Province of the
EASTERN CAPE
HEALTH

TENDER DOCUMENT

FOR

BID NO: SCMU3-24/25-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES

THREE VOLUME APPROACH:

VOLUME 1 – TENDERING PROCEDURES
VOLUME 2 – RETURNABLE DOCUMENTS
VOLUME 3 – DRAFT CONTRACT

PREPARED FOR:

Eastern Cape Department of Health
Global Life Centre
c/o R63 and Avenue
BHISHO
6505

PREPARED BY:

Lukhozi Consortium,
Quartzite Drive, The Quarry,
Selborne
East London
5201

NAME OF SUPPLIER: _____

CRS NUMBER: _____

APRIL 2025

	CONTENTS	
Volume	**Number**	**Heading**
Volume 1		**Tendering Procedures**
	T1.1	Tender Notice and Invitation to Supplier
	T1.2	Tender Data

Volume 2		**Returnable Documents**
	T2.1	List of Returnable Documents
	SBD1	Invitation to Bid: Part A and B
	SBD 4	Declaration of Interest
	SBD 6.1	Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2022
	T2.2a	Resolution for Signatory
	T2.2b	Resolution of Board of Directors to Enter into Consortium or Joint Venture (JV) Agreements
	T2.2n	Record of Addenda to Supplier Documents
	T2.2r	Compulsory Enterprise Questionnaire
	T2.2v	CIPC - company registration certificate
	T2.2y	Proof of Registration with Centralized Supplier Database
		NB: Mandatory Documents
	C1.1a	Final Summary Page
	C1.1	Form of offer and acceptance (Signed)
	T2.2u	CIDB grading certificate – Proof of registration
	T2.2c-1	Schedule of Proposed Subcontractors
	T2.2e	Schedule of Key Personnel
	T2.2f	Bank Rating
	T2.2g	Specific goals claimed (CIPRO certificate)
	T2.2z	Valid letter of Good standing (COIDA)
	T2.3	Returnable schedules or documents: Annexures related to evaluation
	Annexure A1	Method Statement (Generic)
	Annexure A2	Method Statement (Summary Task)
	Annexure A3	Method Statement (Programme with Timelines and Resources)
	Annexure B1	Key personnel qualifications (Maintenance/Construction manager)
	Annexure B2	Key personnel qualifications (Maintenance/ Construction Supervisor)
	Annexure B3	Key personnel qualifications (OHS Safety officer)
	Annexure B4	Key personnel qualifications (Skilled installation staff)
	Annexure C1	Key personnel experience (Maintenance/ Construction manager) Attach CV
	Annexure C2	Key personnel experience (Maintenance/ Construction Supervisor) Attach CV
	Annexure C3	Key personnel experience (OHS Safety officer) Attach CV
	Annexure C4	Key personnel experience (Skilled installation staff) Attach CV
	Annexure C5	Proof of Business address
	Annexure C6	Company Experience
	T2.2x	References

Volume 3		**Draft Contract**
	Part C1: Agreement and Contract Data	
	C1.1	Form of Offer and Acceptance (signed)
	C1.2	Contract Data
	C1.3	Fixed Performance Guarantee
	C1.4	Confirmation of Receipt of Contract (PRO FORMA)
	Part C2: Pricing Data	
	C2.1	Pricing Instructions
	C2.2	Bills of Quantities
	C2.3	CIDB Adjudicator's Agreement
	Part C3: Scope of Work	
	C3.1	Scope of Works
	C3.6	Health and Safety Specification
	Part C4: Site Information	
	C4.1	Site Information as per Scope of Works
	Part C5	**Supplementary Specification**
	C5	Technical Specification
		Checklists

VOLUME 1: TENDERING PROCEDURES

T1.1: TENDER NOTICE AND INVITATION TO SUPPLIER

T1.1: TENDER NOTICE AND INVITATION TO SUPPLIER
THE EASTERN CAPE DEPARTMENT OF HEALTH INVITES SUPPLIERS FOR:

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Any reference to words "Bid" or Bidder" herein and/or in any other documentation shall be construed to have the same meaning as the words "Supplier" or "Tender".

The attention of Suppliers is drawn to the eligibility criteria in the table below. Suppliers are required to familiarise themselves thoroughly with the conditions of Supplier as contained in the Supplier Data (T1.2) and the Standard Conditions of Supplier which form part of the Supplier document. Only Suppliers that are responsive to responsiveness criteria contained in the table below are eligible to have their Suppliers evaluated:

☒	Joint ventures are eligible to submit tenders provided that: They have a signed joint venture agreement
☒	Only Suppliers who have access to a suitably qualified and experienced contract manager who will be the single-point of accountability and responsibility for the management of the contract works as described in clause C.2.1.2 shall be eligible to have their Tenders evaluated. **At least five (5) of e*xperience must be on Airconditioning and Ventilation equipment installation and maintenance industry.***
☒	Only Suppliers who have access to a suitably qualified and experienced contract supervisor as described in clause C.2.1.3 shall be eligible to have their Tenders evaluated. **At least five (5) years of e*xperience must be on Airconditioning and Ventilation equipment installation and maintenance industry.***
☒	Suppliers that are responsive to the criteria stated above shall be evaluated further in accordance with the conditions of Supplier as stipulated in the Tender Data (T1.2) and the Standard Conditions of Tender (as amended), which form part of this Tender document.

Preferences are offered to Suppliers in accordance with the points systems as below:

☒ 80/20 Preference point scoring system

Preference:		**Price:**	
SPECIFIC GOALS Status Level:	20 Points	Price:	80 Points
Total must equal:	**20 Points**	Total must equal:	**80 Points**

1. **AVAILABILITY OF SUPPLIER DOCUMENTS:**

☒ Tender documents may be freely downloaded from Tender portal www.echealth.gov.za/tenders OR www.etenders.gov.za

☒ A compulsory clarification meeting with the representatives of the Employer will take place as follows:

Date: **23 April 2025**
Venue: **John Tremble Hall, Frere Hospital, Amalinda, East London**
Time: **11h00 -until 12h00**

2. **ENQUIRIES RELATED TO TENDER DOCUMENTS MAY BE ADDRESSED TO:**

Procurement Contact:	**Ms Thabisa Notshe**	**E-mail**	**thabisa.notshe@echealth.gov.za**
Tel. No.	**040 608 9641**		

3. DEPOSIT / RETURN OF TENDER DOCUMENTS:

The closing time and date for submission of Tender is **11:00am** on the **09 May 2025** where Tenders will be opened to the public. The following must be noted by all Suppliers;

1. Telegraphic, telephonic, telex, facsimile (faxed), email and late Tenders will not be accepted.
2. The requirements for sealing, addressing, delivery, opening and assessment of Tenders are stated in the Tender Data (T1.2)
3. All Suppliers must be submitted on the official, hardcopy documents issued with the bid including any addenda issued to prospective Suppliers by the Department.
4. Tender documents must be deposited in the Tender box at the address indicated below:

DEPOSITED IN THE TENDER BOX AT:
Department of Health
Global Life Centre,
SCM Unit
c/o Phalo Avenue and R63 (opposite Engen Garage)
BHISHO

COMPILED BY:

Section	Department	Date
Engineering and Technical Services	Lukhozi Consortium	March 2025

T1.2: TENDER DATA

T1.2: TENDER DATA

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Clause number	
	The conditions of Supplier are the Standard Conditions of Supplier as contained in Annex C of Board Notice 423 of 2019 in Government Gazette No. 42622 of 8 August 2019, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of Suppliers as an Annex to this Tender Data. The Standard Conditions of Supplier make several references to the tender Data for details that apply specifically to this Tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of Supplier. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Supplier to which it mainly applies. **The following variations, amendments and additions to the Standard Conditions of Supplier as set out in the Tender Data below shall apply to this Supplier:**
C.1.1	*Add the following:* The employer is the Eastern Cape Department of Health Global Life Center c/o R63 and Phalo Avenue Bhisho
C.1.2	*Add the following:* Tender documents issued by the Employer comprise of: **Volume 1: Tendering Procedures** T1.1 Tender Notice and Invitation to Supplier T1.2 Tender Data **Volume 2: Returnable Documents** SBD1 Invitation Bid: Part A and B SBD4 Declaration of Interest SBD6.1 Preference Points Claim Form in Terms of the Preference Regulations 2022 T2.2r Compulsory Enterprise Questionnaire T2.1 List of Returnable Schedules/Documents C1.1a Final Summary Page C2.2: Preliminaries and General & Bills of Quantities T2.2a Resolution of Signatory T2.2b Resolution of Board of Directors to Enter into Consortium or Joint Venture (JV) Agreements T2.2c-1 Schedule of Proposed Subcontractors T2.2e Schedule of Key Personnel T2.2f Bank Rating T2.2g Specific goals claimed (CIPRO certificate) T2.2n Record of Addenda to Supplier Documents T2.2u CIDB grading certificate – Proof of registration T2.2v CIPC – company registration certificate T2.2y Proof of Registration with Centralized Supplier Database T2.2x References T2.2z Valid Letter of Good Standing T2.3 Returnable schedules or documents: Annexures related to evaluation

	Annexure A1: Method Statement (Generic) Annexure A2: Method Statement (Summary Task) Annexure A3: Method Statement (Programme with Timelines and Resources) Annexure B1: Key personnel qualifications (Maintenance/ Construction manager) Annexure B2: Key personnel qualifications (Maintenance/ Construction Supervisor) Annexure B3: Key personnel qualifications (OHS Safety officer) Annexure B4: Key personnel qualifications (Skilled installation/maintenance staff) Annexure B5: Proof of business address Annexure C1: Key personnel experience (Maintenance/ Construction manager) Annexure C2: Key personnel experience (Maintenance/ Construction Supervisor) Annexure C3: Key personnel experience (OHS Safety officer) Annexure C4: Key personnel experience (Skilled installation/maintenance staff) **Volume 3: The Draft Contract** **Part C1: Agreement and Contract data** C1.1: Form of offer and Acceptance C1.2: Contract Data C1.3: Fixed Performance Guarantee C1.4: Confirmation of Receipt of Contract (PRO FORMA) **Part C2: Pricing Data** C2.1: Pricing Instructions C2.2: Bills of Quantities C2.3: CIDB Adjudicator's Agreement **Part C3: Scope of Works** C3.1: Scope of Works C3.6: Health and Safety Specification **Part C4: Site Information** C4.1: Site Information as per Scope of Works

C.1.4	*Add the following:* The employer's agent: Lukhozi Consortium
C.1.6.1	*Add the following to the clause:* The Department reserves the right to not accept the tender from the tenderer with the highest number of points or award any contract.
C1.6.3	*Add the following:* A two-stage system will be followed.
C.2.1	*Add the following:* 1. Only those Tenderers who satisfy the following eligibility criteria are eligible to submit tenders: 1. 1 Tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in ac Contractor grading designation equal to or higher than a Contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for **Class 6 ME (PE), Grade 7 ME** or higher construction work, are eligible to have their tenders evaluated. 2. Joint ventures are eligible to submit tenders provided that: 2.1 Every member of the joint venture is registered with the CIDB; 2.2 The lead partner has a contractor grading designation in **Class 6 ME (PE) or Grade 7 ME** class of construction works under considerations and possess the required recognition status. 2.3 The combined Contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal or higher than a contractor grading designation determined in accordance with the sum tendered for **Class 6ME (PE), Grade 7 ME** or higher construction work or a value determined in accordance with Regulations 25 (1B) or 25 (7A) of the Construction Industry Development Regulations; and 2.4 The joint venture is registered on Central Supplier Database or proof of application 2.5 All members of the joint venture must submit copies of the returnable documentations or original where it is so stipulated for all members. 2.6 In the case of a Partnership/Joint Venture/Consortium the tax clearance must be the Partnership/Joint Venture/Consortium or individual valid tax clearance certificates for all the members of the Partnership/Joint Venture/Consortium. 2.7 In the case of a Partnership/Joint Venture/Consortium the CIPRO certificates must be submitted indicating percentage of ownership for specific goals points scoring, failing which the tenderer will score zero points.
C.2.2	Add the following to the clause: Accept that the Employer will not compensate the Tenderer for any costs incurred in attending briefing session, negotiation meetings or any meeting or interviews in the office of the Employer or Employer's agent (if required).
C.2.7	For particulars regarding a pre-Tender site inspection meeting, see Tender Notice and Invitation to Supplier T1.1

	" A compulsory briefing session will be held and no compensation will be paid for attendance at this meeting. Tenderers must be represented by a person who is suitably qualified and experience to comprehend the extent of the work involved and who is at the employ of the prospective tenderer. The tenderer's representative must sign the attendance register in the name of the tendering entity. Addenda will be issue to and tenders will be received only from those tendering entities appearing in the attendance register of the briefing session."
C.2.12	No alternative tenders are allowed.

C.2.13.2	*Replace sub-clause C.2.13.2 with the following;* Return all returnable documents to the employer after completing them in their entirety by writing in **non-erasable ink**
C.2.13.3	*Add the following:* Parts of each Supplier offer communicated on paper shall be submitted as an original, plus 0 (nought) copies.
C.2.13.4	*Add the following:* The Supplier shall be signed by a person duly authorized to do so. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation of the joint venture, in the form of a joint venture agreement, in which it is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorized to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. Failure to provide the joint venture agreement, bound with the Supplier submission, on the date and time of the closing of the bid, shall render the Supplier non-responsive.
C.2.13.5	*Add the following:* The employer's address for delivery of Supplier offers and identification details to be shown on each Supplier offer package are: **Location of Supplier box:** Department of Health **Physical address:** Eastern Cape Department of Health Global Life Center, SCM Unit c/o Phalo Avenue and R63 Bhisho **Identification details:** **Tender No. SCMU3-24/25-0659-HO** **Title of Supplier: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES** Sealed Tender with the identification details on the envelope must be placed in the appropriate official Tender box at the abovementioned address
C.2.13.6	*Add the following:* A two-envelope procedure will not be followed.
C.2.13.9	Telephonic, telegraphic, telefax, facsimile or e-mailed tender offers will not be accepted.
C.2.13.10	*Add the following:* By signing the offer part of C1.1 Form of Offer and Acceptance the Supplier declares that all information provided in the Supplier submission is correct and free of misrepresentation.
C.2.15.1	*Add the following to C.2.15.1:* The closing time for submission of Supplier offers is as stated in the Tender Notice and Invitation to Supplier. Telephonic, telegraphic, telex, facsimile or e-mailed Supplier offers will not be accepted.

C.2.16.1	*Add the following to C.2.16.1:* The Supplier offer validity period is **12 weeks.**
C.2.17	*Insert the following at the end of the last sentence of the note:* "…….elect to do so, provided that the competitive position of the preferred Supplier is not affected"
	A Supplier may be rejected as non-responsive if the Supplier fails to provide any clarification requested by the employer within the time for submission stated in the employer's written request for such clarification. The clarification of a Supplier offer includes the provision of the priced bills of quantities (Part C2.2: Bills of Quantities).
C.2.18	*Add the following:* The tenderer will be required to submit his fully priced Bills of Quantities (complete document inclusive of all parts) together with this tender.
C.3.4	*Add the following:* The opening of the tender offers will take place immediately after the closing time of tenders.
C.3.8	*Add the following:* Suppliers will be considered non-responsive if, inter alia: 1. the Supplier has failed to attend the compulsory briefing meeting; 2. the Supplier is submitted by Telegraphic, telephonic, telex, facsimile (faxed) or email media or if the Supplier is submitted late. 3. the Supplier does not comply with the eligibility criteria listed in C2.1 above; 4. The resolution for signatory is not attached to the Supplier submission on a company letterhead. 5. the Supplier has failed to fully complete and sign SBD1, SBD4 & the Compulsory Enterprise Questionnaire. Failure to submit the required information shall be subjected to a request from SCM to the bidder to submit the required information within 7 days of the request. Failure to comply with such request will result in the bid being deemed non-responsive
C.3.11.1	*Add the following:* This is a two-stage evaluation process: Stage 1: Administrative compliance Stage 2: Evaluation for price and preference The following procedure will be used to evaluate tender offers received: a. Open and record tender offers received b. Determine whether or not tender offers are complete. c. Determine whether or not tender offers received are responsive, and reject non-responsive tenders. d. Perform Technical Evaluation of Equipment as per technical Data Sheet. e. A bid with Equipment proposed that does not conform to scope of work or specification will be found non responsive. f. Score tender evaluation points for each price g. Confirm that tenderers are eligible for the preferences claimed and, if so, score tender evaluation points for preferencing. h. Calculate total tender evaluation points i. Rank tender offers from the highest number of tender evaluation points to the lowest. j. Perform a risk analysis on the tenderer having the highest ranking/number of points to ascertain if the submission presents an acceptable risk to the employer. k. Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so. The Employer shall in the evaluation of tender offers take due account of the Tenderer's past performance in the execution of similar engineering works of comparable

	magnitude, and the degree to which possesses the necessary technical, financial and other resources to enable him to complete the Works successfully with the contract period. The tenderer shall be required to satisfy the Employer and the Engineer as to his ability to perform and complete the Works timeously, safely and with satisfactory quality, and furnish details in section T2.2z of contracts of a similar nature and magnitude which they have successfully executed in the past. The Employer is restricted in accordance with clause 7.(c)(iii) of the Construction Regulations, 2014, to only appoint a contractor to whom he is satisfied has the necessary competencies and resource to carry out the work safely. Submitting inferior and inadequate information relating to health and safety shall be regarded as justifiable and compelling reasons not to accept the tender offer of the tenderer scoring the highest number of tender evaluation points.
C.3.11.3	The procedure for the evaluation of responsive tenders is **Method 1: Administrative, Price and Specific Goals**
C.3.11.7	*Add the following:* The financial offer will be scored using **Formula 2 (Option 1):** $N_{FO} = (1 – (P-P_M)/P_m) \times W_1$ Where. N_{FO} = number of Supplier evaluation points awarded for financial offer W_1 = the maximum possible number of Supplier evaluation points Tender P_M = the comparative offer of the most favourable Supplier offer P = the comparative offer of the Supplier offer under consideration
C.3.11.8	Up to 100 minus W_1 (refer C.3.11.7 above) Supplier evaluation points will be awarded to Suppliers according to their SPECIFIC GOALS status level, determined in accordance with section 9(1) of the Broad-Based Black Economic Empowerment Act (No 53 of 2003), and who have submitted original valid or valid, certified copies of SPECIFIC GOALS status verification certificates issued by either a verification agency accredited by the South African Accreditation System (SANAS) or a sworn affidavit in terms of the amended SPECIFIC GOALS codes. The points will be awarded as follows, based on the SPECIFIC GOALS status level of the Supplier:

	The specific goals allocated points in terms of this tender	**Number of points allocated (80/20 system) (To be completed by the organ of state)**	**Number of points claimed (80/20 system) (To be completed by the tenderer)**
	Historically Disadvantaged Individuals Ownership	20% (4)	
	Women Ownership	20% (4)	
	Youth Ownership	20% (4)	
	Disability Ownership	20% (4)	
	Military Veterans Ownership	10% (2)	
	Locality Ownership (Eastern Cape)	10% (2)	
	TOTAL	100% (20)	
	A trust, consortium or joint venture will qualify for points for their SPECIFIC GOALS status level as a legal entity, provided that the entity submits their SPECIFIC GOALS status level certificate. A trust, consortium or joint venture will qualify for points for their SPECIFIC GOALS status level as an unincorporated entity, provided that the entity submits their consolidated SPECIFIC GOALS scorecard as if they were a group		
C.3.11.10	*Add the following new sub-clause:* The Employer will perform a risk analysis in respect of the following: (a) reasonableness of the financial offer (b) reasonableness of unit rates and prices (c) the Suppliers ability to fulfil its obligations in terms of the tender document, that is, that the Supplier can demonstrate that he/she possesses the necessary professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience, reputation, personnel to perform the contract, etc.		

C.3.13.1	Supplier offers will only be accepted if: a) the Supplier is registered and in good standing with the South African Revenue Service (SARS) or proof that he or she has made arrangement with SARS to meet his or her outstanding tax obligations. This will be verified by the Employer on the Centralized Supplier Database. Where the recommended bidder is not tax compliant, the bidder will be notified of the non-compliant status and be granted seven (7) working days to rectify their compliance status with the SARS. The bidder must thereafter provide the Department with proof of its tax compliance which must be verified via the CSD or eFiling. b) the Supplier or any of its directors is not listed on the Register of Supplier Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; c) the Supplier or any of its directors is not listed on the Database of Restricted Suppliers kept by the National Treasury and updated from time to time; c) the Supplier has not: i) abused the Employer's Supply Chain Management System; d) The Supplier has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the Supplier's ability to perform the contract in the best interests of the employer or potentially compromise the Supplier process.
C.3.17	*Add the following:* The number of paper copies of the signed contract to be provided by the Employer is one.
C.4	**ADDITIONAL CONDITIONS OF TENDER** The additional conditions of Tender are:
C.4.1	**Invalid Tender** Suppliers shall be considered invalid and shall be endorsed and recorded as such in the Supplier opening record, by the responsible official who opened the Tender, in the following circumstances: a) if the Supplier offer is not submitted on the Form of Offer and Acceptance bound into this Tender document (form C1.1, Part C1: Agreements and Contract Data); b) if the Form of Offer and Acceptance has not been completed or has not been signed by the authorised representative of the Supplier c) if the Form of Offer and Acceptance is signed, but the name of the Supplier is not stated or is indecipherable d) if the Supplier offer is not completed in non-erasable ink;
C.4.2	**Negotiations with preferred Suppliers** The Employer may negotiate the final terms of a contract with Suppliers identified through a competitive Supplying process as preferred Suppliers provided that such negotiation: a) does not allow any preferred Supplier a second or unfair opportunity; b) is not to the detriment of any other Supplier; and c) does not lead to a higher price than the Supplier as submitted. Minutes of any such negotiations shall be kept for record purposes

C.4.3	**General supply chain management conditions applicable to Supplier** In terms of its Supply Chain Management Policy the Employer may not consider a Supplier unless the provider who submitted the Supplier: a) has furnished the Employer with that provider's: • full name; • identification number or company or other registration number; and • tax reference number and VAT registration number, if any; b) has indicated whether: • the provider is in the service of the state, or has been in the service of the state in the previous twelve months; • the provider is not a natural person, whether any of the directors, managers, principal shareholders or stakeholders is in the service of the state, or has been in the service of the state in the previous twelve months; or • whether a spouse, child or parent of the provider or of a director, manager, shareholder or stakeholder referred to above is in the service of the state, or has been in the service of the state in the previous twelve months. Irrespective of the procurement process followed, the Employer is prohibited from making an award to: • a person who is in the service of the state; • a juristic entity of which any director, manager, principal shareholder or stakeholder is in the service of the state; • an advisor or consultant contracted with the Employer; or • a person, advisor or corporate entity involved with the tender specification committee, or a director of such corporate entity. In this regard, Suppliers shall complete Returnable Schedules: Compulsory Enterprise Questionnaire. Failure to complete this schedule will result in the Supplier not being considered further.

C.4.4	**Combating abuse of the Supply Chain Management Policy** In terms of the its Supply Chain Management Policy, the Employer may reject the Supplier of any Supplier if that Supplier or any of its directors has: a) failed, during the last five years, to perform satisfactorily on a previous contract with the Employer or any other organ of state after written notice was given to that Supplier that performance was unsatisfactory; b) abused the supply chain management system of the Employer or has committed any improper conduct in relation to this system; c) been convicted of fraud or corruption during the past five years; d) willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or e) been listed with the Register of Supplier Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or has been listed on National Treasury's database as a person or juristic entity prohibited from doing business with the public sector. In this regard, Suppliers shall complete Part T2.2: Returnable Schedules: Certificate of Independent Supplier Determination and Declaration of Supplier's Past Supply Chain Management Practices. Failure to complete these schedules will result in the Supplier not being considered further.
C.4.6	**Claims arising after submission of Supplier** No claim for any extras arising out of any doubt or obscurity as to the true intent and meaning of anything contained in the Conditions of Contract, Scope of Work and Pricing Data, will be admitted by the Employer after the submission of any Tender and the Supplier shall be deemed to have: 1) read and fully understood the whole text of the Contract Data, Scope of Work and Pricing Data and thoroughly acquainted himself with the nature of the works proposed and generally of all matters which may influence the Contract. 2) visited the site of any proposed works. 3) requested the Employer or his duly authorized agent to make clear the actual requirements of anything contained in the Scope of Work and Pricing Data, the exact meaning or interpretation of which is not clearly intelligible to the Supplier. 4) received any Addenda to the Supplier documents which have been issued in accordance with the Employer's Supply Chain Management Policy. Before submission of any Supplier, the Supplier should check the number of pages, and if any are found to be missing or duplicated, or the figures or writing indistinct, or if the Pricing Data contain any obvious errors, the Supplier must apply to the Employer's Agent at once to have the same rectified, as no liability will be admitted by the Employer in respect of errors in any Supplier due to the foregoing.
C.4.7	**Imbalance in Supplier rates** In the event of Supplier rates or lump sums being declared by the Employer to be unacceptable to it because they are either excessively low or high or not in proper balance with other rates or lump sums, the Supplier may be required to produce evidence and advance arguments in support of the Supplier rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the supplied rates or lump sums objected to, it may request the Supplier to amend these rates and lump sums along the lines indicated by it.

	The Supplier will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the Supplier offer as Supplied or, if applicable, the corrected total of prices in accordance with C.3.9.3. Should the Supplier fail to amend his tender in a manner acceptable to the Employer, the Employer may reject the Tender.
C.4.8	The Employer shall not formally issue Tender documents in electronic format as contemplated in C.2.13.2 and C.2.13.3 and shall only issue Supplier documents in hardcopy. An electronic version of the issued Tender documents may be made available to the Supplier, upon written request in terms of this clause, subject to the following: (a) Electronic copies of the contract document, or parts thereof, will only be provided to Suppliers who have been issued with the Tender documents as contemplated in F.1.2 in hardcopy. (b) The electronic version shall not be regarded as a substitute for the issued Tender documents. (c) The Employer shall not accept tender submitted in electronic format. Suppliers may not complete and submit a printed copy of the electronic version of the Tender document or part thereof. Only those Suppliers that have been completed on the issued hard copy Tender document shall be considered. (d) The Employer accepts no responsibility or liability arising from any reliance on or use of the electronic version provided in terms of this clause. The Employer further does not guarantee that the electronic version corresponds with the issued Tender documents in all respects. Suppliers are alerted to the fact that electronic versions of the Tender documents may not reflect any notices or addenda that amend the Tender document. (e) Any non-compliance with these provisions, including effecting any unauthorized alterations to the Supplier document as contemplated in C.2.11, shall render the Tender invalid. The Employer reserves the right to take any action against such Supplier allowed in law including, in circumstances where the Supplier had already been awarded, the right to cancel the contract. *(f)* In requesting the electronic version of the Tender document or parts thereof, the Supplier is deemed to have read, understood and accepted all of the above conditions.

VOLUME 2: RETURNABLE DOCUMENTS

T2.1 LIST OF RETURNABLE DOCUMENTS

T2.1: LIST OF RETURNABLE SCHEDULES/DOCUMENTS

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

T2.2: RETURNABLE SCHEDULES REQUIRED FOR SUPPLIER EVALUATION PURPOSES

	Returnable Documents	Number of pages issued	Returnable Document
SBD1	Invitation to Bid: Part A and B	2	☒ Yes ☐ No
SBD 4	Declaration of Interest	2	☒ Yes ☐ No
SBD 6.1	Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2022	4	☒ Yes ☐ No
T2.2r	Compulsory Enterprise Questionnaire	3	☒ Yes ☐ No
T2.1	List of Returnable Schedules/Documents	2	☒ Yes ☐ No
C1.1a	Final Summary Page	1	☒ Yes ☐ No
C2.2	Fixed Charge and Value related Items Applicable to All Work & Bill of Quantities	14	☒ Yes ☐ No
T2.2a	Resolution for Signatory	1	☒ Yes ☐ No
T2.2b	Resolution of Board of Directors to Enter into Consortium or Joint Venture (JV) Agreements	2	☒ Yes ☐ No
T2.2c-1	Schedule of Proposed Subcontractors	1	☒ Yes ☐ No
T2.2e	Schedule of Key Personnel	1	☒ Yes ☐ No
T2.2f	Bank Rating	1	☒ Yes ☐ No
T2.2v	Specific goals claimed (CIPRO certificate)	1	☒ Yes ☐ No
T2.2n	Record of Addenda to Supplier Documents	1	☒ Yes ☐ No
T2.2z	Valid Letter of Good Standing	1	☒ Yes ☐

T2.2: OTHER DOCUMENTS REQUIRED FOR SUPPLIER EVALUATION PURPOSES

No.	Document Name	Number of pages issued	Returnable Document
Annexure A1	Method Statement (Generic)	1	☒ Yes ☐ No
Annexure A2	Method Statement (Summary Tasks)	1	☒ Yes ☐ No
Annexure A3	Method Statement (Programme with Timelines and planned Resources)	1	☒ Yes ☐ No
Annexure B1	Key Personnel qualification (Maintenance/ Construction manager)	1	☒ Yes ☐ No
Annexure B2	Key Personnel qualification (Maintenance/ Construction supervisor)	1	☒ Yes ☐ No
Annexure B3	Key Personnel qualification (OHS Safety officer)	1	☒ Yes ☐ No
Annexure B4	Key Personnel qualification (Skilled installation/maintenance staff)	1	☒ Yes ☐ No
Annexure C1	Key personnel experience (Maintenance/ Construction manager) Attach CV	1	☒ Yes ☐ No
Annexure C2	Key personnel experience (Maintenance/ Construction Supervisor) Attach CV	1	☒ Yes ☐ No
Annexure C3	Key personnel experience (OHS Safety officer) Attach CV	1	☒ Yes ☐ No
Annexure C4	Key personnel experience (Skilled installation staff) Attach CV	1	☒ Yes ☐ No
Annexure C5	Proof of Business address	1	☒ Yes ☐ No
Annexure C6	Company Experience	1	☒ Yes ☐ No
T2.2g	Specific Goals claimed (Cipro Certificate)	1	☒ Yes ☐ No
T2.2y	Proof of Registration with Centralized Supplier Database	1	☒ Yes ☐ No
T2.2v	CIPC – company registration certificate	1	☒ Yes ☐ No
T2.2x	References	4	☒ Yes ☐ No
T2.3	Returnable schedules or documents		☒ Yes ☐ No

(The following list of returnable schedules/documents is duplicated from the tables above however these will not appear in duplicate within the Tender document. The purpose is to bring to the Suppliers' attention the list of returnable documents/schedules that shall be incorporated into the contract)

T2.2: OTHER DOCUMENTS REQUIRED TENDER EVALUATION PURPOSES

No.	Document Name	Number of pages issued	Returnable Document
T2.2n	Record of Addenda to Supplier Documents	1	☒ Yes ☐ No
T2.2e	Schedule of Key Personnel: Contract Supervisor	1	☒ Yes ☐ No
SBD 6.1	Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2022	4	☒ Yes ☐ No

T2.2: OTHER DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

C1.1	Form of Offer and Acceptance (Signed)	2	☒ Yes ☐ No
C1.2	Contract Data	7	☒ Yes ☐ No
C2.2	Fixed Charge and Value related Items Applicable to All Work & Bill of Quantities & Final Summary		☒ Yes ☐ No

PART A
INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (*NAME OF DEPARTMENT/ PUBLIC ENTITY*)					
BID NUMBER:	**SCMU3-24/25-0659-HO**	CLOSING DATE:	**09 May 2025**	CLOSING TIME:	**11:00**
DESCRIPTION	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**				

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT *(STREET ADDRESS)*

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT *(STREET ADDRESS)*

Tender Box
Department of Health
Global Life Centre

SCM Unit c/o Phalo Avenue and R63 (opposite Engen Garage)

Bhisho

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO		**TECHNICAL ENQUIRIES MAY BE DIRECTED TO:**	
CONTACT PERSON	**Ms Thabisa Notshe**	CONTACT PERSON	**Thabisa Notshe**
TELEPHONE NUMBER	**040-608 9501**	TELEPHONE NUMBER	**040-608 9501**
FACSIMILE NUMBER		FACSIMILE NUMBER	
E-MAIL ADDRESS	**Thabisa.notshe@echealth.gov.za**	E-MAIL ADDRESS	**Thabisa.notshe@echealth.gov.za**

SUPPLIER INFORMATION				
NAME OF BIDDER				
POSTAL ADDRESS				
STREET ADDRESS				
TELEPHONE NUMBER	CODE		NUMBER	
CELLPHONE NUMBER				
FACSIMILE NUMBER	CODE		NUMBER	
E-MAIL ADDRESS				
VAT REGISTRATION NUMBER				
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		**OR** CENTRAL SUPPLIER DATABASE No:	MAAA
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES OFFERED?	☐Yes ☐No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES OFFERED?	☐Yes ☐No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]	

QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

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

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

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

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

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

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

PART B
TERMS AND CONDITIONS FOR BIDDING

1.	**BID SUBMISSION:**
1.1.	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	**ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED (NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.**
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4.	**THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).**
2.	**TAX COMPLIANCE REQUIREMENTS**
2.1	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3	APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4	BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5	IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6	WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7	NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

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

SIGNATURE OF BIDDER: ……

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

DATE: ……

SBD 4: DECLARATION OF INTEREST

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

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, state employee 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:

……

3 DECLARATION

I, the undersigned, (name)……. in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

3.1 I have read and I understand the contents of this disclosure;

3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;

3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium2 will not be construed as collusive bidding.

1 the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

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.

3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.

3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

…… ..……

Signature Date

…… ……

Position Name of bidder

SBD 6.1

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

---

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- 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 **To be completed by the organ of state**

(*delete whichever is not applicable for this tender*).

The applicable preference point system for this tender is the 80/20 preference point system.

The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

(a) Price; and

(b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	**100**

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

(a) **"tender"** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;

(b) **"price"** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;

(c) **"rand value"** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

(d) **"tender for income-generating contracts"** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and

(e) **"the Act"** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 PREFERENCE POINT SYSTEMS

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

80/20

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

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

80/20

$$Ps = 80\left(1 + \frac{Pt - P\,max}{P\,max}\right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

(a) an invitation for tender for income-generating contracts, that either the 80/20 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or

(b) any other invitation for tender, that either the 80/20 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 80/20 preference point system is applicable, corresponding points must also be indicated as such.

***Note to tenderers: The tenderer must indicate how they claim points for each preference point system.*)**

The specific goals allocated points in terms of this tender	**Number of points allocated (80/20 system) (To be completed by the organ of state)**	**Number of points claimed (80/20 system) (To be completed by the tenderer)**
Historically Disadvantaged Individuals Ownership	20% (4)	
Women Ownership	20% (4)	
Youth Ownership	20% (4)	
Disability Ownership	20% (4)	
Military Veterans Ownership	10% (2)	
Locality Ownership (Eastern Cape)	10% (2)	
TOTAL	100% (20)	

a) Service providers must submit proof of its Specific Goals points claimed / status of contributor.

b) The Specific Goals supporting documents required to verify claimed points may inline with the specified requirements include:

- *Historically Disadvantaged Individuals Ownership: Proof of ownership (CIPRO certificate) with id no.*
- *Women Ownership: Ownership: Proof of ownership (CIPRO certificate) with id no.*
- *Youth Ownership: Ownership: Proof of ownership (CIPRO certificate) with id no.*
- *Disability Ownership: Proof of ownership (CIPRO certificate) with valid medical documentary proof.*
- *Military Veterans Ownership: Proof of ownership (CIPRO certificate) with valid proof of veteran status.*
- *Ownership: Proof of business address (municipal account or valid lease agreement)*
- *Updated CSD report*

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm…….

4.4. Company registration number: ……...

4.5. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I 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 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;

iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

(a) disqualify the person from the tendering 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 tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution, if deemed necessary.

……
SIGNATURE(S) OF BIDDER(S)

SURNAME AND NAME: ……
DATE: ……

ADDRESS: ……

……

……
……

T2.2r: COMPULSORY ENTERPRISE QUESTIONNAIRE

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

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 number: . . . . . .

Section 3: Particulars of sole proprietors and partners in partnerships

Name*	**Identity number***	**Personal income tax number***

***** Complete only if sole proprietor or partnership and attach separate page if more than 3 partners

Section 5: Particulars of companies and close corporations

Company registration number . . . . . .

Close corporation number . . . . . .

Tax reference number . . . . . .

Section 6: Record of service of the state

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

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

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

Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

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

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

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

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

*insert separate page if necessary

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

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

Signed ..... Date .....

Name ..... Position .....

Enterprise name .....

* The schedule should be used where Suppliers are subject to the Local Government: Municipal Finance Management Act

C1.1a Final Summary Page

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District: JOE GQABI & CHRIS HANI**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE NUMBER	DESCRIPTION	TENDER AMOUNT
1A-1	JOE GQABI & CHRIS HANI FIXED CHARGE AND VALUE RELATED ITEMS APPLICABLE TO ALL WORK	
1A-2	JOE GQABI & CHRIS HANI FIXED CHARGE AND VALUE RELATED ITEMS APPLICABLE TO ALL WORK (continued)	
2A-1	JOE GQABI & CHRIS HANI WHITTLESEA CHC THEATRE HVAC	
2A-2	JOE GQABI & CHRIS HANI CRADOCK HOSPITAL THEATRE HVAC	
2A-3	JOE GQABI & CHRIS HANI WILHELM STAHL (MIDDLEBURG) HOSPITAL THEATRE HVAC	
2A-4	JOE GQABI & CHRIS HANI COFIMVABA HOSPITAL THEATRE HVAC	
2A-5	JOE GQABI & CHRIS HANI FRONTIER THEATRE HVAC	
2A-6	JOE GQABI & CHRIS HANI GLEN GREY HOSPITAL THEATRE HVAC	
2A-7	JOE GQABI & CHRIS HANI ELLIOT HOSPITAL THEATRE HVAC	
2A-8	JOE GQABI & CHRIS HANI ALL SAINTS HOSPITAL THEATRE HVAC	
2A-9	JOE GQABI & CHRIS HANI BURGERSDORP HOSPITAL THEATRE HVAC	
2A-10	JOE GQABI & CHRIS HANI ALIWAL NORTH HOSPITAL THEATRE HVAC	
2A-11	JOE GQABI & CHRIS HANI CLOETE JOUBERT HOSPITAL THEATRE HVAC	
2A-12	JOE GQABI & CHRIS HANI MACLEAR HOSPITAL THEATRE HVAC	
2A-13	JOE GQABI & CHRIS HANI EMPILISWENI HOSPITAL THEATRE HVAC	
2A-14	JOE GQABI & CHRIS HANI UMLAMLI HOSPITAL THEATRE HVAC	
2A-15	JOE GQABI & CHRIS HANI LADY GREY HOSPITAL THEATRE HVAC	
2A-16	JOE GQABI & CHRIS HANI TYLOR BEQUEST HOSPITAL THEATRE HVAC	
3	MAINTENANCE SERVICE SCHEDULE	
4	TERM REPAIRS SUBJECT TO APPROVAL OF QUOTATION OF THE WORKS	
SUBTOTAL AMOUNT OF WORKS (EXCL VAT)		
ALLOWANCE FOR VAT AT 15.0%		
TOTAL AMOUNT OF WORKS (INCL VAT) - ENTER THIS AMOUNT TO FORM OF OFFER		

C1.1 FORM OF OFFER AND ACCEPTANCE (SIGNED)

OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a Contract for the procurement of:

CONTRACT NUMBER: SCMU3-24/25-0659-HO
SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES

The Tenderer, identified in the offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the tender schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the Tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

The offered total of the prices inclusive of Value-Added Tax is:

……

……

…….. Rand (in words)

R…….. (in figures)

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in terms of the Conditions of Contract identified in the Contract data.

For and on behalf of the Tenderer:

Name ……

Capacity ……

Signature …… Date: ……...

Name and address of tenderer:

……

……

……

Witness Name ……

Witness Signature …… Date: ……...

ACCEPTANCE

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

The terms of the Contract are contained in:

Part C1: Agreements and Contract data (which includes this agreement)
Part C2: Pricing data
Part C3: Scope of work
Part C4: Site Information and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto, as listed in the returnable schedules as well as any changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule, which must be duly signed by the authorised representative(s) of both parties.

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the Tenderer (now Contractor), within five (5) working days of the date of such receipt, notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding Contract between the parties.

For and on behalf of the Employer:

Name ……

Capacity ……

Signature …… Date: ……...

Name and address of employer:

……

……

……

Witness Name ……

Witness Signature …… Date: ……...

SCHEDULE OF DEVIATIONS

Notes:

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

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

Subject……
Details ……
……
Subject……
Details ……
……
Subject……
Details ……
……
Subject……
Details ……
……
Subject……
Details ……
……
Subject……
Details ……
……

By the duly authorized representatives signing this schedule of deviations, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the Contract between the parties arising from this agreement.

C1.2 CONTRACT DATA

Part 1– Data provided by the Employer

Clause	Statement	Data
1. General		
	The conditions of contract are the core clauses and the clauses for main Option:	A Priced contract with price list
	dispute resolution Option and secondary Options	W1 Dispute resolution procedure
		X1 Price adjustment for inflation
		X13 Performance Bond
		X17 Low service damages
		X18 Limitation of liability
		X19 Task Order
		X20 Key Performance Indicators
	of the NEC3 Term Service Contract (April 2013)	

10.1	The Employer is (name):	Eastern Cape Department of Health
	Address	Department of Health Global Life Centre Corner Phalo Avenue and R63 (opposite Engen garage) Bhisho 5605
	Represented By:	Mr Lamkelo Mdingi
	Tel No.	
	Fax No.	

10.1	The Service Manager is (name):	Lukhozi Consortium
	Tel e-mail	
	The Service Manager is (name):	Mr Bruce Maliti
11.2(2)	The Affected Property is	Chris Hani and Joe Gqabi District Health Facilities in the Eastern Cape Province as per Service Information
11.2(13)	The service is	Scheduled and Re-Active Maintenance works

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.
12.2	The law of the contract is the law of	the Republic of South Africa
13.1	The language of this contract is	English
13.2	The period for reply is	7 days

2. The Contractor's responsibility (If the optional statement for this section is not used, no data will be required for this section)		
21.1	The Contractor submits a first Plan for	2 weeks of the Contract Date acceptance within

3. Time		
30.1	The starting date is	at the Site Handover Meeting Date.
30.2	The service period is	36 Months.

4. Testing and defects	Special testing may be requested by the Service Manager.

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

7. Use of Equipment Plant and Materials	No data is required for this section of the conditions of contract.

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	R 5 000 000.00
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	R 5 000 000.00
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:	R 5 000 000.00
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 that R 5 000 000.00
9. Termination		No data is required for this section of the conditions of contract.
10. Data for main Option Clauses		
A	Priced Contract with Price List	Option A
20.5	The Contractor prepares forecasts of the final total of the Prices for the whole of the service at intervals of no longer than	4 Weeks
11. Data for Option W1		
W1.1	The Adjudicator is (Name) Address Tel. No, Fax No. Email	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)
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. Data for Secondary Option Clauses		

X1 Price Adjustment for Inflation

X1.1 The base date for indices is: Tender Closing Date

The proportions used to calculate the Price Adjustment Factor are:

Note: Requirements for CPA/Price inflation is that Prices must 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

Proportion	Linked to Index for	Index prepared by (Source)
	Non-Adjustable**	
100%		

X13 Performance Bond

X13.1 The Contractor gives the Employer a performance bond: The Tenderer must provide a Performance Bond in the form of a Fixed Performance Guarantee by means of a Bank Guarantee, or from an Insurer approved by the Service Manager, in the amount of 2.5% of the Awarded Contract Value, once the Contract has been awarded to him. This Bond must be given to the Employer with in four (4) weeks of the Contract Date.

X17 Low Service Damages

X17.1 The service level table is in: As per Demerit Table in Contact Data – Annexure CD1

X18 Limitation of Liability

X18.1 The Contractor's liability to the Employer for indirect or consequential loss is limited to: R0.0 (zero Rand)

X18.2 For any one event, the Contractor's liability to the Employer for loss of or damage to the Employer's property is limited to: R2 500 000.00

X18.3 The Contractor's liability for Defects due to his design of an item of Equipment is limited to: The greater of
- the total of the Prices at the Contract Date And
- R2 500 000

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.

X20 Key Performance Indicators: Key performance Indicators will be used to monitor Contractor performance on a monthly basis

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)	The 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	
11.2(19)	The tendered total of the Prices is	
X1	Price adjustment for inflation	

X1.1

Proportion	Linked to Index for	Index prepared by (Source)
	Non-Adjustable**	
100%		

T2.2 : RETURNABLE SCHEDULES REQUIRED FOR SUPPLIER EVALUATION PURPOSES

T2.2a: RESOLUTION FOR SIGNATORY

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

MUST BE ON COMPANY LETTERHEAD

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. This must be on a company letterhead.

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 Supplier 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:

1._____SIGNATURE: _____

2. _____SIGNATURE: _____

T2.2b: RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURES

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

RESOLUTION of a meeting of the Board of *Directors / Members / Partners of:

_____

_____
(Legally correct full name and registration number, if applicable, of the Enterprise)

Held at _____(place)

On _____(date)

RESOLVED that:

1. The Enterprise submit a Bid /Supplier, in consortium/Joint Venture with the following Enterprises:

_____

_____
(List all the legally correct full names and registration numbers, if applicable, of the Enterprises forming the Consortium/Joint Venture)

to the Eastern Cape Department of Health in respect of the following project:

_____

_____
(Project description as per Bid /Supplier Document)

Bid Number: _____(Bid Number as per Document)

2. *Mr/Mrs/Ms:

_____

in *his/her Capacity as: _____(Position in the Enterprise)

and who will sign as follows: _____

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

3. The Enterprise accepts joint and several liability with the parties listed under item 1 for the due fulfilment of the obligations of the joint venture deriving from, and in any way connected with, the Contract to be entered into with the Department in respect of the project described under item 1 above.

4. The Enterprise chooses as its domicilium citandi et executandi for all purposes arising from this joint venture agreement and the Contract with the Department in respect of the project under item 1 above:

Physical address: _____

_____

_____ Postal Code _____

Postal Address: _____

_____

_____ Postal Code _____

Telephone number: _____ _____

Fax number: _____ _____

	NAME	CAPACITY	SIGNATURE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

Note:

1. * Delete which is not applicable

2. NB. This resolution must be signed by all the Directors / Members / Partners of the Bidding Enterprise

3. Should the number of Directors / Members/Partners exceed the space available above, additional names and signatures must be supplied on a separate page

ENTERPRISE STAMP

T2.2c-1: SCHEDULE OF PROPOSED SUBCONTRACTORS

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

	We notify you that it is our intention to employ the following subcontractors for work in this contract. If we are awarded a contract, we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

	Name and address of proposed Subcontractor	**Nature and extent of work**	**Value of Work**	**Subcontractor CIDB grading**
1.				
2.				
3.				

Signed ..... Date .....

Name ..... Position .....

Supplier .....

T2.2e: SCHEDULE OF KEY PERSONNEL

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

The Supplier is referred to clause C.2.1.3 of the Tender Data and shall insert in the spaces provided below details of the key personnel required to be in the employment of the Supplier or a specialist consultant/firm, in order for the Supplier to be eligible to submit a Tender for this project. The Curriculum Vitae of the individual must be appended to this schedule.

Notwithstanding having appended the Curriculum Vitae of the key personnel to this schedule, the Supplier must **also** append to this schedule in terms of clause C.2.1.3, a statement for the individual identified, which indicates any field(s) of specialization and any recent experience that is relevant to this particular project (which may or may not have formed part of the individual's CV). Suppliers should indicate what particular aspect of the project the specialization or experience is relevant to.

Name	Qualifications	No. of Years Specified Experience

Signed ..... Date .....

Name ..... Position .....

Supplier .....

T2.2f: BANK RATING

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers must submit a bank rating from a recognized financial institution as required in clause C.2.1.4 of the Tender Data. The bank rating must be attached to this schedule. Failure to comply with the requirements of C.2.1.4 shall result in the Tender not being evaluated further.

T2.2g: SPECIFIC GOALS CLAIMED (CIPRO CERTIFICATE)

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers must attach CIPRO CERTIFICATE

T2.2n: RECORD OF ADDENDA TO SUPPLIER DOCUMENTS

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

We confirm that the following communications received from the Employer before the submission of this Supplier offer, amending the Tender documents, have been taken into account in this Supplier offer:

	Date	**Title or Details**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed ..... Date .....

Name ..... Position .....

Supplier .....

*This document must form part of the returnable schedules as it is referenced in the offer portion of the Form of Offer and Acceptance

T2.2u: CIDB grading Certificate - Proof of registration

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers must attach CIDB grading proof

T2.2v: CIPC – Company registration certificate

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Tenderer to submit necessary company registration certificate

T2.2y: Proof of Registration with Centralized Supplier Database

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers must attach Full CSD report

T2.2z: Valid Letter of Good Standing

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Tenderer to submit valid and up to date Letter of Good Standing certificate relevant to their services (COIDA)

T2.3: RETURNABLE SCHEDULES OR DOCUMENTS: ANNEXURES RELATED TO EVALUATION

□ □

Annexure A1: Method Statement (Generic)

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers are required to submit a method statement.

Annexure A2: Method Statement (Summary Task)

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers are required to submit a summary task. The summary task must indicate the major tasks and subtasks of the works. Contractor must indicate how they would approach the works to achieve the required outcomes from start to end of the project.

Annexure A3: Method Statement (Programme with Timelines and Resources)

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers are required to submit Programme with timelines such as a Gantt Chart (quarterly and biannual inspections) and planned resources (human resources and tools).

Annexure B1: Key Personnel Qualification (Maintenance/ Construction manager)

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers are required to submit proof of maintenance manager's experience (CV) and qualifications. All certified documents must not be older than three (3) months.

Maintenance Manager Mechanical/Electrical Engineering, Construction Project Management	**Educational Qualification:** Electrical / Mechanical Engineering Degree with Registration as per Act 43 of 2000 (Candidate Registration will not be accepted) **Experience**: Minimum 5 years in the management of HVAC equipment Maintenance. **OR**	Attached certified copies of qualification
	Educational Qualification: Electrical / Mechanical Engineering Diploma with Registration as per Act 43 of 2000 (Candidate Registration will not be accepted) **Experience**: Minimum 5 years in the management of HVAC equipment Maintenance.	Attached certified copies of qualification

Annexure B2: Key Personnel Qualification (Maintenance/ Construction supervisor)

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers are required to submit proof of maintenance supervisor's experience (CV) and qualifications.

All certified documents must not be older than three (3) months.

Construction Supervisor Mech./Elect. Engineering, Construction Project Management	**Educational Qualification:** Electrical / Mechanical Engineering Diploma **WITH** minimum 2 years post qualification experience on Maintenance Electrical / Mechanical Equipment. **OR**	Attached certified copies of qualification
	Trade certificate (Issued by the Department of Labour), or higher qualification **WITH** minimum 2 years post qualification experience on Maintenance Electrical / Mechanical Equipment.	Attached certified copies of qualification

Annexure B3: Key Personnel Qualification (OHS Safety officer)

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers are required to submit proof of OHS safety officer's experience (CV) and qualifications. All certified documents must not be older than three (3) months.

Annexure B4: Key Personnel Qualification (Skilled installation/maintenance Staff)

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers are required to submit proof of Skilled installation/maintenance staff experience (CV) and qualifications. All certified documents must not be older than three (3) months.

Annexure C1 Key personnel experience (Maintenance/ Construction manager) Attach CV

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Annexure C2 Key personnel experience (Maintenance/ Construction Supervisor) Attach CV

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Annexure C3 Key personnel experience (OHS Safety officer) Attach CV

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Annexure C4 Key personnel experience (Skilled installation staff) Attach CV

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Annexure C5: Proof of Business address

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers are required to submit proof of business address (municipal account or valid lease agreement not later than 3 months). All certified documents must not be older than three (3) months.

Annexure C6: Company Experience

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Suppliers are required to submit proof of company experience in Electrical and Mechanical equipment installation and maintenance industry.

T2.2x: References

Reference No. 1

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Sir/Madam,

We are in the process of evaluating _____for the above project.

They have listed you as a reference. Please evaluate the Suppliers performance on the criteria listed below by ticking the appropriate boxes. Please return upon completion as soon as possible. If you have any questions please do not hesitate to contact us.

Tenderers are required to submit work experience that has minimum value of R 3 million in the last 5 years.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD (Start and End Date)	VALUE OF WORK (>/= R3mil)

1. **QUALITY**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

2. **TIME PERFORMANCE**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

3. **FINANCIAL PERFORMANCE**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

4. **COMMENTS:**

_____
_____

Project Manager/Principal Agent: _____

Tel. No: _____

E-mail Address: _____

Signature: _____Date: _____

Place Company Stamp Here

Reference No. 2

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Sir/Madam,

We are in the process of evaluating _____for the above project.

They have listed you as a reference. Please evaluate the Suppliers performance on the criteria listed below by ticking the appropriate boxes. Please return upon completion as soon as possible. If you have any questions please do not hesitate to contact us.

Tenderers are required to submit work experience that has minimum value of R 3 million in the last 5 years.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD (Start and End Date)	VALUE OF WORK (>/= R3mil)

1. **QUALITY**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

2. **TIME PERFORMANCE**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

3. **FINANCIAL PERFORMANCE**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

4. **COMMENTS:**

_____

_____

Project Manager/Principal Agent:

Tel. No: _____

E-mail Address: _____

Signature: _____Date: _____

Place Company Stamp Here

Reference No. 3

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Sir/Madam,

We are in the process of evaluating _____for the above project.

They have listed you as a reference. Please evaluate the Suppliers performance on the criteria listed below by ticking the appropriate boxes. Please return upon completion as soon as possible. If you have any questions please do not hesitate to contact us.

Tenderers are required to submit work experience that has minimum value of R 3 million in the last 5 years.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD (Start and End Date)	VALUE OF WORK (>/= R3mil)

1. **QUALITY**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

2. **TIME PERFORMANCE**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

3. **FINANCIAL PERFORMANCE**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

4. **COMMENTS:**

_____

_____

Project Manager/Principal Agent:

Tel. No: _____

E-mail Address: _____

Signature: _____Date: _____

Place Company Stamp Here

Reference No. 4

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Sir/Madam,

We are in the process of evaluating _____for the above project.

They have listed you as a reference. Please evaluate the Suppliers performance on the criteria listed below by ticking the appropriate boxes. Please return upon completion as soon as possible. If you have any questions please do not hesitate to contact us.

Tenderers are required to submit work experience that has minimum value of R 3 million in the last 5 years.

NAME OF EMPLOYER	NAME OF PROJECT	CONTRACT PERIOD (Start and End Date)	VALUE OF WORK (>/= R3mil)

1. **QUALITY**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

2. **TIME PERFORMANCE**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

3. **FINANCIAL PERFORMANCE**

EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
5	4	3	2	1

4. **COMMENTS:**

_____

_____

Project Manager/Principal Agent:

Tel. No: _____

E-mail Address: _____

Signature: _____Date: _____

Place Company Stamp Here

VOLUME 3: CONTRACT

PART C1: AGREEMENT AND CONTRACT DATA

C1.1 FORM OF OFFER AND ACCEPTANCE (SIGNED)

OFFER

The Employer, identified in the acceptance signature block, has solicited offers to enter into a Contract for the procurement of:

CONTRACT NUMBER: SCMU3-24/25-0659-HO

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES

The Tenderer, identified in the offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the tender schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the Tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

The offered total of the prices inclusive of Value-Added Tax is:

……

……

…….. Rand (in words)

R…….. (in figures)

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in terms of the Conditions of Contract identified in the Contract data.

For and on behalf of the Tenderer:

Name ……

Capacity ……

Signature …… Date: ……...

Name and address of tenderer:

……

……

……

Witness Name ……

Witness Signature …… Date: ……...

ACCEPTANCE

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

The terms of the Contract are contained in:

Part C1: Agreements and Contract data (which includes this agreement)
Part C2: Pricing data
Part C3: Scope of work
Part C4: Site Information and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto, as listed in the returnable schedules as well as any changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule, which must be duly signed by the authorised representative(s) of both parties.

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the schedule of deviations (if any). Unless the Tenderer (now Contractor), within five (5) working days of the date of such receipt, notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding Contract between the parties.

For and on behalf of the Employer:

Name ……

Capacity ……

Signature …… Date: ……...

Name and address of employer:

……

……

……

Witness Name ……

Witness Signature …… Date: ……...

SCHEDULE OF DEVIATIONS

Notes:

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

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

Subject
……
Details
……

……
Subject
……
Details
……

……
Subject
……
Details
……

……
Subject
……
Details
……

……
Subject
……
Details
……

……
Subject
……
Details
……

……

By the duly authorized representatives signing this schedule of deviations, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or change to the

terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the Contract between the parties arising from this agreement.

Part 1– Data provided by the Employer

Clause	Statement	Data
1. General		
	The conditions of contract are the core clauses and the clauses for main Option:	A Priced contract with price list
	dispute resolution Option and secondary Options	W1 Dispute resolution procedure
		X1 Price adjustment for inflation
		X13 Performance Bond
		X17 Low service damages
		X18 Limitation of liability
		X19 Task Order
		X20 Key Performance Indicators
	of the NEC3 Term Service Contract (April 2013)	

10.1	The Employer is (name):	Eastern Cape Department of Health
	Address	Department of Health Global Life Centre Corner Phalo Avenue and R63 (opposite Engen garage) Bhisho 5605
	Represented By:	Mr Lamkelo Mdingi
	Tel No.	
	Fax No.	

10.1	The Service Manager is (name):	Lukhozi Consortium
	Tel e-mail	
	The Service Manager is (name):	Mr Bruce Maliti
11.2(2)	The Affected Property is	Chris Hani and Joe Gqabi District Health Facilities in the Eastern Cape Province as per Service Information
11.2(13)	The service is	SCHEDULED MAINTENANCE OF THEATRE HVAC 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.
12.2	The law of the contract is the law of	the Republic of South Africa
13.1	The language of this contract is	English
13.2	The period for reply is	7 days

2. The Contractor's responsibility (If the optional statement for this section is not used, no data will be required for this section)		
21.1	The Contractor submits a first Plan for	2 weeks of the Contract Date acceptance within

3. Time		
30.1	The starting date is	at the Site Handover Meeting Date.
30.2	The service period is	36 Months.

4. Testing and defects	Special testing may be requested by the Service Manager.

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

7. Use of Equipment Plant and Materials	No data is required for this section of the conditions of contract.

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	R 5 000 000.00
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	R 5 000 000.00
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:	R 5 000 000.00
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 that R 5 000 000.00
9. Termination		No data is required for this section of the conditions of contract.
10. Data for main Option Clauses		
A	Priced Contract with Price List	Option A
20.5	The Contractor prepares forecasts of the final total of the Prices for the whole of the service at intervals of no longer than	4 Weeks
11. Data for Option W1		
W1.1	The Adjudicator is (Name) Address Tel. No, Fax No. Email	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.saice.org.za)
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. Data for Secondary Option Clauses

X1 Price Adjustment for Inflation

X1.1 The base date for indices is Tender Closing Date

The proportions used to calculate the Price Adjustment Factor are:

Note: Requirements for CPA/Price inflation is that Prices must 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

Proportion	Linked to Index for	Index prepared by (Source)
	Non-Adjustable**	
100%		

X13 Performance Bond

X13.1 The Contractor gives the Employer a performance bond — The Tenderer must provide a Performance Bond in the form of a Fixed Performance Guarantee by means of a Bank Guarantee, or from an Insurer approved by the Service Manager, in the amount of 2.5% of the Awarded Contract Value, once the Contract has been awarded to him. This Bond must be given to the Employer with in four (4) weeks of the Contract Date.

X17 Low Service Damages

X17.1 The service level table is in — As per Demerit Table in Contact Data – Annexure CD1

X18 Limitation of Liability

X18.1 The Contractor's liability to the Employer for indirect or consequential loss is limited to — R0.0 (zero Rand)

X18.2 For any one event, the Contractor's liability to the Employer for loss of or damage to the Employer's property is limited to — R2 500 000.00

X18.3 The Contractor's liability for Defects due to his design of an item of Equipment is limited to — The greater of
- the total of the Prices at the Contract Date And
- R2 500 000

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.
X20	Key Performance Indicators	Key performance Indicators will be used to monitor Contractor performance on a monthly basis

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)	The 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

11.2(19) The tendered total of the Prices is

X1 Price adjustment for inflation

X1.1

Proportion	Linked to Index for	Index prepared by (Source)
	Non-Adjustable**	
100%		

Annexure CD1 – Demerit Table and Penalty Calculation System

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

Attach document here

ANNEXURE CD1: 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 NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

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.

C1.3: FIXED PERFORMANCE GUARANTEE

Project title:	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
Bid No:	**SCMU3-24/25-0659-HO**

With reference to the contract between _____

_____(hereinafter

referred to as the "**contractor**") and the Eastern Cape Department of Health

(hereinafter referred to as the **"employer"**).**Contract No** for the

……
……. (hereinafter referred to as the **"Contract"**)

in the amount of R_____**,**

_____**(in words),**

(hereinafter referred to asthe **"contract sum".)**

I/We, _____

in my/our capacity as_____and hereby

representing_____(hereinafter referred to as

the **"guarantor"**) advisethat the **guarantor** holds at the **employer's** disposal the

sum of

R_____**,** (_____**)** being **2.5%** of the

contract sum (excluding VAT), for the due fulfilment of the contract.

The **guarantor** hereby renounces the benefits of the exceptions *non numeratae pecunia, non causa debiti; excussionis et divisionis*; and all other exceptions which could be pleaded against the enforcement of this guarantee, with the meaning and effect whereof I/we declare myself/ourselves to be conversant, and undertake to pay the **employer** the amount guaranteed, during the period when the claim is received by the **guarantor**, on receipt of a written demand from the **employer** to do so, and which demand the **employer** may make if the **employer** has a right of recovery against the **contractor** in terms of X13 of the contract.

Subject to the above, but without in any way detracting from the **employer's** rights to adopt any of the procedures provided for in the contract, the said demand can be made by the **employer**, at any stage prior to the expiry of this guarantee.

The amount paid by the **guarantor** in terms of this guarantee may be retained by the

employer on condition that upon the issue of the last final **payment certificate**, the **employer** shall account to the **guarantor** showing how this amount has been expended and refund any balance due to the **guarantor.**

The **employer** shall have the absolute right to arrange his affairs with the **contractor** in any manner which the **employer** deems fit and the **guarantor** shall not have the right to claim his release on account of any conduct alleged to be prejudicial to the **guarantor.** Without derogating from the aforegoing, any compromise, extension of the **construction period**, indulgence, release or variation of the **contractor's** obligation shall not affect the validity of this guarantee.

This undertaking is neither negotiable nor transferable, and

must be surrendered to the **guarantor** at the time when the **employer** accounts to the **guarantor** in terms of clause 4 above, or
shall lapse on the date of the last **certificate of practical completion;** and
shall not be interpreted as extending the **guarantor's** liability to anything more than payment of the amount guaranteed.

SIGNED AT_____ON THIS_____DAY OF_____201_

AS WITNESS

1. _____

2. _____

_____

By and on behalf of

_____

_____

_____

(insert the name and physical

address of the guarantor) NAME: _____

CAPACITY: _____
(duly authorized thereto by resolution attached marked Annexure A)

DATE: _____

No alterations and/or additions of the wording of this form will be accepted.

The physical address of the guarantor must be clearly indicated and will be regarded as the guarantor's *domicilium citandi et executandi,* for all purposes arising from this guarantee.

This GUARANTEE must be returned to:

_____

_____

_____

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

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

The …… (day) of …… (month) …… (year)

At ……...(place)

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

The …… (day) of …… (month) …… (year)

For and on behalf of the Contractor:

Name ……

Capacity ……

Signature …… Date: ……...

Witness Name ……

Witness Signature …… Date:……...

PART C2-1: PRICING DATA

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

C2.1 Pricing Data

GENERAL NOTES

1 Documents
The Schedule of Quantities form part of the Document and must be read in conjunction with the other parts forming the Document in order to gain the full meanings of the descriptions of the work to be done and materials and equipment to be used.

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

3 Issue of Schedule of Quantities in Electronic Format
The Engineers will make the Schedule of Quantities available to Tenderers in electronic (Microsoft Excel Workbook) format, upon request.

If utilised for tender submission, the Tenderer will be responsible for ensuring the correctness of all calculations. The Consulting Electrical Engineers cannot be held responsible for any arithmetic inaccuracies in the electronic Schedule of Quantities.

4 Pages
Before submitting his Tender, the Tenderer must check to ensure all pages have been included and are distinct. Should any obvious errors be found the Engineer is to be notified immediately to have them corrected as no liability whatsoever will be admitted by the Engineer in respect of errors in the Tender due to the foregoing.

5 Responsibility
The responsibility for the accuracy of the quantities written into the Schedule of Quantities remains with the person who prepared the Schedule of Quantities. The Tenderer shall be relieved of the responsibility of measuring quantities at the Tender stage, and the Tender Price submitted shall be in respect of the quantities set out in the Schedule of Quantities.

The Tenderer will be required to make his assessment of items such as brackets, fixings, etc., from details stated in the Schedule of Quantities and shall make allowances therefore within the rates tendered.

Tenderers shall make due allowance in their rates for any item of incidental or contingent work, labour and materials not contained in the Schedule of Quantities, but deemed necessary for the successful completion of the Works.

6 Offered rates in the Schedule of Quantities
The rates in the Schedule of Quantities shall be final and no further adjustment will be made.

7 Currency
All the offered rates in the Schedule of Quantities shall be in South African Rands (R). Any items purchased overseas must be converted to local currency with all exchange rates and export charges.

8 Unit Rates

Unless a separate rate for the supply and the installation of any item is specifically called for, the supply and installation costs of any items shall be fully included in the unit price.

The description of each item shall, unless otherwise stated herein, be held to include making, conveying and delivering, unloading, storing, unpacking, hoisting, setting, fitting and fixing in position, cutting and waste, patterns, models and templates plant, temporary works, return of water establishment charges, profit and all other obligations arising out of the Conditions of Contract.

9 Variations

Variations in the scope and extent of the work included in the Schedule of Quantities shall be allowed in order to meet the Employer's requirements and shall be measured and costed at the rates entered in the Schedule of Quantities, where appropriate, forming an addition to or deduction from the total of the Schedule of Quantities. Any items or variations for which rates have not been added in the Schedule of Quantities shall be agreed and priced as non-scheduled items in accordance with the provisions of the contract.

The rules governing the extent and costing of the variations shall be those provided for in the Conditions of Contract and Variations to Sub-contract.

Variations to the planning before the work has been executed shall be priced as above. Alterations to work already executed cannot necessarily be priced as above and must be reviewed on its merits.

The appropriate portions of the Preliminary & General Costs are to be adjusted proportionately to the nett additions or omissions of the variations to the contract

10 Preliminary and General

Tenderers are to note that no allowances have been made in the Schedules of Quantities for the pricing of "Preliminary & General" items.

Tenderers shall therefore, include the "Preliminary & General" component of their Tender Price in their tendered rates for the respective items of equipment / Work.

11 Provisional Sums

All Provisional Sums shall be expended only as directed by the Client and Engineer and any balance remaining shall be deducted from the amount of the Sub-contract sum. No work for which Provisional Sums are provided shall be commenced without written instructions from the Engineer.

All Provisional Sums may be utilised in full or in part. These Provisional Sums may be deleted in full or in part if not required.

12 Contingency Sums

All Contingency Sums shall be expended only as directed by the Client and Engineer. No work for which Contingency Sums are provided shall be commenced without written instructions from the Engineer.

All Contingency Sums may be utilised in full or in part. These Contingency Sums may be deleted in full or in part if not required.

13 Dayworks

The rates included for daywork shall not form part of the Tender Price, but Tenderers shall note that this item must be regarded as provisional and will only be payable to the Sub-contractor if and when a written order to this effect has been issued.

14 Value Added Tax

This Schedule of Quantities shall be priced nett, excluding VAT.

VAT shall only be added at the Summary at the end of the Schedule of Quantities for the Principal Contract.

15 Adjustment
The Employer reserves the right to adjust arithmetical errors in the extension of rates and totals in the Tender, and the Tenderer will be informed of the effect of any corrections on his Tender Sum prior to the award of the Contract. In no case will tendered rates be adjusted when correcting such errors.

In the event of there being tendered rates or prices which are declared by the Employer to be unacceptable to him, because they are either excessively low or high or not in proper balance with other rates, the Tenderer may be required to produce evidence and advance arguments in support of the tendered rates or prices objected to. If after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or prices objected to, he may request the Tenderer to amend these rates and prices along the lines indicated by him.

The Tenderer may or may not thereupon alter and amend the rates and prices objected to and such other related prices as are agreed to by the Employer. Should the Tenderer fail to amend his Tender in a manner acceptable to the Employer, or at all, it may prejudice his Tender.

In the case of Tenders with Schedule of Quantities, the total corrected Tender Price in the Tender Form shall constitute the Sub-contract Sum. Tenderers are advised to check their extensions and additions. In the case of a Lump Sum Tender, the original uncorrected Tender Price shall be considered. The Engineer shall negotiate adjustments to the rates tendered in order to correct the arithmetical extension or addition, whilst the Tender Price as submitted, remains unaltered.

In either case, the Tenderer shall be notified of any arithmetical error in his Tender, and shall be given the opportunity to withdraw the Tender at this stage.

16 Quantification
The successful Tenderer and the Employer or his Agent may agree that the total of any Schedule, including any variations by way of additions thereto or deductions there from, represents a fair and accurate quantification of the items set out in the Schedule of Quantities and the parties may agree final payment on that basis. In the event of any dispute as to the quantities, the disputed item or items shall be adjusted where necessary.

17 Ordering
The quantities in this Schedule of Quantities shall not be used for ordering materials. The onus is on the successful Tenderer to order the correct quantities of materials as per the drawings.

18 Payment
The measurement and payment of Work done shall be made in accordance with the unit price rates, and rates of pay listed in the Schedule of Quantities. No payment will be made for any item of associated work not specifically detailed in the Schedule of Quantities.

PART C2-2: BILL OF QUANTITIES

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District: JOE GQABI & CHRIS HANI**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE NUMBER	DESCRIPTION	TENDER AMOUNT
1A-1	JOE GQABI & CHRIS HANI FIXED CHARGE AND VALUE RELATED ITEMS APPLICABLE TO ALL WORK	
1A-2	JOE GQABI & CHRIS HANI FIXED CHARGE AND VALUE RELATED ITEMS APPLICABLE TO ALL WORK (continued)	
2A-1	JOE GQABI & CHRIS HANI WHITTLESEA CHC THEATRE HVAC	
2A-2	JOE GQABI & CHRIS HANI CRADOCK HOSPITAL THEATRE HVAC	
2A-3	JOE GQABI & CHRIS HANI WILHELM STAHL (MIDDLEBURG) HOSPITAL THEATRE HVAC	
2A-4	JOE GQABI & CHRIS HANI COFIMVABA HOSPITAL THEATRE HVAC	
2A-5	JOE GQABI & CHRIS HANI FRONTIER THEATRE HVAC	
2A-6	JOE GQABI & CHRIS HANI GLEN GREY HOSPITAL THEATRE HVAC	
2A-7	JOE GQABI & CHRIS HANI ELLIOT HOSPITAL THEATRE HVAC	
2A-8	JOE GQABI & CHRIS HANI ALL SAINTS HOSPITAL THEATRE HVAC	
2A-9	JOE GQABI & CHRIS HANI BURGERSDORP HOSPITAL THEATRE HVAC	
2A-10	JOE GQABI & CHRIS HANI ALIWAL NORTH HOSPITAL THEATRE HVAC	
2A-11	JOE GQABI & CHRIS HANI CLOETE JOUBERT HOSPITAL THEATRE HVAC	
2A-12	JOE GQABI & CHRIS HANI MACLEAR HOSPITAL THEATRE HVAC	
2A-13	JOE GQABI & CHRIS HANI EMPILISWENI HOSPITAL THEATRE HVAC	
2A-14	JOE GQABI & CHRIS HANI UMLAMLI HOSPITAL THEATRE HVAC	
2A-15	JOE GQABI & CHRIS HANI LADY GREY HOSPITAL THEATRE HVAC	
2A-16	JOE GQABI & CHRIS HANI TYLOR BEQUEST HOSPITAL THEATRE HVAC	
3	MAINTENANCE SERVICE SCHEDULE	
4	TERM REPAIRS SUBJECT TO APPROVAL OF QUOTATION OF THE WORKS	
SUBTOTAL AMOUNT OF WORKS (EXCL VAT)		
ALLOWANCE FOR VAT AT 15.0%		
TOTAL AMOUNT OF WORKS (INCL VAT) - ENTER THIS AMOUNT TO FORM OF OFFER		

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District: JOE GQABI & CHRIS HANI**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE 1A-1: **FIXED CHARGE AND VALUE RELATED ITEMS APPLICABLE TO ALL WORK**

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	**GM 2.5**	**COMPLIANCE:** Contract conditions, Sureties, traveling, allowance				
1,1		Whittlesea CHC	Item	1		
1,2		Cradock Hospital	Item	1		
1,3		Wilhelm Stahl (Middelburg) Hospital	Item	1		
1,4		Cofimvaba Hospital	Item	1		
1,5		Frontier Hospital	Item	1		
1,6		Glen Grey Hospital	Item	1		
1,7		Elliot Hospital	Item	1		
1,8		All Saints Hospital	Item	1		
1,9		Burgersdorp Hospital	Item	1		
1,10		Aliwal North Hospital	Item	1		
1,11		Cloete Joubert	Item	1		
1,12		Maclear Hospital	Item	1		
1,13		Empilisweni Hospital	Item	1		
1,14		Umlamli Hospital	Item	1		
1,15		Lady Grey Hospital	Item	1		
1,16		Taylor Bequest Hospital	Item	1		
2	**GM 2.5 & 3.2**	**SITE ESTABLISHMENT, STORAGE FACILITIES, DE-ESTABLISHMENT (**Cleaning and tiding up after completion**)**				
2,1		Whittlesea CHC	Item	1		
2,2		Cradock Hospital	Item	1		
2,3		Wilhelm Stahl (Middelburg) Hospital	Item	1		
2,4		Cofimvaba Hospital	Item	1		
2,5		Frontier Hospital	Item	1		
2,6		Glen Grey Hospital	Item	1		
2,7		Elliot Hospital	Item	1		
2,8		All Saints Hospital	Item	1		
2,9		Burgersdorp Hospital	Item	1		
2,10		Aliwal North Hospital	Item	1		
2,11		Cloete Joubert	Item	1		
2,12		Maclear Hospital	Item	1		
2,13		Empilisweni Hospital	Item	1		
2,14		Umlamli Hospital	Item	1		
2,15		Lady Grey Hospital	Item	1		
2,16		Taylor Bequest Hospital	Item	1		
3	**GM 2.7**	**COMPILING OF OPERATING AND MAINTENANCE MANUALS :** Compile three sets of O&M Manuals per site, this includes As-built drawings.				
3,1		Whittlesea CHC	Item	1		
3,2		Cradock Hospital	Item	1		
3,3		Wilhelm Stahl (Middelburg) Hospital	Item	1		
3,4		Cofimvaba Hospital	Item	1		

3,5		Frontier Hospital	Item	1		
3,6		Glen Grey Hospital	Item	1		
3,7		Elliot Hospital	Item	1		
3,8		All Saints Hospital	Item	1		
3,9		Burgersdorp Hospital	Item	1		
3,1		Aliwal North Hospital	Item	1		
3,11		Cloete Joubert	Item	1		
3,12		Maclear Hospital	Item	1		
3,13		Empilisweni Hospital	Item	1		
3,14		Umlamli Hospital	Item	1		
3,15		Lady Grey Hospital	Item	1		
3,16		Taylor Bequest Hospital	Item	1		
TOTAL CARRIED FORWARD TO SUMMARY						

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4	**SS 8 & 9**	**OPERATOR AND MAINTAINER TRAINING :** Provide Operator and Maintainer training				
4,1		Whittlesea CHC	Hrs	4,5		
4,2		Cradock Hospital	Hrs	4,5		
4,3		Wilhelm Stahl (Middelburg) Hospital	Hrs	4,5		
4,4		Cofimvaba Hospital	Hrs	4,5		
4,5		Frontier Hospital	Hrs	4,5		
4,6		Glen Grey Hospital	Hrs	4,5		
4,7		Elliot Hospital	Hrs	4,5		
4,8		All Saints Hospital	Hrs	4,5		
4,9		Burgersdorp Hospital	Hrs	4,5		
4,10		Aliwal North Hospital	Hrs	4,5		
4,11		Cloete Joubert	Hrs	4,5		
4,12		Maclear Hospital	Hrs	4,5		
4,13		Empilisweni Hospital	Hrs	4,5		
4,14		Umlamli Hospital	Hrs	4,5		
4,15		Lady Grey Hospital	Hrs	4,5		
4,16		Taylor Bequest Hospital	Hrs	4,5		
5	**GM 2.15**	**ENVIRONMENTAL MANAGEMENT PLAN :** The Contractor must compile a basic Environmental plan specific to the type of work that he will be performing at the Health Facilities as per C3.2	Item	16		
6	**GM 2.15**	**OCCUPATIONAL HEALTH AND SAFETY ACT COMPLIANCE COST :** The Contractor must comply to the project Health and Safety Specification specific to the type of work that he will be performing on site as per C3.2	Month	36		
7	**Clause 83.1**	**INSURANCE : LIMITATION OF LIABILITY** (Amounts applicable for whole Contract)				
7.1		Provision for General Contractor's Insurance (Minimum liability limit must be equal to **R2,000 000**) to cover requirements of Clause 83.1 in Contract Data	Month	36		
8	**X13**	**PERFORMANCE BOND** (Amounts applicable for whole Contract)				
8,1		Provision for a Performance bond of not less than **2,5%** of the Tender Value	Month	36		
9		**INSPECTION BY SPECIALISTS**				
5	**GM 3**	**MAINTENANCE CONTROL PLAN** : Compiling of a detailed Maintenance Control Plan for each Health Facility included in this Tender (See SS 3 for facility listing)				
5,1		Whittlesea CHC	item	1		
5,2		Cradock Hospital	item	1		
5,3		Wilhelm Stahl (Middelburg) Hospital	item	1		
5,4		Cofimvaba Hospital	item	1		
5,5		Frontier Hospital	item	1		
5,6		Glen Grey Hospital	item	1		
5,7		Elliot Hospital	item	1		
5,8		All Saints Hospital	item	1		
5,9		Burgersdorp Hospital	item	1		
5,10		Aliwal North Hospital	item	1		
5,11		Cloete Joubert	item	1		
5,12		Maclear Hospital	item	1		
5,13		Empilisweni Hospital	item	1		
5,14		Umlamli Hospital	item	1		
5,15		Lady Grey Hospital	item	1		
5,16		Taylor Bequest Hospital	item	1		
6	**SS15**	**IN-SERVICE TRAINING OF GRADUATES AND INTERNS :** Provisional Sum to pay the costs associated with employing nominated Interns and Graduates for the duration of the Contract				
6.1		Interns	Months	36	R 6 000,00	R 216 000,00
6.2		Interns	Months	36	R 6 000,00	R 216 000,00
6.3		Graduates	Months	36	R 8 000,00	R 288 000,00
6.4		Graduates	Months	36	R 8 000,00	R 288 000,00
6.5		Direct Fee Percentage (Mark-up) to be charged by Contractor on amount above	%			
7	**SS16**	**PROVISION OF ASSET APPLICABLE ACCREDITED TRAINING :** Arranging of Accredited Asset Applicable Training for Operating and Maintenance Staff as per SS16	Psum	1	R 345 000,00	R 345 000,00
7.1	Clause 11.2(8)	Direct Fee Percentage (Mark-up) to be charged by Contractor on amount above	%			
TOTAL CARRIED FORWARD TO SUMMARY						

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)
CONTRACT REF. NO: SCMU3-24/25-0659-HO **Cluster/District: JOE GQABI & CHRIS HANI**
ASSET TYPE: HVAC THEATRE
SCHEDULE 2A-1: WHITTLESEA CHC THEATRE HVAC

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Whittlesea hospital inclusive of all auxilliaries and ancilliaries**					
2.1		**HEAT RECOVERY CONDENSING UNITS**					
		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
2.1.1		20.6 kW Heat recovery condensing units	Unit	1			
2.2		**AIR HANDLING UNIT**					
2.2.1		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.3		**DUCTING**					
2.3.1		400x400 duct (Insulated)	m	30			
2.3.2		350x350 duct (Uninsulated)	m	20			
2.3.3		600x300 duct(Uninsulated)	m	20			
2.3.4		300x300(Uninsulated)	m	5			
2.3.5		300x400 duct (Insulated)	m	5			
2.3.6		150x400 (Insulated)	m	5			
2.3.7		315 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.11		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.12		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.13		**GENERAL**					
2.13.1		Deep cleaning of theatres	no.	1			
2.13.2		Particle count tests	no.	1			
2.13.3		Stripping of existing equipment	item	1			
2.13.4		Test and commissioning	item	1			
2.13.5		Allow provisional amount for builders work	Sum	1			R 100 000,00
2.13.5		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY PAGE 5 OF BOQ					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)
CONTRACT REF. NO: SCMU3-24/25-0659-HO **Cluster/District: JOE GQABI & CHRIS HANI**
ASSET TYPE: HVAC THEATRE
SCHEDULE 2A-1: CRADOCK HOSPITAL THEATRE HVAC

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Cradock hospital inclusive of all auxilliaries and ancilliaries**					
2.1		**HEAT RECOVERY CONDENSING UNITS**					
		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
2.1.1		20.6 kW Heat recovery condensing units	Unit	1			
2.2		**AIR HANDLING UNIT**					
2.2.1		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.3		**DUCTING**					
2.3.1		400x400 duct (Insulated)	m	30			
2.3.2		350x350 duct (Uninsulated)	m	20			
2.3.3		600x300 duct(Uninsulated)	m	20			
2.3.4		300x300(Uninsulated)	m	5			
2.3.5		300x400 duct (Insulated)	m	5			
2.3.6		150x400 (Insulated)	m	5			
2.3.7		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.11		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.12		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.13		**GENERAL**					
2.13.1		Deep cleaning of theatres	no.	1			
2.13.2		Particle count tests	no.	1			
2.13.3		Stripping of existing equipment	item	1			
2.13.4		Test and commissioning	item	1			
2.13.5		Allow provisional sum of R 100 000 for builder's work	sum	1			R 100 000,00
2.13.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY PAGE 6 OF BOQ					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District:** **JOE GQABI & CHRIS HANI**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE 2A-2: **WILHELM STAHL (MIDDLEBURG) HOSPITAL THEATRE HVAC**

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Wilhelm Stahl Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		**HEAT RECOVERY CONDENSING UNITS**					
		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
2.1.1		20.6 kW Heat recovery condensing units	Unit	1			
2.2		**AIR HANDLING UNIT**					
2.2.1		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.3		**DUCTING**					
2.3.1		400x400 duct (Insulated)	m	30			
2.3.2		350x350 duct (Uninsulated)	m	20			
2.3.3		600x300 duct(Uninsulated)	m	20			
2.3.4		300x300(Uninsulated)	m	5			
2.3.5		300x400 duct (Insulated)	m	5			
2.3.6		150x400 (Insulated)	m	5			
2.3.7		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		**Ducted Air Conditioning Unit**					
2.10.1		Ducted air conditioning unit heatpump ,filter boxes, attenuators, flexible ducting, spigots, disc difusers, intake louvres, fixing materials etc. as specified and shown on the drawings					
2.10.2		16.1kW or 55 000 Btu/hr	Unit	1			
2.10.3		300x300 duct (Insulated)	m	30			
2.10.4		250 diameter round duct	m	15			
2.10.5		150 diameter flexible round duct	m	8			
2.10.6		250 diameter constant flow diffusers	No.	4			
2.10.7		150 diameter disk valve	No.	1			
2.10.8		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.10.9		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.10.10		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.11		**GENERAL**					
2.11.1		Deep cleaning of theatres	no.	1			
2.11.2		Particle count tests	no.	1			
2.11.3		Stripping of existing equipment	item	1			
2.11.4		Test and commissioning	item	1			
2.11.5		Allow provisional sum of R100 000 for builder's work	Sum	1			R 100 000,00
2.11.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)
CONTRACT REF. NO: SCMU3-24/25-0659-HO **Cluster/District: JOE GQABI & CHRIS HANI**
ASSET TYPE: HVAC THEATRE

SCHEDULE 2A-2: COFIMVABA HOSPITAL THEATRE HVAC

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Cofimvaba hospital inclusive of all auxilliaries and ancilliaries**					
2.1		**HEAT RECOVERY CONDENSING UNITS**					
		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
2.1.1		20.6 kW Heat recovery condensing units	Unit	2			
2.2		**AIR HANDLING UNIT**					
2.2.1		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	2			
2.3		**DUCTING**					
2.3.1		400x400 duct (Insulated)	m	60			
2.3.2		350x350 duct (Uninsulated)	m	40			
2.3.3		600x300 duct(Uninsulated)	m	40			
2.3.4		300x300(Uninsulated)	m	10			
2.3.5		300x400 duct (Insulated)	m	6			
2.3.6		150x400 (Insulated)	m	6			
2.3.7		313 diameter round duct	m	16			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	8			
2.4.2		400x600 extract grilles	No.	8			
2.4.3		600x600 Weather louvres	No.	2			
2.4.4		150x150 fluff extracting grilles	No.	8			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	4			
2.5.2		400x400 90 degree bend	No.	6			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	2			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	2			
2.7.2		300x400 to 150x400 transition pieces	No.	2			
2.7.3		350x350 to 300x300 transition pieces	No.	2			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	2			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	2			
2.10		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.11		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.12		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.13		**GENERAL**					
2.13.1		Deep cleaning of theatres	no.	2			
2.13.2		Particle count tests	no.	2			
2.13.3		Stripping of existing equipment	item	2			
2.13.4		Test and commissioning	item	2			
2.13.5		Allow provisional sum of R100 000 for builder's work per theatre	Sum				R 200 000,00
2.13.6		Theatre control panel	item	2			
		TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)
CONTRACT REF. NO: SCMU3-24/25-0659-HO **Cluster/District: JOE GQABI & CHRIS HANI**
ASSET TYPE: HVAC THEATRE

SCHEDULE 2A-2: FRONTIER THEATRE HVAC

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Frontier Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		**HEAT RECOVERY CONDENSING UNITS**					
		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
2.1.1		20.6 kW Heat recovery condensing units	Unit	1			
2.2		**AIR HANDLING UNIT**					
2.2.1		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.3		**DUCTING**					
2.3.1		400x400 duct (Insulated)	m	30			
2.3.2		350x350 duct (Uninsulated)	m	20			
2.3.3		600x300 duct(Uninsulated)	m	20			
2.3.4		300x300(Uninsulated)	m	5			
2.3.5		300x400 duct (Insulated)	m	5			
2.3.6		150x400 (Insulated)	m	5			
2.3.7		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.11		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.12		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.13		**GENERAL**					
2.13.1		Deep cleaning of theatres	no.	1			
2.13.2		Particle count tests	no.	1			
2.13.3		Stripping of existing equipment	item	1			
2.13.4		Test and commissioning	item	1			
2.13.5		Allow provisional sum of R100 000 for builder's work	sum	1			R 200 000,00
2.13.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)
CONTRACT REF. NO: SCMU3-24/25-0659-HO **Cluster/District: JOE GQABI & CHRIS HANI**
ASSET TYPE: HVAC THEATRE

SCHEDULE 2A-2: GLEN GREY HOSPITAL THEATRE HVAC

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Fort Beaufort hospital inclusive of all auxilliaries and ancilliaries**					
2.1		**HEAT RECOVERY CONDENSING UNITS**					
		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
2.1.1		20.6 kW Heat recovery condensing units	Unit	1			
2.2		**AIR HANDLING UNIT**					
2.2.1		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.3		**DUCTING**					
2.3.1		400x400 duct (Insulated)	m	30			
2.3.2		350x350 duct (Uninsulated)	m	20			
2.3.3		600x300 duct(Uninsulated)	m	20			
2.3.4		300x300(Uninsulated)	m	5			
2.3.5		300x400 duct (Insulated)	m	5			
2.3.6		150x400 (Insulated)	m	5			
2.3.7		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.11		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.12		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.13		**GENERAL**					
2.13.1		Deep cleaning of theatres	no.	1			
2.13.2		Particle count tests	no.	1			
2.13.3		Stripping of existing equipment	item	1			
2.13.4		Test and commissioning	item	1			
2.13.5		Allow provisional sum of R100 000 for builder's work	sum	1			R 100 000,00
2.13.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)
CONTRACT REF. NO: SCMU3-24/25-0659-HO **Cluster/District: JOE GQABI & CHRIS HANI**
ASSET TYPE: HVAC THEATRE

SCHEDULE 2A-2: ELLIOT HOSPITAL THEATRE HVAC

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Elliot Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		**HEAT RECOVERY CONDENSING UNITS**					
		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
2.1.1		20.6 kW Heat recovery condensing units	Unit	1			
2.2		**AIR HANDLING UNIT**					
2.2.1		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.3		**DUCTING**					
2.3.1		400x400 duct (Insulated)	m	30			
2.3.2		350x350 duct (Uninsulated)	m	20			
2.3.3		600x300 duct(Uninsulated)	m	20			
2.3.4		300x300(Uninsulated)	m	5			
2.3.5		300x400 duct (Insulated)	m	5			
2.3.6		150x400 (Insulated)	m	5			
2.3.7		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.11		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.12		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.13		**GENERAL**					
2.13.1		Deep cleaning of theatres	no.	1			
2.13.2		Particle count tests	no.	1			
2.13.3		Stripping of existing equipment	item	1			
2.13.4		Test and commissioning	item	1			
2.13.5		Allow provisional sum of R100 000 for builder's work					R 200 000,00
2.13.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)
CONTRACT REF. NO: SCMU3-24/25-0659-HO **Cluster/District: JOE GQABI & CHRIS HANI**
ASSET TYPE: HVAC THEATRE

SCHEDULE 2A-2: ALL SAINTS HOSPITAL THEATRE HVAC

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at All Saints Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		**HEAT RECOVERY CONDENSING UNITS**					
		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
2.1.1		20.6 kW Heat recovery condensing units	Unit	1			
2.2		**AIR HANDLING UNIT**					
2.2.1		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.3		**DUCTING**					
2.3.1		400x400 duct (Insulated)	m	30			
2.3.2		350x350 duct (Uninsulated)	m	20			
2.3.3		600x300 duct(Uninsulated)	m	20			
2.3.4		300x300(Uninsulated)	m	5			
2.3.5		300x400 duct (Insulated)	m	5			
2.3.6		150x400 (Insulated)	m	5			
2.3.7		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.11		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.12		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.13		**GENERAL**					
2.13.1		Deep cleaning of theatres	no.	1			
2.13.2		Particle count tests	no.	1			
2.13.3		Stripping of existing equipment	item	1			
2.13.4		Test and commissioning	item	1			
2.13.5		Allow provisional sum of R100 000 for builder's work	sum	1			R 100 000,00
2.13.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)
CONTRACT REF. NO: SCMU3-24/25-0659-HO **Cluster/District: JOE GQABI & CHRIS HANI**
ASSET TYPE: HVAC THEATRE

SCHEDULE 2A-2: BURGERSDORP HOSPITAL THEATRE HVAC

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Burgersdorp Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		**HEAT RECOVERY CONDENSING UNITS**					
		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
2.1.1		20.6 kW Heat recovery condensing units	Unit	1			
2.2		**AIR HANDLING UNIT**					
2.2.1		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.3		**DUCTING**					
2.3.1		400x400 duct (Insulated)	m	30			
2.3.2		350x350 duct (Uninsulated)	m	20			
2.3.3		600x300 duct(Uninsulated)	m	20			
2.3.4		300x300(Uninsulated)	m	5			
2.3.5		300x400 duct (Insulated)	m	3			
2.3.6		150x400 (Insulated)	m	3			
2.3.7		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.11		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.12		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.13		**GENERAL**					
2.13.1		Deep cleaning of theatres	no.	1			
2.13.2		Particle count tests	no.	1			
2.13.3		Stripping of existing equipment	item	1			
2.13.4		Test and commissioning	item	1			
2.13.5		Allow provisional sum of R100 000 for builder's work	Sum	1			R 100 000,00
2.13.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)
CONTRACT REF. NO: SCMU3-24/25-0659-HO **Cluster/District: JOE GQABI & CHRIS HANI**
ASSET TYPE: HVAC THEATRE

SCHEDULE 2A-2: ALIWAL NORTH HOSPITAL THEATRE HVAC

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Fort Beaufort hospital inclusive of all auxilliaries and ancilliaries**					
2.1		**HEAT RECOVERY CONDENSING UNITS**					
		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
2.1.1		20.6 kW Heat recovery condensing units	Unit	1			
2.2		**AIR HANDLING UNIT**					
2.2.1		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.3		**DUCTING**					
2.3.1		400x400 duct (Insulated)	m	30			
2.3.2		350x350 duct (Uninsulated)	m	20			
2.3.3		600x300 duct(Uninsulated)	m	20			
2.3.4		300x300(Uninsulated)	m	5			
2.3.5		300x400 duct (Insulated)	m	5			
2.3.6		150x400 (Insulated)	m	5			
2.3.7		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.11		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.12		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.13		**GENERAL**					
2.13.1		Deep cleaning of theatres	no.	1			
2.13.2		Particle count tests	no.	1			
2.13.3		Stripping of existing equipment	item	1			
2.13.4		Test and commissioning	item	1			
2.13.5		Allow provisional sum of R100 000 for builder's work	sum	1			R 100 000,00
2.13.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District:** **JOE GQABI & CHRIS HANI**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE 2A-2: **CLOETE JOUBERT HOSPITAL THEATRE HVAC**

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Cloete Joubert Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
		20.6 kW Heat recovery condensing units	Unit	1			
2.1.1		**AIR HANDLING UNIT**					
		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.2		**DUCTING**					
2.2.1		400x400 duct (Insulated)	m	30			
		350x350 duct (Uninsulated)	m	20			
2.3		600x300 duct(Uninsulated)	m	20			
2.3.1		300x300(Uninsulated)	m	5			
2.3.2		300x400 duct (Insulated)	m	5			
2.3.3		150x400 (Insulated)	m	5			
2.3.4		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		**Ducted Air Conditioning Unit**					
2.10.1		Ducted air conditioning unit heatpump ,filter boxes, attenuators, flexible ducting, spigots, disc difusers, intake louvres, fixing materials etc. as specified and shown on the drawings					
2.10.2		16.1kW or 55 000 Btu/hr	Unit				
2.10.3		300x300 duct (Insulated)	m				
2.10.4		250 diameter round duct	m	1			
2.10.5		150 diameter flexible round duct	m	1			
2.10.6		250 diameter constant flow diffusers	No.	1			
2.10.7		150 diameter disk valve	No.	1			
2.10.8		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.		1			
2.10.9		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.10.10		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.11		**GENERAL**					
2.11.1		Deep cleaning of theatres	no.	1			
2.11.2		Particle count tests	no.	1			
2.11.3		Stripping of existing equipment	item	1			
2.11.4		Test and commissioning	item	1			
2.11.5		Allow provisional sum of R100 000 for builder's work	sum	1			R 100 000,00
2.11.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY PAGE 15 OF BOQ					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District:** **JOE GQABI & CHRIS HANI**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE 2A-2: **MACLEAR HOSPITAL THEATRE HVAC**

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Maclear Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
		20.6 kW Heat recovery condensing units	Unit	1			
2.1.1		**AIR HANDLING UNIT**					
		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.2		**DUCTING**					
2.2.1		400x400 duct (Insulated)	m	30			
		350x350 duct (Uninsulated)	m	20			
2.3		600x300 duct(Uninsulated)	m	20			
2.3.1		300x300(Uninsulated)	m	5			
2.3.2		300x400 duct (Insulated)	m	5			
2.3.3		150x400 (Insulated)	m	5			
2.3.4		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		**Ducted Air Conditioning Unit**					
2.10.1		Ducted air conditioning unit heatpump ,filter boxes, attenuators, flexible ducting, spigots, disc difusers, intake louvres, fixing materials etc. as specified and shown on the drawings					
2.10.2		16.1kW or 55 000 Btu/hr	Unit	1			
2.10.3		300x300 duct (Insulated)	m	1			
2.10.4		250 diameter round duct	m	1			
2.10.5		150 diameter flexible round duct	m	1			
2.10.6		250 diameter constant flow diffusers	No.	1			
2.10.7		150 diameter disk valve	No.	1			
2.10.8		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.					
2.10.9		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.10.10		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.11		**GENERAL**					
2.11.1		Deep cleaning of theatres	no.	1			
2.11.2		Particle count tests	no.	1			
2.11.3		Stripping of existing equipment	item	1			
2.11.4		Test and commissioning	item	1			
2.11.5		Allow provisional sum of R100 000 for builder's work	Sum	1			R 100 000,00
2.11.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY PAGE 16 OF BOQ					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District:** **JOE GQABI & CHRIS HANI**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE 2A-2: **EMPILISWENI HOSPITAL THEATRE HVAC**

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Empilisweni Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
		20.6 kW Heat recovery condensing units	Unit	1			
2.1.1		**AIR HANDLING UNIT**					
		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.2		**DUCTING**					
2.2.1		400x400 duct (Insulated)	m	30			
		350x350 duct (Uninsulated)	m	20			
2.3		600x300 duct(Uninsulated)	m	20			
2.3.1		300x300(Uninsulated)	m	5			
2.3.2		300x400 duct (Insulated)	m	5			
2.3.3		150x400 (Insulated)	m	5			
2.3.4		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		**Ducted Air Conditioning Unit**					
2.10.1		Ducted air conditioning unit heatpump ,filter boxes, attenuators, flexible ducting, spigots, disc difusers, intake louvres, fixing materials etc. as specified and shown on the drawings					
2.10.2		16.1kW or 55 000 Btu/hr	Unit				
2.10.3		300x300 duct (Insulated)	m				
2.10.4		250 diameter round duct	m	1			
2.10.5		150 diameter flexible round duct	m	1			
2.10.6		250 diameter constant flow diffusers	No.	1			
2.10.7		150 diameter disk valve	No.	1			
2.10.8		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.		1			
2.10.9		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.10.10		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.11		**GENERAL**					
2.11.1		Deep cleaning of theatres	no.	1			
2.11.2		Particle count tests	no.	1			
2.11.3		Stripping of existing equipment	item	1			
2.11.4		Test and commissioning	item	1			
2.11.5		Allow provisional sum of R100 000 for builder's work	Sum	1			R 100 000,00
2.11.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY PAGE 17 OF BOQ					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District:** **JOE GQABI & CHRIS HANI**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE 2A-2: **UMLAMLI HOSPITAL THEATRE HVAC**

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Umlamli Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
		20.6 kW Heat recovery condensing units	Unit	1			
2.1.1		**AIR HANDLING UNIT**					
		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.2		**DUCTING**					
2.2.1		400x400 duct (Insulated)	m	30			
		350x350 duct (Uninsulated)	m	20			
2.3		600x300 duct(Uninsulated)	m	20			
2.3.1		300x300(Uninsulated)	m	5			
2.3.2		300x400 duct (Insulated)	m	5			
2.3.3		150x400 (Insulated)	m	5			
2.3.4		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		**Ducted Air Conditioning Unit**					
2.10.1		Ducted air conditioning unit heatpump ,filter boxes, attenuators, flexible ducting, spigots, disc difusers, intake louvres, fixing materials etc. as specified and shown on the drawings					
2.10.2		16.1kW or 55 000 Btu/hr	Unit				
2.10.3		300x300 duct (Insulated)	m				
2.10.4		250 diameter round duct	m	1			
2.10.5		150 diameter flexible round duct	m	1			
2.10.6		250 diameter constant flow diffusers	No.	1			
2.10.7		150 diameter disk valve	No.	1			
2.10.8		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.		1			
2.10.9		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.10.10		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.11		**GENERAL**					
2.11.1		Deep cleaning of theatres	no.	1			
2.11.2		Particle count tests	no.	1			
2.11.3		Stripping of existing equipment	item	1			
2.11.4		Test and commissioning	item	1			
2.11.5		Allow provisional sum of R100 000 for builder's work	Sum	1			R 100 000,00
2.11.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY PAGE 18 OF BOQ					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District:** **JOE GQABI & CHRIS HANI**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE 2A-2: **LADY GREY HOSPITAL THEATRE HVAC** **Lady Grey Hospital**

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Lady Grey Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
		20.6 kW Heat recovery condensing units	Unit	1			
2.1.1		**AIR HANDLING UNIT**					
		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	1			
2.2		**DUCTING**					
2.2.1		400x400 duct (Insulated)	m	30			
		350x350 duct (Uninsulated)	m	20			
2.3		600x300 duct(Uninsulated)	m	20			
2.3.1		300x300(Uninsulated)	m	5			
2.3.2		300x400 duct (Insulated)	m	5			
2.3.3		150x400 (Insulated)	m	5			
2.3.4		313 diameter round duct	m	8			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	4			
2.4.2		400x600 extract grilles	No.	4			
2.4.3		600x600 Weather louvres	No.	1			
2.4.4		150x150 fluff extracting grilles	No.	4			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	2			
2.5.2		400x400 90 degree bend	No.	3			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	1			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	1			
2.7.2		300x400 to 150x400 transition pieces	No.	1			
2.7.3		350x350 to 300x300 transition pieces	No.	1			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	1			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	1			
2.10		**Ducted Air Conditioning Unit**					
2.10.1		Ducted air conditioning unit heatpump ,filter boxes, attenuators, flexible ducting, spigots, disc difusers, intake louvres, fixing materials etc. as specified and shown on the drawings					
2.10.2		16.1kW or 55 000 Btu/hr	Unit				
2.10.3		300x300 duct (Insulated)	m				
2.10.4		250 diameter round duct	m	1			
2.10.5		150 diameter flexible round duct	m	1			
2.10.6		250 diameter constant flow diffusers	No.	1			
2.10.7		150 diameter disk valve	No.	1			
2.10.8		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.		1			
2.10.9		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.10.10		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.11		**GENERAL**					
2.11.1		Deep cleaning of theatres	no.	1			
2.11.2		Particle count tests	no.	1			
2.11.3		Stripping of existing equipment	item	1			
2.11.4		Test and commissioning	item	1			
2.11.5		Allow provisional sum of R100 000 for builder's work	Sum	1			R 100 000,00
2.11.6		Theatre control panel	item	1			
		TOTAL CARRIED FORWARD TO SUMMARY PAGE 19 OF BOQ					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District:** **JOE GQABI & CHRIS HANI**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE 2A-2: **TAYLOR BEQUEST HOSPITAL THEATRE HVAC** **Lady Grey Hospital**

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	MATERIAL RATE	LABOUR RATE	AMOUNT
2	**GM 2.5.(5)**	**Supply, Delivery, Installation and Commissioning of the Operating theatre HVAC at Taylor Bequest Hospital inclusive of all auxilliaries and ancilliaries**					
2.1		Outdoor Unit- Supply and install complete as specified including all fixures and fittings, auxilliaries and ancilliaries and refrigerant for entire system and hail guards					
		20.6 kW Heat recovery condensing units	Unit	2			
2.1.1		**AIR HANDLING UNIT**					
		Air handling unit: Air Quantity 900l/s. Cooling 20.6kW. On Coil Dry Bulb Temperature 23.2 degrees Celsius. Off Coil Wet Bulb Temperature 16.3 degrees celsius. Off Coil Dry Bulb Temperature 9.2 degrees Celsius. Off Coil Wet Bulb Temperature 8.9 degrees Celsius. Complete with Primary, Secondary bag and Hepa Filters	Unit	2			
2.2		**DUCTING**					
2.2.1		400x400 duct (Insulated)	m	60			
		350x350 duct (Uninsulated)	m	40			
2.3		600x300 duct(Uninsulated)	m	40			
2.3.1		300x300(Uninsulated)	m	10			
2.3.2		300x400 duct (Insulated)	m	6			
2.3.3		150x400 (Insulated)	m	6			
2.3.4		313 diameter round duct	m	16			
2.4		**LOUVRES, DIFFUSERS & GRILLES**					
2.4.1		Perforated Ceiling diffusers	No.	8			
2.4.2		400x600 extract grilles	No.	8			
2.4.3		600x600 Weather louvres	No.	2			
2.4.4		150x150 fluff extracting grilles	No.	8			
2.5		**BENDS**					
2.5.1		400x400 45 degree bend	No.	4			
2.5.2		400x400 90 degree bend	No.	6			
2.6		**SOUND ATTENUATORS**					
2.6.1		Sound attenuators 400x400 & 1200 long	No.	2			
2.7		**TRANSITION PIECES**					
2.7.1		400x400 to 300x400 transition pieces	No.	2			
2.7.2		300x400 to 150x400 transition pieces	No.	2			
2.7.3		350x350 to 300x300 transition pieces	No.	2			
2.8		**FIRE DAMPERS**					
2.8.1		400x400 spring loaded fire dampers	No.	2			
2.9		**EXHAUST FANS**					
2.9.1		500 diameter in-line duct fan complete with sound attenuators	No.	2			
2.10		**Ducted Air Conditioning Unit**					
2.10.1		Ducted air conditioning unit heatpump ,filter boxes, attenuators, flexible ducting, spigots, disc difusers, intake louvres, fixing materials etc. as specified and shown on the drawings					
2.10.2		16.1kW or 55 000 Btu/hr	Unit				
2.10.3		300x300 duct (Insulated)	m				
2.10.4		250 diameter round duct	m	2			
2.10.5		150 diameter flexible round duct	m	2			
2.10.6		250 diameter constant flow diffusers	No.	2			
2.10.7		150 diameter disk valve	No.	2			
2.10.8		The tender price shall include for the equipment specified below as well as all branch controllers, refrigerant piping, refnet joints, auxilliary and ancilliary equipment etc. for the system to operate as specified.		2			
2.10.9		All equipment that generates noise must be so positioned that it does not interfer with the hospital operation, personnel and patients. Equipment shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.10.10		Refrigerant pipe runs shall generally follow the routes shown on the drawings. shall also be positioned so that it can be easily accessed at all times without unnecessarily disrupting the hospital operation.					
2.11		**GENERAL**					
2.11.1		Deep cleaning of theatres	no.	2			
2.11.2		Particle count tests	no.	2			
2.11.3		Stripping of existing equipment	item	1			
2.11.4		Allow provisional sum of R100 000 for builder's work	sum	2			R 200 000,00
2.11.5		Test and commissioning	item	1			
2.11.6		Theatre control panel	item	2			
		TOTAL CARRIED FORWARD TO SUMMARY PAGE 20 OF BOQ					

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER THREE (3)

CONTRACT REF. NO: **SCMU3-24/25-0660-HO** **Cluster/District:** **JOE GQABI & CHRIS HANI**

ASSET TYPE: **THEATRE HVAC**

SCHEDULE 3 : **MAINTENANCE SERVICE SCHEDULE**

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	MACHINE QTY	QTY	RATE	AMOUNT
1	**GM 3.2**	**MAINTENANCE WORKS :** Standard servicing and planned Maintenance Costs including all parts, consumables and lubricants, labour, travelling, accommodation and subsistence allowances **(Price per machine)**					
1.1		**Frontier Hospitall: Theatre 1**					
1.1.1		**Minor Service Cost :** Price per Monthly Service / Inspection per machine, as per tasks from the Monthly Service Inspection Guideline in C6.	Omitted	Omitted	Omitted		
1.1.2		**Minor Service Cost :** Price per Three Monthly Service / Inspection per machine, as per tasks from the Three Monthly Service Inspection Guideline in C6.	No	1	12		
1.1.3		**Major Service Cost :** Price per Six Monthly Service / Inspection per machine, as per tasks from the Six Monthly Service Inspection Guideline in C6.	No	1	6		
1.2		**Frontier Hospital: Theatre 2**					
1.2.1		**Minor Service Cost :** Price per Monthly Service / Inspection per machine, as per tasks from the Monthly Service Inspection Guideline in C6.	Omitted	Omitted	Omitted		
1.2.2		**Minor Service Cost :** Price per Three Monthly Service / Inspection per machine, as per tasks from the Three Monthly Service Inspection Guideline in C6.	No	1	12		
1.2.3		**Major Service Cost :** Price per Six Monthly Service / Inspection per machine, as per tasks from the Six Monthly Service Inspection Guideline in C6.	No	1	6		
1.3		**Mlamli Hospital: Theatre 1**					
1.3.1		**Minor Service Cost :** Price per Monthly Service / Inspection per machine, as per tasks from the Monthly Service Inspection Guideline in C6.	Omitted	Omitted	Omitted		
1.3.2		**Minor Service Cost :** Price per Three Monthly Service / Inspection per machine, as per tasks from the Three Monthly Service Inspection Guideline in C6.	No	1	12		
1.3.3		**Major Service Cost :** Price per Six Monthly Service / Inspection per machine, as per tasks from the Six Monthly Service Inspection Guideline in C6.	No	1	6		
1.4		**Hewu Hospital: Theatre 1**					
1.4.1		**Minor Service Cost :** Price per Monthly Service / Inspection per machine, as per tasks from the Monthly Service Inspection Guideline in C6.	Omitted	Omitted	Omitted		
1.4.2		**Minor Service Cost :** Price per Three Monthly Service / Inspection per machine, as per tasks from the Three Monthly Service Inspection Guideline in C6.	No	1	12		
1.4.3		**Major Service Cost :** Price per Six Monthly Service / Inspection per machine, as per tasks from the Six Monthly Service Inspection Guideline in C6.	No	1	6		
TOTAL CARRIED TO NEXT PAGE							

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)

CONTRACT REF. NO: **SCMU3-24/25-0659-HO** **Cluster/District:** **BCM AND AMATHOLE**

ASSET TYPE: **HVAC THEATRE**

SCHEDULE 3 : **TERM REPAIRS SUBJECT TO APPROVAL OF QUOTATION OF THE WORKS**

ITEM Nr.	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	**GM 2.8**	**LABOUR RATES APPLICABLE TO UNSCHEDULED WORK:** Labour rates that Contractor will charge for additional adhoc work that is not contained in Schedules 1 to 3.				
1.1		Technician	Hr	1824		
1.2		Senior Artisan (Trade Tested & Additional Certification)	Hr	1824		
1.3		Artisan (Trade Tested)	Hr	1824		
1.4		Utility Man (Non-Trade Tested)	Hr	1824		
1.5		Artisan Aid	Hr	1824		
1.6		General Worker	Hr	1824		
2	**GM 2.8.3**	**TRAVELLING :** Travelling cost will be as per the rates for reimbursable expenses published monthly by the National Department of Public Works at the time of rendering the service/repair.				
2.1		Vehicle Travelling Estimate	Km	177 840		
3	**GM 2.8.3**	**ACCOMMODATION AND SUBSISTENCE :** Daily Rates per person that the Contractor will claim for approved trips lasting more than one day at a time.				
3.1		Accommodation	Per/night	60		
3.2		Subsistence	Per/day	60		
4	**GM 2.5 (10), GM 2.8.1 & GM 2.10.3**	**PROVISION TO COVER REPAIRS DURING THE TERM OF THE CONTRACT :** Lump Sum Provision to cover repairs and breakdowns during the course of the Contract in addition to the agreed routine servicing of the Assets.	PSum	1	R 2 000 000,00	R 2 000 000,00
5	**GM 2.8.1 & Clause 11.2(8)**	**DIRECT FEE PERCENTAGE (MARK-UP) ON MATERIALS AND SERVICES THAT IS NOT INCLUDED IN PRICE LISTS :** Mark-up on proven cost for materials and/or Outsourced Services based on the Provisional sum listed in Item 4. above. **(Apply % to provisional sum in Item 4 above when pricing the tender)**	%			
TOTAL CARRIED FORWARD TO SUMMARY						

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

DECLARATION (In respect of completeness of Tender)

Department of Health
Eastern Cape Department of Health
Global Life Centre
c/o R63 and Phalo Avenue
Bhisho

I/We, the undersigned, do hereby declare that these are the properly priced Schedules of Quantities forming Part C2.2 of this Contract Document which contains 28 pages numbered 1 to 28 and in consecutive order in Volume 2 and the number of pages in consecutive order in Volume 2A as stated on page 1 thereof, upon which my/our tender for **TENDER NO. SCMU3-24/25-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
has been based.

SIGNED ON BEHALF OF TENDERER: . . . . . .

DATE: . . . . . .

C2.3 CIDB ADJUDICATOR'S AGREEMENT

This agreement is made on the . . . . day of . . . . between:. . . . .
. . . . (name of company / organisation) of . . . .
. . . .
. (address) and. . . . . (name of company /
organisation) of . . . .
. . . . (address) (the Parties) and. . . . .
. . . . (name) of . . . .
. . . .
. . . . (address)
(the Adjudicator).

Disputes or differences may arise/have arisen* between the Parties under a Contract dated . . . . and known as. . . . .
and these disputes or differences shall be/have been* referred to adjudication in accordance with the CIDB Adjudication Procedure, (hereinafter called "the Procedure") and the Adjudicator may be or has been requested to act.
* Delete as necessary

IT IS NOW AGREED as follows:

1 The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
2 The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
3 The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
4 The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
5 The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.

SIGNED by:		SIGNED by:		SIGNED by:	
Name:	______________	Name:	______________	Name:	______________
Witness	______________	Witness:	______________	Witness:	______________
Name:	______________	Name	______________	Name:	______________
Address:		Address:		Address:	
Date:	______________	Date:	______________	Date:	______________

Contract Data

1	The Adjudicator shall be paid at the hourly rate of R. . . . . in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to: Printing, reproduction and purchase of documents, drawings, maps, records and photographs. Telegrams, telex, faxes, and telephone calls. Postage and similar delivery charges. Travelling, hotel expenses and other similar disbursements. Room charges. Charges for legal or technical advice obtained in accordance with the Procedure.
3	The Adjudicator shall be paid an appointment fee of R . . . . . This fee shall become payable in equal amounts by each Party within ….. days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
4	The Adjudicator is/is not* currently registered for VAT.
5	Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
6	All payments, other than the appointment fee (item 3) shall become due 7 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

* Delete as necessary

PART C3: SCOPE OF WORKS

C3.1: SCOPE OF WORKS

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI & JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

This specification is for the scheduled maintenance, repair and proper functioning of the listed Theatre HVAC installations, for the duration of the Contract period. Please refer to the asset register for the list of facilities with operating theatres. Some of the theatres will require replacement.
The successful Contractor will be responsible for, and is expected to, maintain all the plant and installations detailed in the Price List and the Inventory of Equipment / asset register attached to this Contract.

Chris Hani District Facilities

Facility Name	No. of Theatres
Hewu Hospital	2
Cradock Hospital	2
Wilhelm Hospital	1
Cofimvaba Hospital	1
Frontier Hospital	3
Glen Grey Hospital	1
Dordrecht Hospital	1
Elliot Hospital	4
All Saints Hospital	1
Total number of Theatres	**21**

AMATHOLE District Facilities

Facility Name	No of Theatres
Burgersdorp Hospital	1
Aliwal North Hospital	1
Cloete Joubert Hospital	1
Maclear Hospital	1
Empillisweni Hospital	1
Umlamli Hospital	1
Lady Grey Hospital	1
Taylor Bequest Hospital	1
Total number of Theatres	**17**

A supplementary specification is attached with this document in section Part C5.

ASSET REGISTER FOR EXISTING THEATRE HVAC – CLUSTER 3

FACILITY	ASSET TYPE	LOCATION	TYPE OF EQUIPMENT	MAKE	MODEL No.	QUANTITY	GIAMA Status
Whittlesea CHC	HVAC	Theatre	Mid wall	DAIKIN	FTXS50G2V1B	1	Good
Hewu Hospital	HVAC	Theatre Passage	Mid wall	Samsung	Not Visible	1	Good
Hewu Hospital	HVAC	Theatre Passage	Extractor Fan	Not Visible	Not Visible	2	Fair
Hewu Hospital	HVAC	Theatre 2	Fresh Air Fan	Not Visible	Not Visible	4	Good
Hewu Hospital	HVAC	Theatre 2	Extractor Fan	Not Visible	Not Visible	2	Good
Cradock Hospital	HVAC	Theatre	Mid wall	Not Visible	Not Visible	1	Good
Cradock Hospital	HVAC	Theatre	Extraction Canopy Fan	Not Visible	Not Visible	1	Very Poor
Cradock Hospital	HVAC	Theatre 1	Inline Duct Fan System	Not Visible	Not Visible	2	Good
Cradock Hospital	HVAC	Theatre 1	Extraction Fan	Not Visible	Not Visible	2	Good
Cradock Hospital	HVAC	Theatre 2	Inline Duct System	Not Visible	Not Visible	2	Good
Cradock Hospital	HVAC	Theatre 2	Extraction System	Not Visible	Not Visible	1	Good
Wilhelm Stahl (Middelburg) Hospital	HVAC	Theatre	Mid wall	Alliance	Not Visible	1	Good
Wilhelm Stahl (Middelburg) Hospital	HVAC	Theatre	Inline Duct Fan	Not Visible	Not Visible	2	Fair
Cofimvaba Hospital	HVAC	Theatre 1	Inline Duct Fan	Not Visible	Not Visible	4	Good
Cofimvaba Hospital	HVAC	Theatre 1	Extraction Fan	Not Visible	Not Visible	2	Good
Cofimvaba Hospital	HVAC	Theatre Plantroom	Air Handling Unit	Midea	MOV-192HNI-R	1	Good
Cofimvaba Hospital	HVAC	Theatre Passage	Extraction Fan	Stylvent	Not Visible	1	Good
Cofimvaba Hospital	HVAC	Theatre Passage	Extraction Fan	Xpelair	Not Visible	2	Poor
Frontier Hospital	HVAC	Main Theatre	Chilled Water System	AERMEC	ANL202	1	Fair
Frontier Hospital	HVAC	Maternity Theatre	Direct Expansion System	Daikin	Not Visible	1	Fair
Frontier Hospital	HVAC	Theartre 3	Central AHU	Not Visible	Not Visible	16	Fair
Frontier Hospital	HVAC	Theater Recovery Room	Chilled Water System	Not Visible	Not Visible	1	Fair
Frontier Hospital	HVAC	Theater Offices	Midwall	Not Visible	Not Visible	5	Poor

Glen Grey Hospital	HVAC	Theatre	Central AHU	1	Not Visible	6	Poor
Dordrecht Hospital	HVAC	Theatre	Central AHU	Not Visible	Not Visible	1	Poor
Elliot Hospital	HVAC	Theatre	Central AHU	Not Visible	Not Visible	1	Poor
Elliot Hospital	HVAC	Theatre	Under-ceiling	Not Visible	Not Visible	1	Fair
Elliot Hospital	HVAC	Theatre	Ducted Fresh Air System	Not Visible	Not Visible	1	Poor
Elliot Hospital	HVAC	Theatre	Midwall	TLC	Not Visible	2	Poor
Elliot Hospital	HVAC	Theatre	Central AHU	Not Visible	Not Visible	1	Poor
All Saints Hospital	HVAC	Theatre	Central AHU	Not Visible	Not Visible	1	Poor
All Saints Hospital	HVAC	Theatre	Under-ceiling	Not Visible	Not Visible	1	Fair
All Saints Hospital	HVAC	Theatre	Ducted Extration System	Not Visible	Not Visible	1	Poor
All Saints Hospital	HVAC	Theatre	Ceiling sweap fan	Not Visible	Not Visible	3	Fair
All Saints Hospital	HVAC	Theatre	Midwall	Not Visible	Not Visible	1	Fair
All Saints Hospital	HVAC	Theatre	Cassette	Not Visible	Not Visible	1	Poor

SPECIFICATION

FOR

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIES

TENDER No: SCMU3-24/25-0659-HO

PROJECT SPECIFICATION DOCUMENT:

TENDERER'S NAME: .....

TENDERER'S ADDRESS: .....

.....

.....

Telephone Number: ..... Facsimile Number: .....

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIES

CONTENTS PAGE

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIES
NOTICE TO TENDERERS

1. The Tenderer for this contract shall submit additional information regarding the installer of the Mechanical Installation together with the returnables enclosed with the tender enquiry documents.

2. The contractor, on acceptance of his tender for the principal contract shall submit within the period stated, the information indicated on the forms following immediately after the Summary of the bills of quantities for this installation.

STANDARD CONDITIONS IN RESPECT OF THE SUPPLY, DELIVERY AND INSTALLATION OF MECHANICAL EQUIPMENT AND MATERIALS

1 TESTS AND FINAL COMPLETION

1.1 Tests

After completion of the Works and before Practical Completion is taken, a full test will be carried out on the installation for a period of sufficient duration to determine the satisfactory work thereof. During this period the whole of the Works will be inspected, and the Contractor shall make good to the satisfaction of the Representative / Agent, any deficiencies that may arise.

The Contractor shall provide all instruments and equipment required for the testing as well as any water and power required for the commissioning and testing of installations at completion.

The contractor shall provide testing and commissioning data that clearly illustrates the duties and power requirements, as specified, of the installed equipment.

1.2 Final Completion

The conditions of Final Completion shall be as prescribed in the NEC3 Term contract.

2 CONTRACTOR'S LIABILITY IN RESPECT OF DEFECTS

2.1 Latent Defects Liability Period

As prescribed in NEC3 Term contract.

2.2 Maintenance of installations

With effect from the date of the Practical Completion Certificate the Contractor shall at his own expense undertake the regular servicing of the installation during the period stipulated and shall make all adjustments necessary for the correct operation thereof.

If during the said period the installation is not in working order for any reason for which the Contractor can be held responsible, or if the installation develops defects, he shall immediately upon being notified thereof take steps to remedy the defects or faults or to make any necessary adjustments.

Should such stoppages however be so frequent as to become troublesome, or should the installation otherwise prove unsatisfactory during the said period the Contractor shall, if called upon by the Representative / Agent, at his own expense replace the whole installation or such parts thereof as the Representative / Agent may deem necessary with apparatus specified by the Representative / Agent.

3 COMPLIANCE WITH REGULATIONS

3.1 The installation shall be erected and tested in accordance with the following Acts and Regulations:

i) The latest issue of SANS 10142: "Code of Practice for the Wiring of Premises",
ii) The Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended,
iii) The Local Government Ordinance 1939 (Ordinance 17 of 1939) as amended and the municipal by-laws and any special requirements of the local supply authority,
iv) The Fire Brigade Services Act 1993 Act 99 of 1987 as amended,
v) The National Building Regulations and Building Standards SANS 10400:
vi) The Post Office Act 1958 (Act 44 of 1958) as amended,
vii) The Electricity Act 1984 (Act 41 of 1984) as amended and
viii) The Regulations of the local Gas Board where applicable
ix) SANS 10103: The measurement and rating of environmental noise with respect to annoyance and to speech communication

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIES
SECTION 1: GENERAL SPECIFICATION FOR AIR CONDITIONING INSTALLATION WORK

CONTENTS

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIESSECTION 1: GENERAL SPECIFICATION FOR AIR CONDITIONING INSTALLATION WORK

1 TESTS

After completion of the works and before first delivery is taken, a full test will be carried out on the installation for a period of sufficient duration to determine the satisfactory working thereof. During this period the installations will be inspected and the Contractor shall make good, to the satisfaction of the Representative / Agent, any defects which may arise.

The Contractor shall provide all instruments and equipment required for testing and any water, power and fuel required for the commissioning and testing of the installations at completion.

2 MAINTENANCE OF INSTALLATIONS

The maintenance period shall be twelve (12) months from the date of the Practical Completion.

If during the said period the installation is not in working order for any reason for which the Contractor is responsible, or if the installations develop defects, he shall immediately upon being notified thereof take steps to remedy the defects and make any necessary adjustments.

Should such stoppages however be so frequent as to become troublesome, or should the installations otherwise prove unsatisfactory during the said period the Contractor shall, if called upon by the Representative / Agent, at his own expense replace the whole of the installations or such parts thereof as the Representative/Agent or the Director-General may deem necessary with apparatus specified by the Representative / Agent.

3 REGULATIONS

The installation shall be erected and tested in accordance with the latest issued and amendments

of the following Acts and regulations:

SANS 1125 : Room air conditioning and heat pumps

- SANS 1238 : Duct work
- SANS 1287-1&2 : Ventilation practices and ducting
- SANS 1424 : Filters
- SANS 10147 : Refrigeration Systems
- SANS 10173 : Installation, testing and balancing Air Con The Occupational Health and Safety Act, 1993 (Act 85 of 1993),
- SANS 5151 : Non-ducted air conditioning and heat pumps
- SANS 10400 : The National Building Regulations
- SANS 10142 Parts 1 & 2 : Code of Practice for the Wiring of Premises
- Local Government Ordinance 1998 (Act 10 of 1998 (Gauteng), municipal by-laws and any special requirements of the local supply authority,
- The Fire Brigade Services Act 2000 (Act 14 of 2000),
- The Post Office Act 1998 (Act 124 of 1998),
- The Electricity Act 1996 (Act 88 of 1996) and
- The Regulations of the local Gas Board where applicable.
- SANS 10103: The measurement and rating of environmental noise with respect to annoyance and to speech communication

4 GENERAL

All workmanship and materials used in the installation shall be of the highest quality.

All plant associated with the installation shall comply with the Code of Practice for “Refrigeration systems including plants associated with air-conditioning” SANS 1992, as amended.

5 MATERIALS, SAMPLES AND SHOP DRAWING

5.1 The drawings provided with this tender document are general arrangement drawings only. The successful Tenderer shall check all design criteria and submit shop drawings (including builder’ for approval which take into consideration available spaces, builders work requirements, access for maintenance purposes etc. The tenderer is required to make allowance for builder’s work as this not a building contract but mainly mechanical.

5.2 The requirements for proof of compliance with materials specifications, samples and shop drawings are:

- Material specifications
- Shop drawings

5.3 The contractor shall, on certain occasions, be required to provide samples on request by the Engineer.

6 COMMISSIONING AND TESTING

On completion of the installation, it shall be tested to the satisfaction of the Engineer and all results

shall be recorded in the Operating and Maintenance manuals.

All balancing and testing shall be carried out by the Contractor entirely at his own expense, and all test instruments shall be checked for accuracy by the Manufacturers, Suppliers, or an approved Laboratory and certified copies of the certificates showing the degree of accuracy shall be supplied to the Engineer, if requested.

Gauges, thermometers, ammeters, and other instruments which form part of the permanent plant may be used for test purposes provided they are certified as accurate.

The Engineer shall have the right to inspect any item of equipment during manufacture or before delivery to site.

The Contractor shall balance, set, and test the entire plant and shall submit the results to the Engineer who shall then carry out spot checks in the presence of the Contractor.

7 ELECTRICAL WIRING

Unless specifically stated otherwise in the project specification, the Contractor shall be responsible for all electrical work and control wiring associated with the air conditioning installation with the exception of the incoming power which will be provided by others.

All electrical work shall comply with the requirements of the local Municipal Authorities and the Code of Practice for the “Wiring of Premises” SANS 10142, as amended.

The contractor shall electrically connect the new air handling units and condensing units. The contractor shall allow for new cables that will run in galvanised cable trays; allowance should be made for cable terminators and cable glands onto the control panel and main AC DB.

All Electrical Work shall be undertaken by a qualified and registered Installation Electrician as defined in the OHS Act.

8 OPERATING AND MAINTENANCE INSTRUCTIONS

The Contractor shall furnish to the Engineer three bound copies of Operating and Maintenance Instructions prior to the final acceptance of the installation.

The manuals shall include the following:

- Index
- Description of the plant
- Operation of the plant
- Plant and equipment - including model numbers and Suppliers
- Test report
- Maintenance instructions
- Spare parts list and contact details
- Descriptive literature
- Record drawings (for all equipment installed and electrical wiring performed by the air conditioning contractor).

9 PAINTING

No untreated metal surfaces shall be permitted on the project. Items which are not galvanised or similarly protected against rust and corrosion, shall be painted.

All black metal work including brackets, hangers, platforms, piping etc. either exposed or concealed shall be thoroughly cleaned, de-scaled and painted with one coat zinc chromate followed by one coat enamel paint, to an approved colour.

Unless specified to the contrary hereafter, all equipment, exposed ducting, pipes, metal parts and insulated and plastered surfaces shall be painted with a primer coat followed by two coats enamel paint, to an approved colour.

10 AIR CONDITIONING RETICULATION – ROOF VOIDS

10.1 Reticulation positioned within roof voids may be laid on and supported by the existing roof trusses. Suitable hold down clamps must be used at intervals not exceeding 3 metres. The hold down clamps must be fixed to the roof trusses using a minimum of two x 4mm stainless steel 316 wood screws or similar. Care must be taken to ensure sufficient clearance around reticulation to allow for the installation of preformed thermal insulation. To avoid sagging, refrigerant piping shall be supported on cable trays in every 2m interval. No Ozone Depleting substances are to be associated with either the manufacturer or composition of all thermal insulants in the project.

10.2 Where reticulation interferes with other services such as electrical or potable water reticulation the contractor must avoid these services by rerouting the air conditioning reticulation.

10.3 Should the tenderer determine that the existing timber support structure spacing, is not suitable to adequately support the required refrigerant reticulation, the tenderer must make provision for the installation of additional timber battens or supports.

11 AIR CONDITIONING RETICULATION – BUILDING EXTERIORS

11.1 All piping must be supported in steel holder bats (clamps). The clamps must be positioned a maximum distance of 2 (two) metres apart. Clamps must be installed at all changes in direction or elevation.

11.2 Holder bats shall be installed in such a manner as to ensure sufficient clearance to allow for installation of thermal insulation.

11.3 All externally exposed reticulation including reticulation between the outdoor unit and entrance into the ceiling void must be insulated with thermal insulation. This thermal insulation must be neatly covered using 0,7mm grade 304 stainless steel cladding. All to the approval of the Engineer or Engineers Representative.

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIESSECTION 2: DETAILED SPECIFICATION FOR AIR CONDITIONING INSTALLATION WORK

CONTENTS

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIESSECTION 2: INSTALLATION DETAILS

1 EXTENT OF WORK

1.1 This specification establishes the performance, design and test requirements for the air handling units and stripping off existing equipment at various Chris Hani and Joe Gqabi Health Facilities and replacing with new and also maintenance of existing and functional HVAC theatres. The specifications should be read in conjunction with the BoQ, the facilities are clearly spelt out in the BoQ and the intended work.

1.2 *Equipment as indicated on the drawings is to be supplied and installed as described below and on the drawings. This specification has been written in such a manner as to be as generic as possible. Tenderers are to ensure that all pipework, accessories and ancillaries are included to ensure the final installation performs as described below and on the drawings. Tenderers must have a fully equipped repair and maintenance workshop with manufacturer approved staff within the major town (Queenstown) and to support the installation for a minimum duration of the defects liability period.*

1.2 This specification relates to the supply, delivery, off-loading, temporary storage, installation, testing, commissioning and handing over in good order all ancillary equipment required to provide fully functional equipment and systems.

1.3 The supply of all Maintenance and Operating Manuals inclusive of “AS INSTALLED” drawings forms part of this specification.

1.4 The major systems included in this specification are as follows:

- Theatre air handling unit/s, inclusive of ducting, grilles etc.
- Air conditioning unit supply to the recovery area, for some hospitals.
- Stripping off existing equipment in the plantroom, theatres and recovery area.

1.5 The outdoor units as described in detail below and shown on the drawings shall be mounted on the concrete plinths. The contractor to include in his/her bill of quantities an allowance for the Air Handling units plinths, holes through walls and making good thereof.

1.6 Equipment that is to be supplied/offered by the Contractor is to be approved by the Engineer prior to commencing with any purchase action.

1.7 This section and all standard drawings deal with the General Technical Requirements for ALL installations, the particulars of each system being given in the contract drawings and following sections.

1.8 Tenderers, however, are free to offer alternative equipment that in their opinion would be equal to or an improvement upon that specified.

1.9 Where such alternatives are offered, price variations compared with the main offer shall be clearly stated, as also the advantages claimed for such a substitution. Such price variations shall be shown in a covering letter, separate from the Schedule of Prices.

NOTE: The Contractor must refer to the drawings for the pricing of the Materials. All equipment schedules are clearly incorporated within the drawings forming part of the tender documents.

2. SITE CONDITIONS

2.1 **Location**
The sites are located in the province of the Eastern Cape, Chris Hani and Joe Gqabi districts.

2.2 **Access**
Access to the site shall be agreed with the hospital and be advised.

3 PROGRAMME

3.1 The Tenderer shall allow for programming the work in such a manner as to not disrupt the entire hospital; as the installation will be done separately because they are currently occupied. Sequence of work to suit Contractor's requirements will not be guaranteed.

3.2 The Tenderer shall take note of the fact that this is not a new building and as such interruptions and interference with the hospital activities will occur. Claims arising out of broken work sequences or agreed programmes changed due to onsite requirements will not be considered.

3.3 The cost of overtime, additional labour and plant necessary for the completion of the Works in accordance with the programme shall be included in the Air Conditioning Contractor's tender price for the Works.

4 WORKS CARRIED OUT BY OTHERS

The following work is included in this Contract and will be carried out by others.

- All builders' work including concrete plinths, the forming of holes in walls and making good thereafter.
- The cutting of holes in suspended ceilings and ceiling tiles for the fixing of air conditioning equipment.
- The provision of a 400/420V 3ph 50Hz electrical supply to the air conditioning outdoor units.
- The provision of a 230 V 1 Ph 50 Hz electrical supply to all ventilation systems.
- The provision of a chased in 100 x 50 x 50 back box and conduit with draw wire to the ceiling void above to accommodate installation of hard wired remote controller supplied with each unit.
- Provision of Certificates of Compliance for all electrical works which forms part of this contract.

5 REQUIREMENTS FOR AIR HANDLING UNITS/EQUIPMENT SPECIFICATIONS

5.1 The air conditioning systems for the theatres shall be air cooled, heat recovery air handling units. The air handling units shall be 100% fresh air with a variable speed drive. Some facilities will have one (1) theatre and others two (2).

5.2 Humidity levels to be controlled at between 45 and 55% with a temperature set at 21 degrees Celsius with a maximum deviation of ±1. The air handling units' temperature shall have a range of ±3 degrees Celsius.

5.3 The refrigeration compressor in the outdoor unit shall be equipped with inverter controller and capable of changing the rotating speed to follow variations in cooling or heating load.

5.4 The refrigerant used shall be R410A. The refrigerant piping shall be capable of being extended up to 150m with a 50m level difference without any oil traps.

5.5 The system shall be capable of operating continuously at ambient temperatures between -5°C and 40ºC.

5.6 High efficiency particulate air (Hepa) filters shall be utilised and be situated at the supply air terminals/diffusers before the air enters the theatre or as close to the air terminals as possible. These filters shall be accessible from the Service Areas.

5.7 Hepa Filters shall be side or top entry fitted to seal in the direction of airflow against a neoprene gasket, and shall be secured by mechanical means to ensure no air bypass.

5.8 Primary and secondary filters shall be secured by means of no less than four (4) holding 304 stainless steel clips.

5.9 Secondary and Hepa filters housings shall be fitted with Magnahelic manometers marked with the filter's operating parameters. The parameters for the filters are:

Theatre	Primary	Secondary	Tertiary	Particle Count
Type of filters	Pleated filters	Pocket/Bag/ Box filters	High Efficient Particulate air	
Efficiency	20%	95%	99.97-99.99%	
Particle Count				ISO 14644-5

5.10 Air handling units and outdoor units shall be assembled, tested, and charged with refrigerant at the factory.

5.11 The systems shall be provided with potential free contacts to be wired to the fire detection panel and shall shut down in the event of alarm being received.

5.12 The air handling units to be fitted with two thermostats and one smoke detector, with one thermostat in the supply air duct set at 70 degrees Celsius and the other at extraction duct set at 40 degrees Celsius. A detector is to be mounted on the extract and linked to the fan so that it shuts down the fan; and close dampers if a thermostat is released.

5.13 Air handling units are to have 2 temperature sensors; one installed in the supply air duct and one in the outdoor unit.

5.14 Typical AHU Capacities:

	Technical
	AHU
Air flow	900 l/s
Total Cooling	20.6kW
Condenser type	VRV
Room Design	22°C 50% RH
Outside Conditions	32°C db 22°C wb summer
Outside Conditions	5°C db 4.9°C wb winter
Coil Entering Conditions	21°C db
Coil Entering Conditions	16.3°C wb
Coil Leaving Conditions	9.2°C db
Coil Leaving Conditions	8.9°C wb
Fresh Air	100%
Fan Motor	2.2kW 4Pole 380V
Fan external static pressure	1200 Pa
EN Class H13 HEPA filters	Yes

6 OUTDOOR UNITS

6.1 System performance shall not be less than the schedules above. The Tenderer shall submit, with his tender, proof that the equipment offered complies with these minimum performance specifications. The condensing units shall be air cooled heat recovery.

6.2 The systems shall be controlled using an intelligent programmable controller.

6.3 The outdoor units shall be factory-assembled units housed in sturdy weatherproof casings constructed from rust proof galvanized steel panels coated with a baked epoxy powder finish. Outdoor units shall be corrosion protected with Bluechem, Tectyl or engineer approved equal.

6.4 The units shall each have a minimum of two scroll compressors and be able to operate even when one of the compressors is out of order.

6.5 The noise level shall not be more than 60 dB (A) at normal operation measured horizontally 1m away and 1,5m above ground. The outdoor unit shall be equipped with a night quiet mode.

6.6 The compressor shall be of a highly efficient scroll type and equipped with an inverter control capable of changing the speed in accordance to the cooling or heating load requirement. It shall be fitted complete with built-in thermistor protection and automatic reset protection against heavy loads.

6.7 The refrigerant circuit shall include shut off valves and a solenoid valves. All necessary safety devices shall be provided to ensure the safety operation of the system. The following safety devices shall be part of the outdoor unit:

- High Pressure Switch
- Overload Relay
- Inverter Overload Protector
- Fusible Plugs.

6.9 Condenser units are suitable for operation at low ambient temperatures.

6.10 The evaporator and the condenser are to be protected against freezing of the evaporator coil.

6.11 The cooling fins must be protected against hail with suitably sized perforated galvanized material powder coated the same colour as the units. All fixings shall be galvanized or stainless steel.

6.12 The outdoor units shall be capable of heating water to be circulated to storage vessels.

7 CONTROL

7.1 Wired remote type computerized PID controllers shall be used to maintain correct room temperatures and interrogate the system log. The position of the main control panel is to be advised.

7.2 Units shall be equipped with a self-diagnostic and logging system for easy and quick maintenance and service.

7.3 The LCD {Liquid Crystal Display) remote controllers shall memorize the latest malfunction code for easy maintenance.

7.4 Temperature control shall be provided in each theatre for the operating staff to be able to set the temperature within the operating temperature between 18°C and 26°C.

7.5 The installation shall be fitted with a central intelligent controller capable of managing the various systems including:

- Monitoring of all systems and subsystems locally and remotely
- Control of all systems and sub-systems locally and remotely
- History recording
- Reporting faulty equipment
- Setting start/stop times
- Override stop for extended hours with additional stop points
- Setting operating window – high low set points
- Emergency stop in event of fire
- Password security
- Graphical User Interface (GUI)
- Ethernet port
- Digital I/O contacts

8 AIR HANDLING UNIT

8.1 General Description

1 The air handling units shall be positioned as shown on the drawings. The AC Contractor shall provide all brackets, fixing materials, frames, plinths, brackets etc. required around the various systems for safe mounting, operation and maintenance.

2 The unit for the theatres shall comprise an air handling unit with fresh air intake balancing louvre and an air-cooled condenser. The air handling unit shall be on emergency power.

3 The calculated fan motor absorbed power shall have a 20% safety factor to give minimum motor nameplate power.

4 The air handling unit plenum shall consist of a 50mm thick interlocked, chromadek clad, polystyrene insulated double skinned air handling unit plenum section, including a SANS quality anodized extruded aluminium corner section and powder coated stainless steel corner end covers and full AHU height heavy duty hinged access doors.

5 The supply air fan (centrifugal double inlet, double width type) will be a backward curved impeller type, mounted on a hot dip galvanized steel base frame and fitted with suitable selected neoprene anti vibration mounts (AVM). These AVM's, together with the flexible neoprene canvass collar fitted to the supply fan discharge, will isolate the fan assembly from the AHU casing limiting vibration and running noise emission.

6 A 4 pole, 380 volt, 3 phases, 50hz foot mounted, squirrel cage, electric motor will drive the supply fan. The motor shall be certified as suitable for continuous operation with a frequency speed controller (VVVF).

7 The supply fan motor will be mounted in a direct drive configuration on a suitably strengthened motor mounting plate fixed to the galvanised cubic framework of the supply fan and fitted to suit either the vertical or horizontal fan discharge configuration without compromising access to the fan motor terminal box

8 The Supply fan motor shaft and supply fan shaft shall be directly coupled using a suitable Fenner flex, ORC or similar approved coupling

9 The AHU is to include washable 50mm thick pleated type primary filters (G4) mounted and clipped into a powder coated galvanized filter frame. The air is to be drawn through the primary filters.

10 The AHU is to include disposable 300mm deep secondary filters (G8) mounted and clipped into a powder coated galvanized filter frame. The air is to be blown through the secondary filters. An air diffuser plate, mounted after the fan discharge and before the secondary filters, will ensure a relatively even flow of air through the filters.

11 A Magnehelic gauge shall be supplied and fitted across each individual filter bank to provide visual indication of the relevant pressure drop across the relevant filter. In addition a low differential pressure transmitter shall be fitted across each filter bank and the display and alarm fitted in the control panel in the operating theatre. The operating range shall be suitable for the filter in question and it shall operate from a 24 VAC/VDC power supply, output signal 0-10 VDC or 0-20mA. It shall be response time selectable and the enclosure shall have a minimum ingress protection rating of IP54.

12 Filter frames are mechanically jointed with sufficient support providing a rigid filter section that will withstand the full pressure drop equal to the selected static pressure of the supply fan without cavitations of the filter frame assembly. Each system shall be complete with Hepa filters, bag/pocket filters and pleaded filters. The primary and secondary filters shall be 95% and 98% efficient, respectively.

13 The filter securing clips are to be manufactured from stainless steel and designed to press and hold the filter securely against a neoprene gasket included the filter frame thereby not allowing air to bypass the filters.

14 All filter frames must be flashed and sealed to the AHU plenum preventing filter bypass air. The average face velocity over the face of the filters must not be greater than 2.5 meters/second.

15 The air-handling unit is to be complete with an intake air plenum manufactured from the same construction material as the rest of the unit. The air intake shall be fitted with an intake cowl fitted with an aluminium weather louver complete with stainless steel vermin mesh and shall be suitably sized to accommodate a free area face velocity of not more than 5 m/s across the louver at the full supply air quantity.

16 The access doors will be suitably wide for removal of filters, cleaning of coils, adjusting of dampers, removal of fan, replacement or adjustment of fan belts.

17 The drip trays of the cooling coil will be manufactured from grade 304 stainless steel, the drip tray is to slope from all directions in a “Vee” formation, and condensate is to drain through a minimum 28mm copper pipe connection to outside.

18 The Cooling coil casing will be manufactured from grade 304 stainless steel.

19 The coil tubes and fins will be Copper/Aluminium respectively. Coil face velocities shall not exceed 2.5m/s however, a face velocity of 2.3m/s shall be preferable. They shall be factory pressure tested to 3500Kpa. Refrigerant gas shall be R410A.

20 The coil shall be treated with “Bluchem” or similar approved anti corrosion treatment

21 The coil shall be selected and installed to accommodate a heat recovery installation.

22 The Electronic expansion valves shall be selected and installed according to the manufacturers specification and shall be Proprietary parts of the manufacturer.

23 The validation of theatres shall comply with ISO 14644-1: Class 7.

9. Outdoor Units

9.1 General

1 The air handling unit systems shall consist of a heat recovery outdoor unit connected to an air handling unit as described above, with single or multiple cooling circuits.

2 Humidity levels to be controlled at between 45% and 55%.

3 The refrigeration compressor in the outdoor unit shall be equipped with inverter controller and capable of changing the rotating speed to follow variations in cooling or heating load.

4 The refrigerant used shall be R410A.

5 The system shall be capable of operating continuously at ambient temperatures between -5°C and 40ºC.

6 The outdoor units shall be assembled and tested at the factory.

7 The outdoor units shall be factory assembled units housed in sturdy weatherproof casings constructed form rust-proofed galvanised steel panels coated with a baked epoxy powder finish.

8 The noise level shall not be more than 60 dB(A) in normal operation measured horizontally 1m away and 1,5m above ground.

9 The compressor shall be of highly efficient hermetic scroll type and equipped with DC inverter control capable of changing the speed in accordance to the cooling or heating load requirement.

10 The circuit shall include off valves and solenoid valves. All necessary safety devices shall be provided to ensure the safety operation of the system. The following safety devices shall be included in the outdoor unit:

- High Pressure Switch
- Overload Relay
- Inverter Overload Protector
- Fusible Plugs.

11 Each circuit shall be fitted with an electronic expansion valve kit and the control circuitry associated with these expansion valves. A 230V single phase power supply is required for this panel.

12 The control boards shall be either of the recirculation type (MA) suitable for room temperature control or the full fresh air type (MF) suitable for leaving temperature control. Temperature sensors linked to the control circuitry shall be positioned as per the manufacturer's instructions on the refrigerant pipes and in the air stream such as to accurately control the operation of the valves.

13 The air handling unit shall be equipped with an air flow switch wired into the forced off terminal of the outdoor unit to protect the equipment in the event of lack of air flow.

14 The condensers shall be fitted with a Hail guard, the construction of which is to be approved prior to manufacture.

10 Controls

1 A wired remote type computerized PID controller shall be used to operate the expansion valves on each air handling unit. The controllers shall be capable of changing the system from heating to cooling mode.

2 The LCD {Liquid Crystal Display) controllers shall be equipped with a self-diagnostic system for easy and quick maintenance and service. The controllers shall memorize the latest malfunction code for easy maintenance,

11 Commissioning

1 The Contractor shall allow for preliminary commissioning of the system by the equipment manufacturer's technician or accredited representative.

2 Power shall be supplied to the outdoor units for at least 6 hours prior to running the initial test. Mains voltage shall be checked to ensure all phases are within the required tolerances and recorded.

3 The required additional charge of gas shall be calculated from the chart inside the outdoor unit and the figure recorded on the card. After charging the system with additional refrigerant as detailed above, electrical power to all indoor and outdoor units shall be switched on.

4 The equipment test sequence shall be run and action taken to correct any errors, which are shown on the remote controller.

5 Each piece of equipment individually and each completed system as a whole shall be checked for satisfactory cooling and heating operation. Temperatures, pressures and voltages shall be recorded for submission to the equipment manufacturer for warranty purposes.

6 All stripped equipment from the current installation shall be the contractor's responsibility but credit should be passed to the Department of Health.

12 Warranty

The warranty on the equipment shall be a minimum of 12 months from the start-up of the plant subject to the equipment having been commissioned by a technician certified by the manufacturers.

13 System Control

1 The Programmable logic controller shall be capable of accepting, processing and actuating all relevant control signals, e.g.:

- Room Temperature
- Water inlet and outlet Temperature
- Antifreeze
- Compressor and Fan status
- Compressor suction and discharge pressure
- Air Temperature
- Pump Down logic
- Superheater
- Compressor envelope
- Setting for intermittent or permanent running with hour, day and week settings.
- Thermostatic Valve
- History alarms

The AC Contractor shall provide and install the interface equipment and cable between the two units.

2 The Supply air fan speed (duct static pressure) shall be controlled by means of a VVVF speed drive. The controlled medium input shall be obtained from a static pressure transducer (0-250Pa) range, and the variable control signal shall be fed by the programmable logic controller.

3 All electronic field sensors (i.e., Thermocouples, pressure transducers, differential pressure switches etc) and mechanical field sensors (Pressure gauges etc) shall be provided to ensure optimum operational conditions and enable easy visual monitoring of parameters.

4 A fire signal shall be provided to shutdown plant in the event of a fire.

5 Printed Circuit boards, and electronic expansion valves and their relevant sensors are to be used to facilitate refrigerant control. PCB's are to be interlocked with main system controller for optimum plant performance.

6 All mechanical heating and cooling cycles are to be interlocked with an airflow safety switch; the interlock shall be via electronic and hard wire methods.

7 Pressure differential safety switches shall be fitted for the purpose of airflow safety, and dirty filter indication purposes.

8 Control for Cooling operation

- Supply air fan and VVVF to maintain supply air duct static pressure.
- The main PLC will verify that Room temperature is higher than set point temperature, via a network room module which will interface with the Main PLC
- When the Main PLC calls for cooling it will activate a cooling mode signal on the heat pump system. This will allow the heat pump system to only operate in cooling mode.

9 Control for heating operation

- Supply air fan and VVVF to maintain supply air duct static pressure.
- The main PLC will verify that Room temperature is lower than set point temperature, via a network room module, which will interface with the Main PLC.
- When the Main PLC calls for heating it will activate a heating mode signal on the heat pump system. This will allow the heat pump system to only operate in heating mode.
- The main PLC shall also modulate the electric heaters until such time as the Heat pump cycle has reached optimum temperatures.

14 Ducting

1 Supply and extract Ducting to the theatres is to be externally insulated and every effort is to be made to avoid condensation forming in the ducts.

2 Ducting shall be manufactured from galvanized sheet steel in accordance with SANS 10173. SMACNA (Sheet Metal and Air Conditioning Contractors National Association Inc. USA, SANS 1238. All ductwork that carries air temperatures below ambient dew point shall be provided with a vapour barrier seal that complies with SANS 10173.

3 Insulation shall be fire retardant 50mm 16 DV SAGEX or double side bubble wrap approved equal.

4 Where exposed to the elements, waterproofing shall comprise a synthetic membrane treated with Pekay F435 acrylic sealer to manufacturers' specification with a final coat of acrylic roof paint.

5 Flexible ducts shall not exceed 1,2m in length.

6 All supply air ducts shall be pressure tested with a maximum leakage of 5%.

7 All duct connections to vibrating equipment shall consist of a flanged joint followed by a flexible connector consisting of a neoprene covered fibre-glass cloth fixed on either side of the joint in a double lock seam to form an airtight flexible joint, with a minimum of 50mm separation between metal edges. Ducting at flexible joints shall be so supported that the ductwork is held square with the adjoining duct and no stress is imposed upon the flexible joint.

8 The position of the controls for the Theatres to be advised.

9 The air supply system for the theatres is to have the following filtration:

- Primary filter
- Secondary filters
- Hepa filters

12 The location of each of the vents is to be clearly indicated on the system and is to be removable without compromising or damaging the insulation.

13 All penetrations into the ward spaces shall be made completely watertight.
14 Ducting shall have 300x750 inspection holes as marked on the drawing.

15 Fire Dampers

1 All Fire Dampers shall be of the spring loaded multi-blade type complete with a fusible linkage and shall be certified fire rating. All fire dampers shall be installed where the ducting penetrates or passes through a fire wall, as shown on the drawing.

16 Diffusers, Grilles, Sound Attenuators etc.

1.1 Air distribution shall be by means of ceiling diffusers or grilles as detailed in the project specification.

1.2 Ceiling diffusers shall be of “Rickard", “Trox", or equal and similar manufacture specified. Ceiling diffusers shall be perforated and shall have a plenum box so that the duct is connecting from the side. Noise level shall be 30dBA-35dBA as recommended by SANS10103:2008 – The measurement and rating of environmental noise with respect to annoyance and to speech communication.

1.3 Side blow outlets shall be of “Natal Aluminium", “Trox" or equal and similar manufacture, and shall be either double or single deflection as specified, manufactured from extruded aluminium with anodised or powdercoated finish. Outlets shall be fitted with opposed blade dampers.

1.4 Return air grilles shall be either of the egg crate or fixed blade type as detailed in the project specification. They shall be manufactured from extruded aluminium with anodised or powder coated finish.

1.5 Door grilles shall be of the v-type with telescopic flanges, manufactured from extruded aluminium with anodised or powder coated finish.

1.6 Outside weather louvers shall be manufactured from extruded aluminium with anodised or powder coated finish.

Louvers used for outside air intakes shall be fitted with opposed blade dampers having blades no less than 100mm deep. All outside weather louvers shall be fitted with a vermin proof galvanised wire screen behind the blades.

1.7 The sound attenuator dimensions are indicated on the drawings shall be supplied and installed as part of this installation. Final selection of sound attenuators shall be done in conjunction with the fan supplier to ensure compliance to the noise level of between 30dBA and 35dBA.

17 Ducted Air Conditioning Unit

1 The recovery area, outside the theatres, shall be served with a ducted hideaway inverter type air conditioning heat pump unit.

2 The units shall be capable of achieving leaving air temperatures of 18^{o}C on cooling and 25^{o}C on heating for an operating range of -5^{o}C and 43^{o}C.

3 The system shall supply the duty specified on the drawing.

4 The refrigerant used shall be R410a and outdoor unit shall be factory assembled and tested.

5 The outdoor unit compressor shall be highly efficient hermetic scroll type and equipped with DC

inverter control capable of changing the speed in accordance to the cooling and heating requirements.

18 Fans

1 Extraction fans shall be in-line duct type fitted with anti-vibration fast clamps.

2 The fan shall have backward curved blades and an externally mounted rotor motor.

3 The fan motor must be selected with high level of efficiency and should be 100% speed controllable. The fan motor must have integrated motor protection.

4 The fan installation shall be air tight, including the fan casing. Fan casing shall be manufactured from galvanised sheet steel.

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIES
SECTION 3: BILLS OF QUANTITIES

GENERAL NOTES

1 SPECIFICATIONS

The Schedule of Quantities form part of the Tender Document and must be read in conjunction with the other parts forming the Tender Document in order to gain the full meanings of the descriptions of the work to be done and materials and equipment to be used.

2 ALTERATIONS

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

3 ISSUE OF SCHEDULE OF QUANTITIES IN ELECTRONIC FORMAT

The Consulting Electrical Engineers will make the Schedule of Quantities available to Tenderers in electronic (Microsoft Excel Workbook) format, upon request.

If utilised for tender submission, the Tenderer will be responsible for ensuring the correctness of all calculations. The Consulting Electrical Engineers cannot be held responsible for any arithmetic inaccuracies in the electronic Schedule of Quantities.

4 PAGES

Before submitting his Tender, the tenderer must check to ensure all pages have been included and are distinct. Should any obvious errors be found the Consulting Electrical Engineer is to be notified immediately to have them corrected as no liability whatsoever will be admitted by the Consulting Electrical Engineer in respect of errors in the Tender due to the foregoing.

5 RESPONSIBILITY

The responsibility for the accuracy of the quantities written into the Schedule of Quantities remains with the person who prepared the Schedule of Quantities. The Tenderer shall be relieved of the responsibility of measuring quantities at the Tender stage, and the Tender Price submitted shall be in respect of the quantities set out in the Schedule of Quantities.

The Tenderer will be required to make his assessment of items such as brackets, fixings, etc., from details stated in the Schedule of Quantities and shall make allowances therefore within the rates tendered.

Tenderers shall make due allowance in their rates for any item of incidental or contingent work, labour and materials not contained in the Schedule of Quantities, but deemed necessary for the successful completion of the Works.

6 UNIT RATES

Unless a separate rate for the supply and the installation of any item is specifically called for, the supply and installation costs of any items shall be fully included in the unit price.

The description of each item shall, unless otherwise stated herein, be held to include making, conveying and delivering, unloading, storing, unpacking, hoisting, setting, fitting and fixing in position, cutting and waste, patterns, models and templates plant, temporary works, return of water establishment charges, profit and all other obligations arising out of the Conditions of Contract.

7 VARIATIONS

Variations in the scope and extent of the work included in the Schedule of Quantities shall be allowed in order to meet the Employer's requirements and will be re-measured and all costing shall be done at the rates entered in the Schedule of Quantities, where appropriate, forming an addition to or deduction from the total of the Schedule of Quantities. Any items or variations for which rates have not been added in the Schedule of Quantities shall be agreed and priced as non-scheduled items in accordance with the provisions of the contract.

The rules governing the extent and costing of the variations shall be those provided for in the Conditions of Contract and Variations to Sub-contract.

Variations to the planning before the work has been executed shall be priced as above. Alterations to work already executed cannot necessarily be priced as above and must be reviewed on its merits.

The appropriate portions of the Preliminary & General Costs are to be adjusted proportionately to the nett additions or omissions of the variations to the contract

8 PRELIMINARY AND GENERAL

Tenderers shall price the Preliminary & General under any or all of these groups, viz.:

a) A fixed amount

b) An amount varied in proportion to the final contract value as compared to the Tender Price

c) An amount varied in proportion to the final contract period as compared to the originally specified contract period

The allocation of prices to the three categories listed above must be realistic and the Electrical Sub-contractor may be required to justify the allocation of the prices. Should no Preliminary & General Costs be entered against the variable items b) or c) above, no adjustment thereof shall be considered.

9 PROVISIONAL SUMS

All Provisional Sums shall be expended only as directed by the Consulting Electrical Engineer and any balance remaining shall be deducted from the amount of the Sub-contract sum. No work for which Provisional Sums are provided shall be commenced without written instructions from the Engineer.

All Provisional Sums may be utilised in full or in part. These Provisional Sums may be deleted

in full or in part if not required.

10 CONTINGENCY SUMS

All Contingency Sums shall be expended only as directed by the Consulting Electrical Engineer. No work for which Contingency Sums are provided shall be commenced without written instructions from the Engineer.

All Contingency Sums may be utilised in full or in part. These Contingency Sums may be deleted in full or in part if not required.

11 DAY WORKS

The rates included for day work shall not form part of the Tender Price, but Tenderers shall note that this item must be regarded as provisional and will only be payable to the Electrical Sub-contractor if and when a written order to this effect has been issued.

12 VALUE ADDED TAX

This Schedule of Quantities shall be priced nett, excluding VAT. VAT shall be added at the summary at the end of the Schedule of Quantities. The final price entered into the Tender Form shall be inclusive of VAT.

13 ADJUSTMENT

The Employer reserves the right to adjust arithmetical errors in the extension of rates and totals in the Tender, and the Tenderer will be informed of the effect of any corrections on his Tender Sum prior to the award of the Contract. In no case will tendered rates be adjusted when correcting such errors.

In the event of there being tendered rates or prices which are declared by the Employer to be unacceptable to him, because they are either excessively low or high or not in proper balance with other rates, the Tenderer may be required to produce evidence and advance arguments in support of the tendered rates or prices objected to. If after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or prices objected to, he may request the Tenderer to amend these rates and prices along the lines indicated by him.

The Tenderer may or may not thereupon alter and amend the rates and prices objected to and such other related prices as are agreed to by the Employer. Should the Tenderer fail to amend his Tender in a manner acceptable to the Employer, or at all, it may prejudice his Tender.

In the case of Tenders with Schedule of Quantities, the total corrected Tender Price in the Tender Form shall constitute the Sub-contract Sum. Tenderers are advised to check their extensions and additions. In the case of a Lump Sum Tender, the original uncorrected Tender Price shall be considered. The Consulting Engineer shall negotiate adjustments to the rates tendered in order to correct the arithmetical extension or addition, whilst the Tender Price as submitted, remains unaltered.

In either case, the Tenderer shall be notified of any arithmetical error in his Tender, and shall be given the opportunity to withdraw the Tender at this stage.

14 QUANTIFICATION

The successful Tenderer and the Employer or his Agent may agree that the total of any Schedule, including any variations by way of additions thereto or deductions there from, represents a fair and accurate quantification of the items set out in the Schedule of Quantities and the parties may agree final payment on that basis. In the event of any dispute as to the quantities, the disputed item or items shall be adjusted where necessary.

15 ORDERING

The quantities in this Schedule of Quantities shall not be used for ordering materials. The onus is on the successful Tenderer to order the correct quantities of materials as per the drawings.

The Contractor shall check the lengths of cables and overhead conductors on site before ordering any of the cables. Any allowance for off-cuts shall be made in the unit rates.
The Engineers written approval is required should the actual measured length be longer than that given in the Schedule of Quantities

16 PAYMENT

The measurement and payment of Work done shall be made in accordance with the unit price rates, and rates of pay listed in the Schedule of Quantities. No payment will be made for any item of associated work not specifically detailed in the Schedule of Quantities.

EASTERN CAPE DEPARTMENT OF HEALTH

STANDARD SPECIFICATION

FOR THE

GENERAL MAINTENANCE AND REPAIRS

OF

THEATRE HVAC EQUIPMENT

AT

VARIOUS HOSPITALS AND HEALTH FACILITIES IN

THE

CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICTS

OF THE EASTERN CAPE PROVINCE

CONTENTS

STANDARD SPECIFICATION FOR THE GENERAL MAINTENANCE AND REPAIRS OF THEATRE HVAC AND ASSOCIATED EQUIPMENT

GM 1 GENERAL

The successful Contractor will be responsible for, and is expected to, maintain all the plant and installations detailed in the Price List and the Inventory of Equipment attached to this Contract.

The intention of this comprehensive maintenance Contract is to assess the current theatre HVAC and associated equipment's condition of each asset, repair what is needed, and maintain all equipment included as part of the Contract, in such a manner that, except for normal wear and tear, their condition don't deteriorate during the initial Service Period of 36 (thirty-six) months. Instruction to proceed with any work related to this Contract shall be authorized by means of a Task Order from the Service Manager.

As skills transfer are an integral part of this Contract the Employer's Operating and Maintenance staff will be responsible for all operating and daily inspections on the equipment, unless otherwise specified in the relevant asset specific Supplementary Specification and/or Relevant Price List.

The Contractor is required to provide pricing for the following items in the Contract as expanded on in this specification for each asset type and equipment quantity as covered by this Tender:

- Verify the Assets and update the Asset Inventory List that is provided with this Contract;

- Compile a Preliminary Maintenance Control Plan (Annexure I) to determine what routine servicing should take place on each type of equipment covered by the Contract, and at what frequency the services should take place during the Contract Period if this does not correlate to the Price List service frequency proposed by the Service Manager. With reference to the Price List and C3.1b Supplementary Specification requirements, the Contractor must submit an all-inclusive price and quantity of, for each Service Activity required. Service Activities may include Operations, Minor Services, Major Services or Statutory Inspections as detailed in the Supplementary Specification related to this bid as well as the Price List.

- Cost to do a full functionality test and condition assessment of all equipment and installations included in the Contract (after Contract award) and provide a priced key spare part pricelist for this equipment.

- Cost to provide a detailed Functional Condition Assessment Report based on the findings from the functionality test and condition assessment process.

It is to be noted that the aim of the maintenance Contract is NOT to replace random components at the beginning of the Contract in anticipation of a possible breakdown during the Service Period. Only known defects shall be repaired once approved by the Service Manager. It is the Contractor's responsibility to decide if he/she wants to visit each site and familiarize themselves with the actual condition of each installation before submitting a Tender, or to rely on the information as contained in the Inventory of Equipment that is attached to this Contract.

Maintenance of an installation shall be performed in accordance with the Airconditioning and Ventilation Equipment **Service Information** which will include:

1. This Standard Specification for the General Maintenance and Repairs of Electrical and Mechanical Installations,
2. The Technical Specifications that may be applicable,
3. The Supplementary Specification for this Asset Type,
4. The Operating and Maintenance Manuals (where applicable) for this Asset Type,
5. Relevant Inspection Check sheets for this Asset Type,
6. The Maintenance Control Plan per Health Facility,
7. All relevant SANS Standards and Legislation that is referred to in the above listed documents, and
8. All relevant drawings forming part of this Contract.

The main mechanical and electrical sections of a facility with their subsections as set out in the Service Information and in the Price List will each be deemed "an installation". Maintenance, as specified, will be applicable to all these installations.

All Contractors are to undergo an approximately three-hour long Contractor's induction process before being allowed to work at any of the sites. This induction shall cover the General Rules for Contractors on Site, the penalty system applicable to this Contract, as well as the minimum work quality standards for the work to be done on site.

Major equipment replacement, major upgrades and/or redesigned functionality will be handled outside of this Contract via a separate projects program, and are therefore not part of this Contract. The maintenance and repair work phase will run parallel to each other at the same time.

GM 2 MAINTENANCE REQUIREMENTS

i The Contractor will adhere to the Task Order and when completed, contact the Service Manager for formal approval and signing off, of the Task Order. The Engineering Representative will assist the Service Manager in verifying completed work.

ii The Contractor is expected to be fully aware of his obligations in so far as this Contract is concerned and he shall attend to the maintenance procedure within the time limits specified for each class of maintenance procedure.

iii The completed Task Order will be returned to the Service Manager, who will forward it to the Call Centre to log the completed Task Order into the system. When the completed Task Order is logged into the system the job will be closed.

iv When a maintenance procedure cannot be completed within the specified downtime the Contractor should apply in writing to the Service Manager for an extension of time with reasons for the delay. This application should be submitted as soon as the details of the maintenance procedure and availability of spare parts are known.

v The Call Centre Manager will submit a weekly response performance report to the Service Manager, who will make a decision on the implementation of penalties which will depend on the nature of each breakdown, as well as valid claims on delays received from the Contractor. The recorded report date and time as well as the recorded completion date and time will be regarded as sufficient and final proof for the proper administration of this

aspect of the Contract.

GM 2.2 SERVICE MANAGER

Eastern Cape Department of Health's agent will be appointed as **Service Manager** (Project Manager) to manage and administrate all work and financial aspects related to this particular bid. He/she will be supported on the ground by an Engineering Representative to verify workmanship and compliance of completed activities to Contract requirements. The Service Manager will be responsible for the following:

i Perform duties as per the NEC3 Term Services Contract Standard Clauses;

i Ensure that either he/she, or the Facility Specific Site Representative, visit the Facility and compile reports on the status of the Facility infrastructure that forms part of this bid;

ii Liaise with the Call Centre and check on call outs;

iii Determine routine maintenance work to be done, and issue Task Orders for routine maintenance and repairs/refurbishment/upgrades (that was accepted by the Employer), to the relevant Contractor;

iv Consult and co-ordinate with the Program Lead Consulting Engineer as needed on specific maintenance aspects, designs and specifications to be done;

v Assess the completed work for the assessment period, consider the payment applications lodged by the Contractor during this period, Certify the payment due, and issue a Payment Certificate for the accepted work as per the Standard Contract clauses;

vi Monitor the logging of regular maintenance work done;

vii Prepare reports on maintenance and repair work done;

viii Liaise with the hospital Site Representative regarding all work to be done on this asset type at the facility;

ix Liaise with management of the facility;

x Obtain approvals from the Employer where required for

GM 2.3 CONTRACTOR'S RESPONSIBILITIES

The Contractor shall maintain the complete installation as specified in the **Service Information** for the full Contract period subject to the agreed repairs and performance criteria.

Maintenance implies and shall include routine preventative maintenance on a schedule as approved by the Service Manager, corrective maintenance, as well as breakdown maintenance of all components of the specified installation.

The Contractor shall be responsible to perform all tasks as specified in this specification, subject to the requirements of the NEC3 Term Service Contract Standard Clauses. In addition, the Contractor must:

1. Record work done, performance indicators, defects identified and/or corrected, and spares used;

2. Obtain work done sign-off on site as well as from the Engineering Representative;

3. Submit completed Task Orders and invoices to the Service Manager;

4. Attend scheduled project meetings with the Service Manager.

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 Paragraph GM 7, and against the Tendered rates as provided for in the Price List, and within the down-time as specified in the applicable Task Order. In the event of any repair item for which a rate is not available in the Price List, the rate as specified in the Task Order will apply.

GM 2.4 TASK ORDERS

All works required to be done by the Contractor will be instructed by issuing of a **Task Order** by the **Service Manager**. No Works shall be conducted without a Task Order.

The Call Centre may issue breakdown and defects correction/repair Task Orders to the Contractor at any time during the Service Period, but they must all be copied to the Service Manager. The time for the completion of the Breakdown Task Order will be as per the allowable response times in Table 1 in Section GM 7.

If the exact nature and possible cost of rectifying a breakdown is not known when the Breakdown Task Order is issued to the Contractor, the task order will be issued with provisional information and costs estimates. The Contractor shall respond to such a Breakdown Task Order by traveling to the site to evaluate the breakdown (scope of repair work), estimate the realistic cost as well as downtime and provide feedback to the Service Manager to form the basis of the revised Task Order.

Should the Contractor not be able to complete the Breakdown Task Order within the agreed and approved time for completion, it shall be the Contractor's responsibility to obtain an extension of time from the Call Centre Manager. The written report shall clearly state the reasons for requiring the extension, as well as the actual extension period required.

Should the actual time for completion of the Breakdown Task Order exceed the agreed time allowed, including any extension of time, the Contractor shall be liable for damages at the rate stated in the Task Order.
The Service Manager will issue Task Orders for the routine maintenance services, and

approved repair/upgrade work once the Maintenance Control Plan has been approved and updated with the relevant information from the Repair Schedule as per GM 3.

Routine maintenance, approved repairs and breakdown repairs will all be done parallel to each other on the equipment as per the Maintenance Control Plan and Call Centre priorities.

GM 2.5 FUNCTIONAL CONDITION ASSESSMENT

Immediately after handing over of the site, and having attended the Contractor's Induction Training Session, the Contractor shall start with a **detailed functional test and condition assessment process** of the specified installation/equipment at each Health Facility and **submit a detailed report** to the Service Manager regarding the functionality, performance and condition of the equipment. It is this Contract's intention that this task be completed within **two weeks** of each site handover to the Contractor, but the Service Manager will arrange and agree specific deliverable dates for each Health Facility with the Contractor in this regard as part of the Contractor's Maintenance Control Plan.

The following work shall be carried out during the time allowed for the execution of the Functional Condition Assessment:

i **Verify the Asset Data** from the Asset Inventory List in C4.1, obtain the additional asset information that might be required for a specific piece of equipment, and update the Inventory of Mechanical and Electrical Equipment for each Health Facility with make and model numbers, capacities and general condition, year of manufacture (age), additional equipment to be added to the list, and equipment to be deleted from the list (i.e. equipment not on site anymore), etc., as per the fields provided in the format provided by the Service Manager after Contract award.

ii **Prepare a clear A4 size line drawing** of the building/ward/room in which the plant is installed, typically as per one of the two examples below, and show positions of the equipment schematically on this drawing. Please provide basic information regarding the general condition of the room/facility/building where the asset is located (this will assist to provide information to the facility repair teams), next to, or below the line drawing;

One line drawing per location per Health Facility must be provided and can be hand drawn, provided that the drawing is clear, neat and all info is readable.

i Record the number/name of each piece of equipment on the line drawing. If no name/number exists on the equipment itself, allocate a descriptive number (i.e. Washer) and mark this on the equipment with a black permanent marker pen. Reference shall be made to this ID number in the defects listed in the Repair Schedules for each item of equipment to identify the equipment accurately.

ii **Verify what spare parts (if any) are available** on site for the equipment covered by the Contract, as well as the condition there-off;

iii **Compile a Priced Spare Part List,** (based on the Contractor's cost price for the spares) for the relevant spare parts required for a repair of all the types of equipment listed in the Asset Inventory, and indicate on this list what spares should be kept in stock on site for use by the site maintenance staff. The Employer however retains the right to negotiate the offered spare part prices with like type spares prices solicited through the Tender process, if they are not in line with national price norms.

iv **Inspect the condition and test the functionality** of all components of the installation to confirm the extent of the repair work required (if any). If the equipment is not in an operable state record this and proceed with item 7 below;

v **Verify if the equipment meets current standard technical specifications** for the specific application. Advise on an alternative if applicable. Please consult the Facility Manager when doing the assessment to get information regarding any issues that they are experiencing with the equipment.

vi **Verify the estimated remaining service life** for the equipment based on the equipment's age and current condition. If the equipment is old and in a bad state it might be more cost effective to replace the unit rather than rebuilding it. Please advise in this regard;

vii Should it be impossible to determine the details of the defect without dismantling the machine/equipment item, the Contractor shall nevertheless prepare an estimate with a cost breakdown for repairs he/she anticipates will be needed. After a written instruction has been received to repair the machine/equipment item, the final cost will be determined after the machine/equipment item has been dismantled for repairs. **Equipment shall not be dismantled for inspections during the equipment functional condition assessment period.**

viii **Compile a detailed Repair Schedule for each separate equipment unit (machine)**. This Repair Schedule will consist out of a clear identification of the equipment unit, a detailed description of what is wrong with the equipment unit, a detailed repair or replacement method statement (and explanation on why it is recommended that the unit be replaced if applicable), and an accurate detailed quote, with estimated lead times and a high-level project plan to enable the work to proceed if the approval to do so is granted by the Service Manager via a Task Order. (See GM 2.8 for the rates requirements)

ix The Employer does not guarantee that any, or all, of the repairs/replacements recommended via the repair schedules, will be accepted for implementation by the Contractor. Accepted Repair Schedules will however become part of the Final Maintenance Control Plan once approved by the Employer, and will then be included in the work scheduled for this Contract. Depending on the cost and complexity, equipment replacement recommendations might be transferred to the Repair Project Work Stream of the Employer's Mechanical and Electrical Equipment Repair Programme.

1. **Compare the identified defects of each item of equipment with the components already included under the standard minor and major services scopes** in the Contract Price List, and remove costing for these from the repair requirements. Include all identified defects into the Functional Condition Assessment Report, but only price the defects not covered by the standard servicing scope of works. (See GM 3.2 (3) for costing of the updated Asset Inventory List (both hard and electronic copies) completed in the Excel Format provided by the Service Manager after Contract Award;

2. Clear location identifiable layout line drawings of the equipment, with ID numbers and brief room/facility/building condition description as per GM 2.5 (2)

3. A list of spare parts, and their condition, that is currently available on site;

4. A priced spare part list of the typical spare parts that might be needed to do repairs on the equipment if it should breakdown or fail. The Contractor must also indicate on this spare

part price list which consumable spare parts (i.e. fan belts, filters, oil, fuses, light globes, etc.) that can be replaced by the site maintenance staff, should be kept in stock at the Health Facility;

5. A summary of the equipment per Health Facility indicating:

i Condition;

ii If the equipment meets current technical specifications;

iii Estimated remaining Service life before replacement will be due; and

iv Recommended work to be done (i.e. service only, minor repairs required, major repairs required, replacement or upgrade recommended).

6. A Repair Schedule for each repair that is required. This information will be used to populate the Task Orders for accepted repairs, or feed the Tender document information in case it is moved to the Project Work Stream;

7. A description of the defect for which repair work is not easily identifiable with an estimate of the final cost for repairs. This item will typically apply to breakdowns or defects where the machine or equipment must be de-commissioned and at least partially dismantled before the extent of the work can be fully established;

8. Compile a list of equipment for which a Statutory Inspection and Test is, or will become due during the Contract period. Copies of previous Inspection and Test Certificates to be attached to the report (if available).

x standard services)

xi Where applicable, **obtain copies of Statutory Inspection and Test Reports** from the Health Facility (if available) and attach these to the Defects Inspection Report.

xii **Submit the detailed Functional Condition Assessment Report** to the Services Manager who shall thereafter demarcate any areas to be repaired and forward this information to the Contractor. Once approval is granted, the Service Manager will instruct the Contractor about the repair work to be done.

GM 2.6 FUNCTIONAL CONDITION ASSESSMENT REPORT

A Functional Condition Assessment Report must be compiled for each Health Facility, and shall contain the following:

Should the Contractor not be able to complete the Functional Condition Assessment Report within the period as specified GM 2.5, it shall be his responsibility to obtain extension of the Functional Condition Assessment period from the Service Manager. The written report shall clearly state the reasons for the extension, as well as the actual extension required. An extension of time shall only be considered by the Service Manager if the Engineering Representative believes the Contractor has carried out the already completed portion of the report with the due diligence and attention to detail.

Should the actual time for the completion of the report exceed the specified time for completion, including any extension granted, the Contractor shall be liable to a payment reduction for the difference between actual and approved completion periods. The value of the payment reduction for each health facility shall be as specified in Section X18 of the Secondary Options Clauses of

the Contract.

After the repair phase work and costs have been accepted, the Contractor shall commence with the known and approved repair work only after site access for repair work has been approved and the Task Order issued. The Contractor shall complete the work within the period allowed for the repair work as specified in the applicable Task Order.

GM 2.7. OPERATING AND MAINTENANCE MANUALS

The Contractor shall, where specified, and as part of the repairs to each installation, compile and submit a comprehensive Operating and Maintenance Manual based on the Original Equipment Manufacturer's requirements. The Contractor shall ensure through training that the operating and maintenance personnel of the Health Facility are conversant with the instructions as presented in the Operating and Maintenance Manual, as per SS 8 and SS 9.

The Operating and Maintenance Manual, as accepted by the Service Manager, shall be used as a basis for preventative maintenance. The Contractor shall perform all preventative and corrective maintenance as described in the Operating and Maintenance Manual. This shall be in accordance with the Standard and Supplementary Specifications.

The Operating and Maintenance manuals must be based on the updated Inventory of Equipment (C4.1) data after completion of the Functional Condition Assessment, and shall be updated with respect to Make, Model Number, Capacity and any other relevant data.

The Contractor must provide three (3) sets of each required Operating and Maintenance Manual as follows:

i One set to be installed at a suitable position on a short chain, against a wall in the room/area where the equipment is located, or as otherwise instructed by the Service Manager for outside and spread out equipment;

ii Two sets to the Services Manager.

The Operating and Maintenance Manuals must be delivered as soon as possible after the Functional Condition Assessment Report has been completed. Also see Section GM 3.3 (15).

Where several of the same equipment is in the same room/area, only one set of three Operating and Maintenance Manuals is required. If the same equipment is spread out throughout the health facility the Contractor must install one Operating and Maintenance Manual near each one, or group of the equipment unless otherwise instructed by the Service Manager.

The Contractor will be required to install several Document Consoles (storage and writing platform units) with sleeve anchors or bolts, into the walls at different locations of each Health Facility, to secure and store the chained manuals and maintenance logs. A Provisional sum will be included for this in the Price List.

GM 2.8. RATES

Scheduled work is all planned routine servicing of the equipment at the all-inclusive Contracted Rates contained in Schedule 3 of the Contract. Unscheduled work is all repairs, breakdowns, special maintenance activities, special tests and/or replacement tasks, that is ordered via a Task Order by

the Service Manager, in addition to the scheduled work. Payment for this work will be based on the Contracted Rates from Schedule 4.

Where no rates exist in the Contract, the itemized breakdown shall be accompanied by documentary proof from the Supplier, Manufacturer, Engineering Works, etc., where materials were bought or services out-sourced from. The Employer however retains the right to verify and test these rates against the market.

The Contractor shall submit quotes for all Unscheduled work with an itemized breakdown of the total cost involved for acceptance by the Service Manager, in a quotation as detailed below:

GM 2.8.1 MATERIALS AND OUTSOURCED SERVICES

Unscheduled:	List all items with quantities and rates as per quotations or price lists obtained from suppliers or service providers (proven reasonable cost), and attach a copy of the quotation/price list to the quotation. Apply the Direct Fee Percentage (Mark-up %) to all proven reasonable material costs and outsourced services.
Direct Fee % (Mark-up %):	Mark up percentage on proven cost to cover P's & G's, overheads, profit, etc. as per Schedule 4 based on NEC3 TSC Contract Data.
Scheduled:	All materials required for Scheduled Servicing are included into the pricing for the Service as per Schedule 3.

GM 2.8.2 LABOUR

Unscheduled:	List time required for travelling to and back from site (subject to conditions contained in GM 2.8.3 below), actual repair and/or replacement, testing and commissioning time of all unscheduled items at the applicable labour rates as stated in Schedule 4. No Direct Fee % will be applicable to Contracted labour rates.
Scheduled:	Cost is included in Service costs as per Schedule 3.

GM 2.8.3 TRANSPORT AND ACCOMMODATION

Unscheduled:

Traveling and Accommodation claims will be subject to the condition contained in GM 2.8.4 below. Travelling cost will be as per the rates for reimbursable expenses published monthly by the National Department of Public Works applicable at the time of rendering the service/repair. Allow for the actual distance travelled (and specify the reason for the traveling). All travel time and disbursements need to be supported by a Google Maps route planner printout for proof of travelling distance and time. Kilometre claims can be claimed from point of departure to destination and back, but must be linked to the indicated kilometres as per the Google Map attached and referenced to. The Contractor must submit proof of registration to verify the engine cubic capacity of the vehicle, in respect of any vehicle to be claimed for. Allow for the actual accommodation and disbursements (and specify the reason for the accommodation requirement) at the rates as per Schedule 4. **Trips must be combined with Scheduled Servicing trips where possible, to minimize additional expenditure.**

Trips will be in accordance with the approved Maintenance Control Plan.

GM 2.8.4 The Employer requires that the Contractor be based in a location inside the Cluster or District Area that the Contract is awarded for. The home base (departure point) must therefore be located inside the Cluster Area. If the Contractor does not have a home base in the Cluster Area, the traveling rates (for both distance and labour) will be calculated based on a location inside the Cluster which will typically be the largest Town or City located inside the Cluster or District, as may be applicable as instructed by the Service Manager.

GM 2.8.5 PROVISIONAL SUMS

It is the Employer's sole discretion to decide on spending any, all or none of the Provisional Amounts listed in the different Price List Schedules of this Contract.

GM 2.9 REPAIR WORK

GM 2.9.1 Definitions

1. Defect

For this maintenance Contract, a defect shall mean a deficiency in any component of an installation which impairs the functionality of that component or equipment. Worn parts of a component which do not impair the functionality and/or performance of the component will not be regarded as a defect.

Defects may be classified in the following three groups:

(i) Type A defect

Those deficiencies which can be rectified by proper maintenance only, i.e. set parameters of a control system, proper lubrication, balancing, alignment, set pressures on safety valves, cleaning and de-staining, etc.

(ii)Type B defect

Those deficiencies which can only be rectified by replacing parts of, or the complete component as in the case of a breakdown or where a certain amount of upgrading is necessary such as the provision of anti-vibration mountings, removal of rust and re-painting, etc.

(iii)Type C defect

Those deficiencies which are visible but which do not impair on the functionality of the installation or system yet, such as structural cracks in parts of a component, rust, bad workmanship during a previous Contract, etc.

Components in which abnormal noise and/or vibration is present shall be serviced in accordance with the Manufacturer's recommendations and if the noise and/or vibration persists, the deficiency will be classified as a defect.

2. Repairs

Repairs of an installation shall mean the elimination of the deficiencies classified as types B and C defects in Paragraph (1.) above.

The specific repair phase commences as indicated on the Task Order issued by the Service Manager for each approved repair. The repairs must be completed within the period as determined by the Task Completion Date as stated in the Task Order. Delay damages for late completion will be applicable as indicated on the Task Order.

Depending on the nature of the work and availability of funds access may be given at any time during the Service Period and not necessarily directly after site hand-over.

A representative of the user department or person in charge of the plant, system or building shall endorse the schedule after completion of the maintenance or servicing procedure to the effect that the maintenance or service is, to his opinion, completed satisfactorily and shall countersign the service schedule. Where necessary the Site Representative will inspect the work done and report his findings to the Service Manager.

GM 2.9.2 Scope of Repair Work

The repair work shall be completed within the time allowed for repairs for each installation as defined in the applicable Task Order. If the work is to be carried over two or more financial year's the work will be segmented and prioritized according to the Final Maintenance Plan. The Contractor will be informed of the work to be completed within each financial year. **The starting date for repair work for the current financial year will be the date of acceptance of the measured Price List from the Functional Condition Assessment Report.** The starting dates for subsequent years will be on 1 April of that particular year.

All repair work shall be executed using resources (labour, equipment materials and spare parts) that comply with the requirements of GM 2.11.

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

GM 2.10 MAINTENANCE WORK

Maintenance work commences with the acceptance of the Tender bid and expires at the end of the Service Period. As compensation, the Contractor is paid the **remeasured** Contracted quantities, distributed in agreed intervals and amounts over the Service Period as per the Final Maintenance Control Plan, at the rate Contracted for the applicable maintenance work, subject to the requirements of GM 8.

GM 2.10.1 ROUTINE PREVENTATIVE MAINTENANCE

This entails the rendering of services and servicing of equipment according to a predetermined Maintenance Control Plan to:

i Repair, lubricate, clean and service components of equipment, units or parts thereof for each installation at pre-scheduled intervals regardless of condition.

ii Re-adjust, reset, clean, balance, corrosion protect all components of equipment, units or parts thereof for each installation, and

iii Carry out all necessary and implied actions to maintain installations in a functional condition (i.e. replace or clean filters, replace or top up fluids, etc.)

Preventative maintenance shall be aimed at prevention or at least minimization of breakdowns.

GM 2.10.2 CORRECTIVE MAINTENANCE

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

The Maintenance Procedures for Corrective Maintenance shall be compiled by the Contractor and is included in the Maintenance Control Plan for each system or plant. Inspection items shall include, inter alia, the following:

Checking for:

i Unusual noise and vibration;
ii Abnormal surface temperature of machines such as electric motors;
iii High temperatures of equipment and wiring inside switchboards;
iv Incorrect settings or operation of safety devices;
v Alarm conditions of any instrument or control panel;
vi Gas or fluid leaks from the equipment or associated piping systems.

The frequency of corrective maintenance shall be determined by the Contractor himself in line with the recommendations from the Operating and Maintenance Manuals, and actual operational environment where the equipment is operating. This may vary from once every day for high-risk, sensitive installations to once a month for low-risk installations such as exhaust fans and office. The frequency of corrective maintenance must be accepted by the Service Manager in the Maintenance Control Plan.

GM 2.10.3 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 the installation to their normal functional condition, within the maximum downtime allowed.

Breakdown repairs will be controlled via the Call Centre and approved Breakdown Repair Task

Order process as per GM 2.1. A provisional amount will be included in the Contract Price List Schedules to cover Break Down Task Order expenditure.

GM 2.10.4 COMMENCEMENT OF SERVICE PERIOD

The Contractor shall accept full maintenance responsibilities for each installation from the date on which the site has been handed over to the Contractor. **An annual maintenance service shall be carried out on all installations during the period in which the Defects Inspection Report is compiled, or as soon as possible thereafter.** If the current statutory compliance of a qualifying asset cannot be verified with the correct documentation of proof, a statutory inspection must be performed immediately after the first annual service has been completed.

For equipment or installations where the complete installation is shut down for the repair phase, no maintenance services will be required during the repair period.

GM 2.11 SUPPLY OF LABOUR, EQUIPMENT AND MATERIAL

1. Labour

Only competent, qualified personnel shall be allowed to execute all maintenance work.

2. Equipment

All tools, equipment and consumables required for performing maintenance work shall be supplied by the Contractor at his own cost (except where otherwise agreed to in writing and provided by the Employer). The Contractor may use already installed Employer equipment such as crawl beams and crawls, etc. provided that they obtain written approval from the site Maintenance/Technical Manager to do so. Such site approval will be based on the serviceability of the equipment, and upon confirmation of the Contractor's competency compliance in being able to use and operate this equipment during maintenance.

3. Materials and Parts

All materials, spare parts, components, equipment and appurtenances necessary for the complete maintenance of each installation shall be supplied and installed by the Contractor **at the rates and quantities as instructed by the Service Manager**, after the Functional Condition Assessment Report as specified in GM 2.5 has been accepted.

Only original parts as specified by the Original Equipment Manufacturer may be used for replacement purposes. Generic or alternative parts will only be allowed if they comply fully with all the specifications of the original parts, but may only be used upon written acceptance by the Service Manager.

Substitute electronic components will be acceptable, **PROVIDED** that they are equal to, and of the same quality as, or superior to, the original components and are accepted, in writing, by the Service Manager.

All parts, spares and materials which are used, shall conform to the applicable SANS Specifications and shall, where possible, carry the SANS mark of approval.

Substitute parts, as well as the serial numbers (where available) of the original and new components, shall be entered on the service sheets and in the maintenance/repair log-book.

The Contractor shall obtain, and cede any supplier's or factory guarantee of repaired or replaced

components to the Employer. All workmanship, new equipment, materials, components, systems, etc. used for servicing and repairs shall be guaranteed for 12 months unless otherwise agreed to in writing with the Service Manager. The guarantee cards for repaired or replaced components or equipment shall also be attached to service sheets and the maintenance/repair log-book. New equipment and system installations will in addition to the above requirements also have a twelve (12) month defects liability period, valid from the date of successful commissioning and hand over to the Employer as acceptance by the Service Manager.

All scrapped and/or removed parts and equipment that might be installed elsewhere, or that will not be returned to service again, must remain on site after removal or disassembly of the equipment as they remain the property of the Employer. The Maintenance/Technical Manager of the facility will indicate to the Contractor where to place these items after removal. Removal of any parts and/or equipment for whatever reason from site, may only occur with the written approval to do so by the Maintenance/Technical Manager subject to the rules and regulations that the Employer has in this regard.

GM 2.12 SITE MAINTENANCE RECORD KEEPING

The Contractor shall provide and maintain hard-cover A4 size maintenance files for each installation for the duration of the Service Period. Copies of all schedules, checklists, breakdown reports, preventative maintenance records, component replacement records, service sheets, etc. shall be filed in these.

An A4 size register book shall be kept for all work performed on the equipment, to state the service technician's name, surname, date of work performed, and a short description of the work performed. This book must be installed on a short chain next to the relevant Operating and Maintenance Manual as per GM 2.7.

Copies of the site maintenance records and all service sheets, shall be submitted to the Service Manager at each monthly meeting, while copies of the service sheets must also accompany all claims and invoices.

Statutory Logbooks must be supplied and maintained on site for all statutory equipment such as pressure vessels, boilers and lifts.

GM 2.13 SERVICE SHEETS

Every service, repair, test, inspection, etc. related to the maintenance portion of the Contract, shall be fully described on a service sheet which must be completed and signed by the Contractor and attached to the Task Order when it is returned to the Service Manager. The following minimum information shall appear on service sheets:

i The company name and address;

ii A unique work sheet serial number;

iii The corresponding Task Order unique number;

iv The district and health facility names;

v The building/area name or alternatively the building/area code;

vi The plant identity code and description;

vii The nature of the call, i.e. P1, P2, P3 or P4 (see GM 7);

viii A general description of the problem or purpose of the work to be done, alternatively the complaint as received by the Call Centre;

ix A statement as to whether the individual system is operational or not in terms of the specification;

x Should the system not be operational (in case of a breakdown) the response time and repair time shall be recorded individually and details of a preliminary service sheet shall be forwarded to the Call Centre Manager;

xi The description of the repairs/replacements carried out on each machine/equipment item on that specific system;

xii A list of materials used for each machine/component. Where scheduled items are used, only the description can be listed. For non-scheduled items, a copy of the quotation must be attached to the service sheet;

xiii A detailed report on the extent of the work done together with the total cost involved;

xiv Suggestions to avoid similar future problems;

xv A list of the Contractor's personnel responsible for the work with the date, starting time, completion time, distance travelled, and any accommodation and S&T costs;

xvi Signature and name of the responsible Employer site technician/artisan/engineer and the Site Representative, confirming the work was completed to the required quality and performance standards, and that the equipment is operational again;

xvii Signature and telephone number of the User of the equipment or the person who initiated a call or Task Order (if it was a defect, or breakdown).

Service sheets shall also be used for normal routine maintenance services and other non-maintenance activities such as training of the health facility's operating and maintenance personnel and administration duties of heads of firms when managing the Contract.

The Service sheets shall be completed in three categories as follows:

1. **For repairs on machines:** The same data as above must be captured with one service sheet to be completed for each repair (See below for grouping of like type equipment for servicing).

2. **For normal maintenance on an installation:** The same data as above must be captured with one service sheet to be completed for each service (See below for grouping of like type equipment for servicing).

3. **For Administration and Training:** In this case only the name of the Head of the Company is required on the service sheet with no other reference to Building- or Plant codes or machine ID numbers. A full description of the service provided must be included.

Copies of the completed Service Sheet and Task Orders must be attached to all invoices and shall be submitted to the Service Manager for discussions and acceptance.

An example of the Service Sheet is attached to the Contract Documentation as C7.

The standard requirement for normal services carried out on a specific plant is to complete one service sheet for all the equipment within any one building. This standard requirement applies to installations where all such machines can be serviced within a period of approximately five working days, but all equipment serviced must be listed on the service sheet.

For larger installations where the time required for a maintenance service is more than five working days, the machines may be grouped together to form several groups within the building with the provision that each group can be serviced within a period of approximately five working days. One service sheet shall be completed for each group in a building, but all equipment included in the group must be listed on the service sheet.

For smaller installations where the complete installation inside a building can be serviced in less than one working day, the installations in more than one building may be grouped together, but all the equipment covered by the service sheet must be listed.

The definition of the groups must be determined by the Contractor and clearly specified in the Maintenance Control Plan for acceptance by the Service Manager.

GM 2.14 VOLTAGE SURGES DUE TO LIGHTING AND OTHER CAUSES

The area in which most of the sites are situated is known for heavy lightning storms. Damage caused by voltage surges due to lightning, phase imbalance, low and high voltages, power failures, etc. will be dealt with in the same manner as any other breakdown. Contractors are advised to investigate available surge protection systems, if any, on each plant during the Functional Condition Assessment stage, and to decide for themselves whether additional protection will be required or not.

The provision of additional surge protection systems shall form part of the repair activities, if accepted by the Service Manager, and the cost thereof must be allowed for in the Functional Condition Assessment Report.

Contractors may as an alternative provide and install one or more Universal Disturbance Analysers to record any voltage surges at their own cost. Breakdowns caused by voltage surges which can be proved beyond any doubt will be dealt with in the same manner as operational damage and other normal breakdowns.

GM 2.15 SHEQ: SAFETY, HEALTH, ENVIRONMENTAL AND QUALITY

The Contractor must comply with all the Safety, Health, Environmental and Quality requirements as per C3.2 and GM 3.1, and must provide pricing to cover all the applicable requirements under this specification. The Contractor must take note of any specific Safety, Health and/or Environmental risks that might be highlighted in section SS 13.

GM 2.16 HIV / AIDS AWARENESS

The Contractor must comply with all the requirements as per C3.3, and must provide pricing to cover all the applicable requirements under this specification.

GM 3 MAINTENANCE CONTROL PLAN

The Contractor is responsible to compile a detailed Preliminary Maintenance Control Plan (Annexure I) as per GM 3.2 which he need to submit with his Tender Bid. This plan must contain the details of what maintenance will be done (itemized), how often, what resources will be involved, what spares and consumables will be used, how long it will take to perform the work, and the cost breakdown per service for a specific Asset Type. The Service Manager gave service interval recommendations in Schedule 3, but the Contractor can recommend alternative intervals for consideration and approval by the Service Manager.

After Contract Award the Contractor will be required to expand the Preliminary Maintenance Control Plan to a Health Facility specific plan for each asset type with the assistance of the Service Manager.

GM 3.1 WORK QUALITY

Maintenance quality control shall be the responsibility of the Contractor who shall introduce a Maintenance Control Plan to assist him in ensuring that all preventative, corrective and breakdown maintenance is performed as described in the Service Information. The Contractor will be responsible to correct any sub-standard work that is discovered after the Contractor has done his work. The rework will be for the Contractor's own account and must be signed off by the Site Representative after completion.

If the Contractor fails to remedy any sub-standard work within the time frame stipulated by the Service Manager, the Service Manager may at his/her discretion appoint another Contractor to execute the repair work. In this case, the replacement Contractor will be paid with the funds that were earmarked for the first Contractor to do the work, and the first Contractor will not be paid for that specific work.

GM 3.2 PRELIMINARY MAINTENANCE CONTROL PLAN

A preliminary version of the Maintenance Control Plan, based on the Asset Inventory Data, must be submitted with the Contractor's Tender bid. This plan is a high-level plan on what maintenance tasks the Contractor will be performing on all the equipment across all Health Facilities covered by the Contract and must be completed on the forms of Annexure I. The information from the Preliminary Maintenance Control Plan will be expanded into that of the final Maintenance Control Plan as specified in Section GM 3.3 below. Details contained in this preliminary Maintenance Control Plan shall include:

1. A Maintenance Schedule containing all the different tasks that will be performed on all the equipment covered by this Contract, and captured on the **Preliminary Annual Equipment Maintenance Schedule** Form contained in Annexure I.

2. A brief Capacity Statement where the Contractor describes his company's capacity and experience that will be applicable to this Contract. This must include a description and location of his home base (workshop/home/bakkie based, number of staff with qualifications and experience, what staff and/or Sub-Contractors will be used to support on the Contract, available tools and/or specialized equipment, transport capacity and where staff will be based, as well as capacity/ability to repair defective equipment (i.e. overhauling a pump or compressor);

3. A detailed **Maintenance Task Planning Sheet** (See Annexure I) for each of the Minor, Major, and other, service activities priced in the Price List. This Maintenance Task Planning Sheet will describe the pricing and details of scheduled maintenance activities to be performed during services conducted as per the recommendations of the **Preliminary Annual Equipment Maintenance Schedule**, and will also be used to populate the respective Task Order. These prices must be all inclusive and must include all labour, service parts, lubricants and consumables, special equipment (if required), accommodation (if applicable) and any travelling and subsistence costs, etc. that might be applicable to do the service. The service price must indicate clearly if more than one piece of equipment will be combined for servicing during a single trip to avoid double payment for Travel and Subsistence related payments by the Employer.
4. The service methodology;
5. Preliminary grouping of equipment for maintenance purposes as per GM 2.13 (if applicable);
6. A breakdown of which sub-Contractors will be used (as per T2.2c), and for what activities, by the Contractor in rendering the services required by this Contract **Sub-Contractors must also be registered on the Treasury Central Supplier Database;**

GM 3.3 MAINTENANCE CONTROL PLAN

One Maintenance Control Plan must be compiled for each Health Facility covered by the Contract. The Maintenance Control Plan shall be based on the Contractor's Preliminary Maintenance Control Plan information, and updated with the findings and data from the Functional Condition Assessment process. The Maintenance Control Plan shall be bound in a neat, A4 sized, ring bound document with a cover page and back cover and an original copy presented to the Service Manager. The contents of the document shall be indexed.

The Maintenance Control Plan will become the main plan for all work to be done under this Contract, as per the Main Contract Clauses, after the Contract has been awarded.

When the documents are compiled, the Contractor may reproduce relevant paragraphs from any of the specifications forming part of the Contract documents, or Operating and Maintenance Manuals, but should there be any discrepancies between such paragraphs 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.

The Maintenance Control Plan shall also contain the following in addition to the items listed in Section GM 3.2:

1. Detailed Maintenance Schedule per equipment type, per Health Facility on the **Annual Equipment Maintenance Schedule Asset Specific** Form;

2. Remeasured service quantities for the routine services of Schedule 3 in the Price List, based on actual equipment condition and the ability to perform a service on them or not in their current condition. **The Contractual payments will be based on these remeasured quantities, accepted by the Service Manager, and not on the original Tendered quantities which might have been based on incorrect information at the time**;

3. A risk register containing all the foreseen risks that can have an impact on the cost and/or deliverables of this Contract as per the NEC3 Term Service Contract Standard Contract Clauses numbers 11.2(14), 16.1, and 16.4;

4. A summary of the repair and maintenance work to be carried out in terms of the Contract giving details of the conditions of the various installations at the facility affected by the activities under the Contract.

5. Details of how the Contractor intends to carry out the various types of maintenance work especially breakdown maintenance should breakdowns occur.

6. Details of the procedures agreed upon between the Service Manager and the Contractor on how breakdown calls will be handled (Call Centre process).

7. A list of organisations and persons directly involved with the Contract or whose requirements must be considered during the entire Service Period. Each person's position within his organisation as well as the applicable phone numbers shall be given. (See T2.2c)

8. Details of monthly meetings (dates, times and venues) to be held between the Contractor, Employer Representative and Site Representative.

9. Service Sheets and Reports to be submitted after every routine inspection (a copy of all reports, checklists, breakdown records, etc. for each system of an installation shall be kept on the site in a hardcover file);

10. A priced spare parts list for relevant spares that might be required for repairs and/or breakdowns for each equipment type. The Employer retains the right to negotiate the listed prices based on price comparisons with like type spares prices solicited through the Tender process;

11. A recommended spares list for items that should be held in stock at the facility;

12. Copies of the Repair Schedules from the Functional Condition Assessment process that has been approved to proceed;

13. An updated Cost Forecast of the estimated final total of the Prices for the whole of the services in consultation with the Service Manager at intervals as stated in the Contract Data Clause 20.5;

14. Procedures to address complaints and logged breakdowns.

15. Details of reports in electronic format, summarizing 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 shall be obtained from the service sheets.

16. Assistance to be given to the Service Manager and Engineering Representative with decisions regarding material, equipment and other recommendations.

17. An updated list of the inventory of equipment complete with the ID number (if available), make and model number, serial number, year of manufacture/age and capacity.

18. The Maintenance Control Plan shall be upgraded when its contents are no longer representative of actual conditions.

19. The Contractor shall check the contents of existing Operating and Maintenance Manuals (if available) and shall update or modify them and then incorporate applicable data into his own manuals. Where no manuals exist, the Contractor shall draw up his own Operating and Maintenance Manuals based on the OEM Operating and Maintenance manuals as per the requirements of GM 2.7.

20. The way maintenance data as recorded on service sheets will be captured and processed for submission to the Services Manager, for invoicing, and as part of the maintenance report.

Pertinent data contained in the Operating and Maintenance Manuals may be transferred to the Maintenance Control Plan to make it a document which can be used as an independent handbook for maintenance work in future.

GM4 COMMUNICATION

The Maintenance Control Plan (Paragraph GM 3.3) will provide, after agreement between the Contractor and the Service Manager, with the assistance of the Site Representative, for the following communication procedure to be implemented:

1. The Contractor shall establish a telephone and fax line and a cellular telephone connection to ensure that he can be reached at any time.

2. Should the Service Manager determine or suspect that preventative, corrective or breakdown maintenance is required, a call shall be logged through any communication channel available to reach the Contractor as soon as possible. This will be followed up with a Task Order.

3. Maximum down times will be as described in Paragraph GM 7.

4. All breakdown calls from the Health Facility will be reported to the Call Centre who will follow the procedure as detailed in Section GM 2.1.

GM 5 PERFORMANCE MEASUREMENT

The Contractor's performance shall be measured against the criteria specified in Section X20 of the Secondary Options Clauses of the Contract and C1.2b Annexure CD.

Poor performance by the Contractor will lead to penalties being imposed by the Service Manager as per X17 and C1.2b Annexure CD, and can lead to early termination of the Contract.

GM 6 SPECIAL TESTING OF AN INSTALLATION

An amount has been allowed in the Price List to cover the cost of additional tests that the Service Manager may request at his own discretion from time to time on the equipment and installations covered by this Contract. The Service Manager will have the sole authority to spend the amount or part thereof under sub-paragraph.

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

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

The Service Manager shall upon completion of the tests or inspections issue an inspection report including any corrective actions (if any) to be taken by the Contractor.
The Contracted markup percentage will be paid to the Contractor on the value of each payment made to the approved testing authority if any special testing is ordered by the Service Manager.

GM 7 MAXIMUM MAINTENANCE DOWN-TIME

After a breakdown, defect or complaint has been logged the Contractor will be expected to remedy the defect in the system/component with as little delay as possible, notwithstanding the maximum down-time allowed and listed in the following paragraphs or as stipulated in the Task Order. **Should the Contractor not respond within the maximum down-time, the Service Manager may arrange, at the cost of the Contractor, for the necessary repair work to be done by others.**

The Contractor shall respond to a breakdown registration by traveling to the site to evaluate the breakdown (scope of repair work), estimate the realistic cost as well as downtime and provide feedback to the Service Manager and Site Representative to form the basis of a Task Order.

Should the Contractor not be able to complete the required repair work within the maximum down-time period allowed, it shall be his responsibility to obtain extension of down-time from the Service Manager. The written report shall clearly state the reasons for the extension, as well as the actual extension required.

Extension of down-time will only be granted by the Service Manager if:

1. The maximum down-time is unreasonable in relation to the scope of the repair work required.

2. The delivery time of a new component/subassembly/machine or spares required for the repair of the defective component/subassembly does not enable the Contractor to successfully complete the repair work within the maximum breakdown down-time allowed.

Should the actual down-time exceed the maximum down-time, the Contractor shall be penalized as per X17 and C1.2b Annexure CD.

PRIORITY	DESCRIPTION	RESPONSE
P1	Emergency (Life Threatening)	Immediate response from the time of logging a call and the emergency to be resolved (at least temporarily) within 8 hours
P2	Urgent	Immediate response from the time of logging a call and to be resolved within 12 hours
P3	Planned Maintenance Repairs	Scheduled Maintenance is to be scheduled and performed within 3 business days of the scheduled date
P4	Emergency Facility Repairs	7 Days planning and execution subject to supply chain regulations

Table 1: Maximum allowable response times

"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 reported or located until the installation has been repaired to its functional specification.

A guideline classification for typical P1, P2, P3 and P4 breakdowns for each installation are specified in the Supplementary Specification for each asset type.

The job card (Task Order) issued for the repair will state whether the repair is regarded as P1, P2, P3 or P4 and it will be required of the Contractor to react accordingly.

GM 8 MEASUREMENT AND PAYMENT

Measurement and payment will be done as per the Secondary Options Clauses of the Contract. See X1, X13, X17, X18, X19 and X20, supplemented by C1.2b Annexure CD.

C3.6: HEALTH AND SAFETY SPECIFICATION

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER NO.	**SCMU3-24/25-0659-HO**

Province of the
EASTERN CAPE
HEALTH

Occupational Health and Safety Specification

Issued in terms of the Occupational Health and Safety Act, 1993 Construction regulations 2014

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2)– HEALTH FACILITIES (36 MONTHS)**
LOCATIONS	**HEWU HOSPITAL** **CRADOCK HOSPITAL** **WILHELM STALL HOSPITAL** **COFIMVABA HOSPITAL** **GLEN GREY HOSPITAL** **DORDRECHT HOSPITAL** **ELLIOT HOSPITAL** **BURGERSDORP HOSPITAL** **ALIWAL NORTH HOSPITAL** **CLOETE JOUBERT HOSPITAL** **MACLEAR HOSPITAL** **UMLAMLI HOSPITAL** **LADY GREY HOSPITAL** **TAYLOR BEQUEST** **BCM DISTRICT HOSPITALS** **ADM DISTRICT HOSPITALS**
DISTRICT	**CLUSTER TWO (2) – BCM AND ADM DISTRICT**
BID NO	**SCMU3-24/25-0659-HO**

Province of the EASTERN CAPE HEALTH

TABLE OF CONTENTS

ANNEXURE A	**CONTRACTOR'S MONTHLY HEALTH AND SAFETY REPORT**
ANNEXURE B	**REQUIREMENTS FOR THE SAFETY PLAN ASSESSMENT**
ANNEXURE C	**LEGAL APPOINTMENTS**
ANNEXURE D	**SAFETY SPECIFICATION AND BASELINE RISK ASSESSMENT ISSUE REGISTER**
ANNEXURE E	**BASELINE RISK ASSESSMENT**

1 SCOPE

This health and safety specification in respect to the services for Cluster Three (3) – Buffalo City Municipality and Amathole Municipality District. This specification is for the scheduled maintenance, repairs and proper functioning of the listed HVAC installations for the duration of the contract period. Please refer to Scope of works for the list of facilities with operating Theaters, some theaters will require replacement:

WHITTLESEA CHC THEATRE HVAC

CRADOCK HOSPITAL THEATRE HVAC

WILHELM STAHL (MIDDLEBURG) HOSPITAL THEATRE HVAC

COFIMVABA HOSPITAL THEATRE HVAC

FRONTIER THEATRE HVAC

GLEN GREY HOSPITAL THEATRE HVAC

ELLIOT HOSPITAL THEATRE HVAC

ALL SAINTS HOSPITAL THEATRE HVAC

BURGERSDORP HOSPITAL THEATRE HVAC

ALIWAL NORTH HOSPITAL THEATRE HVAC

CLOETE JOUBERT HOSPITAL THEATRE HVAC

MACLEAR HOSPITAL THEATRE HVAC

EMPILISWENI HOSPITAL THEATRE HVAC

UMLAMLI HOSPITAL THEATRE HVAC

LADY GREY HOSPITAL THEATRE HVAC

TYLOR BEQUEST HOSPITAL THEATRE HVAC

1.2 This specification is for the scheduled maintenance, repairs and proper functioning of the listed HVAC installations for the duration of the contract period. Please refer to Scope of works for the list of facilities with operating Theaters, some theaters will require replacement.

The scope provides the overarching framework within which the Principal Contractor is required to demonstrate compliance with certain requirements for occupational health and safety established by the Occupational Health and Safety Act 85 of 1993 during construction work;

- Establishes the way the Principal Contractor is to manage the risk of health and safety incidents during construction; and
- Establishes the way the Client or Clients Agent will interact with The Principal Contractor.

This specification establishes general requirements to enable the Principal Contractor to satisfy aspects of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Construction Regulations, 2014. The Principal Contractor is required to develop, implement and maintain a site-specific health and safety plan. The Clients Agent is required to provide certain site-specific information to the Principal Contractor or a health and safety specification for the works to enable such a plan to be formulated. Accordingly, this specification on its own cannot ensure compliance with the requirements of the Act.

The Construction Regulations, 2014, requires a Client or Clients Agent to stop any contractor from executing construction work which is not in accordance with the contractor's health and safety plan for the site or which poses to be a threat to the health and safety of persons.

2 DEFINITIONS

As per the Occupational Health and Safety Act (85 of 1993) and the relevant regulations and applicable standards.

2.1 List of Abbreviations

AIA	Approved Inspection Authority
CC	Compensation Commissioner
CHSA	Construction Health and Safety Agent
CHSO	Construction Health and Safety Officer
CR	Construction Regulations (CR 2014)
DoL	Department of Labour
GAR	General Administration Regulations
GSR	General Safety Regulations
HCSR	Hazardous Chemical Substances Regulations
HIRA	Hazard Identification Risk Assessment
H&S	Health and Safety
OHSA	Occupational Health and Safety Act No. 85 of 1993 (as amended)
OHSS	Occupational Health and Safety Specification
PA	Principal Agent
PSHSS	Project Specific Health and Safety Specification
PC	Principal Contractor
PPE	Personal Protective Equipment
SANS	South African National Standards (Authority)
SDS	Safety Data Sheet
SWP	Safe Work Procedure

2.2 Key References

Occupational Health and Safety Act No. 85 of 1993 and Regulations (as amended)

Construction Regulations 2014.

Compensation for Injury and Occupational Diseases Act No. 100 of 1993 (as amended).

SANS codes.

3 INTERPRETATION

The Act and its associated regulations shall have precedence in the interpretation of any ambiguity or inconsistency between it and this specification.

3.1 PURPOSE OF THE PROJECT SPECIFIC HEALTH AND SAFETY SPECIFICATION (PSHSS)

The PSHSS is a performance specification to ensure that the Client and any bodies that enter into formal agreements with the Client / Agents, Professional Service Consultants (Engineers, Quantity Surveyors and Architects), Principal Contractors and Contractors achieve an acceptable level of OHS performance.

No advice, approval of any document required by the PSHSS, such as hazard identification and risk assessments, or any other form of communication from the Client shall be construed as acceptance by the Client or Clients Agent of any obligation that absolves the Principal Contractor from achieving the required level of performance and compliance with legal requirements. Furthermore, there is no acceptance of liability by the Client or Clients Agent, which may result from the Principal Contractor failing to comply with the PSHSS, i.e. the Principal Contractor remains responsible for achieving the required performance levels.

A Mandatary Agreement in terms of Section 37.2 of the OHSA will be signed between parties prior to any works commencing. The PSHSS highlights the aspects to be implemented over and above the minimum requirements of current legislation. Requirements may be changed should new risks or issues are identified that could not have been foreseen during the design phase of the project, or during the construction phase. Any new legislation or standards (legislated or determined by the Client or Clients Agent) that are promulgated or accepted during the contract will automatically be applied.

It should be noted that this OHSS in no way relieves the Contractor of any of his responsibilities set out in the Act and Regulations

3.2 REQUIREMENTS

A project specific H&S Plan in response to this PSHSS will be subject to approval by the Client or Clients Agent. This must include all supporting documentation as required to verify the H&S system:

4 GENERAL REQUIREMENTS

4.1 RISKS

Principal Contractor to provide a detailed risk assessment for the entire work on site. The items noted are for information only and must be expanded as required by the project.

Summary of Risk on site:

a) Working within an operational Health facility.
b) Working at Heights.
c) Entering ceilings and damaging other equipment.
d) Lifting equipment
e) Fire
f) Flammable Liquids / Gas
g) Fragile Materials
h) Hazardous Substances
i) Hot Works
j) Members of Public
k) Snakes/ Bees
l) Biological risks
m) Ergonomic risks
n) Environmental Management
o) Weather related.
p) Equipment and machinery
q) Asbestos management

r) Use of Electrical Equipment/Tools
s) Exposure to Medical Fluids
t) Confine Space

Existing structures on site and surrounding land use (with a significant impact on Health & Safety):

a) Public Hospital Staff safety a concern.
b) SMME (Construction Mafia)

4.2 SPECIFIED HAZARDOUS CHEMICAL SUBSTANCES

The PC is to supply the products required as per the bill of quantities-, materials safety data sheets (SDSs) for each of the products envisaged to be utilized on site.

OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

Notification of Construction Work (Annexure 2)

The Notification must be taken to the Regional Department of Labor Office in East London for acknowledgment. This must take place before any work commences.

It should be noted that this OHSS in no way relieves the Contractor of any of his responsibilities set out in the Act and Regulations.

The file must be submitted for approval to the Client or Clients Agent and issued to the Department of Labour before any construction work commences on site.

It should be noted that this OHSS in no way relieves the Contractor of any of his responsibilities set out in the Act and Regulations.

4.3 HEALTH AND SAFETY PLAN FRAMEWORK

The H&S aspects related to the project outlined in the previous sections are to be taken into account when drawing up the H&S Plan. The PC is required to demonstrate competence by providing an H&S system that will address the requirements of the project.

The Client or Clients Agent may from time-to-time request additions or systems as they relate to the works or legislative requirements at the time.

4.5 APPOINTMENT OF COMPETENT SITE PERSONNEL

The CEO (OHSA S16.1) of the PC will take overall responsibility for the appointment of competent site staff for the duration of the project. Should the CEO not be personally involved in the project, the H&S responsibilities are to be delegated to the Site Agent (OHSA 16.2). Knowledge and training in H&S is required, and certificates indicating H&S training as well as experience to be included in CVs.

All other legal appointments are to be made with relevance to the type of work required.

4.6 CONSTRUCTION / MAINTENANCE MANAGER / SUPERVISORS

Competent Construction / Maintenance Managers/ Supervisors must be appointed to manage part or all the works and have training and/or experience in the area of responsibility. All site supervisors must show evidence of appropriate training in H&S, and an understanding or training in areas of responsibility (i.e., risk assessments, method statements etc.). Multiple competent Assistant Construction / Maintenance Managers/ Supervisors may be appointed where justified by the scope and complexity of the works.

There should be 2x Construction / Maintenance Managers / Supervisors if the team Splits up into two regions for work.

Curriculum Vitae (CVs) are to be submitted for approval by the Client and Clients Agent. The Construction / Maintenance Managers / Supervisors will be held responsible for the safety of working teams and subordinates,

housekeeping and stacking and storage of materials. The Construction / Maintenance Managers / Supervisors must, as a minimum, have a supervision course.

If the Construction / Maintenance Managers / Supervisors Manager changes throughout the project. The Principal Contractor must ensure to provide the proposed Construction / Maintenance Managers / Supervisors CV and certificates for approval and then update the Annexure 2 and ensure that the appointment letter as well as proof of competency is available in the Health and Safety File.

4.7 HEALTH AND SAFETY OFFICER

Competent registered **Part-Time** Safety Officer to be appointed for the duration of the project.

The CHSO must provide the SACPCMP valid registration certificate, CV and relevant certificates/qualifications. The officer will be required to compile a monthly report, see **Annexure A**.
These people may not hold any other position on the site staff.

The site supervisor may not act as the CHSM or Officer.

4.8 HEALTH AND SAFETY REPRESENTATIVE

Irrespective of the number of employees on site the PC must appoint **Full-Time Health and Safety Representatives**, who at least has completed the necessary health and safety representative course.
The H&S representatives will liaise and report to health and safety officer.

4.9 OTHER APPOINTMENTS

Not limited too but other legal appointments must be done as per the OHS Act 85 of 1993 and related regulations.

5 GENERAL RISK MANAGEMENT

5.1 HEALTH RISKS AND MEDICAL SURVEILLANCE

All workers (including those of Contractors) are required to be in possession of a medical certificate of fitness issued by a registered Occupational Medical Practitioner prior to commencing work. Medical surveillance will commence at pre-employment.

Many of the processes may be labour intensive and ergonomic risks are to be noted. All workers (including Contractors) are to be included in the medical surveillance programme.

Workers will be exposed to biological risk, noise, dust, and physical risks from extended periods of work of a repetitive nature, materials specified and the general nature of the business.

Environmental monitoring results and risk assessments are to be made available to the occupational health professionals doing the medical surveillance. The use of occupational risk exposure profiling (OREPS) and job descriptions are to be used to determine specific exposures for management.

All workers (including Contractors) are required to be in possession of a medical certificate of fitness prior to commencing work.

Employees required to perform work at heights or from fall risk position must be medically fit to perform such work, such employee's medicals must specify "Fall Risk" or "Working at heights" in the exposure section of the annexure 3 template.

Annual medical surveillance is required (unless identified as being required more frequently e.g. Noise, Dust, Asbestos etc), as well as exit medical.

Arrangements for keeping medical records for the required time are to be noted.

It is preferable that the PC has a medical surveillance plan.

5.2 HAZARDOUS BIOLOGICAL AGENTS

1. **Identify the HBAs**: Determine which HBAs are present in the workplace and classify them into the appropriate groups (Group 1, Group 2, Group 3, or Group 4) based on their potential to cause human disease.
2. **Evaluate the Risks**: Assess the potential risks associated with each HBA. This includes considering the likelihood of exposure, the severity of the potential health effects, and the number of people who could be affected.
3. **Implement Control Measures**: Based on the risk evaluation, implement appropriate control measures to minimize or eliminate the risks. This may include engineering controls, administrative controls, and personal protective equipment (PPE).
4. **Monitor and Review**: Continuously monitor the effectiveness of the control measures and review the risk assessment regularly to ensure it remains up-to-date and effective.

By following these steps, you can effectively manage the risks associated with HBAs and ensure the safety and health of individuals who might be exposed to these agents.

Hepatitis A & B vaccination is required for all contractor employees that will be working in all Health Facilities.

5.3 NOISE AND DUST CONTROL AND RISK

All plant from plant hire companies (suppliers) or that of the PC is to be compliant with the Noise Induced Hearing Loss Regulations. Plant identified that has not been tested and marked for noise emissions will result in having to be tested at the Contractors or PCs expense. Failure to do so within a reasonable time period will result in such plant being removed from site.

Medical Surveillance for Noise Exposure (Noise Exposure Regulations, 2024 – Sec 9)
Workers exposed to noise levels exceeding 85 dB must undergo:

- Baseline audiometry testing before employment.
- Annual audiometry screenings to monitor hearing health.
- Exit audiometry within 30 days of leaving a noise-exposed position.

If a worker shows signs of Noise-Induced Hearing Loss (NIHL), the employer must:

- Reassign them to a lower-noise environment where possible.
- Provide additional protective measures, such as enhanced hearing protection.

Audiometric testing of all workers is noted as required in the medical surveillance programme for all permanent workers prior to work commencing. All workers in identified noise areas will require testing if the noise levels are indicated on plant or through processes as greater than 85dB. Audiometry records are to be available in the H&S file.
Suitable SANS approved hearing protective equipment shall be issued and worn. Where several items of construction plant are in operation at or near to each other, the noise zone for the combined plant should be established and suitable hearing protective equipment used within this zone.

The PC must ensure that the Health facilities will be fully operational and take extra care and planning is communicated to the Facility Management to ensure that noise and dust does not interfere with daily activities.

5.4 EMERGENCY PROCEDURES

An emergency plan and procedure that is appropriate to the risks is required prior to commencement on site. It is advised that the system should be simple and easy for any worker to follow.

The emergency plan is to ensure the inclusion of local service providers where possible. Such arrangements should be made with these persons prior to the commencement of the project.

Local emergency telephone numbers must be displayed and made part of the emergency procedure.

The general principals of emergency management are to be applied as it applies to the hierarchy of control and management. The PC must consult with the Client in preparation of the emergency as buildings will be operational.

Fire Prevention and Emergency Preparedness

A Fire Risk Assessment must be conducted before construction begins and updated throughout the project as site conditions change.

The Principal Contractor must ensure compliance with fire prevention, emergency preparedness, and fire-fighting measures as outlined in the General Safety Regulations, 2025 (GSR) and the Construction Regulations, 2014.

5.5 FIRST AIDERS AND FIRST AID EQUIPMENT

Irrespective of the number of employees on site the PC will appoint at least **1 First Aiders** who will be trained to **Level 3.**

First aiders shall be available and accessible on site always and be able to work as a team when responding to any emergency on the project.

Appropriately stocked first aid kits, at least to the requirements of the Annexure to the GAR, are to always be available to assure continual availability in every vehicle used to work on sites.

THIS SHOULD BE AVAILABLE FOR EVERY TEAM.

5.6 FIRES AND EMERGENCY MANAGEMENT

Attention to emergency planning and procedures is very important. Requirement in terms of identified risks:

- Fire;
- Public Safety;
- Falls from heights,
- Hot Works (Permit from Facility)

The emergency plan is to ensure the inclusion of local service providers where possible. Such arrangements should be made with these persons prior to the commencement of the project; the emergency plan is to include the risks of fire on site and related to any specific activities.

Fire extinguishers will be appropriate for the risk and in sufficient numbers to deal with the type of fires that could occur. All mobile plants are to have appropriate, accessible fire extinguishers. Hot work permits are required for any such activities.

5.7 INCIDENT MANAGEMENT AND COMPENSATION CLAIMS

All incidents and accidents are to be investigated. All serious incidents involving any form of disabling injury or fatality are to be reported to the Client or Clients Agent immediately. This shall be confirmed in writing following the incident.

Any person who contracts an Occupational Disease will need to be reported to the Compensation Commissioner as an occupational disease where their work is to monitor and in contact with others. Such details are provided in the Compensation for Injuries and Diseases Act (COIDA).

Failure to comply with emergency provisions will be considered a serious offence, and the operation or project may be stopped if deemed inadequate for the work at the time of assessment or site inspection.

5.8 PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING

The PC is to provide PPE to all employees free of charge.

The wearing of the identified SANS approved PPE at all times is non-negotiable.

- Hard hats;

- Protective footwear;
- Overalls fitted with reflective strips that ensure worker visibility.
- Eye protection (if required)
- Hearing protection;
- Reflective jackets for Supervisors (no bibs);
- Respiratory protection (minimum of FFP2);
- Safety Gloves
- Safety Harnesses and
- Any other necessary PPE identified from SDS's and/or risk assessments.

5.9 OCCUPATIONAL HEALTH AND SAFETY SIGNAGE

On-site H&S signage is required. Signage shall be posted up at fixed or temporary working areas, or other potential risk areas/operations. These signs shall be in accordance with the requirements of the General Safety Regulations or SANS requirements as amended. Signage is to be noted on the site drawings indicating where fixed/temporary signage is required.

- 'hard hat area' or other PPE requirements noted;
- First aid box positions (including vehicles); and
- Fire extinguishers.
- Scaffold signage.
- Assembly Area
- No Un-authorized entry.
- Hoarding.
- Access for Staff
- Safe Walkway

Signs shall be posted at areas of work on site indicating that a construction site is being entered and that persons should take note of H&S requirements. The Principal Contractor must ensure that members of the that need to access the hospital will not be able to gain access to the construction area. It should be noted that the hospital will be fully operational, and the construction area should be properly and securely barricaded at all times.

5.10 INDUCTION OF EMPLOYEES AND VISITORS, GENERAL H&S TRAINING

A simple, formal induction program is to be prepared which is site specific. Inductions must be carried out for all workers and visitors (including Client) to the site.

DSTi training is required to ensure workers are familiar with the risks and H&S measures of the work or tasks to be done. Any person found on site without proof of induction in the H&S File will be removed from site until the proof is supplied and, and a penalty issued per non-compliance.

5.11 DECANTING

Decanting of patients and employees:

Care should be taken to ensure that construction activities are always being separated from employees as well as patients are reallocated.

It is the responsibility of the Contractor to inform the Health Facility Management, minimum 7 Days Prior, of the required Decanting. This Decanting Agreement should be done in writing and Signed off by all the relevant Parties.

No work should be conducted when employees are decanted, all employees be removed from the area before construction activities commence.

Once the decanting is completed, area should be checked for safe for use and signed off by Maintenance Manager.

6 COMMUNICATION ON SITE

All H&S communication during the project between the Client or Clients Agent and the PC will be done in writing, including the issue and responses to non-conformances and H&S audit results.

7. AUDITING

Frequency of external auditing by the Client or Clients Agent will be conducted every 30 Days to ensure that the contractors conform to the requirements of the Construction Regulations. The site will be inspected, and the documentation audited relative to the activities and H&S plan. The CHS Officer of the PC must accompany the Client or Clients Agent, on all audits and inspections.

The PC will ensure that all their Contractors are audited at a frequency determined by the Client or Clients Agent. Audit frequency may be increased if Contractors are not performing adequately. Audit results will be acted upon, and non-conformances and penalties issued where deemed appropriate. The Client or Clients Agent may act or require further outcomes if non-compliances are noted, or unsafe acts are noted on site.

Internal audits are to include site conditions as well as ensuring H&S files are appropriate, and compliant. Comprehensive audit reports are to be made available, the format of the audit reports are to be acceptable by the Client or Clients Agent.

The audit will be adjusted from time to time relative to the activities on site. A similar process is to be used by the PC when auditing their Contractors on site. Compliance with legislative requirements and the systems provided by the PC to manage the H&S on site will be measured. Full compliance is required. Time limits for corrective actions will be set and must be adhered to.

8.SITE ACCESS POINTS AND SECURITY CONTROL

Site access - Entry to site may only be through pre-arranged security-controlled access points.

The contractor must detail how members of the public will be prevented from accessing site (risk of cross contamination between people working on site and members of public).

Provision of Visitors Book for signing in and out of site. Records of all personnel entering the site and their contact details must be kept.

- The proposed hospital will attract separate site entrances of which the main contractor will establish and ensure access control thereof.
- The main contractor will be required to demarcate and hoard off the work. Hoarding plans will be provided indicating proposed construction site access points. (Hoarding measured in BOQ)
- The main contractor is required to provide and secure a separate exclusive site own access, for the entire works. The main hospital entrance is not to be used for any construction-related business. It is recommended that the access be on the of the site adjacent to the dedicated contractor's site camp.
- The site access shall be the contractor's responsibility. For main contractors, selected-, domestic-, SMME subcontractors, suppliers, visitors, etc.
- The Contractor shall provide and maintain an all-weather temporary graded surface from the site access (gate) for construction area and access to construction site offices.
    - A Traffic Management Plan is required for entry to the site yard and to the Hospital Areas.
    - Access will only be allowed at designated public entrance for Public.

Site access - Entry to site may only be through pre-arranged security-controlled access points.

- Works areas should be Demarcated
- Signage in Place
- Access Controlled
- All Electrical to have **LOCK OUT** Procedure in Place.
- Follow the above but not limited to the above.

9. CARE OF WORKERS ON SITE (WELFARE)

Adequate toilets, clean, safe drinking water and decent shelter must be afforded to workers at all times.

It is the responsibility of the contractor to inform and agree with the Health Facilities Management for the use of Ablution Facilities and Water.

10 DISCIPLINE, ALCOHOL AND SUBSTANCE ABUSE

All employees (management included) are to follow instructions given in the interest of H&S. Disciplinary action is to be imposed on those who do not follow such instructions or company rules or policies.

No person can work or access site if under the influence of alcohol or other substances that could impact on their own or others safety.

11 WORKING AT HEIGHTS

A practical site-specific fall protection plan and rescue plan as per CR 10 needs to be compiled by a competent person as per unit standard 229994.

Only competent persons may be allowed to work at heights.

All employees working at heights shall be in possession of working at heights certificate US 229998.

No Homemade structures or ladders will be permitted on the project.

Surroundings to be clear of rubble.

Fall protection, fall prevention, and fall rescue plans to be in place and communicated to site employees.

Ladders to be structurally sound and not broken and in accordance with GSR 13A.

Correct personal protective equipment to be used (safety harness and lanyard) to be used.

GSR (6) 6. No employer shall require or permit any person to work in an elevated position and no person shall work in an elevated position, unless such work is performed safely from a ladder or scaffolding, or from a position where such person has been made as safe as if they were working from scaffolding.

Construction regulation 10 of 2014 to be implemented when working at heights and to prevent any person from falling from heights.

Trestle tables are not to be used.

SCAFFOLDING

A contractor using access scaffolding must ensure that the scaffolding, when in use, complies with the safety standards as specified in the SANS 10085-1:2024 and relevant regulations under section 44 of the Occupational Health and Safety Act. The following specific requirements must be adhered to:

- Level and Balanced Footing:
- Scaffolding must be level and balanced on the correct footing, including the use of base jacks, U-jacks, or mobile wheels, as specified in SANS 10085-1:2024. Regular inspections must confirm that the scaffold remains level and stable, with all footings securely in place and adjusted as necessary.
- Ledgers and Bracing:

- Scaffolding frames and standards must be secured using appropriate ledgers and bracing methods. These must be installed in accordance with the design specifications and the guidelines in SANS 10085-1:2024 to ensure full stabilization against lateral forces.
- Platform Boarding and Edge Protection:
- All working platforms must be fully boarded and equipped with the correct edge protection, including guardrails and toe boards, as required by SANS 10085-1:2024. Platforms should be securely fastened, ensuring no gaps that could pose a fall hazard.
- Platform Load Capacity:
- Working platforms must adhere to the load classifications specified in Table 6 of SANS 10085-1:2024. Contractors must ensure that no platform is overloaded beyond its designated capacity, and that load distribution is even across the scaffold structure.
- Access Points:
- The scaffold must include proper access points, such as ladders or stairways, integrated within the scaffold structure. These access points must comply with SANS 10085-1:2024 requirements. While trap doors are optional, safe access to working platforms must be ensured.
- Securing the Scaffold:
- Scaffolding must be secured using appropriate fastening methods, such as reveal ties and fixed ties, in accordance with SANS 10085-1:2024. Where necessary, buttresses must be employed to ensure stability, particularly in high-wind areas or when the scaffold height exceeds the limits specified by the standard.
- Signage:
- Clearly visible signage must be displayed on the scaffold to indicate safe load limits, user restrictions, and other critical safety information as required by SANS 10085-1:2024. The signage should reflect the scaffold's current safety status following each inspection or modification.
- signage must be displayed to indicate if the scaffold is safe or unsafe to use.

CRANES

A contractor must, in addition to compliance with the Driven Machinery Regulations, 1988 ensure that where tower cranes are used.

Employees required to perform work at heights or from fall risk position must be medically fit to perform such work, such employee's medicals must specify “Fall Risk” or “Working at heights” in the exposure section of the annexure 3 template.

Failure to comply with the above will lead to a fine as stipulated below.

12. DEMOLITION WORK

The Contractor must provide a Demolition Method statement for approval by the Clients Agent. Dust control and noise reduction measures must be put in place before demolition starts.

The Demolition will be the removal of existing HVAC equipment such as Ducting, Diffusers, Grills, Air Handling Units, etc.

All rubble and waste material must be removed from site asap and registers thereof kept as per the waste management plan. Proof of disposal of the demolished material must also be provided and kept on record.

12.1 ASBESTOS

All asbestos work should be done in compliance with the Asbestos Abatement Regulations 2020.

The Contractor shall ensure that all asbestos work is done only by registered “Asbestos Contractor” as prescribed by the Asbestos Abatement Regulations, 2020.

All asbestos containing material removed on site will be disposed of at an accredited disposal site and disposal certificates must be obtained from the accredited disposal site and kept on file.

An AIA to be appointed in accordance with Asbestos Regulation. AIA to compile and submit Asbestos Plan of works to Department of Labour for acknowledgement.

All asbestos work may only continue after the notification for asbestos work has been submitted.

AIA will visit the site for assessment before the asbestos work commence, during and after for clearance.

On completion of asbestos removal submit the Asbestos Clearance certificate and keep it on file.

13 ELECTRICAL

In addition to the requirements of the Electrical Machinery Regulations and the General Machinery Regulations, any electrical distribution board used for construction work shall be fitted with suitable earth leakage protection.
Leads must be properly and firmly connected.
Plugs and sockets shall be in good and safe condition.

All electrical apparatus, other than electrical hand tools, shall have a physical “lock out” system which will prevent any operation other than that authorized by a supervisor.
A “lock out” sign shall be displayed when the apparatus is not in use.

Method statements and safe work procedures will be required for all work involving electrical apparatus.
Ensure that main power supply and gas line in service duct to be identified and method statement to be submitted to Electrical & Mechanical Engineer for approval.
A Certificate of Compliance (COC) is to be submitted after work is completed.

14 INSPECTION AND HAND TOOLS

No handmade or damaged tools may be used on site.
The Principal Contractor needs to exercise control over all contractors on site. Hand tools may only be used for its intended purpose.
A competent person must be appointed to inspect hand tools weekly.
Inspections need to be recorded on a register and each tool identified with a unique number.
<u>Inspection of equipment and tools.</u>
The following items of equipment must be regularly inspected and maintained and appropriate records kept on file.

1.1. First Aid dressing registers
1.2. Fire equipment
1.3. Portable electrical equipment
1.4. Stacking and storage inspections
1.5 Hazardous Chemical Substances (HCS)
1.6. Ladders
1.7. Excavations
1.8. Construction vehicles and mobile plant.
1.9. Health and Safety Representatives checklists.
Not limited to just the above items.

15 LADDERS AND LADDER WORK

The Principal Contractor shall appoint a competent person in writing to inspect all ladders weekly and record such findings in a register.
Ladders are to extend one meter above a landing and must be secured at the top and have a secure, non-slip base.
All ladders that do not comply with Health and Safety standards are to be removed from the site immediately.

Electrical contractors to use Fiberglass ladder for non-conducting purposes.

16 SUBCONTRACTORS

The PC is to ensure that every sub-contractor will comply with the health and safety specifications.
All subcontractors' health and safety files must be approved by the Principal Contractor prior to any work commencing.

Contractor and SMME s to be Audited by Principal contractor on monthly basis.

17 DELIVERY OF MATERIALS

The PC must reasonably manage all deliveries of material to site. Stacking and storage of materials to be properly coordinated.
The PC is to consider the neighbors and public in all its activities related to this construction work.
Hospital services, namely Gas, are not to be affected by construction activities.

18 HOARDING

Adequate hoarding to be done to reduce dust and noise and prevent public entrance to site.
Security features must accompany the hoarding to maintain a secure environment for the existing occupants.

No Unauthorized person signage should be installed at entrances.

Maintenance of Hoarding to be done at regular intervals.

19 NON-CONFORMANCES

Should, at any time, the work, or part of the works, be stopped due to unsafe acts or non-compliance with the Clients OHS Spec or PCs H&S Plan; the PC shall have no claim for extension of time or any other compensation.

The following constitute examples of the types of non-conformances that will attract penalties:

Minor: Penalty: R50/count	**Medium: Penalty: R500/count and a non-conformance**	**Severe Penalty: R5000/count, a non-conformance and/or activity stoppage**
Non-use of PPE supplied	No certificates of fitness for workers as required	Contractors working without Health and Safety Plan approval
Non completion of registers for plant and equipment on site	No monthly OHS report at site meeting to report on	Workers transported in contravention of the OHS plan or legal requirements
Lack of H&S signage at work areas	Working without training or the appropriate H&S method statements	Invalid Letters of Good Standing
Tools and equipment identified in poor condition during inspections	Legal non-conformances identified during the previous audit and not addressed within the agreed time frame.	Fall protection harness not tied off / not worn
		Any breach of legal requirements

20 HEALTH AND SAFETY FILE

The documentation submitted and approved following the awarding of the contract will be used to form the H&S file. The H&S file is required to be laid out in a logical manner, and documentation filed within the file is to be easily accessible.

The following completed information shall be included (but not be limited to) as part of the index:

- The Site-Specific Health and Safety Specification. (from Client)
- The H&S Plan and the approval by Client;
- Appointment by Client;
- Mandatory agreement with Client;
- Construction work Annexure and confirmation letter from DOL.
- H&S specifications issued;
- Record of Competencies (CVs) and appointments;
- Training Records;
- Method statements;
- Risk assessments;
- Safe work procedures;
- Emergency and injury management;
- Safety data sheets
- Medical surveillance records;
- Registers; and
- Employee records (who is on site)

Province of the
EASTERN CAPE
HEALTH

ANNEXURE A

CONTRACTORS MONTHLY HEALTH AND SAFETY REPORT
(To be submitted by the end of the first week of each month and be available with each audit)

	CONTRACT NUMBER:	PROJECT NAME:	CONTRACT DETAILS:
1	GENERAL ACTIVITIES FOR THE MONTH (detail each area of work)		
2	NUMBER OF WORKERS (Permanent and local, contractors)		
3	TRAINING DONE (supplier, no of people, type)		
4	INCIDENTS / ACCIDENT (list number and details, attach reports)		
6	NON-CONFORMANCES (closed out or active)		
7	CONTRACTORS (list, approval status)		
8	AUDITS COMPLETED (internal and external)		
9	CRITICAL ISSUES		
10	GENERAL		

Health and Safety Officer: _____**Signature:** _____**Date:** _____

Construction Manager: _____ **Signature:** _____**Date:** _____

ANNEXURE B – REQUIREMENTS FOR THE SAFETY PLAN ASSESSMENT

The Contractor must note that the information below is pertinent to the compilation of their safety plan response to this site-specific safety specification and it would be preferred if the Safety Plan is written in the order of the assessment documented below.

No	Item	Notes
1	**Project Directory**	Please state details of Project Client, Project Manager / Principal Agent, Safety Agent, Consulting Engineer, etc. (Name, address, contact details).
2	**Contractors Directory**	Please indicate if you will be using Contractors on this project, if yes, include their details, trade, and FEM details.
3	**Other Parties Directory**	Please indicate contact details for any services applicable (electricity, water, etc.) as well as Department of Labour and Emergency Services.
4	**Project Safety Statement**	The Project Safety Statement must be included in the Safety Plan.
5	**Health and Safety standards for the project (OHS Act, construction regulations, basic conditions of employment, etc.)**	Health and Safety standards must be included in the Safety Plan.
6	**Project Particulars**	Scope of works must be included in the Safety Plan. This is critical.
7	**Existing environment – Structures and Surroundings, Services (Electrical, Water, Sewerage, etc.), Traffic Arrangements, Parking, Access to Site, Storage of Plant and Materials**	Please include these items in the plan. The items must be Site Specific, the location of services and services that will be affected must be mentioned.
8	**Management Structure for safety on the Project**	A structured organogram with names of the responsible people must be included.
9	**Appointed Persons, Supervision**	The required appointments must be identified. A list of the appointed persons must be included in the Safety Plan.
10	**Security Procedures**	Please indicate if a security company will be appointed and include the contact information in the Safety Plan.
11	**Registers list and inspection frequency**	A list of the Inspection Registers that will be on file must be included in the Safety Plan.
12	**Design Co-ordination**	Please indicate your procedure for implementation of design changes by designer on the project, and the procedures for liaison and implementation of temporary works design on the project.
13	**Contractor Co-ordination**	Mention must be made of how Contractors will be coordinated on site to ensure that they work together and not adversely affected health and safety.

No	Item	Notes
14	**Housekeeping, stacking and storage**	Housekeeping policies and procedures must be included in the Safety Plan.
15	**Waste Disposal Arrangements**	Waste disposal arrangements procedures must be included in the Safety Plan.
16	**Noise and dust control**	Please indicate if any noisy operations (more than 85 decibels) will be carried out and what measures will be used to reduce noise exposure to workforce.
17	**Training Requirements**	Training requirements must be identified and recorded.
18	**Plant and Equipment**	A list of plant and equipment to be used on site must be included in the Safety Plan.
19	**Safety Monitoring Arrangements**	The name, contact details and SACPCMP registration status of the Safety Officer must be included in the Safety Plan. State how often the Safety officer will be on site (note safety specification requirement in section 1.7).
20	**Information for Contractors**	State how information will be given to Contractors on site.
21	**Consultation/communication arrangements with Employees**	State how information will be given to employees e.g., notice board.
22	**Selection of Contractors Procedures**	Principal contractor must state what health and safety procedures they will use to assess the competence and resources of their contractors on site.
23	**Activities with risk to Health and Safety (Risk Assessment)**	A Baseline Risk Assessment must be included in the Safety Plan; it must address the Risks identified in the Safety Specification as well as the risk of any other hazards that the Principal Contractor is aware of that are relevant to the site.
24	**Hazardous Substances**	Must be listed in the Safety Plan and addressed in the Risk Assessment.
25	**First Aid and Medical Procedures**	Please indicate name of first aider, position of first aid box, location of nearest medical facility and emergency numbers.
26	**Fire and Emergency Procedures**	List of emergency telephone numbers must be drawn up and included in the Safety Plan. The position of Fire Extinguishers, Assembly Point location, fire drill frequencies, numbers of fire marshals, etc.
27	**Accident and Incident Reporting and investigation**	State the Accident and Incident Reporting and investigation procedures of your company.
28	**Welfare and Site Facilities**	Elaborate on toilets and eating areas, water provision, how will workers be protected during wet weather conditions etc.
29	**Site Rules**	The Site Rules must be included in the Safety Plan.
30	**Personal Protective Equipment**	The necessity must be identified by Risk Assessments.
31	**Health & Safety File arrangements**	Please indicate arrangements for the return of the Health and Safety File to the safety agent at the end of the project.

No	Item	Notes
32	**Method Statements/Safe System of Works**	A list of Method Statements/Safe System of Works must be included in Safety Plan for all High-risk activities
33	**Permits and wayleaves**	List of activities that Principal Contractor anticipates will require permits and wayleaves (including those stated in the safety specification) to be included.
34	**Fall Prevention and Protection Plan and Fall Rescue Plan**	A copy of the Fall Prevention and Protection Plan, fall rescue plan and fall risk assessment must be included in the Safety Plan.
35	**Demolition method statement**	A copy of the Demolition Method Statement must be included in the Safety Plan.
36	**Confined spaces**	The Principal Contractors' procedures for managing access, egress and work in confined spaces must be specified in the Safety Plan. Includes permit procedures, air monitoring, PPE, etc.
37	**Safety Representatives and Safety Committees**	When a project has more than 20 employees a designated employee must be chosen by the laborers to represent them. A safety committee must be established if 2 or more safety representatives are appointed. Please note Safety Specification requirements regarding this section (section 2.12).
38	**Have the significant hazards from the safety specification been addressed?**	See section 1.9 of the Specifications and ensure practical measures have been detailed in the safety plan.
39	**Safety File - Safety Policies in File and Signed by 16(1) CEO.**	Safety Policies must be signed and explained to employees.
40	**Safety File - A copy of the valid Letter of Good standing from FEM / Workman's Compensation must be on file.**	A copy of the valid Letter of Good standing from FEM / Workman's Compensation must be on file.
41	**Safety File - Signed copy of the 37.2 Mandatary Agreement**	A 37.2 Mandatary Agreement needs to be signed between the Client and the Principal Contractor.
42	**Safety File - Appointment letter from Client (as well as 5.1.K)**	The Client must appoint the Principal Contractor in writing.
43	**Safety File – Notification / Permit**	A copy of the Annexure 2 Notification (and proof of submission) to Department of Labour must be available. This can be in the form of a Department stamp, email, or copy of Construction Work Permit.

ANNEXURE C – LEGAL APPOINTMENTS

The contractor shall make the following appointments, as required:

Chief Executive Officer (OSH Act 16(1)
Contract Director/Manager (OSH Act 16(2)
Construction Manager (CR 8(1)
Maintenance Supervisor (CR 8(7)
Assistant Maintenance Supervisor (CR 8(8)
Construction Safety Officer (CR 8(5)
Safety Representative (where > 20 employees on site)
Construction risk assessor (CR 9(1))
Excavation Supervisor (CR13(1)(a)
Demolition Supervisor (CR14(1)
Scaffold Supervisor (CR16(1)
Material Hoist Inspector (CR19(8)(a)
Material Hoist Operator (CR19(6)
Controller of Explosive Actuated Fastening Devices Nails, Cartridges or Studs Issue and Collection (CR21(2)(g)(1)
Construction Vehicle and Mobile Plant Operator (CR23(1)(d)(i)
Controller of Temporary Electrical Installations (CR24(c)
Stacking Supervisor (CR28(a)
Fire Extinguishing Equipment Inspector (CR29(h)
Fall Protection Plan Developer (CR 10(1)(a)
Incident Investigator (OSH Act 9(2)

ANNEXURE D – SAFETY SPECIFICATION AND BASELINE RISK ASSESSMENT ISSUE REGISTER

Date of Original Safety Specification Compilation	Compiled By	Issue Date
20th March 2025	J Bhana / B Malati	20th March 2025

Notes as per Noluthando	J Bhana / N Mcopele	14th March 2025
Teams Meeting	J Bhana / N Mcopele/ B Maliti	**20th March 2025**
Document Review	J Bhana / N Mcopele/ B Maliti	**26th March 2025**

Acknowledgement:

I, _____representing.

_____(Contractor), have satisfied myself with the content of this Health and Safety Specification and shall ensure that our employees and contractors on site comply with the requirements of this document, our safety documentation and health and safety legislation.

_____ _____

Signature of Contractor Date

Comments:

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
TRAVELING TO SITE								
	RE	Driving on public roads/ Driver not competent or medically and psychologically fit/ under the influence of drugs and/or alcohol/ Pre-start check not completed? Speeding over the Speed Limit	Financial loss/ Damage to equipment/ Injuries to employees/ Damage to property/ Possible fatalities	All drivers must be authorised in writing, be in possession of valid Competence and Medical Certificate. All employees shall undergo a mandatory alcohol level test. Driver must perform pre-ignition check and ensure checklist completed before leaving workshop/office. Under no circumstances shall anyone tamper with the safety devices / mechanisms on the machinery. No loading of passanger in Load cab of bakkies. Driver to ensure that bakkie are kept in good state. Maintained as per maintenance schedule. All Occupants in bakkie to ensure seatbelt is engaged at all times.	2	2	2	8

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
	TRAVELING TO SI	Storage of Materials and Tools	Injury / Property damage / Theft / Security Issues	Proper separated between Human and Material in the vehicle. Flammable Materials to be stored in demarcated storage containers. Fire Extinguisher to be available.	3	3	3	27
		Mechanical failure/ not maintained as per maintenance schedule/ Wear and Tear	Financial loss/ Damage to equipment/ Injuries to employees/ Damage to property/ Possible fatalities	Daily pre-ignition checklist to be completed and any faults found reported to immediate supervisor and/or safety officer. Workshop Manager to ensure that machines are kept in good state. Maintained as per maintenance schedule. Under no circumstances shall anyone tamper, remove or modify any safety devices / mechanisms on the machinery. Maintenance must be performed by Competent Trained Petrol / Diesel Mechanics.	2	1	2	4

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
		Handling Heavy Equipment and Material- **Ergonomics**	Employee suffering from muscle strain when picking up the tools or equipment alone or in the wrong manner.	At least 2 employees carry the equipment Employees trained in **ergonomics** (lifting techniques). Good communication. Equipment has handles (cage) to make handling easy.Employees to use their upper legs to pick up the equipment and not their lower back.	3	2	2	12
LOADING AND OFFLOADING								

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
CR19.3a	**OFFLOADING**	Lifting Operations	Falling material Crushing by materials Hand injuries to the slinger Toppling crane	Check test certificate Check examination certificate Check inspection have been carried out Check certificates for lifting equipment (chains, slings, shackles, etc.) Ensure lifting gear is rated to carry load (SWL) Ensure materials being lifted are properly packaged and slung. Be aware that there should be a minimum clearance of 600mm between any slewing parts of a crane and any fixed installation to prevent being trapped. Access to the work area during lifting operations is to be restricted to those involved with and trained in the work in hand. Do not allow members of the public to gain access to the area. Only trained banksmen to be used. The crane driver and the banksman are to ensure that the signals given are clearly understood.	2	2	2	8

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
	LOADING AND	Manual Handling of General Items	Muscular skeletal injuries if the load is too heavy or awkward Operative falling/ tripping Contamination from the substance being carried Fall of material being carried	Personnel should be aware of safe manual handling techniques Personnel to wear Personal Protective Equipment when carrying items, e.g. safety footwear and gloves. Ensure good housekeeping against tripping/fall hazards. Operative to get assistance if load too heavy- team lift if necessary. Utilise mechanical lifting and carrying aids where possible. Personnel to ensure access equipment, ladders will take weight of operative and load being carried. Personnel to ensure item being carried is properly bonded or is not liable to break apart whilst being manually handled.	2	2	2	8

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
		Material Hoist	Mechanical failure Overloading Hoist gateway being left open at landings	Safe working limit to be indicated on hoist. Hoist operator to be trained/ competent. Regular maintenance and inspection of hoist by competent person Records of maintenance and inspection to be maintained. Hoist gate should be fitted with mechanical and electrical interlocking devices.	2	2	2	8
ASSESMENT OF HEALTH FACILITIES								

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
GMR	SMENT OF HEALTH FACILITIES	Plant and Equipment	Injury / Property damage / Theft / Security Issues/ Hepatitus	Trained and competent operators must be used Wear appropriate protective clothing/equipment, e.g., goggles, gloves, ear defenders, etc. as appropriate. Vacination for Hepatitus A&B Added security - Identification of Employees Awarness of Hot Surfaces & Moving Equipment	3	3	3	27
General		Snakes/Bees/Wasp	Snake bite/ Bee Stings	Qualified first aider required for site who can treat snakebite/ Bee & Wasp Snake bite kit to be on hand Check area before working Find out nearest hospital and get emergency telephone numbers.	1	1	1	1

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
CR14e	**ASSE**	Overhead Services (Working near)	Contact with live services causing injury to personnel Damage caused to services	Maintain safe clearance levels Establish presence of any services via proper walk-through survey of site and/or means of service drawings Wear personal protective clothing Ensure height of plant/vehicles does not compromise or exceed clearance levels for overhead services Obtain information on clearance levels from service provider	1	1	1	1
SERVICES, MAINTENANCE, REPAIRS AND REPLACEMENTS								

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
GMR		Plant and Equipment	Injury / Property damage / Theft / Security Issues/ Hepatitus	Trained and competent operators must be used Wear appropriate protective clothing/equipment, e.g., goggles, gloves, ear defenders, etc. as appropriate. Vacination for Hepatitus A&B Added security - Identification of Employees Awarness of Hot Surfaces & Moving Equipment	3	3	3	27
General		Snakes/Bees/Wasp	Snake bite/ Bee Stings	Qualified first aider required for site who can treat snakebite/ Bee & Wasp Snake bite kit to be on hand Check area before working	1	1	1	1

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
CR14e	REPLACEMENTS	Overhead Services (Working near)	Contact with live services causing injury to personnel Damage caused to services	Maintain safe clearance levels Establish presence of any services via proper walk-through survey of site and/or means of service drawings Wear personal protective clothing Ensure height of plant/vehicles does not compromise or exceed clearance levels for overhead services Obtain information on clearance levels from service provider	1	1	1	1

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
CR19.3a	**SERVICES, MAINTENANCE, REPAIRS AND**	Lifting Operations	Falling material Crushing by materials Hand injuries to the slinger Toppling crane	Check test certificate Check examination certificate Check inspection have been carried out Check certificates for lifting equipment (chains, slings, shackles, etc.) Ensure lifting gear is rated to carry load (SWL) Ensure materials being lifted are properly packaged and slung. Be aware that there should be a minimum clearance of 600mm between any slewing parts of a crane and any fixed installation to prevent being trapped. Access to the work area during lifting operations is to be restricted to those involved with and trained in the work in hand. Do not allow members of the public to gain access to the area. Only trained banksmen to be used. The crane driver and the banksman are to ensure that the signals given are clearly understood.	2	2	2	8

Province of the EASTERN CAPE HEALTH

SWP safe working practice OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
		Demolition	Falling materials Premature collapse of structure	Ensure there is a current method statement in place Ensure all emergency procedures are in place and all details are displayed Ensure that structural demolition has been approved by the designer and site management Personnel must be competent Ensure at all times there is a safe means of access and egress All personnel must wear suitable and sufficient Personal Protective Equipment, including head, eye, and skin protection	3	3	3	27
		Painting	Toxic Fumes from Solvent Paint Pollution of Enviroment	Refer to safety data sheet for usage instructions, hazards and precautions required. When working at height, refer to risk assessment addressing this hazard below.	1	1	2	2

Province of the EASTERN CAPE HEALTH

safe working practice OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
		Scaffold Erection/ Dismantling	Personnel falling from a height Items of scaffold falling onto personnel Scaffold collapsing onto those below	Ensure scaffold is designed to take the imposed loads scaffolding is constructed properly scaffold is not overloaded scaffolders are fully trained scaffolding is regularly checked by competent person and record of inspection retained. Written inspections to be recorded on weekly basis scaffolders must adhere to the safe systems of work. all fall arrest equipment to be checked and certified in good working order that ALL understand the safe system of work	2	2	2	8

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
		Steel Erection	Falls from height Falling components Contact injuries from falling lifting equipment	Adhere to all general precautions for working at height (See risk assessment below) Barrier off / exclude area below work All lifting appliances to be examined and inspected Inspection register in place and up to date All personnel to be trained and competent and wear clipped on safety harnessed when working at height Ensure that lifting equipment (slings, chains, shackles) test certificates are current and on site. Competent persons only to connect loads and direct plant	2	1	1	2

Province of the EASTERN CAPE HEALTH

SWP safe working practice OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
		Steel Fixing	Back injuries caused by manual handling Eye injuries from tie wire Trips / falls Falling form height	PPE must include safety boots and goggles Manual handling training may be required Care to be taken when working near overhead lines Use only trained personnel Provide safe means of access Maintain and regularly inspect all lifting appliances and equipment Cap starter bars to prevent injuries where feasible Construct scaffold walk ways to cross reinforcing mesh, as required	2	1	1	2

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
CR10		Working and Heights	Fall from heights / tools and equipment falling / struck by	All access equipment is properly constructed (inspections record must be maintained) Only trained personnel construct, dismantle or control the access equipment All access equipment must have full toe boards and guardrails - comply with SANS 10085 on erection, use and dismantling of scaffolding No access equipment may be loaded above the level of the guardrail No access equipment to be loaded above its safe working load Where work involves leaning out on an open leading edge, then all personnel are to be fitted with full body harness. The harness must be connected at all times All fall arrest equipment to be correctly maintained Ensure if ladders are being used for access, they are either footed or tied. Also, the ladder must be set at the correct level of 1 in 4 or approximately 75·	3	1	1	3

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
		Exposed Live Electrical Wire	Electrical shock when in conact with exposed live wires or generator is not earthed correct.	To be inspected by a qualified electrician. Not used during wet weather. Earth spike in place. Machine used is inspected before use and need to be clean, leak free and serviceable.	3	2	2	12
		Electrical Commissioning	Electric shock	Personnel to comply with permits to work issued by Client All Contractors Staff to be trained in Lock Out Procedure Personal protective equipment to be worn by employees to prevent electric shock First aid treatment to be readily available Only competent and trained persons may decommission or commission electrical equipment	3	1	3	9
		Exposed Moving Parts	Injury to the body when in conact with exposed moving machinery.	Safety guards are inplace and in good working condition. Hand place ment to be in the correct place.	3	1	3	9

Province of the EASTERN CAPE HEALTH

SWP safe working practice OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
		Asbestos Cement Removal	Personnel falling from height Debris falling from height Falls of equipment or tools Release of asbestos fibres	Notice to be erected informing personnel of fragile roofs, as applicable Ensure safe access and egress is provided Erect physical barriers to prevent entry by unauthorised persons and falls from height, as applicable Roof sheets to be sprayed with water to prevent fibre release, where feasible Take extreme care to remove sheets whole. Where breakage occurs damp down exposed area to contain fibre release Personnel involved to wear asbestos respiratory protection Exclusion zone may be required under area of sheet removal to prevent injury from falls of material from height Only Department of Labour registered asbestos contractors may work with asbestos, and strictly in accordance with the requirements of the Asbestos Regulations.	3	1	3	9

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
		Ergonomics	Repetitive movements that may cause strain injuries. Lifting, carrying, pushing, or pulling heavy objects. Prolonged standing or awkward postures that may lead to fatigue or discomfort. Mechanical aids must be used where possible to reduce manual lifting hazards, including: Cranes, hoists, and forklifts for heavy loads. Trolleys, conveyor systems, or adjustable workstations to minimise strain.	Workers must receive training on proper lifting techniques to prevent back injuries and muscle strain, including: Bending at the knees and keeping the back straight when lifting. Holding loads close to the body to reduce strain. Avoiding twisting movements while carrying heavy objects. Heavy loads must be team-lifted or assisted with lifting aids to reduce the risk of injury.	3	1	3	9

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
		Excessive Noise (>85dB)	Excessive noise can cause noise induced hearing loss. Excessive noise in a public place can cause noise pollution.	Employees to use the correct earplugs and to use them in the correct manner.	3	2	1	6
		Hot Surface	Employee suffering from burns when making contact with the hot surface of the generator.	Only handled when it has cooled enough. Hot surfaces isolated with cage. Correct PPE to be used to make sure that	3	2	2	12
General Facility Safety					**Baseline risk**			
		Access	Injury to person's / employees /personnel/ consultants/patients	Separate general public access from working access area. Extra care to be taken to ensure the public and personnel do not gain access to the maintenance activities as well as early works	2	2	2	8

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
CR 10		Exposure noise	Interruptions to existing activities	Nosie Control should be taken into account. Extra special care and planning and communication between the contractor and Facilities Management.	2	2	2	8
		Exposure to dust	Interruptions to existing Hospital activities	Dust Control should be taken into account. Extra special care and planning and communication between the contractor and Facilities Management.	2	2	2	8
		Waste Management	Daily waste from contractor / professionals / specialists cross contaminated with Facilities waste.	Normal waste from all the appointed contractor / professionals / specialists should have separate controlled waste areas. To ensure no cross contamination with the existing Facilities waste management systems	2	2	2	8

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
GS' 13A	**General Facility Safety**	Contact with Biohazardous Waste	Contractor / professionals / specialists coming into contact with medical biohazardous waste from the hospital	Controlled medical biohazardous dump area should be completely separated from contractor / professionals / specialists **Employees to be innoculted with Hepatitus A & B**	2	2	2	8
		Barricading / Demarcating / Hoarding	Interaction with existing Facilities activities / personnel and general public	Control should be taken to ensure that all work activities is at all times being separated from day to day Facilities activities / staff / patients / general public as well as storage facilities. To bear in mind exposure to general patient. A solid hoarding structure to be above ceiling height to be considered.	3	3	3	27
GS' 13A		Security	Theft	Contractors and professionals doing maintenance activities should have own security on site. Contractors to ensure that materials and items of value are stored correctly as this can cause a security risk for the existing Facility.	1	1	2	2

Province of the EASTERN CAPE HEALTH

safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

low	med	high
1	4	12
2	6	18
3	8	27

BASELINE RISK ASSESSMENT BID NO: SCMU3-23/24-0659-HO: SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER 2 – HEALTH FACILITIES (36 MONTHS) JOE GQABI AND CHRIS HANI – HEALTH FACILITIES

Risk Rating multiplier: Low = 1; Medium = 2; High = 3

The base line risk assessment is to highlight hazards emanating from project risks identified.

					Baseline risk			
Reference	Area	Hazard	Risks identified as present	Describe the obvious control measures to be part of design	Likely consequences of an incident	Frequency of Exposure	Probability of harm	Risk rating and risk category
GS' 13A		Epidemic and Pandemic Control	Contact with Airbourne and infectious diseases.	Control should be taken to ensure that maintenance activities is at all times being separated from day to day facilities activities / staff / patients / general public.	1	1	3	3
GS' 13A		Medicine Access Control	Theft and substance abuse	Control should be taken to ensure that maintenance activities is at all times being separated from day to day facilities activities / staff / patients / general public.	2	3	3	18
GS' 13A		Infection Prevention	Jeopardizing the sterility of the patients environment.	Control should be taken to ensure that maintenance activities is at all times being separated from day to day facilities activities / staff / patients / general public.	2	3	3	18
GS' 13A		Fraternization	Harassment of persons on Hospital property.	Extra Control should be taken to ensure that consultants / professionals / specialists / contractors are separated from staff / patients / general public	1	2	3	6

PART C4: SITE INFORMATION

C4.1: SITE INFORMATION

PROJECT NAME	**SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIES**
TENDER No.	**SCMU3-24/25-0659-HO**

C4 Site Information

1. GENERAL

a) The Standard for Uniformity in Construction Procurement published in terms of the Construction Industry Development Board (CIDB) Act, 2000 (Act no 38 of 2000), the Standardized Construction Procurement Documents for Engineering and Construction Works as issued by the CIDB and any other relevant documentation pertaining thereto must be studied and all principles in this regard must be applied to all procurement documentation, practices and procedures.

b) The Supplier must acquaint themselves fully with all matters pertaining to this section in order to enable prospective Suppliers to price for all eventualities.

c) All hospitals are functional, caution must be taken in terms of contractor movement and noise.

d) The employer will advise will confirm where the stripped materials need to be disposed.

2. LIST OF FACILITIES IN CLUSTER 2

Chris Hani District Facilities

Facility Name
Hewu Hospital
Cradock Hospital
Wilhelm Hospital
Cofimvaba Hospital
Frontier Hospital
Glen Grey Hospital
Dordrecht Hospital
Elliot Hospital
All Saints Hospital

AMATHOLE District Facilities

Facility Name
Burgersdorp Hospital
Aliwal North Hospital
Cloete Joubert Hospital
Maclear Hospital
Empillisweni Hospital
Umlamli Hospital
Lady Grey Hospital
Taylor Bequest Hospital

PART C5: SUPPLEMENTARY SPECIFICATION.

PART C5

EASTERN CAPE DEPARTMENT OF HEALTH

SUPPLEMENTARY TECHNICAL SPECIFICATION

FOR THE

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICT – HEALTH FACILITIES
AT

VARIOUS HOSPITALS AND HEALTH FACILITIES IN

THE
CLUSTER TWO (2) – JOE GQABI AND CHRIS HANI DISTRICTS

OF THE EASTERN CAPE PROVINCE

SUPPLEMENTARY TECHNICAL SPECIFICATION FOR REPAIRS TO THEATRE HVAC SYSTEMS

Table of Contents

SUPPLEMENTARY TECHNICAL SPECIFICATION

FOR THE

SCHEDULED MAINTENANCE OF THEATRE HVAC SYSTEMS IN CLUSTER TWO (2) – CHRIS HANI AND JOE GQABI DISTRICTS – HEALTH FACILITIES

SS 1. GENERAL

This specification is for the repair and fixed term maintenance of theatre HVAC systems at various hospitals and health facilities listed in paragraph SS 3. of the CLUSTER TWO (2) – Chris Hani and Joe Gqabi Districts.

This specification shall be read in conjunction with the Service Information which will include the Standard Specifications for the General Maintenance and Repairs to Electrical and Mechanical Installations, Standard Technical Specifications that may be applicable, the Supplementary Specification, the Operating and Maintenance Manuals (where applicable) and the Maintenance Control Plan, as well as the, General Conditions of Tender and all Schedules and Drawings forming part of the Tender.

Where specifications and/or drawings are at variance this Supplementary Specification will have preference over both the Standard Specifications and the Drawings.

Maintenance and servicing shall be carried out strictly as stated in the service schedules and after each service a copy of the service schedule duly completed and signed shall be submitted to the responsible Service Manager.

SS 2. EQUIPMENT INSTALLATIONS

The Airconditioning and Ventilation equipment installations, listed in the Bills of Quantities, shall be maintained and repaired as part of this contract.

SS 3. SCOPE OF WORK

This specification is for the repair, maintenance and proper functioning of Airconditioning and Ventilation equipment, for the duration of the Contract period, as detailed in the Scope of Works (C3.1).

The repair and maintenance phases shall run in parallel as specified in GM 2.4. The equipment to be repaired and maintained is listed under the Inventories of Equipment in Annexure A.

The maintenance work (Minor and Major Services) required on the equipment listed in the Inventory of the attached Annexure A, will be as per the pricing of the Schedule 2 Price List, but subject to the scheduling of the final Maintenance Control Plan as per paragraph GM 3.3. All work must comply to the minimum requirements set by the Standard Specifications for the General Maintenance and Repairs to Electrical and Mechanical Installations, and this Supplementary Technical Specification for the Airconditioning and Ventilation equipment installations

The repair work will be as per the Schedule 3 Price List, but subject to work being approved from the Repair Schedule as per GM 2.6. Due to limited funds and as specified in paragraph GM 2.8, some of the repair work may be stretched over two or more financial years. The repair work for the first financial year will commence only after the Repair Schedule has been accepted and the relevant repairs approved by the Service Manager. The Contractor will be issued with a written instruction (Task Order as per GM 2.4) to proceed with the specified work.

.

SS 4. INSPECTION OF THE SITE

Due to the large number of and area over which the Health Facilities covered by this Contract is spread, it is the Contractor's own choice if he/she wants to inspect the sites prior to tendering to ascertain the condition of the equipment, or rely solely on the information provided as part of the Tender Documentation and single site tender briefing meeting. No further claims due to non-compliance with this requirement shall be entertained.

SS 5. STATUTORY AND REGULATORY REQUIREMENTS

The latest edition, including all amendments up to the date of tender, of the specifications, publications and codes of practice listed in the Standard Specification for Airconditioning and Ventilation equipment Installations shall be read in conjunction with this specification and shall be deemed to form part thereof.

All equipment that is subject to regular statutory inspections shall be prepared for statutory inspections and tests only when the validity of the existing certificates has expired. This work will form part of the maintenance phase of the contract.

SS 6. GENERAL REQUIREMENTS FOR REPAIR AND MAINTENANCE CONTRACTS

Whenever reference is made in the specifications to repairs and/or repair phase it shall mean the repairs required to the installation to bring the installation up to a standard, as described in the Standard Specifications for the General Maintenance and Repairs to Electrical and Mechanical Installations. In general, the repair work shall commence only after the Functional Condition Assessment Report has been approved and the quantities verified.

Maintenance work must be completed according to the approved Maintenance Control Plan. (See GM 3.3). Repair work can only commence once the Service Manager has approved it (See GM 2.8), or a breakdown Task Order has been issued by the Call Centre. Critical repairs may be carried out immediately with the approval of the Service Manager, but will be priced as per the guidelines of GM 2.8

SS 7. ROUTINE SERVICING AND MAINTENANCE WORK

Maintenance of the Airconditioning and Ventilation equipment is articulated in section 5 of the tender document

SS 8. TRAINING OF THE DEPARTMENT'S MAINTENANCE STAFF

It is required of this contract that the Contractor arrange for the theoretical and practical training of at least three maintenance personnel employed by the Department at each Health Facility specified in the Supplementary Specification. The Contractor shall ensure that the training is carried out by persons well qualified for the various tasks and shall call upon the services of experts from the various component manufacturers for assistance if need be.

The Contractor shall ensure that his own maintenance personnel are sufficiently qualified for the duties required.

Maintenance staff must receive enough instructions to ensure that they are fully conversant with the equipment concerned, and so that they can understand what the impact of their actions (or lack thereof) will be on the equipment. This training of the Health Facility's Employees shall be for a minimum duration of 40 hours, which shall include, but not necessarily be limited to, instruction on the operation and maintenance of the items mentioned in One/three/six monthly inspections.

The training should be aligned to the general tasks contained in the Inspection and Servicing Guideline for the Airconditioning and Ventilation equipment Installations and Operation and Maintenance Manuals.

SS 9. COMPETENT PERSON ON SITE

It is not a condition of contract that a Competent Person must be full time on site. Payment reductions will however be imposed if repairs are not carried out within the time limitations specified in Paragraph GM 7. Tenderers are therefore advised to evaluate the additional expense required for a competent person on site to ensure quick response against the possibilities of payment reductions, before submitting a tender.

SS 10. CLASSIFICATION OF BREAKDOWNS

The classification of breakdowns specific to Airconditioning and Ventilation equipment shall be as follows in line with the requirements of GM 7:

PRIORITY	DESCRIPTION	RESPONSE
P1	Emergency (Life Threatening)	Immediate response from the time of logging a call and the emergency to be resolved (at least temporarily) within 8 hours
P2	Urgent	Immediate response from the time of logging a call and to be resolved within 12 hours
P3	Planned Maintenance Repairs	Scheduled Maintenance is to be scheduled and performed within 3 business days of the scheduled date
P4	Emergency Facility Repairs	7 Days planning and execution subject to supply chain regulations

SS 11. PENALTIES

Penalties applicable to this specification will be as per the criteria specified in Section X17 of the Secondary Options Clauses of the Contract.

SS 12. STANDARD SPECIFICATIONS

SS 12.1 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

SABS and other specifications and codes

a) SANS 10400 – 2014: The application of the National building regulations

b) SANS 1238: Ductwork

c) SANS 1125: Room air conditioning and heat pumps

d) SANS 1287-1&2: Ventilation practices and ducting

e) SANS 1424: Filters

f) SANS 10147: Refrigeration Systems

g) SANS 10173: Installation, testing and balancing of air conditioning ductwork.

h) SANS 10142-1&2: Code of Practice for the Wiring of Premises

i) SANS 10103: The measurement and rating of environmental noise with respect to annoyance and to speech communication

j) SANS 1850-2014:The design and manufacture of commercial kitchen extraction/ventilation systems

k) Construction Regulations and Health and Safety Requirements

l) Local Fire Regulations

m) Local Municipal by-laws and regulations

n) The Electricity Act 1996

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.

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.

SS 13. 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 Standard Specification.

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

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

Complete description and the working of the equipment.

(b) Commissioning data

Complete commissioning, test and inspection data of equipment.

(c) Operating data

(i) Equipment running checklist and frequency of servicing required;
(ii) Safety precautions to be implemented;
(iii) Manual and automatic operation;
(iv) Operator's duties (logging requirements);
(v) Lubricating oils and service instructions;
(vi) Pre-start checklist for individual equipment;
(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) Manufacturer's 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 numbers of all replacement items and spares;
(iv) Capacity curves of pumps, fans and compressors, etc;
(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) Manufacturer's 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) Manufacturer's brochures and pamphlets.

(h) Drawings

(i) Paper prints of all as-built mechanical and electrical drawings;
(ii) Wiring diagrams of each individual control panel shall be put inside the panel, and a set provided to the maintenance supervisor.

SS 14. TRAINING OF THE DEPARTMENTS OPERATING STAFF FOR THE OPERATION OF THE INSTALLATION AND EQUIPMENT

In addition to the requirements of Standard Specification, the Contractor shall allow and provide for training of the Airconditioning and ventilation installations to the operators as specified and set out in this specification. The objective of this training will be to ensure that the following be achieved:

(a) High standard of operator skills;
(b) High equipment operating efficiencies to reduce operating costs;
(c) Reduce the maintenance cost of the equipment to an acceptable level, and maintain the cost at this level in so far as it is affected by the operating conditions;
(d) Prevent maloperation of the equipment.

The training course to be utilised for the evaluation of the airconditioning and ventilation operating staff shall include at least the following:

(a) Equipment and component recognition.
(b) How to operate the equipment, including the following:

(i) Starting the equipment;
(ii) Manual and automatic controlling;
(iii) Shut-down of equipment for short periods;
(iv) Cleaning of equipment;
(v) Normal shut-down.

(c) Emergency procedures to be followed in the case of power failure, water shortage, etc.
(d) Safety precautions to be followed and implemented.

(e) The identification, reporting and recording of faults and operation of equipment.
(f) The logging of equipment operation, readings and settings.

SS 15. TESTS AND INSPECTIONS ON COMPLETION OF REPAIR WORK

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

In the event of the equipment 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 equipment is 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 occupied space served by that system for up to twenty-four hours a day continuously until the system is handed over.

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

After completing the installation or 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 efficiency of all equipment, as well as certificates to be obtained from all 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 between the relevant parties.

SS 16. COMMISSIONING AND RE-COMMISSIONING OF EQUIPMENT

SS 16.1 GENERAL

On completion of the repair work and/or the installation of new equipment the equipment shall be put into operation after all tests and adjustments have been carried out to the satisfaction of the Engineer. Where new equipment is installed, the Contractor shall run and operate the equipment for a period of time as specified by the Engineer and train the staff of the User Client to operate and maintain the system.

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

The Contractor shall submit a full commissioning report.

SS 16.2 RE-COMMISSIONING OF EQUIPMENT

On completion of the inspections and tests of major repairs the Contractor shall re-commission the equipment. This operation shall be done strictly in accordance with the manufacturer's specification and shall be witnessed by the Engineer. The operation shall include but not be limited to the following:

(a) All required pre-commissioning mechanical checks

(i) Check all connections.
(ii) Check all moving points.
(iii) Check all seals.
(iv) Reinstall all covers and doors and check that they are properly secured.
(v) Check and record that all lubrication to equipment and components has been done in accordance with manufacturer's specification.
(vi)

(b) All required pre-commissioning electrical checks

(i) Check all wiring connections for tightness and repair any hot connections.
(ii) Check that all electrical equipment has 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 without livening up electrical equipment.
(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 with manufacturer's specifications.
(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.

(c) Commissioning of equipment

On completion of the pre-commissioning checks the Contractor shall proceed with the commissioning of the equipment. This shall be done strictly in accordance with the manufacturer's specification and shall include but not be limited to the following:

(i) During the commissioning process all level and warning system checks are to be performed on the water-level control system where applicable.
(ii) During load conditions the equipment shall be readjusted and finally switched to automatic operation on completion of all automatic control functions for correct operation where applicable.

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

SS 17. GUARANTEE OF INSTALLATION AND EQUIPMENT

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

All new equipment including the completely 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.

SS 18. REPAIR WORK TO INSTALLATIONS, SYSTEMS AND EQUIPMENT

SS 18.1 GENERAL

During 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 with 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, standards, 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 are 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 specified durations as listed in the Appendix to Tender. 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 of completion for the repair work. These guarantees shall be furnished in favour of the Department of Health. 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.

SS 19. MAINTENANCE TO INSTALLATIONS AND EQUIPMENT

SS 19.1 GENERAL

Quarterly maintenance responsibilities for each installation including all units and components as specified, shall commence with access to the site.

Maintenance responsibilities of completed new equipment installations 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,

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

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

(a) Split type air conditioning units
(b) Ducted hideaway air conditioning units
(c) VRV condensing units
(d) Ventilation Systems
(e) Dehumidifiers
(m) Extract canopies.

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

SS 20. DEFINITION AND QUALIFICATION OF ACTIONS

Daily maintenance actions

Daily actions are the responsibility of the User Client. These are to be performed by the responsible of the hospital

(a) Operating checks

(i) Check if there is power and all electrical connections are intact.
(ii) Check all interconnecting refrigerant pipes are intact.
(iii) Check all drain lines and drip trays for any clogging.
(iv) Check operation of temperature controllers.
(v) Check operation of all doors, hatches, lids and they are closed.
(vi) Check operations of mechanical moving parts are covered for safety purposes.

These daily checks shall be logged at the facility, i.e., by the maintenance supervisor.

Quarterly maintenance actions

Quarterly maintenance actions are the responsibility of the Contractor, and they are listed in section 5a of this document.

Biannual maintenance actions

Biannual maintenance actions are the responsibility of the Contractor, and they are listed in section 5b of this document.

Annual maintenance actions

Annual maintenance actions are the responsibility of the Contractor, and they are listed in section 5c of this document.

Province of the
EASTERN CAPE
HEALTH

AIR CONDITIONING AND VENTILATION EQUIPMENT THREE MONTHLY INSPECTIONS

Note:
Three Monthly inspections must be conducted by the service provider.
Three Monthly inspections will include weekly and monthly inspection tasks.
Results and findings must be entered in a logbook and signed by the relevant operator/maintainer.

The tasks listed is for a generic service regime. Where this Task List included below does not include manufacturer's servicing specifications, the Original Equipment Manufacturer's servicing specifications must be added, as all services are to be carried out in accordance with the manufacture's specification.

UNIT LOCATION		MAKE OF UNIT	
MODEL NO.		SERIAL NO.	
ASSET NUMBER		ELECTRIC/STEAM	
CHECKED BY		DATE	

Item	Description	Check	Value / Reading	Comments/Findings
	GENERAL			
1	Wipe down louvres, diffusers and grilles.			
2	Clean the supply air vents by vacuuming them.			
3	Verify that insulation is intact on ducting			
4	Wash filters where applicable.			
5	Check the thermostat.			
6	Check the condenser coils and evaporator coils for damage and clean.			
7	Check and tighten all electrical connections.			
8	Inspect ducting for damage, dirt and leaks. Fix where applicable.			
9	Verify operation.			
10	All quarterly inspections must be completed and recorded.			
	CONDENSER FANS			
1	Lubricate motor and bearings.			
2	Checking for bearing wear.			
3	Check the shaft if its not damage and securely fixed.			
4	Check fan blades for damage and wear and tear.			
5	Check all parts for corrosion.			
6	Check rain shields.			
7	Check for proper rotation, supply or exhaust.			
8	Check all electrical connections.			

Province of the
EASTERN CAPE
HEALTH

Item	Description	Check	Value / Reading	Comments/Findings
	GENERAL			
	CONDENSER COIL			
1	Check for damage and clean.			
2	Check finned surfaces.			
	COOLING COIL			
1	Inspect coils for damage or leaks.			
2	Inspect condensate connection and tighten where loose or replace.			
3	Check insulation on refrigerant pipes.			
4	Check refrigerant levels and adjust or replace.			
	FILTERS			
1	Change filters.			
	CONTROL PANEL			
1	Inspect control panel's instrumentation for operation and correct labelling.			
2	Check and tighten all loose electrical connections.			
3	Test thermostats and controls to ensure correct pressures, temperatures and timer settings.			
	FAN MOTOR ASSEMBLY			
1	Check fan blades for damage, looseness or wear and tear.			
2	Check bearings for excessive wear and dryness.			
3	Check bearings for excessive temperature and damage.			
4	Check drive couplings, pulleys ad belts.			
5	Replace any damaged if needed.			

LUKHOZI

RNA CONSULTING ENGINEERS
Consulting Electrical & Mechanical Engineers

GATYENI CONSULTING

AIR CONDITIONING AND VENTILATION EQUIPMENT SIX MONTHLY INSPECTIONS

Note:
Six Monthly inspections must be conducted by the service provider.
Six Monthly inspections will include weekly and monthly inspection tasks.
Results and findings must be entered in a logbook and signed by the relevant operator/maintainer.

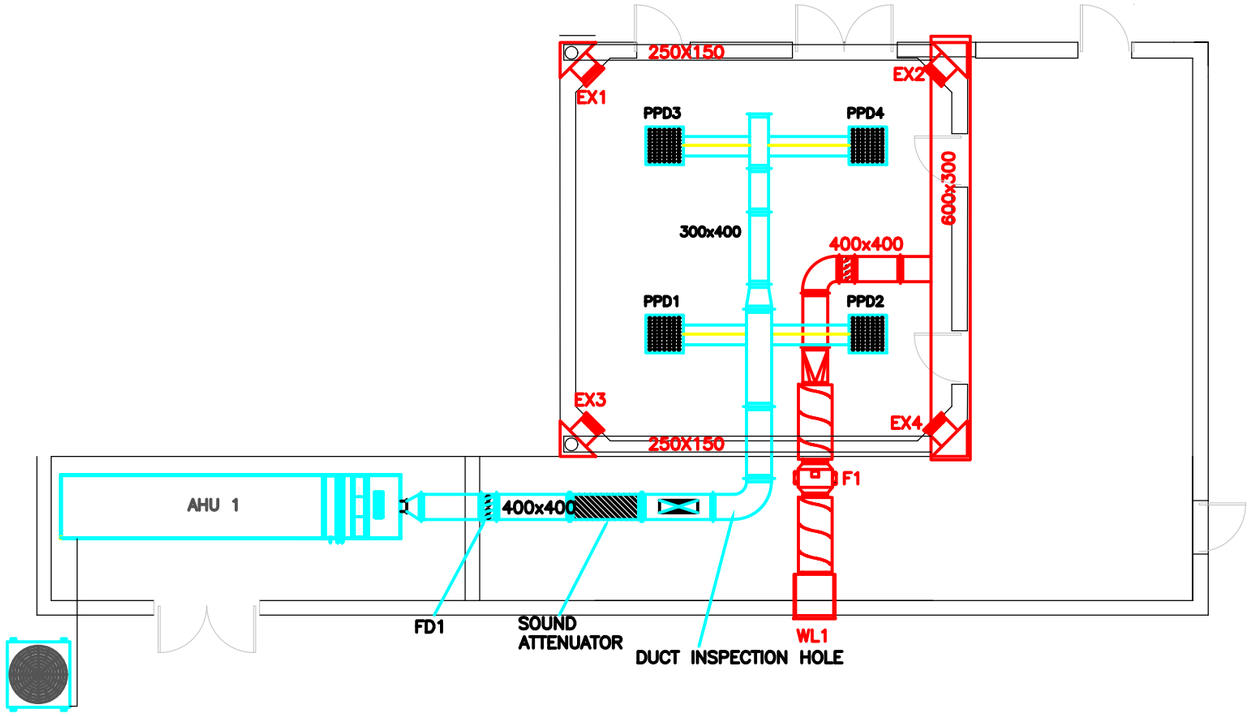
The tasks listed is for a generic service regime. Where this Task List included below does not include manufacturer's servicing specifications, the Original Equipment Manufacturer's servicing specifications must be added, as all services are to be carried out in accordance with the manufacture's specification.

UNIT LOCATION		MAKE OF UNIT	
MODEL NO.		SERIAL NO.	
ASSET NUMBER		ELECTRIC/STEAM	
CHECKED BY		DATE	

Item	Description	Check	Value / Reading	Comments/Findings
	GENERAL			
1	Wipe down louvres, diffusers and grilles.			
2	Clean the supply air vents by vacuuming them.			
3	Verify that insulation is intact on ducting			
4	Wash filters where applicable.			
5	Check the thermostat.			
6	Check the condenser coils and evaporator coils for damage and clean.			
7	Check and tighten all electrical connections.			
8	Inspect ducting for damage, dirt and leaks. Fix where applicable.			
9	Verify operation.			
10	All Biannual inspections must be completed and recorded.			
	CONDENSER FANS			
1	Lubricate motor and bearings.			
2	Checking for bearing wear.			
3	Check the shaft if its not damage and securely fixed.			
4	Check fan blades for damage and wear and tear.			
5	Check all parts for corrosion.			
6	Check rain shields.			
7	Check for proper rotation, supply or exhaust.			
8	Check all electrical connections.			

Item	Description	Check	Value / Reading	Comments/Findings
	GENERAL			
	CONDENSER COIL			
1	Check for damage and clean.			
2	Check finned surfaces.			
	COOLING COIL			
1	Inspect coils for damage or leaks.			
2	Inspect condensate connection and tighten where loose or replace.			
3	Check insulation on refrigerant pipes.			
4	Check refrigerant levels and adjust or replace.			
	FILTERS			
1	Change filters.			
	CONTROL PANEL			
1	Inspect control panel's instrumentation for operation and correct labelling.			
2	Check and tighten all loose electrical connections.			
3	Check high pressure and low-pressure sensors.			
3	Test thermostats and controls to ensure correct pressures, temperatures and timer settings.			
4	Start and running capacitor to be check if applicable.			
	FAN MOTOR ASSEMBLY			
1	Check fan blades for damage, looseness or wear and tear.			
2	Check bearings for excessive wear and dryness.			
3	Check bearings for excessive temperature and damage.			
4	Check drive couplings, pulleys and belts.			
5	Replace any damaged if needed.			
	COMPRESSOR			
1	Check for any undue noise and vibration.			
2	Anti-vibration mounts to be checked.			
3	Check compressor current (Amperes).			
4	Condenser to be cleaned and painted.			

Item	Description	Check	Value / Reading	Comments/Findings
	GENERAL			
4	Check isolator conditions that might be damaged by weather and check electrical wires.			
5	Check support brackets for tightness and rust.			
6	Check the holderbats/cable tray for the refrigerant and drainpipes.			
7	Check and test fan motor speed.			
8	Delay timer to be checked where applicable.			



SCHEDULE OF EQUIPMENT				
UNIT NO.	DESCRIPTION	QUANTITY	DUTIES	ELECTRICAL REQUIREMENTS
AHU1	100% FRESH AIR HANDLING UNIT COMPLETE WITH HEAT RECOVERY AIR COOLED CONDENSING UNITS.	1	AIR QUANTITY: 900l/s FACE COIL VELOCITY: 2.3m/s ON COIL DRY BULB: 23.2°C ON COIL WET BULB: 16.3 OFF COIL DRY BULB: 9.2°C OFF COIL WET BULB: 8.9°C COOLING REQUIRED: 20.6kW HEPA FILTERS: 99.99-99.97% EFFICIENCY SECONDARY FILTERS (BAG/POCKET): 95% EFFICIENCY PRIMARY FILTERS (PLEATED): 20% EFFICIENCY	2kW 4 POLE 380V FOR THE AHU CONDENSING UNIT: 3 PHASE 380-415v 25A MAXIMUM FUSE AMPS
F1	ø500 IN-LINE DUCT FAN COMPLETE WITH UPSTREAM & DOWNSTREAM SOUND ATTENUATORS.	1	900l/s @ 200Pa	400V 2kW 3.1AMPS
FD1	SPRING LOADED TYPE FIRE DAMPERS	1	400x400	
PPD1-PPD4	TROX PPD TYPE PERFORATED 4-WAY DISCHARGE CEILING DIFFUSERS OR APPROVED EQUAL. COMPLETE WITH 590mm X 410mm HIGH PLENUM BOX & H14 FILTERS	4	598x593 225l/s 1.5m THROW	
EX1 - EX4	TROX EXTRACT GRILLES COMPLETE OPPOSED BLADE DAMPERS OR APPROVED EQUAL. GRILLES TO BE MOUNTED AT 300AFFL. 150X150 FLUFF EXTRACTING GRILLES AT TOP LEVEL	4	400X600 180l/s	
WL1	TROX OR APPROVED EQUAL WEATHER LOUVRE	1	600X600	

LEGEND:

No	APPROVED	AMENDMENTS	DATE
T0	BM	ISSUED FOR TENDER	28-02-2025

SURVEYED	-	-
DRAWN	A MTAMBEKI	28-02-2025
DESIGNED	B MALITI	28-02-2025
CHECKED	B MALITI	28-02-2025
APPROVED	PR REGISTRATION NO.	DATE:---

LUKHOZI

LUKHOZI CONSULTING ENGINEERS (PTY) LTD

KWA LUKHOZI, QUARTZITE DRIVE,
THE QUARRY, SELBORNE, 5201

TEL 043 721 1321
EMAIL el@lukhozi.co.za
WEB www.lukhozi.co.za

CLIENT

Eastern Cape
EASTERN CAPE
PROVINCE

-
-

PROJECT TITLE

TYPICAL ONE ROOM THEATRE: REPLACEMENT OF THEATRE AIR HANDLING UNITS

DRAWING TITLE

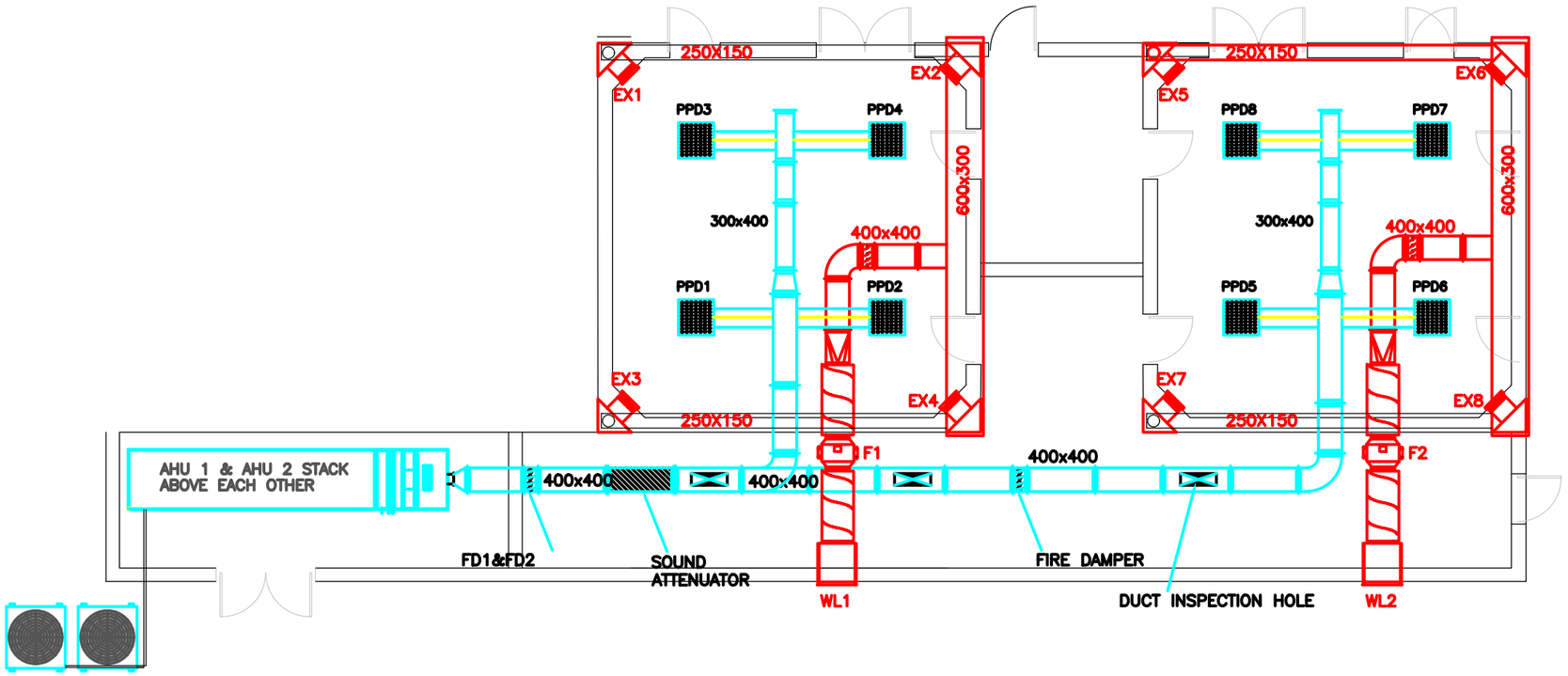
MECHANICAL INSTALLATION
THEATRES
AIR CONDITIONING & VENTILATION

SCALE	SHEET SET	SHEET SIZE
1 : 50	SHEET 2 OF 2 SHEETS	A1

DRAWING No.	REVISION
1757-MEC-HVAC-02	T0

2025/02/28 02:39 pm

P:\EL\1757 Mechanical Maintenance - BCM & Amathole\04 Design & Drawings\3 Mechanical\1757-MEC-HVAC-02 (Typical One Room Theatre).dwg



SCHEDULE OF EQUIPMENT				
UNIT NO.	DESCRIPTION	QUANTITY	DUTIES	ELECTRICAL REQUIREMENTS
AHU1 – AHU2	100% FRESH AIR HANDLING UNIT COMPLETE WITH HEAT RECOVERY AIR COOLED CONDENSING UNITS.	2	AIR QUANTITY: 900l/s FACE COIL VELOCITY: 2.3m/s ON COIL DRY BULB: 23.2°C ON COIL WET BULB: 16.3 OFF COIL DRY BULB: 9.2°C OFF COIL WET BULB: 8.9°C COOLING REQUIRED: 20.6kW HEPA FILTERS: 99.99–99.97% EFFICIENCY SECONDARY FILTERS (BAG/POCKET): 95% EFFICIENCY PRIMARY FILTERS (PLEATED): 20% EFFICIENCY	2kW 4 POLE 380V FOR THE AHU CONDENSING UNIT: 3 PHASE 380–415v 25A MAXIMUM FUSE AMPS
F1–F2	ø500 IN–LINE DUCT FAN COMPLETE WITH UPSTREAM & DOWNSTREAM SOUND ATTENUATORS.	2	900l/s @ 200Pa	400V 2kW 3.1AMPS
FD1–FD2	SPRING LOADED TYPE FIRE DAMPERS	2	400x400	
PPD1–PPD8	TROX PPD TYPE PERFORATED 4–WAY DISCHARGE CEILING DIFFUSERS OR APPROVED EQUAL, COMPLETE WITH 590mm X 410mm HIGH PLENUM BOX & H14 FILTERS	8	598x593 225l/s 1.5m THROW	
EX1 – EX8	TROX EXTRACT GRILLES COMPLETE OPPOSED BLADE DAMPERS OR APPROVED EQUAL. GRILLES TO BE MOUNTED AT 300AFFL. 150X150 FLUFF EXTRACTING GRILLES AT TOP LEVEL	8	400X600 180l/s	
WL1 – WL2	TROX OR APPROVED EQUAL WEATHER LOUVRE	2	600X600	

LEGEND:

No	APPROVED	AMENDMENTS	DATE
0	BM	ISSUED FOR TENDER	28-02-2025

SURVEYED	-	-
DRAWN	A MTAMBEKI	28-02-2025
DESIGNED	B MALITI	28-02-2025
CHECKED	B MALITI	28-02-2025
APPROVED	PR REGISTRATION NO.	DATE:---

LUKHOZI

LUKHOZI CONSULTING ENGINEERS (PTY) LTD

KWA LUKHOZI, QUARTZITE DRIVE,
THE QUARRY, SELBORNE, 5201

TEL 043 721 1321
EMAIL el@lukhozi.co.za
WEB www.lukhozi.co.za

CLIENT

Province of the EASTERN CAPE

-
-

PROJECT TITLE

TYPICAL TWO ROOM THEATRE: REPLACEMENT OF THEATRE AIR HANDLING UNITS

DRAWING TITLE

MECHANICAL INSTALLATION
THEATRES
AIR CONDITIONING & VENTILATION

SCALE	SHEET SET	SHEET SIZE
1 : 50	SHEET 1 OF 2 SHEETS	A3

DRAWING No.	REVISION
1757-MEC-HVAC-01	T0

P:\EL\1757 Mechanical Maintenance - BOM & Anathole\04 Design & Drawings\3 Mechanical\1757-MEC-HVAC-01 (Typical Two Room Theatre).dwg

2025/02/28 02:44 pm