cost for the repairs on the complete motor will be regarded as repairs on a single subassembly/component.
- b) A starter motor, for example, is a subassembly, which can be removed from the machine for repairs. The repairs on the starter motor together with the repairs on the main bearings will not be regarded as a repair on a single subassembly/component. If the complete diesel engine is replaced with its associated subassemblies the replacement of the complete unit will be regarded as a single component.
- c) A pump as a whole is regarded as a single component. The pump and driving machine on long coupled pumps are regarded as separate subassemblies. Pumps and motors on close-coupled equipment are regarded as a single component. The pump and motor of a sump pump are therefore regarded as a single component.
- d) Control equipment for the control of a single item, with the sensing device, the controller itself and the final controlled variable are regarded as a single component of the system. The repairs on any one item on a controller have an influence on the rest of the control equipment and must after the replacement be commissioned again as a unit.
- 1 The Contractor shall submit a written report to the Engineer for approval. This report shall contain the following information:
- a) The make and model number of the machine serviced/inspected/ repaired/replaced;
- b) The identification number of the machine:
- c) A description or name and part number of the defective part/component or subassembly;
- d) A statement on whether the component could be repaired, together with a cost estimate;





- e) A quotation valid for a minimum period of 60 days if the component/part/subassembly has to be replaced or repaired by an outside firm. If the subassembly/machine is to be repaired or replaced by an outside company, the Contractor shall supply one (1) quotation for such parts/repairs or a quotation from any sole supplier. Only an original quotation will be accepted. The mark-up on such work shall be a percentage as tendered and shall be applicable to the total cost (VAT excluded) of repair work by outside companies;
- f) The expected urgency for the replacement or repairs, and
- g) The delivery time of a new component/subassembly/machine or delivery times on spares required to repair the defective component/ subassembly.
- 3. A written approval to proceed with the work must be issued by the Department. Copies of the original VAT invoices from outside companies for all repairs or spare parts supplied must be attached to the Contractor's invoice.

SA 02.04 COMPONENTS INCLUDED IN MAINTENANCE SCOPE

The items to be serviced and maintained include the generator set prime movers, alternators, manual and automatic mains failure control panels, starter batteries, engine exhaust systems fuel tanks, piping and pumps together with all associated equipment.

SA 02.05 COMMENCEMENT OF MAINTENANCE PERIOD

Maintenance responsibilities for an installation prior to practical completion of repair work shall include maintenance of all individual units, equipment or components thereof, for which no repair work is required (as per the contract document) or for which the repair work has not yet started, and shall commence with access to the installation.

Where access to an installation with a view to commence repair work is delayed, then the maintenance responsibilities which in such cases will consist of keeping the installation in the condition it is in, shall commence immediately at the start of the Contract.

Such maintenance before access is obtained, shall consist for example of fixing leaks without replacing pipework or opening a blocked pipeline without further altering or inspecting such pipes.

The Contractor shall accept full maintenance responsibilities for each completed installation upon issue of a Certificate of Practical Completion for repair work of that installation.

The preliminary construction programme differentiates between commencements of maintenance on various installations.

SA 02.06 DEFINITIONS

a) Routine preventative maintenance

- I. This entails the rendering of services and servicing of equipment according to a predetermined maintenance control plan to:
- II. replace and service components of equipment, units or parts thereof for each installation at prescheduled moments regardless of condition;
- III. readjust, reset, clean, corrosion protect all components of equipment, units or parts thereof for each installation, and
- IV. carry out all implied actions to maintain installations in their present functional condition.

Preventative maintenance shall be aimed at minimisation of breakdowns.

a) Corrective maintenance





This entails regular observation of the equipment, identifying pending breakdowns, maladjustment or anomalies of equipment, units or parts of installations and subsequent action to restore installations to the functional condition as before the breakdown.

b) Breakdown maintenance

This entails repair and/or replacement of defective equipment, units or parts of installations following a breakdown that leaves the installation inoperable or unsafe, and subsequent action to restore installations to their normal functional condition, within the maximum down-time allowed.

c) Emergency maintenance repairs

These repairs are defined as any work required to rectify an emergency breakdown that disables a complete installation and prevents it from functioning to its designed service level.

d) Ordinary maintenance repairs

These repairs are defined as all maintenance work required other than emergency maintenance repairs.

e) Fatal breakdown

Fatal breakdown is defined as an occurrence when an installation or a specified part thereof fails to operate for any period of time other than during the execution of routine preventative and corrective maintenance activities.

SA 02.07 SITE MAINTENANCE RECORD KEEPING

The Contractor shall provide and maintain hard-cover A4 maintenance files for each installation for the duration of the Contract. All schedules, checklists, breakdown reports, preventative maintenance records, component replacement records and quarterly reports shall be filed, together with information regarding repairs exceeding the Contractor's liability, as set out in SA 02.02 and SA 02.03.

Site maintenance records shall be submitted at each monthly meeting.

SA 02.08 SUPPLY OF LABOUR. EQUIPMENT AND MATERIAL

a) <u>Labour</u>

Competent personnel that have been trained by the Contractor, in accordance with Additional Specification SD: General Training shall execute all maintenance work.

b) Equipment

All tools and equipment required for maintenance work shall be supplied by the Contractor at his cost (except where otherwise provided).

c) Material

All material, spare parts, components, equipment and appurtenances necessary for the complete maintenance of each installation shall be supplied and installed by the Contractor at his cost, to a maximum value per part/subassembly as specified in the Special Conditions of Contract for exceeding Contractor's Liability.





Materials as provided for in the Schedule of Quantities, shall be supplied and delivered by the Contractor at the tendered rates upon order of the Engineer only, and shall be free-issued to the User Client for own use. The Contractor shall inform the Engineer of all scheduled deliveries to arrange official hand-over with the User Client.

SA 02.09 IDENTIFICATION OF EQUIPMENT

A unique identification number will be allocated only to each mechanical equipment item forming part of the installation. This identification number will be allocated and administered in collaboration with the User Client and must be described in the maintenance control plan.

Reference shall be made to identification numbers in the maintenance control plan, operating and maintenance manuals and during all maintenance activities, including the logging of breakdowns and other correspondence. Identification numbers shall also be indicated on as-built drawings.

SA 03 MAINTENANCE CONTROL

SA 03.01 SCOPE

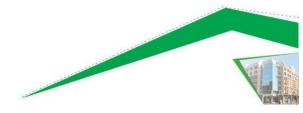
Maintenance quality control shall be the responsibility of the Contractor who shall introduce a maintenance control plan to assist him in ensuring that preventative, corrective and breakdown maintenance are performed as described in the operating and maintenance manuals and Technical and Particular Specifications.

SA 03.02 PRELIMINARY MAINTENANCE CONTROL PLAN

A preliminary version of the maintenance control plan shall be submitted with the programme and the framework of the preliminary version shall be as close as possible to that of the final maintenance control plan as specified in SA 03.03 below. Detail contained in this preliminary maintenance control plan shall include:

- Actual time that a representative of the Contractor will be present on Site for the duration of the
- b) maintenance period;
- c) the scope and frequency of routine inspections
- d) repair methodology
- e) details of training plan to be implemented in accordance with Additional Specification SD





SA 03.03 MAINTENANCE CONTROL PLAN

- a) The maintenance control plan shall be based on the Contractor's preliminary maintenance control plan, and shall be bound in a neat, A4-sized, ring-bound document with a cover page and back cover. The contents of the document shall be indexed.
- b) In drawing up the document, the Contractor may reproduce relevant paragraphs and clauses from any of the specifications forming past of the Contract documents, but should there be any discrepancies between such clauses and paragraphs in the maintenance control plan and those in the Contract documents, those in the Contract documents shall be regarded as being correct and shall apply.
- c) To ensure that the Engineer is satisfied that the Contractor understands the purpose and advantage of carrying out maintenance work according to a maintenance control plan he shall, as an introduction to the control plan document, set out his views as to what he believes the implementation of a maintenance control plan will achieve.
- d) The maintenance control plan shall also contain the following:
- I. A summary of the repair and maintenance work to be carried out under the Contract giving details of the conditions of the various installations at the facility(ies) affected by the activities under the Contract. The Contractor shall bear in mind that maintenance work may have to be carried out before the repair phase of the installation has been entirely completed and the summary mentioned above shall therefore differentiate between maintenance work before and after the repair phase has been completed.
- II. Details of how the Contractor intends to carry out the various types of maintenance work especially breakdown maintenance should breakdowns occur.
- III. Details of how the call centre works, as specified in clause SA 04 as well as all statistics of breakdowns, leakages, blockages, etc. available from the call centre for the installation and the age of the installation that has been taken into account in compiling the contents of the maintenance control plan.
- IV. A list of organisations and persons directly involved with the Contract or whose requirements have to be taken into account during the entire Contract Period such as the Department of Public Works, the User Client, the Consulting Engineer, the Contractor, the Local Authority, etc. Each person's position within his organisation as well as the applicable phone numbers shall be given.
- V. Details of monthly meetings to be hold with the Department of Public Works and Infrastructure, the User Client, Contractor and Engineer;
- VI. Reports to be submitted after every routine inspection (all reports, checklists, breakdown records, score card results, etc. for each system of an installation shall be kept on the site in a hard cover file);
- VII. Procedures to address complaints and logged breakdowns;
- VIII. Details of quarterly reports, summarising all inspections, together with inspection data such as nature of test, names of persons carrying out tests and inspection results. Detail of repairs and replacements, together with testing of repaired equipment shall also be reflected in this report, and
- IX. Assistance to be given by the Engineer with decisions regarding material, equipment and other recommendations





- e) The codes of practice as set out in ISO 10006 and ISO 9004 for quality systems and management shall be used as a guideline for compiling a maintenance control plan. ISO accreditation is not a requirement in terms of this Contract.
- f) The maintenance control plan shall be upgraded when its contents are no longer representative of actual conditions.
- g) The Contractor shall check the contents of existing Operating and Maintenance Manuals (if available) and shall update or modify and then incorporate applicable data into his own manuals. Where no manuals exist, the Contractor shall draw up his own Operating and Maintenance Manuals.
- h) Pertinent data contained in the Operating and Maintenance Manual may be transferred to the Maintenance control plan to make it a document which can be used as an independent handbook for maintenance work.
- i) The Contractor is referred to the contents of paragraph (a) above regarding the reproduction of data, as this shall also be applicable to data reproduced from Operating and Maintenance Manuals.

SA 04 COMMUNICATION

The maintenance control plan (Clause SA 03) will provide, after agreement between the Contractor and the Engineer, for the following communication and complaint logging procedure:

- a) The Contractor shall establish a telephone and a cellular telephone connection to ensure that he can be reached at any time.
- b) The Contractor shall primarily be responsible for determining the items requiring preventative, corrective and breakdown maintenance, and shall communicate this information directly to his maintenance workforce.
- c) Should the Engineer or operating personnel of the User Client determine or suspect that preventative, corrective or breakdown maintenance is required, a call shall be logged through the call centre to reach the Contractor as soon as possible.
- d) Reaction times will be as described in Clause SA 05.02.
- e) All complaints of the User Client shall be reported to the Engineer via the call centre, as set out in the maintenance control plan, and the Engineer shall issue instructions to the Contractor. After the Contractor has attended to the complaint, the Engineer will provide feedback to the call centre both telephonically and via fax.

The call centre logs the details of the Engineer's call and provides feedback to the complainant.





SA 05 PERFORMANCE MEASUREMENT

The Contractor's performance shall be measured against the following parameters:

SA 05.01 SPECIAL TESTING OF AN INSTALLATION

The Engineer may at any time inspect any part of the entire installation. During Maintenance work, the Engineer shall at his discretion order special tests to be carried out on complete installations at intervals of not less than four months, to verify the satisfactory functional condition of the installation.

The Engineer reserves the right to select at random component equipment and trade practices to be tested by independent authorities for compliance with specifications as specified in this Contract document.

The Contractor shall provide all equipment, tools and instruments required for testing.

SA 05.02 MAXIMUM MAINTENANCE DOWN-TIME

After a complaint has been logged and forwarded to the Contractor, the Contractor shall be expected to minimise the maintenance down-time until the system component is fully operational to the satisfaction of the Engineer. Should the Contractor not respond within the maximum down-time, the Engineer may arrange, at the cost of the Contractor, for the necessary repair work to be done by others.

Should the actual down-time exceed the maximum down-time the Contractor shall be liable to a payment reduction for the difference between actual down-time and maximum down-time. This is reflected in the table below:

REQUIRED MAINTENANCE	MAXIMUM DOWN- TIME ALLOWED	PAYMENT REDUCTION IF EXCEEDED
Fatal breakdown (where specified)	Zero (immediate response)	R2 500/hour
Emergency Breakdown	72 hours	R2 500/day
Ordinary Breakdown	7 days	R500/day
Operational damage repair	14 days	R500/day

"Maximum down-time" shall mean the period of time allowed to repair a breakdown, and "actual down-time" shall mean the measured period from the instant when the breakdown was logged with the Contractor until the installation has been repaired to its functional specification.

"Immediate response repairs" shall imply breakdown maintenance repair work where no breakdowns are allowed at any time in terms of the Technical Specification.

"Emergency maintenance repairs" shall imply any breakdown maintenance repair work required to rectify a component or unit of the installation that disables the installation from functioning at its designed maximum requirement in terms of the Technical Specification.

"Ordinary maintenance repairs" shall imply all breakdown maintenance repair work required other than immediate response or emergency maintenance repairs.





Unit: point

SA 05.03 PERFORMANCE-BASED PAYMENT

Remuneration for all value-related as well as all time-related preliminary and general charges shall be deemed included in the monthly maintenance payments for the various installations.

SA 05.03.01 Score-card

The Engineer shall inspect each installation monthly after Practical Completion of the repair phase of the installation. The Engineer shall use a score-card to measure the quality of preventative and corrective maintenance rendered by the Contractor during the preceding month, on all components that form part of the installation, in accordance with the maintenance specifications. The Engineer will record his inspection directly onto the score-card. The score-card shall serve to evaluate ten performance indicators each month in the manner set out below.

The Contractor shall always have the opportunity to score the maximum points, provided that his preventative and corrective maintenance work comply with the Specifications. The Employer shall be protected against a reduced or unsatisfactory service level and may refuse payment on such points.

SA 05.03.02 Performance indicators

Performance indicators shall be selected to measure the Contractor's service level of preventative and corrective maintenance.

The Contractor and the Engineer shall each have the opportunity to select five (5) performance indicators each month, which shall focus on the measurement of maintenance quality against the relevant specifications for the ensuing month. All ten (10) performance indicators are known to both the Engineer and the Contractor.

The Contractor shall aim to perform satisfactorily on all ten performance indicators. All indicators shall be selected from the scope of his normal preventative and corrective maintenance work and shall be based on the maintenance control plan and operating and maintenance manuals. The work shall either be satisfactory, or unsatisfactory, and the Contractor shall score one (1) or zero (0) respectively per indicator.

Performance indicators shall be used to focus on certain key aspects of the work and shall in no way limit the Contractor's responsibility to do all the required work.

SA 05.03.03 Satisfactory performance

The Engineer shall inspect the site on an arbitrary day to measure the quality of maintenance against the ten selected performance indicators. Should the Contractor score the maximum points (10) he shall receive his full maintenance payment for the installation. Should the quality of preventative maintenance, or components requiring persistent corrective maintenance be unsatisfactory according to the score-card, the Contractor may fail to achieve full payment due to a reduced service level. Each monthly payment for maintenance shall be subject to evaluation based on the score-card.

A copy of the score-card including a guideline for the use thereof is included in this Specification.

SA 06 MEASUREMENT AND PAYMENT

SA.01 MAINTENANCE OF A COMPLETED INSTALLATION

The unit of measurement shall be a point. Each month shall represent a maximum of ten points and a minimum of zero points, depending on the performance and quality of maintenance. Ten points per month, determined by using the tendered rate per point, shall include full compensation for all liabilities and obligations described or implied in the Contract document and deemed by the Contractor to be applicable to the maintenance phase of the Contract, for the complete monthly maintenance of an





entire installation after practical completion of repair work, and all appurtenant works deemed to form part thereof, as defined in the relevant Technical or Particular Specifications.

The combined tendered rate for ten points (which shall not be less than 10% of the total tendered Contract Price) shall also include full compensation for complete preventative, corrective and breakdown maintenance (as defined in this General Maintenance Specification), including full compensation for all costs related to resetting, repair, procurement, supply, delivery, replacement, protecting, furnishing, installing, testing and commissioning of all items and material required to maintain the complete installation in a perfect functional condition. The only items not to be included in the rate for monthly maintenance points are:

- 1. Supply, delivery, installation and testing of special equipment/materials that will be measured elsewhere, and
- 2. Special testing of an installation.

Different installations shall be listed in the Schedule of Quantities, in accordance with the definition of each installation.

Although ten points per month shall include full compensation for preventative, corrective and breakdown maintenance, the Contractor might fail to achieve all points applicable in the event of unsatisfactory performance, in which case he shall still perform all maintenance requirements according to specification, but at his own cost where a reduction in points awarded is insufficient to cover his cost.

Remuneration for all value-related as well as all time-related preliminary and general charges shall be deemed included in the monthly maintenance payments for the various installations.

SA.02 MAINTENANCE OF AN INSTALLATION PRIOR TO PRACTICAL COMPLETION Unit: point

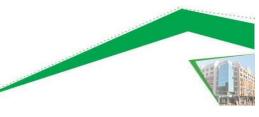
The unit of measurement shall be a point. Each month shall represent a maximum of ten points and a minimum of zero points, depending on the quality of maintenance. Ten points per month determined by using the tendered rate per point, shall include full compensation for the monthly maintenance of an incomplete installation until practical completion of the repair work thereof.

The combined rate tendered for ten points (which shall not be less than 10% of the total tendered Contract Price) shall include full compensation for preventative, corrective and breakdown maintenance (as defined in this General Maintenance Specification) of all units, equipment and/or components thereof that require no initial repair work in terms of the complete installation. As repair work progresses, maintenance responsibilities shall be extended to include those units, equipment or parts thereof that have been serviced, repaired or reconditioned.

Different installations shall be listed in the Schedule of Quantities, immediately below maintenance of a completed installation. The total number of points for maintenance of a completed installation plus maintenance of the same installation prior to practical completion shall be 360.

Although ten points per month shall include full compensation for preventative corrective and breakdown maintenance, the Contractor might in the event of unsatisfactory performance fail to achieve all points applicable, in which case he shall still perform all maintenance requirements according to specification, but at his own cost where a reduction in points awarded is insufficient to cover his cost.





SA.03 ADDITIONAL TESTS:

An amount has been allowed in the Schedule of Quantities to cover the cost of additional tests required by the Engineer. The Engineer will have the sole authority to spend the amount or part thereof under sub item SA.03.01.

The tendered percentage under sub item SA.03.02 will be paid to the Contractor on the value of each payment made to the approved testing authority.

The unit of measurement shall be the number of hours during which a component of an installation was in a dysfunctional condition and required immediate response repairs.

The negative fixed rate shall include full compensation for the User Client's loss in productivity and, multiplied by the number of hours measured, shall be deducted from the certified amount due to the Contractor.

The unit of measurement shall be the number of days, in excess of 48 hours, during which a component of an installation was in a dysfunctional condition that required emergency repairs.

The negative fixed rate shall include full compensation for the User Client's loss in productivity and, multiplied by the number of days measured, shall be deducted from the certified amount due to the Contractor.

The unit of measurement shall be the number of days, in excess of 7 days, during which a component of an installation was in a dysfunctional condition that required ordinary repairs.

The negative fixed rate shall include full compensation for the User Client's loss in productivity and, multiplied by the number of days measured, shall be deducted from the certified amount due to the Contractor.





The unit of measurement shall be the number of days, in excess of 7 days, during which a component of an installation was in a dysfunctional condition that required ordinary repairs. The negative fixed rate shall include full compensation for the Client's loss in productivity and, multiplied by the number of days measured, shall be deducted from the certified amount due to the Contractor.

Preventive maintenance of YD Perkins Engine (Diesel Generator)

Schedules

The schedules which follow must be applied at the interval (hours or months) which occur first.

Renew the antifreeze every 2 years. If a coolant inhibitor is used instead of antifreeze, it should be renewed every 6 months.

The lubricating oil and the filter canister(s) must be renewed every 250 hours or 12 months.

The oil change interval will change with the amount of sulphur in the fuel (see table below). The interval to change the canister of the lubricating oil filter is not affected.

Percentage of sulphur in the fuel (%)	Oil change interval
<0.5	Normal
0.5 to 1.0	0.75 of normal
>1.0	0.50 of normal

B) Every day or every 8 hours

Check the amount of lubricating oil in the sump

Check the lubricating oil pressure at the gauge

Check the amount of coolant

Clean the air cleaner or empty the dust bowl of the air filter (extremely dusty conditions)

C) Every 200 hours or 6 months

Check the tension and the condition of the drive belt

Check for water in the pre-filter (1), (or earlier if your fuel supply is contaminated)

Renew the canister of the lubricating oil filter (six cylinder naturally aspirated engines with a single filter canister)

Clean the air cleaner or empty the dust bowl of the air filter (normal conditions)

Clean the compressor air filter

D) Every 400 hours or 12 months

Check the concentration of the coolant

Check Stanadyne fuel injection pump for governor operation

Renew the elements of the fuel filter(s)

Renew the engine lubricating oil

Renew the canisters(s) of the lubricating oil filter

Clean the sediment chamber and the strainer of the fuel lift pump

Clean or renew the air filter element, if it has not been indicated earlier

Ensure that the valve tip clearances of the engine are checked and, if necessary,

Adjusted

E) Every 2000 hours

Ensure that the atomisers are checked

Clean the engine breather system

Ensure that the turbocharger impeller and turbocharger compressor casing are cleaned

Ensure that the exhauster or compressor is checked

Ensure that the alternator and the starter motor are checked





Speed Queen Washer-Extractors Model SCL080KNV Monthly maintenance procedures

NOTE: Disconnect power to the machine at its source before performing the monthly maintenance procedures.

- 1. Verify points of contact at terminals and quick disconnects are firm throughout the machine by gently tugging the wires. Reseat any loose contacts.
- 2. For 80 and 100 models only, each month OR after every 200 hours of operation, lubricate bearings (locate the bearing lubrication decal under the top panel). Visually inspect grease line for air pockets; purge to remove.

The grease must have the following characteristics:

- NLGI Grade 2
- Lithium-based
- Water-insoluble
- Anti-rusting
- Anti-oxidizing
- · Mechanically stable

The grease must have adequate base oil viscosity with one of the following ratings:

- ISO VG 150 (709–871 SUS at 100°F [135–165 cSt at 40°C])
- ISO VG 220 (1047–1283 SUS at 100°F [198–242 cSt at 40°C])
- An SAE 40 rating is also acceptable as long as the cSt or SUS values are within the specified ranges.

Pump the grease gun slowly, permitting only 2 strokes.

NOTE: Do not pump the grease gun until grease comes out of the bearing housing. This can result in over lubrication, causing damage to bearings and seals.

- Clean inlet hose filter screens:
- a. Turn water off and allow valve and water line to cool, if necessary.
- b. Unscrew inlet hose from the faucet and remove filter screen.
- c. Clean with soapy water and reinstall. Replace if worn or damaged.
- d. Repeat procedure with the filter located inside the valve at the back of the machine.

NOTE: All filter screens should be replaced every five years.

- 4. Clean customer-supplied steam filter (if applicable).
- a. Turn off steam supply and allow time for the valve to cool.
- b. Unscrew cap.
- c. Remove element and clean.
- d. Replace element and cap
- 5. Clean interior of machine, by wiping with a water-soaked sponge or cloth.
- 6. If applicable, check the supply dispenser hoses and hose connections for leaks or visible signs of deterioration. Replace immediately if either are present.





Yearly Maintenance procedures

NOTE: Disconnect power to the machine at its source before performing maintenance procedures.

- Remove the front panel(s) and rear access panels and inspect all hose, drain, and overflow connections/clamps for leaks. Inspect all hoses for visible signs of deterioration. Replace as necessary.
- 2. Inspect and vacuum clean the inverter heat sink (where applicable).
- 3. Use a vacuum to clean lint from motor.
- 4. Remove chemical supply components and check all flush hoses and connections for residual chemicals, leaks or visible signs of deterioration. Clean or replace as necessary.

NOTE: Hoses and other natural rubber parts deteriorate after extended use. Hoses may develop cracks, blisters or material wear from the temperature and constant high pressure they are subjected to

NOTE: All hoses should be replaced every five years.

- 5. Use compressed air to ensure that all electrical components including coin acceptors (if applicable) are free of moisture and dust.
- 6. Tighten door hinges and fasteners, if necessary.
- 7. Tighten motor mounting bolt locknuts and bearing bolt locknuts, if necessary.
- 8. Check the tightness of the motor spring and motor pulley hardware. Also check that the eyebolt is tightened properly.
- 9. Verify that the drain motor shield is in place and secure, if so equipped.
- 10. Check the bearing mounting bolts to make sure they are torqued properly. Refer to Torque table below.

Torque, ft-lbs.		
Model	Bearing	Torque
80-100	ALL	357

- 11. Use the following procedures to determine if belt(s) require replacement or adjustment. Call a qualified service technician in either case.
- a) Check belt(s) for uneven wear and frayed edges. Belts must not be twisted and must be properly seated on pulleys.
- b) After disconnecting power to the machine and removing all panels necessary for access to the drive belt, use one of the following methods to verify that the belt is properly tensioned.

NOTE: Basket pulley must be rotated three (3) full turns before assessing belt tension after every adjustment.

- Frequency Gauge. Tighten eyebolt top nut until the correct frequency is obtained mid-span. Torque jam nut to spring bracket to 20.6 ± 2 ft.- lbs.
- Tension Gauge. Tighten eyebolt top nut until the proper belt gauge is obtained mid-span. Torque jam nut to spring bracket to 20.6 ± 2 ft.-lbs.
- Spring Length. Tighten eyebolt top nut until the spring measures the correct distance between the hooks. Torque jam nut to spring bracket to 20.6 ± 2 ft.-lbs.

Sp	ring Length, [mm]
Model	Distance Between Hooks
80-100	121





Maintain Tension During Belt Removal. If proper tension is achieved, tape the jam nut in
place and loosen eyebolt top nut to release the belt. Replace belt and retighten eyebolt top
nut back to jam nut position.

Belt Tension	n by Frequency or Belt Te	nsion Gauge	
Model	Frequency (Hz)	Belt tension (lbs.)	Tension Gauge (N)
80	102 +/-2	132 +/-5	588 +/-23
* Models made before 1	0/13/14 are self-tensioning	and do not require any ac	ljustment.

- 12. Remove the back panel and check overflow hose and drain hose for leaks or visible signs of deterioration. Replace immediately if either are present.
- 13. Place a large magnet over the normally-closed ball switch to verify the stability switch operation.
- 14. Run a factory test. Reference Programming Manual for procedure details and components tested.
- 15. Check all painted surfaces for exposed metal.
 - If bare metal is showing, paint with primer or solvent based paint.
 - If rust appears, remove it with sandpaper or by chemical means. Then paint with primer or solvent-based paint.
- 16. Tighten anchor bolts, if necessary.
- 17. Tighten anchor bolts as specified in the Machine Mounting and Grouting section, if necessary. Inspect grout for cracking.

IMPORTANT: All torque joints must remain dry (non-lubricated).

Speed Queen Tumble Dryer Model ST075E

Quarterly

- 1. Use a vacuum to clean air vents on drive motors.
- 2. Check and clean steam coils, if applicable.
- 3. Check flow of combustion and ventilation air.
- 4. Check belt tension and condition. Replace worn or cracked belts.
- 5. Clean the machine's top panel with mild detergent. Rinse with clean water.
- 6. Models equipped with a fire suppression system: Perform the fire suppression system maintenance test by pressing the test button in the control box

Bi-Annually

- 1. Check mounting hardware for any loose nuts, bolts or screws.
- 2. Check gas connections for leakage.
- 3. Check for loose electrical connections.
- 4. Check steam connections for looseness and leakage.
- 5. Check steam filter. Replace if dirty.
- 6. Remove all front panels and vacuum, including coin drop mechanisms.
- 7. Check cylinder and front panel seals.
- 8. Inspect cabinet and inner panels for any damage, replace or repair as needed.
- 9. Clean burner tubes and orifice area of any lint build-up.





- 10. Machines equipped with a fire suppression system: All inlet and outlet hoses should be checked for any visible signs of deterioration. Replace as necessary or every five years.
- 11. Machines equipped with a heat exchanger kit: Clean the inlet and outlet with a soft brush or clean by using hot water and, if needed, a mild detergent.

TEMPORARY WORKS

All temporary work to comply with the Occupational Health and Safety Act (Act 85 of 1993) and its regulations

ROUTINE MAINTENANCE MARATHON MOTORS

Quarterly or every 2000 operating hrs

Preventive maintenance encompasses planning and action necessary to identify and rectify deteriorating influences or conditions before they advance to the stage where the initiative is removed from preventive maintenance and placed in repair maintenance.

Logic and experience clearly indicates that preventive maintenance, properly applied, reduces repair costs and increases production as a result of reduced downtime. By careful planning much preventive maintenance work can be done while the machine is in full production. During this period vibration, heating, current balance and temperature rise should be noted and recorded. More stress should however be placed on safety while examining motors under operating conditions. Sufficient information must be available on the record card to serve the purpose of the card.

Moisture, oil, dirt, grease and carbon or metallic dust is the principal causes of electrical breakdown. As far as it is practicable, machines should be kept clean and dry both internally and externally. Dust and grease should be removed from ventilating ducts, cores, windings and protecting mesh cover, as accumulation of foreign matter will affect the ventilation and machine temperatures.

During the first few weeks of service a new machine should receive particular attention. New installations are likely to cause teething-trouble in this period during which the moving parts are gradually setting down to working surfaces and temperatures.

Careful attention to the following routine inspection may help prevent serious trouble developing later.

- Ensure that all external cables are adequately cleated and are properly secured.
- Check the security of all electrical connections with the motor isolated from the supply. Ensure that all terminals (Terminal block) are clean and tight.
- Check and ensure that the windings and bearings are not overheating and that the motor runs quietly and smoothly. The windings demand frequent attention if the machines are working in damp, humid or dirty situations, or in excessive temperatures, and insulation must be kept clean, otherwise earth faults or short circuits may occur.
- Check the security of all fixing bolts, couplings, coupling guards etc.
- Check that cowl intake vents are not choked. Choked cowl intake may restrict the flow of cooling air and cause overheating. Compare the actual load current, Supply voltage with the full load current, rated voltage given on the rating plate.
- Ensure that load current does not exceed motor name plate full load current. Ensure that supply voltage and frequency is within the tolerance band specified in the catalogue/test certificate.
- The line voltages and currents are also to be checked to ensure balanced loading within specified limits.





Check that the Carbon Brushes are sitting properly on the slip ring and the tension
of the holders are uniform. The brushes should not vibrate in the holders when the
motor is running.

Note:

Should any fault occur which cannot be analysed, please communicate with the nearest MARATHON Electric establishment or agent or directly with the Works. A Staff of experienced engineers is available who can assist or advise customers on the rectification of any fault or breakdown.

Lubrication:

A motor cannot run satisfactorily unless due attention is paid to its bearings. Ball and roller bearings for MARATHON Electric make motors have been designed for a minimum L10 working life of 20,000

hours and in order to meet this requirement attention should be given to the points elaborated below.

Double sealed life lubricated bearings are provided for small motors up to 180L frame size motors. These bearings need to be replaced at the end of working life. Motors with lubrication points require regular lubrication.

Unshielded bearings are provided with Lithium Based Multipurpose Grade 3 grease, or Alithex

2.0 of Tide Water (see section 2.3) which has an operating temperature of –20C to 120C. Servogem

No. 3 of I.O.C or MP3 grease of Bharat petroleum or Equivalent Grease should be used for lubrication.

Grease should preferably be added whilst the machine is running, and should be free from contamination by dirt or water. The importance of ensuring cleanliness of grease fittings before and

after lubrication cannot be over emphasized. Mix-up of different types of grease should not be done, because this might lead to bearing failure. Over greasing causes leakage into the windings and

overheating of bearings and hence is not at all recommended.





Asset Register

Burgersdorp Child and Youth care Centre

	AIR CONDITIO	NERS		
Туре	Manufacturer	Model Code Indoor Unit	Model Outdoor Unit	Refrigerant
Wall-mounted Split type	Midea	MS11D-09HRDN1	MS11D- 09HRDN1	R410A/640g
Four way Cassette Split Universal	Midea	MCA2-12HRDN1- Q	MOU-12HDN1	R410A/1130g
Four way Cassette Split Universal	Midea	MCD-18HRDN1-Q	MOU-18HDN1	R410A/1320g
Wall-mounted Split type	TLC	TAC- 12CHSA/KCSYM	TAC- 12CHSA/KCSYM	R410A/860g
Four way cassette Split Universal	Midea	MCD-24HRDN1-Q	MOU-24HDN1	R410A/2100g
Rooftop Package	Midea		CSU-26RTN1	R410A/6000g

Kitchen Appliances	}			
Appliance	Manufacturer	Model No.	Serial No.	Refrigerant
Flat top Stove	Vulcan	143/3	3/10549	
Double Door Fridge	Vulcan	RB-1200C	201511125	R134a
Freezer	Defy	CF530-HC	1714625401	R600a/71g

Laundry			
Appliance	Manufacturer	Model No.	Serial No.
Washer	Speed Queen	SCL080KNVP12E01	1605029910
Tumble Dryer	Speed Queen	ST075EREM1A2Q01	1606032370

	Generator			
Manufacturer	Size	List No	Serial No.	Туре
PERKINS	140kVA	2332/1800	YD73346	U890877s

ALIWAL NORTH-COMMUNITY DEVELOPMENT CENTRE

	AIR CONDITIONS	ERS		
Type	Manufacturer	Model Code Indoor Unit	Model Outdoor Unit	Refrigerant
Wall-mounted Split type	SAMSUNG	AR18TSHGAWKN	AR18TSHGAWKX	R410A/1200g

123



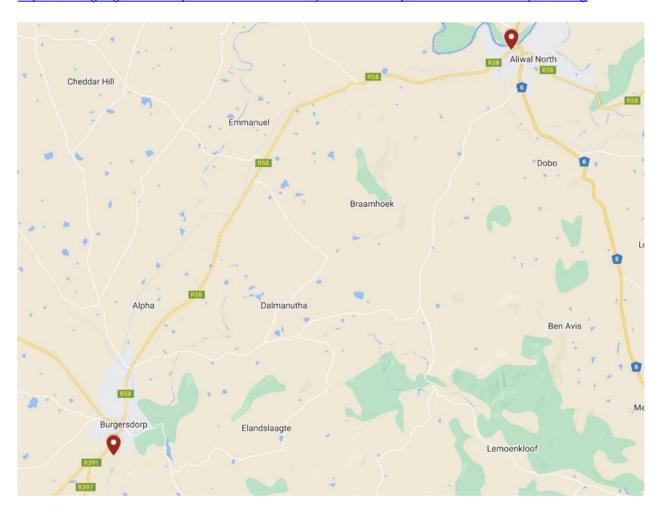


Part C3: Site information C3 - Site information

LOCATION OF THE WORKS

Burgersdorp in the following building Department of Social Development (ERF 3515 TEMBISA LOCATION, Child andyouth care Centre) and Aliwal North Department of Social Development (Community Development Centre).

https://www.google.com/maps/d/edit?mid=1112KkyRtnU8k157lOj5xFzSbhT6eMhc&usp=sharing







Part C4: Pricing data

C4 - Bills of Quantities





SCHEDULE NO.1: MAINTENANCE OF MECHANICAL AND ELECTRICAL INSTALLATIONS AT DSD PROPERTIES IN THE JOE GQABI REGION. FOR A PERIOD OF 24 MONTHS TENDER NO: SCMU5-22/23-0130 BILL NO 1: PRELIMINARIES AND GENERAL

	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.1	FIXED-CHARGE ITEMS				
	Contractual Requirements	Sum			
	Appoint specialised agent to conduct diagnostic assessment	Sum			
	on written instruction of Project Manager)	Sum			
1.2	TIME-RELATED ITEMS				
1.2.1	Contractual Requirements	Month	24		
1.2.2	Operate and maintain facilities on Site	Month	24		
1.2.3	Facilities for Contractor for duration of construction				
	a) Offices and storage sheds	Month	24		
	b) Living Accommodation	Month	24		
	c) Tools and equipment	Month	24		
	d) Water Supplies, electric power and				
1.2.3	SUPERVISION	Month	24		
1.2.4	COMPANY OVERHEADS				
	costs	Month	24		
	HEALTH AND SAFETY				
1.2.5	The contractor must make provision and price for all the requirements of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification.	Month	24		