



TENDER

MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA

SCMU5-20/21-0010ME CHR

NAME OF COMPANY:

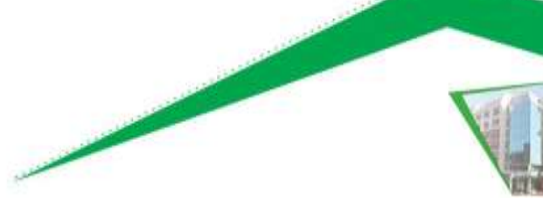
CSD Nr: _____

CRS Nr (CIDB): _____

CLOSING DATE: 17 August 2020

TIME: 11H00 am

Department of Public Works and Infrastructure
Ground Floor Office C.G 019
No. 1 Creamery Road
Old CPA Building
Komani
5320



PART T1: TENDER PROCEDURES

T1.1 TENDER NOTICE AND INVITATION TO TENDER

T1.2 TENDER DATA



T1.1 Tender Notice and Invitation to Tender

The Eastern Cape Department Public Works and infrastructure invites Contractors with a CIDB Grading of **3ME OR 3ME PE OR HIGHER** in the following Class of works **(ME)** tenders for **MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA**

The contract will be based on the 2000 JBCC Principal Building Agreement Edition 4.1 of March 2005 where the Eastern Cape Department of Public Works & Infrastructure will enter into a contract with the successful Bidder.

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

Documents may be downloaded from the departmental website on www.ecdpw.gov.za or can be obtained from the offices of the Department of Public Works and Infrastructure, No.1 Creamery Road, Old CPA Building, Ground Floor, Office No. C.G 19, Komani from 08:30 on 12 August 2020.

The closing time for receipt of Bids is **11h00 on 17 August 2020**. Telegraphic, telephonic, telex, facsimile, e-mail and late Bids will not be accepted. Bids must be submitted in sealed envelopes clearly marked "**MEDICAL GAS SYSTEM UPGRADE FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA, SCMU5-20/21-0010ME CHR**" must be deposited in the Bid box, Department of Public Works and Infrastructure, **Ground Floor, No.1 Creamery Road, Old CPA Building– Reception Area**, Komani.

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

Tenders may only be submitted on the tender documentation that is issued. Tenderers must be registered on the National Treasury Central Supplier Data Base and proof of registration must be submitted with the proposal (<https://secure.csd.gov.za>).

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

B. TENDER EVALUATION:

This tender will be evaluated in Two (2) stages as follows:

Stage ONE: Compliance, responsiveness to the tender rules and conditions,

Stage TWO: Tenderers passing the stage above will thereafter be evaluated on PPPFA.

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

Maximum points on price	-	80 points
Maximum points for B-BBEE	-	20 points
Maximum points	-	100 points

C. TENDER SPECIFICATIONS, CONDITIONS AND RULES

The minimum specifications, other tender conditions and rules are detailed in the tender document under Tender Data

The Department of Public Works and Infrastructure SCM policy applies.

Tender validity period is **90 days**.

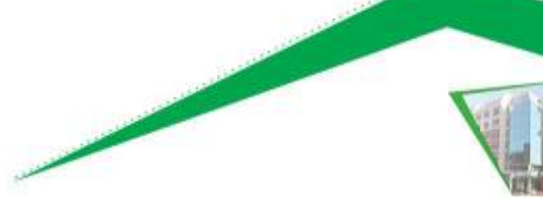


D. ENQUIRIES WITH REGARD TO THIS ADVERT MAY BE DIRECTED TO:

- **SCM RELATED ENQUIRIES**
Ms. N Dokoda
Tel No: 045 807 6624
Email Address: nosiphe.dokoda@ecdpc.gov.za
- **TECHNICAL ENQUIRIES**
Mr. S. Boltina
Tel No.: 045 807 6708 / 066 292 1502
Email Address: Siyabulela.Boltina@ecdpc.gov.za
- **TECHNICAL ENQUIRIES**
Mr. A. Ndaba
Tel No.: 045 807 6740 / 082 394 8988
Email Address: Aphelele.Ndaba@ecdpc.gov.za

FOR COMPLAINTS, FRAUD, & TENDER ABUSE:

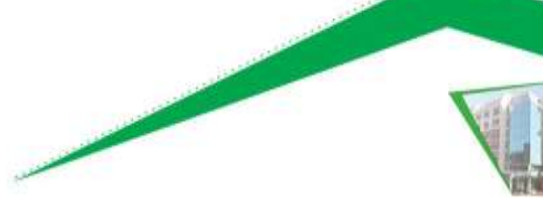
Call: 0800 701 701



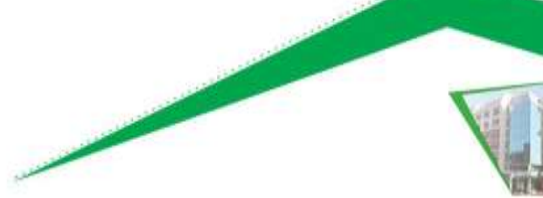
T1.2 Bid Data

The conditions of bid are the latest edition of SANS 10845-3, *Standard conditions of tender*. SANS 10845-3 makes 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 provisions of SANS 10845-3 *and* as contained in **Annexure C of Standard for Uniformity in Construction Procurement (Board Notice 423 Government Gazette No 42622 of August 2019)**, Each item of data given below is cross-referenced to the clause in SANS 10845-3 to which it mainly applies.

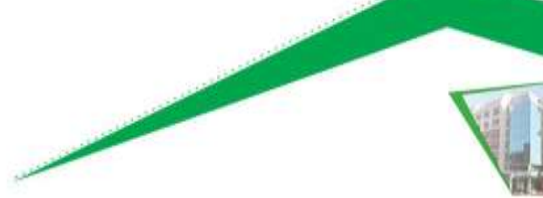
Clause number	Bid Data
3.1	The Employer is Public works and infrastructure
3.2	The tender documents issued by the employer comprise the following documents: THE BID Part T1: Tendering procedures T1.1 - Tender notice and invitation to bid T1.2 - Tender data Part T2: Returnable documents T2.1 - List of returnable documents T2.2 - Returnable schedules THE CONTRACT Part C1: Agreements and Contract data C1.1 - Form of offer and acceptance C1.2 - Contract Data Part C2: Pricing data C2.1 - Pricing Instructions C2.2 - Pricing Schedule Part C3: Scope of work C3.1 - Scope of work C3.2 - Technical Specifications Part C4: Site information C4 - Site information
3.2	The tender documents issued by the employer comprise the documents listed on the contents page
3.4	The employer's agent is: Name: Mr. A. Ndaba Department of Public Works & Infrastructure No 1 Creamery Road, Old CPA Building Komani Tel No.: 045 807 6740 / 082 394 8988 Email Address: Aphelele.Ndaba@ecdpw.gov.za
3.4	The language for communications is English
3.6	The competitive negotiation procedure shall be applied.
3.6	Method 2: two stage procurement procedure shall be applied.
4	Tender's obligations
4.1	Only those tenderers who satisfy the following eligibility criteria and who provide the required evidence in their tender submissions are eligible to submit tenders and have their tenders evaluated: <ul style="list-style-type: none"> • Tax matters are in order. • Directors or company is not in the Treasury's database of restricted suppliers
4.3	The employer will compensate the bid as follows as per the conditions of the Form of Contract signed or SLA . The employer will not compensate the bidder for any costs incurred in attending interviews or making any submissions in the office of the employer.
4.4	It is the responsibility of the tenderer to check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.



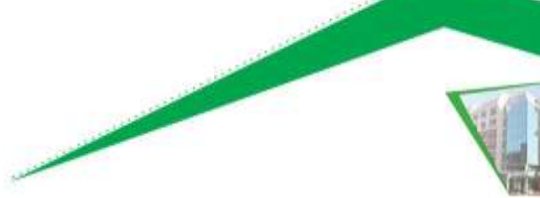
4.5	<p>Confidentiality and copyright of documents Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.</p>
4.6	<p>Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are incorporated into the tender documents by reference.</p>
4.7	<p>Acknowledge receipt of addenda to the tender documents, which the employer may issue, and, if necessary, apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.</p>
4.8	<p>Seek clarification <i>Request clarification of the tender documents, if necessary, by notifying the employer at least 2 (Two) working days before the closing time stated in the bid data.</i></p>
4.10	<p>Tenderers are required to state the rates and currencies in Rands. Include in the rates, prices, and the bided total of the prices (if any), all duties, taxes which the law requires to be paid [except value added tax (VAT)], and other levies payable by the successful bidder, that are applicable 14 days before the closing time stated in the bid data. Show the VAT payable by the employer separately as an addition to the bided total of the prices. Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data. State the rates and prices in monetary value of the contract unless otherwise instructed in the bid data.</p>
4.10(a)	<p>If after the commencement of the Contract, the cost or duration of the services is altered as a result of changes in, the amount of the main contractor or contract amount from which fee account/estimate were based, or amounts or additions to, any statute, regulation or by-laws, or the requirements of any authority having jurisdiction over any matter in respect of the Project, then the Contract Price and time for completion shall be adjusted in order to reflect the impact of those changes, provided that, within 90 days of first having become aware of the change, the Service Provider or Project Manager furnished the Employer with detailed justification to the Price or Period of the Performance (or both).</p>
4.11	<p>Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer or to correct errors made by the bidder and ensure that all signatories to the bid offer initial all such alterations. Do not make erasures using masking fluid.</p>
4.12	<p>Main tender offers are not required to be submitted together with alternative tenders.</p>
4.12	<p>No alternative bid offers will be considered</p>
4.13.1	<p>Parts of each tender offer communicated on paper shall be submitted as an original. Submit a) the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with a translation of any documentation in a language other than the language of communication established in 3.4, and b) the parts communicated electronically by the employer or its agents on paper format with the tender.</p>
4.13.2	<p>Sign the original and all copies of the bid offer where required in terms of the tender data. State in the case of a joint venture which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the bid offer. NOTE The employer holds all authorized signatories liable on behalf of the bidder.</p>
4.13.3	<p>A tender security in the amount of N/A is required and shall remain valid for a period not exceeding N/A days after the closing date for tender offers. The form of the tender security shall not differ substantially from the sample provided in Annex D of SANS 10845-3.</p>
4.13.4	<p>The employer's details and address for delivery of bid offers and identification details that are to be shown on each tender offer package are: Location of Tender box: Old CPA Building – Reception Area Physical address: No 1 Creamery Road, Komani 5320</p>



	Identification details: Tender reference number, Title of Tender and the closing date and time of the Tender
4.13.5	The tenderer is required to submit with his tender the following certificates: 1) a copy of the CSD report showing, amongst other things, that tax matters of the service provider are in order the South African Revenue Services. 2) CIDB Grading certificate or CRS number.
4.13.6	A two-envelope procedure will not be required.
4.13.7	Telephonic, telegraphic, telex, facsimile or e-mailed bid offers will not be accepted. The tenderer accepts that the employer does not assume any responsibility for the misplacement or premature opening of the bid offer if the outer package is not sealed and marked as stated.
4.15	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Proof of posting shall not be accepted as proof of delivery. Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of the standard conditions of bid in this part of SANS 10845 apply equally to the extended deadline.
4.16.1	The tender offer validity period is 90 days . Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data. If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period, with or without any conditions attached to such extension. Extend the period of the tender security, if any, to cover any agreed extension requested by the employer.
4.16.2	Placing of contractors under restrictions / withdrawal of tenders If any tenderer who has submitted a tender offer or a contractor who has concluded a contract has, as relevant: withdrawn such tender or quotation after the advertised closing date and time for the receipt of submissions; after having been notified of the acceptance of his tender, failed or refused to commence the contract; had their contract terminated for reasons within their control without reasonable cause; offered, promised or given a bribe in relation to the obtaining or the execution of such contract; acted in a fraudulent, collusive or anti-competitive or improper manner or in bad faith towards the Provincial Government; or, made any incorrect statement in any affidavit or declaration with regard to a preference claimed and is unable to prove to the satisfaction of the Provincial Government that the statement was made in good faith or reasonable steps were taken to confirm the correctness of the statements, such tenderer/s may be placed under restriction from tendering with the state. Procedures are outlined in the EC SCM Policy for Infrastructure procurement and Delivery Management and also on cidb Inform Practice Note #30. Excerpts of the policy can be availed on request of any interested tenderer.
4.19	Access shall be provided for the following inspections, tests and analysis: N/A
4.20	the preferred tenderer will be required to submit an approved insurer undertaking to provide the Performance Bond / Guarantee / Surety / Security to the format and/or standard as per DPW&I policy
5	Employer's undertakings
5.1	The Employer will respond to requests for clarification received up to Two (2) working days before the tender closing time. If, as a result of the issuing of addenda, it is necessary to extend the closing time stated in the tender data, grant such extension and notify all respondents accordingly.
5.2	The employer shall issue addenda until Two (2) working days before tender closing time.
5.4	Tenders will be opened immediately after the closing time for tenders at 11:00am hours .
5.6	Do not disclose to tenderers, or to any person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.



5.8	<p>Determine, after opening and before detailed evaluation, whether each tender offer that was properly received</p> <p>a) complies with the requirements of the standard conditions of tender in this part of SANS 10845, b) has been properly and fully completed and signed, and c) is responsive to the other requirements of the tender documents.</p> <p>A responsive tender is one that conforms to all the terms, conditions, and scope of work of the tender documents, without material deviation or qualification. A material deviation or qualification is one which, in the employer's opinion, would</p> <p>d) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the scope of work, e) significantly change the employer's or the tenderer's risks and responsibilities under the contract, or f) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.</p> <p>Reject a non-responsive tender offer, and do not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.</p>												
5.9	<p>Arithmetical errors, omission and discrepancies</p> <p>Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.</p> <p>For Vat related discrepancies, National and Provincial Treasury prescripts in relation to VAT procedures apply.</p>												
5.11.1	<p>The financial offer will be reduced to a comparative basis using the Tender Assessment Schedule.</p> <p>Table F.1: Formulae for calculating the value of A</p> <table border="1" data-bbox="352 920 1374 1137"> <thead> <tr> <th>Formula</th> <th>Comparison aimed at achieving</th> <th>Option 1*</th> <th>Option 2*</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Highest price or discount</td> <td>$A = \left(1 + \frac{(P - P_m)}{P_m} \right)$</td> <td>$A = P/P_m$</td> </tr> <tr> <td>2</td> <td>Lowest price or percentage commission / fee</td> <td>$A = \left(1 - \frac{(P - P_m)}{P_m} \right)$</td> <td>$A = P_m/P$</td> </tr> </tbody> </table> <p>a P_m is the comparative offer of the most favourable comparative offer. P is the comparative offer of the tender offer under consideration.</p>	Formula	Comparison aimed at achieving	Option 1*	Option 2*	1	Highest price or discount	$A = \left(1 + \frac{(P - P_m)}{P_m} \right)$	$A = P/P_m$	2	Lowest price or percentage commission / fee	$A = \left(1 - \frac{(P - P_m)}{P_m} \right)$	$A = P_m/P$
Formula	Comparison aimed at achieving	Option 1*	Option 2*										
1	Highest price or discount	$A = \left(1 + \frac{(P - P_m)}{P_m} \right)$	$A = P/P_m$										
2	Lowest price or percentage commission / fee	$A = \left(1 - \frac{(P - P_m)}{P_m} \right)$	$A = P_m/P$										
5.11.2	<p>The procedure for the evaluation of responsive tenders is Method 1: Price only.</p>												
5.11.3	<p>The procedure for the evaluation of responsive tenders is Method 2: Price and Preference. In the case of a price and preference:</p> <p>This tender will be evaluated in Two (2) stages as follows: Stage ONE: Compliance, responsiveness to the tender rules and conditions, Stage TWO: Tenderers passing the stage above will thereafter be evaluated on PPPFA.</p> <p>1. <u>STAGE ONE : COMPLIANCE, RESPONSIVENESS TO THE TENDER RULES AND CONDITIONS</u></p> <p>A. Tenderers' proposals must meet the following minimum requirements and supporting documents must be submitted with the completed tender document in a sealed envelope in the tender box at the closing date and time. Failure to comply will automatically eliminate the tender for further consideration:</p> <ol style="list-style-type: none"> 1. Tender Document (This Document must be submitted in its original format) 2. Tenders which are late, incomplete, unsigned or submitted by facsimile or electronically, will not be accepted. 3. Tenderer must be registered with cidb as per the tender notice and requirements. It is the responsibility of the tenderer to keep the status on cidb active throughout tendering process (advert till award stage). 4. Tenderers must be a legal entity or partnership or joint venture or consortia. 5. Form of offer and Acceptance (fully completed and signed) 6. SBD 4- Declaration of Interest (fully completed and signed) 7. SBD 8- Declaration of Bidder's past Supply Chain Management Practices. (Completed and signed) 8. SBD 9- Certificate of Independent Bid Determination. (Completed and signed) 9. Declaration: Validity of Information Provided 10. Resolution to Sign (if applicable) 												



11. Only one offer per item per tenderer is allowed and alternative offers will not be considered. If more than one offer per item is received, none of the offers will be considered. Tenderers are also not allowed to submit a tender whilst they are in agreements with other tenderers in the form of joint ventures or consortiums.

B. Other Conditions of tender - Non Eliminating

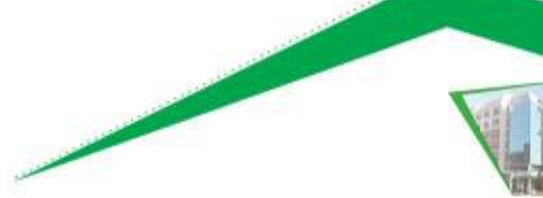
- i. The tenderer must be registered on the Central Supplier Database (CSD) prior the award.
- ii. All tenderers' tax matters must be in order prior award. Tenderers' tax matters will be verified through CSD.
- iii. Returnable Schedule: SBD 1- Invitation to bid must be completed and signed.
- iv. A valid original or certified copy of B-BBEE certificate must be submitted with the tender OR a valid original or certified copy of a Sworn Affidavit attested by a Commissioner of Oaths prepared and issued in terms of the amended B-BBEE Construction Sector Codes (CSC000) must be submitted in order to qualify for preference points for B-BBEE. In case of EMEs/QSEs submitting separate Sworn Affidavits, the EME or QSE with the lowest B-BBEE contributor will be used for purposes of calculating points. Failure to comply with this, will automatically results in the non-awarding of points for B-BBEE.
- v. The Department will contract with the successful tenderer by signing a formal contract.
- vi. This tender will be awarded as a whole. All trades listed in the Bills of Quantities or Pricing schedule must be priced for (except provisional sums and allowances which must also be added to the total), failure to do so will increase commercial risk of the tender and may lead to elimination or passing over of the tenderer.
- vii. Returnable Documents: Company Details.
- viii. Returnable Documents: Company Composition.
- ix. If the offer (any of the items quoted for) is "Vat Inclusive", the VAT registration number of service provider must be indicated. Tenderers are not entitled to claim the VAT if they are not VAT registered.
- x. Bidders must submit a minimum of three (3) written contactable references for projects successfully completed in the past (clearly indicating client name, contract value, contract term, contact person, contact details). Refer to Annexure M. Unless it is used for Quality/functionality Points.
- xi. The bidder must also list all projects where there are pending litigations or litigations have been concluded. The form for this is also attached after Annexure K. Unless it is used for Quality/functionality Points.
- xii. Bidders must submit their company profiles, list of available resources, plant and machinery and any other additional capacity with the bid. Refer to Annexure L. Unless it is used for Quality/functionality Points.
- xiii. Wherever a brand name is specified in this document (i.e. specifications, pricing schedule, bill of quantities or anywhere), the department requires an item similar/equivalent or better.

2. STAGE TWO: EVALUATION POINTS ON PRICE AND B-BBEE REGULATIONS OF 2017

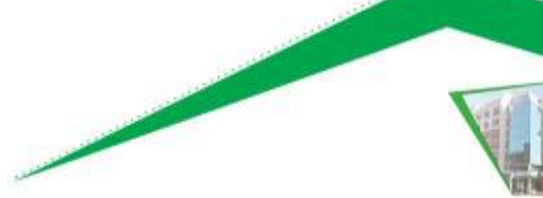
The **80/20 preference point system** shall be applied for the purposes of this bid as per the requirements of the *Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000)* and *B-BBEE/ PPPFA Regulations of 2017*

Criteria	Points
POINTS ON PRICE	80
B-BBEE	20
TOTAL	100

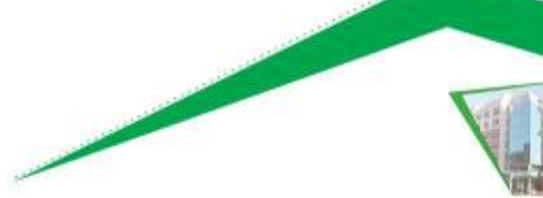
The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R50 million:



	<p>(a) The following formula must be used to calculate the points for price in respect of bids (including price quotation) with a Rand value equal to, or above R 30 000 and up to Rand value of R 50 000 000 (all applicable taxes included):</p> $P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$
5.11.5	The procedure for the evaluation of responsive tenders is Method 2 (Price and Preference)
5.13	<p>Tender offers will only be accepted if:</p> <ul style="list-style-type: none"> a) the tenderer is registered on the Central Supplier Database (CSD) for the South African government (see https://secure.csd.gov.za/) unless it is a foreign supplier with no local registered entity b) the tenderer is in good standing with SARS according to the Central Supplier Database. Bidders must submit a CSD no. or tax status compliance pin. c) The bidder is registered with the Construction Industry Development Board in an appropriate contractor grading designation; d) the preferred bidder will be required to submit an approved insurer undertaking to provide the Public Liability Insurance, Works Insurance and other applicable insurances. e) the tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; f) the tenderer has not: <ul style="list-style-type: none"> i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect; g) the bidder has duly completed and signed the Form of Offer, SBD 1, SBD 4, SBD 6.1, SBD 8 and SBD 9. Incomplete or unsigned or poorly completed forms will lead to a bidder being declared non-responsive. No second chance will be afforded to a bidder to come and complete or sign an information. h) the bidder has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the bidder's ability to perform the contract in the best interests of the employer or potentially compromise the bid process and persons in the employ of the state are permitted to submit bids or participate in the contract; i) Bids which are late, incomplete, unsigned or submitted by facsimile or electronically will not be accepted. j) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer; k) The tenderer undertakes to maximize the sourcing of building material or infrastructure input material from Eastern Cape based suppliers or manufacturers. l) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely. m) the tender has offered a market related offer. If the offer is believed not to be market related, the department through its Supply chain Management bid committees will attempt to negotiate the offer with identified bidder/s to a reasonable amount. Bidders are not allowed to increase their tender offers during this process. n) A Resolution of signatory form has been completed and signed by director/s or a letter bearing a letterhead of the tenderer has been attached (specific to this bid) to the bid submission; it must be duly signed by all directors and submitted the bid. Only a duly authorized official can sign the bid. o) Prospective bidders must register on CSD prior submitting bids (open tenders). Any prospective bidder found to have Tax matters not in order with SARS (verified through CSD) during the evaluation process (after being given an opportunity to rectify tax matters) will be eliminated and not be considered further in the process. Preferred bidder/s will be afforded an opportunity to rectify their tax affairs within 7 days. A bidder that fails to rectify its tax matters with SARS will be eliminated.



	<p>p) NOTE: The amount reflected on the Form of Offer and Acceptance takes precedence over any other total amount indicated elsewhere in bidder's tender submission. If the Form of Offer and Acceptance has no value or figure, the bidder will be regarded as having made no offer.</p> <p>q) The department reserves the right not to award the bid to the most favorable tenderer, if any of the situations occur: if it is not assisting in the advancement of designated groups; risk profile of the favorable firm is too high; the bidder has been awarded a considerable number of projects by the department; has performed unsatisfactorily in the past.</p>
5.17	The number of paper copies of the signed contract to be provided by the employer is 1.
	<p>The additional conditions of bid are:</p> <ul style="list-style-type: none"> Wherever a brand name is specified in this document (i.e. specifications, pricing schedule, bill of quantities or anywhere), the department requires an item similar/equivalent or better.
T.2.1	A. List of returnable documents
1	<p>Documentation to demonstrate eligibility to have bids evaluated i.e. List all documentation to demonstrate eligibility to have a submission evaluated.</p> <ul style="list-style-type: none"> Appropriate CIDB grading suitable for the works (as stated under T1.1). The Attach a list of past projects (stating the name, amount, client name, project manager, duration, completion date) – reachable references.
2	<p>Returnable Schedules required for tender evaluation purposes</p> <p>The bidder must fully and appropriately complete and sign the following returnable schedules as relevant:</p> <ul style="list-style-type: none"> Record of Addenda to Bid Documents Proposed amendments and qualifications SBD 1, 4, 6.1, 8 and 9 Form of Offer and Acceptance Final Summary of Bills of Quantities or a complete Pricing Schedule
3	<p>Other documents required for tender evaluation purposes</p> <p>The tenderer must provide the following returnable documents:</p> <ul style="list-style-type: none"> An original or certified copy of a valid B-BBEE Verification certificate from a verification agency accredited by SANAS and recognized as an Accredited B-BBEE Verification Agencies (see www.sanas.co.za/directory/bbee_default.php) if preference points are claimed in respect of Broad-Based Black Economic Empowerment. A tenderer which is a EME or QSE can submit a duly signed a valid original or certified copy of a Sworn Affidavit attested by a Commissioner of Oaths. In case of EMEs/QSEs submitting separate Sworn Affidavits, the EME or QSE with the lowest B-BBEE contributor will be used for purposes of calculating points. Failure to comply with this, will automatically results in the non-awarding of points for B-BBEE. A CSD Report with valid and correct information.
4	<p>Returnable Schedules that will be used for bid evaluation purposes and be incorporated into the contract</p> <p>The tenderer must complete the following returnable documents:</p> <ul style="list-style-type: none"> A duly completed form of Offer and Acceptance (and any revision of prices if there are any).
5	<p>Only authorized signatories may sign the original and all copies of the tender offer where required. In the case of a ONE-PERSON CONCERN submitting a tender, this shall be clearly stated. In the case of a COMPANY submitting a tender, include a copy of a resolution by its board of directors authorizing a director or other official of the company to sign the documents on behalf of the company. In the case of a CLOSE CORPORATION submitting a tender, include a copy of a resolution by its members authorizing a member or other official of the corporation to sign the documents on each member's behalf.</p>



	<p>In the case of a PARTNERSHIP submitting a tender, all the partners shall sign the documents, unless one partner or a group of partners has been authorized to sign on behalf of each partner, in which case proof of such authorization shall be included in the Tender.</p> <p><u>Accept that failure to submit proof of authorization to sign the tender shall result in the tender offer being regarded as non-responsive.</u></p>
6	<p>Information and data to be completed in all respects</p> <p>Accept that tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the employer as nonresponsive.</p>
7	<p>Canvassing and obtaining of additional information by bidders</p> <p>The Tenderer shall not make any attempt either directly or indirectly to canvass any of the Employer's officials or the Employer's agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon.</p> <p>The Bidder shall not make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders.</p>
8	<p>Prohibitions on awards to persons in service of the state</p> <p>The Employer is prohibited to award a tender to a person -</p> <ol style="list-style-type: none"> a) who is in the service of the state; or b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or c) a person who is an advisor or consultant contracted with the Department or municipal entity. <p>In the service of the state means to be -</p> <ol style="list-style-type: none"> a) a member of:- <ol style="list-style-type: none"> a any municipal council; b any provincial legislature; or c the National Assembly or the National Council of Provinces; d) a member of the board of directors of any municipal entity; e) an official of any Department or municipal entity; f) an employee of any national or provincial department; g) provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999); h) a member of the accounting authority of any national or provincial public entity; or i) an employee of Parliament or a provincial legislature. <p>In order to give effect to the above, the questionnaire for the declaration of interests in the bid of persons in service of state in part T2 of this procurement document must be completed.</p>
9	<p>Awards to close family members of persons in the service of the state</p> <p>Accept that the notes to the Employer's annual financial statements must disclose particulars of any award of more than R2000 to a person who is a spouse, child or parent of a person in the service of the state (defined in clause 8 above), or has been in the service of the state in the previous twelve months, including -</p> <ol style="list-style-type: none"> a) the name of that person; b) the capacity in which that person is in the service of the state; and c) the amount of the award. <p>In order to give effect to the above, the questionnaire for the declaration of interests in the bid of persons in service of state in part T2 of this procurement document must be completed.</p>
10	<p>Respond to requests from the bidder</p> <p>The employer will respond to requests for clarification up to 2 (two) working days before the tender closing time.</p>
11	<p>Opening of tender submissions</p> <p>Tenders will be opened immediately after the closing time for tenders</p>
12	<p>Scoring quality / functionality</p> <p>N/A</p>
13	<p>Cancellation and re-invitation of tenders</p> <p>An organ of state may, prior to the award of the tender, cancel the tender if-</p> <ol style="list-style-type: none"> (a) due to changed circumstances, there is no longer a need for the services, works or goods requested; <p>or</p>



	<p>(b) funds are no longer available to cover the total envisaged expenditure; or (c) no acceptable bids are received. (d) Tender validity period has expired. (e) Gross irregularities in the tender process and/or documents.</p> <p>Where applicable, the decision to cancel the tender will be published in the CIDB website and in the Tender Bulletin or the media in which the original tender invitation as advertised.</p>
15	<p>Where the employer terminates the contract due to default of the contractor in whole or in part, the employer may decide to: a) Refer the breach in contract to the CIDB for investigation as a breach of the CIDB Code of Conduct in terms of the CIDB Regulations; or b) may impose a restriction penalty on the contractor in terms of Section 14 of the Preferential Procurement Regulations. The outcomes of such investigations in terms of both the CIDB Regulations and the Preferential Procurement Regulations may prohibit the contractor from doing business with the public sector for a period not exceeding 10 years.</p>
16	<p>The duration of the contract shall be two (2) months from the commencement date and the details for calculation of penalties will be specified on the contract document i.e. the 2000 JBCC Principal Building Agreement Edition 4.1 of March 2005.</p>

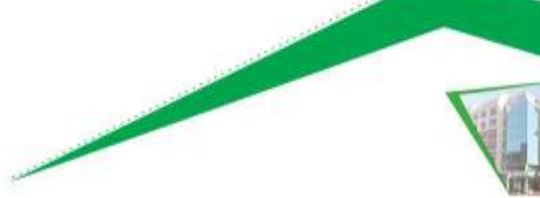
T2.1 Returnable Documents

<p>The tenderer must complete the following returnable documents:</p> <p>1 Returnable Schedules required for evaluation purposes</p> <ul style="list-style-type: none"> Record of addenda issued (Only if addenda is issued) <p>2 Other documents required for evaluation purposes</p> <ul style="list-style-type: none"> Form of Offer and Acceptance Final Summary (Bills of Quantities/Pricing Schedule) <p>3 Returnable Schedules that will be incorporated into the contract</p> <ul style="list-style-type: none"> Details of the Project Team and CV with Qualifications & Proof of Registration completed for each individual of proposed Record of projects: current, past and on tender. Project References – at least 3 SBD 1, 4, 6.1, 8 and 9 Certified copy of B-BBEE Status Level Verification certificate OR a valid original or certified copy of a Sworn Affidavit attested by a Commissioner of Oaths.



INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE					
BID NUMBER:	SCMU5-20/21-0010ME CHR	CLOSING DATE:	17 AUGUST 2020	CLOSING TIME:	11H00
DESCRIPTION	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT					
NO. 1 CREAMERY ROAD, DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE , OLD CPA BUILDING – RECEPTION AREA, KOMANI					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	Ms N Dokoda		CONTACT PERSON	Mr. A Ndaba	
TELEPHONE NUMBER	045 807 6624		TELEPHONE NUMBER	045 807 6740 / 082 394 8988	
FACSIMILE NUMBER	045 807 6663		FACSIMILE NUMBER	045 807 6600	
E-MAIL ADDRESS	nosiphe.dokoda@ecdpcw.gov.za		E-MAIL ADDRESS	aphelele.ndaba@ecdpcw.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 DATABASE No:	SUPPLIER MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No	
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?		<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?		<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A BRANCH IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?				<input type="checkbox"/> YES <input type="checkbox"/> 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.					



TERMS AND CONDITIONS FOR BIDDING

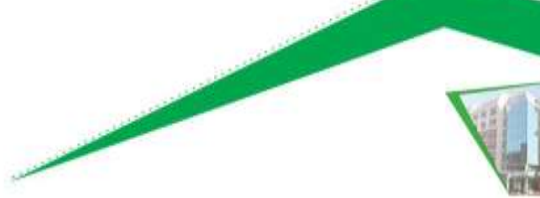
1. BID SUBMISSION:	
1.1.	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4.	THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
2. TAX COMPLIANCE REQUIREMENTS	
2.1	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3	APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4	BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5	IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6	WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7	NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE 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

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes an advertised competitive bid, a limited bid, a proposal or written price quotation). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-

- the bidder is employed by the state; and/or
- the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

2. **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

2.1 Full Name of bidder or his or her representative:

2.2 Identity Number:.....

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

2.4 Registration number of company, enterprise, close corporation, partnership agreement or trust:
.....

2.5 Tax Reference Number:

2.6 VAT Registration Number:

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

¹"State" means –

- (a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
- (b) any municipality or municipal entity;
- (c) provincial legislature;
- (d) national Assembly or the national Council of provinces; or
- (e) Parliament.

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

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

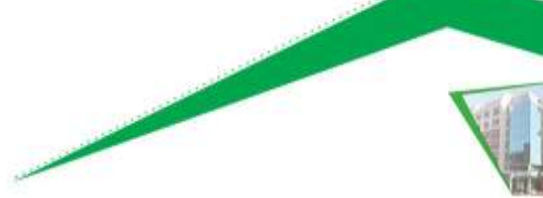
2.7.1 If so, furnish the following particulars:

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

.....

Name of state institution at which you or the person connected to the bidder is employed :

.....



Position occupied in the state institution:

Any other particulars:
.....
.....
.....

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

2.7.2.1 If yes, did you attach proof of such authority to the bid document? **YES / NO / N/A**

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

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

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

2.8.1 If so, furnish particulars:
.....
.....
.....

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

2.9.1 If so, furnish particulars.
.....
.....
.....

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

2.10.1 If so, furnish particulars.
.....
.....
.....

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

2.11.1 If so, furnish particulars:
.....
.....



3 Full details of directors / trustees / members / shareholders.

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

4 DECLARATION

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

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

II. I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder



Compulsory Enterprise Questionnaire

A

Compulsory Enterprise questionnaire

The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.		
Section 1: Name of enterprise:		
Section 2: VAT registration number, if any:		
Section 3: cidb registration number, if any:		
Section 4: Particulars of sole proprietors and partners in partnerships		
Name*	Identity number*	Personal income tax number*
<i>* Complete only if sole proprietor or partnership and attach separate page if more than 3 partners</i>		
Section 5: Particulars of companies and close corporations		
Company registration number		
Close corporation number Tax		
reference number		
Section 6: The attached SBD 4 must be completed for each tender and be attached as a tender requirement.		
Section 7: The attached SBD 6.1 must be completed for each tender and be attached as a requirement.		
Section 8: The attached SBD 8 must be completed for each tender and be attached as a requirement.		
Section 9: The attached SBD 9 must be completed for each tender and be attached as a requirement.		
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 Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004; iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;		
iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and		
iv) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.		

Signed

Date

Name

Position

SBD 6.1

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

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

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

1. GENERAL CONDITIONS

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

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

1.2

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

1.3 Points for this bid shall be awarded for:

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

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

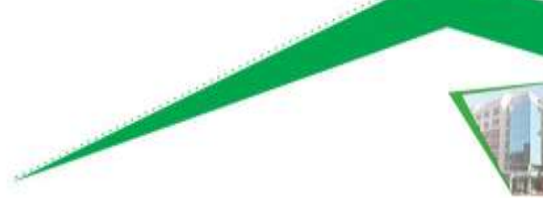
	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

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

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

2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) of the Broad-Based Black Economic Empowerment Act;
- (d) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an



5. BID DECLARATION

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

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

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

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

7. SUB-CONTRACTING

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

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted.....%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....
- iv) Whether the sub-contractor is an EME or QSE

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

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

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

8. DECLARATION WITH REGARD TO COMPANY/FIRM

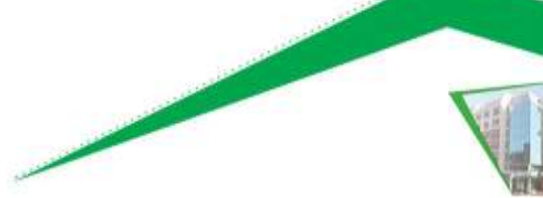
8.1 Name of company/firm:.....

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM

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



[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

8.6 COMPANY CLASSIFICATION

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

[TICK APPLICABLE BOX]

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

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

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person’s conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES

1.

2.

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

DATE:

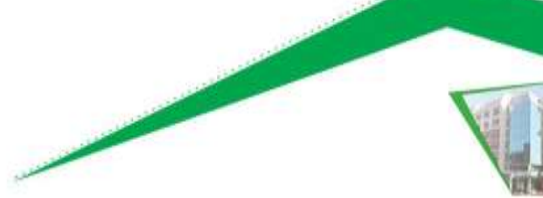
ADDRESS

.....

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Standard Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be disregarded if that bidder, or any of its directors have-
 - a. abused the institution's supply chain management system;
 - b. committed fraud or any other improper conduct in relation to such system; or
 - c. failed to perform on any previous contract.
- 4 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's database as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <i>audi alteram partem</i> rule was applied).	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Bid Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? To access this Register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Bid Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012) 3265445.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		



CERTIFICATION

**I, THE UNDERSIGNED (FULL NAME).....
CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND
CORRECT.**

**I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN
AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.**

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Standard Bidding Document (SBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
 - a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
 - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
- 4 This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

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

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



CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

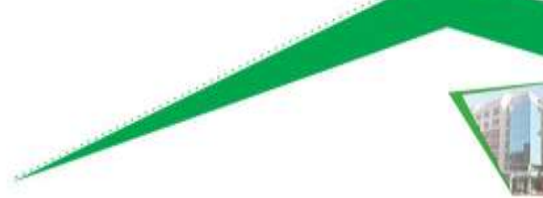
(Name of Institution)

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

I certify, on behalf of _____ that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;



- (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder



***VALID ORIGINAL OR CERTIFIED COPY OF B-BBEE
CERTIFICATE***

(IF APPLICABLE, ATTACH HERE)



SWORN AFFIDAVIT

(IF APPLICABLE, CHOOSE THE CORRECT FORM AND COMPLETE)

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



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

I, the undersigned,

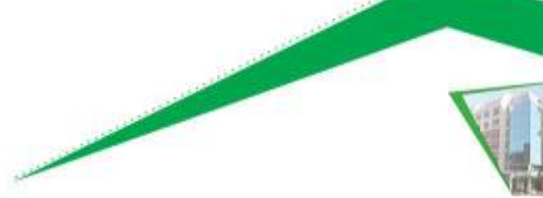
Full name & Surname	
Identity number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a Member / Director / Owner of the following enterprise and am duly authorised to act on its behalf:

Enterprise Name:	
Trading Name (If Applicable):	
Registration Number:	
Enterprise Physical Address:	
Type of Entity (CC, (Pty) Ltd, Sole Prop	
Nature of Business:	
Definition of “Black People”	<p>As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 “Black People” is a generic term which means Africans, Coloureds and Indians –</p> <p>(a) Who are citizens of the Republic of South Africa by birth or descent; or (b) Who became citizens of the Republic of South Africa by naturalization-</p> <ol style="list-style-type: none"> i. Before 27 April 1994; or ii. On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior

3. I hereby declare under Oath that:
 - The Enterprise is _____% **Black Owned** as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
 - The Enterprise is _____% **Black Woman Owned** as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
 - The Enterprise is _____% **Black Designated Group Owned** as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
 - Based on the Financial Statements/Management Accounts and other information available on the latest financial year-end of _____ (DD/MM/YYYY), the annual Total Revenue was equal to/or less than R10, 000,000.00 (ten Million Rands or less),



- Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box.**

100% Black Owned	Level One (135% B-BBEE procurement recognition level)	
At least 51% Black Owned but less than 100% black owned	Level Two (125% B-BBEE procurement recognition level)	
At least 30% Black Owned but less than 51% black owned	Level Four (100% B-BBEE procurement recognition level)	
Less than 30% Black Owned	Level Five (80% B-BBEE procurement recognition level)	

NB: KEY NOTES FOR EMES (extract from Gazette No. 41287)

- 3.6.2.4.1 An Exempted Micro Enterprise (EME) with a total annual revenue of less than R1.8 million in the case of BEPs and less than R3 million in the case of Contractors are :
 - A) Not subject to the discounting principle and therefore do not have to comply with the QSE Skills Development element, and
 - B) Not required to have an authorised B-BBEE verification certificate, and may present an affidavit or a certificate issued by the Companies and Intellectual Property Commission (CIPC), in respect of their ownership and annual turnover.
 - Contractors and/Built Environment Professionals are encouraged to familiarize themselves with the Construction Sector Codes (CSC000) as issued through Government Gazette No. 41287, Board No. NOTICE 931 OF 2017.
Details are available on: www.thedti.gov.za/economic_empowerment/bee_sector_charters.jsp
 - An electronic copy can also be requested through DPW offices (Supply Chain Offices)
3. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
4. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: _____

Date: _____

Commissioner of Oaths
Signature & stamp _____



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

I, the undersigned,

Full name & Surname	
Identity number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a Member / Director / Owner of the following enterprise and am duly authorised to act on its behalf:

Enterprise Name:	
Trading Name (If Applicable):	
Registration Number:	
Enterprise Physical Address:	
Type of Entity (CC, (Pty) Ltd, Sole Prop	
Nature of Business:	
Definition of “Black People”	<p>As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 “Black People” is a generic term which means Africans, Coloureds and Indians –</p> <p>(a) Who are citizens of the Republic of South Africa by birth or descent; or (b) Who became citizens of the Republic of South Africa by naturalization-</p> <ol style="list-style-type: none"> i. Before 27 April 1994; or ii. On or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior

3. I hereby declare under Oath that:

- The Enterprise is _____% **Black Owned** as per Amended Code Series CSC000 of the revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as amended by Act No 46 of 2013,
- The Enterprise is _____% **Black Woman Owned** as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- The Enterprise is _____% **Black Designated Group Owned** as per Amended Code Series CSC000 of the Revised Construction Sector Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- Based on the Financial Statements/Management Accounts and other information available on the latest financial year-end of _____ (DD/MM/YYYY), the annual Total Revenue was between 10 million (ten Million Rands) and less than R50,000,000.00 (fifty Million Rands).
- Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box.**



100% Black Owned	Level One (135% B-BBEE procurement recognition level)	
At least 51% Black Owned but less than 100% black owned	Level Two (125% B-BBEE procurement recognition level)	

NB: KEY NOTES FOR QSE (extract from Gazette No. 41287)

- 5.6.3 A QSE that is at least 51% Black Owned or 100% Black Owned that does not comply with paragraph 3.6.2.3 above, will be discounted by one level from that level awarded in paragraphs 5.3.1 and 5.3.2 respectively.
 - 5.3.4 Despite paragraphs 5.2, 5.3.1 and 5.3.2, an at least 51% Black Owned QSE's B-BBEE Status Level and corresponding B-BBEE Recognition Level will be enhanced by one level if it achieves full points (excluding the bonus points) for the Skills Development element of the QSE Scorecard (paragraphs 1.1, 1.2 and 1.3 of Statement CSC603) or the Preferential Procurement and Supplier Development element of the QSE Scorecard (paragraphs 1.1, 1.2, 1.3 and 2.1 of CSC604).
 - 5.3.5 For the avoidance of doubt, a Measured Entity that is measured in terms of the full QSE scorecard is not eligible for enhancement in terms of paragraph 5.3.4 above.
 - Contractors and/Built Environment Professionals are encouraged to familiarize themselves with the Construction Sector Codes (CSC000) as issued through Government Gazette No. 41287, Board No. NOTICE 931 OF 2017.
Details are available on: www.thedti.gov.za/economic_empowerment/bee_sector_charters.jsp
 - An electronic copy can also be requested through DPW offices (Supply Chain Offices)
4. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
 5. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: _____

Date: _____

Commissioner of Oaths

Signature & stamp



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

(ATTACH HERE)



VALID CIDB CERTIFICATE OF A BIDDER
(ATTACH HERE)



RECORD OF ADDENDA TO BID DOCUMENTS

PROJECT TITLE	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
SCMU NUMBER	SCMU5-20/21-0010ME CHR

I / We confirm that the following communications received from the Department of Public Works and Infrastructure before the submission of this bid offer, amending the bid documents, have been taken into account in this bid offer: (Attach additional pages if more space is required)

Item	Date	Title or Details	No. of Pages
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Attach additional pages if more space is required.

Signed _____ Date _____

Name _____ Position _____

Bidder _____



PROPOSED AMENDMENTS AND QUALIFICATIONS

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

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

PROJECT TITLE	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
SCMU NUMBER	SCMU5-20/21-0010ME CHR

Page	Clause /Item	Proposal

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

Signed

Date

Name

Position

Enterprise name



RESOLUTION FOR SIGNATORY

A: CERTIFICATE OF AUTHORITY FOR SIGNATORY

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

An example is given below:

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

Mr/Ms _____, whose signature appears below, has been duly authorised to

sign all documents in connection with the bid for Contract No. _____

and any Contract which may arise there from on behalf of (Block Capitals) _____

SIGNED ON BEHALF OF THE COMPANY: _____

IN HIS/HER CAPACITY AS: _____

DATE: _____

SIGNATURE OF SIGNATORY: _____

WITNESSES:

DIRECTOR (NAMES)		SIGNATURE	
DIRECTOR (NAMES)		SIGNATURE	
DIRECTOR (NAMES)		SIGNATURE	
DIRECTOR (NAMES)		SIGNATURE	
DIRECTOR (NAMES)		SIGNATURE	
DIRECTOR (NAMES)		SIGNATURE	

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



F
CERTIFICATE OF AUTHORITY FOR JOINT VENTURES

This Returnable Schedule is to be completed by joint ventures.

We, the undersigned, are submitting this bid offer in Joint Venture and hereby authorise Mr/Ms
, authorised signatory of the company
, acting in the capacity of lead partner, to sign all documents in
 connection with the bid offer and any contract resulting from it on our behalf.

PROJECT TITLE	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA	
SCMU NUMBER	SCMU5-20/21-0010ME CHR	
NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner:		Signature. Name Designation.....
..... .		Signature. Name Designation.....
..... .		Signature. Name Designation.....
..... .		Signature. Name Designation.....



G

CAPACITY OF THE BIDDER

PROJECT TITLE	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
SCMU NUMBER	SCMU5-20/21-0010ME CHR

WORK CAPACITY: (The Bidder is requested to furnish the following capacity particulars and to attach additional pages if more space is required. This is not an elimination factor, but important for the department to make a decision when doing risk assessment.

Artisans and Employees: (Artisans and Employees to be ,or are ,employed for this project)

Quantity / No. of Resources	Categories of Employee - Key Personnel (part of Business Enterprise)	Professional Registration No.	Date of Employment
	Team Leader / Key Personnel		
	Project Manager		
	Senior Technologists		
	Quality Control & Safety Officer-Construction Supervisor		
	Technicians		
	Unskilled employees		
	Others		

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

Signed:	Date
Name:	Position

Enterprise Name:



H

RELEVANT PROJECT EXPERIENCE – COMPLETED PROJECTS

Bidders must submit a description of at least one project successfully completed. Attach proof for each of the project provided. This is important for the department in order to make a decision and will lead to elimination of bids.

The description of each project must include the following information:

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

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

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

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

Signed.....

Date.....

Name.....

Position.....

Enterprise name.....



I

RELEVANT PROJECT EXPERIENCE – CURRENT PROJECTS

Bidders must submit a description of at least one project under construction/ on hold/ just handed over/ towards completion (if they exist). Attach an Appointment letter for each of the project provided. This is not an elimination factor, but important for the department to make a decision when doing risk assessment.

The description of each project must include the following information:

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

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

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

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

Signed _____ Date _____

Name _____ Position _____

Enterprise name _____



J

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

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

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

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

Signed

Date

.....

.....

Name

Position

.....

.....

Enterprise name

.....



K

SCHEDULE OF BIDDER'S LITIGATION HISTORY

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

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

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

Signed

Date

Name

Position

Bidder name



L

PLANT AND EQUIPMENT

The Tenderer must provide full particulars of the following Assets: (Assets owned and to be hired - Indicate owned assets). Attach details of ownership of each of the plant & vehicle provided or hiring letter or provisional approval to hire. This is not an elimination factor, but important for the department to make a decision when doing risk assessment.

NO.	MACHINERY	PLANT	EQUIPMENT	VEHICLES
1				
2				
3				
4				

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

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

Signed

Date

Name

Position

Enterprise name



M

Evaluation Schedule 1 – Project Reference Forms - 1

Project title:	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
Project Number:	SCMU5-20/21-0010ME CHR

NOTE: This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the bidder. This is important for the department in order to make a decision and will lead to elimination of bids.

I, _____ (name and surname) of
 _____ (company name) declare
 that I was the Project Manager on the following building construction project successfully
 executed by _____ (name of bidder):
 Project name: _____
 Project location: _____
 Construction period: _____ Completion date: _____
 Contract value: _____

A. Please evaluate the performance of the Bidder on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

Key Performance Indicators	Very Poor 1	Poor 2	Fair 3	Good 4	Excellent 5	Total
1. Project performance / time management / programming						
2. Quality of workmanship						
3. Resources: Personnel						
4. Resources: Plant						
5. Financial management / payment of subcontractors / cash flow, etc						
TOTAL						



B. Would you consider / recommend this bidder again:

YES	NO

Any other comments:

D. My contact details are:

Telephone: _____ Cellphone: _____ Fax: _____

E-mail: _____

Thus signed at _____ on this _____ day of _____ 20__.

Signature of principal agent

<p>COMPANY STAMP</p>

NOTE:

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the bidder to put referees who are reachable.

Name of Bidder

Signature of Bidder

Date



Evaluation Schedule 2 – Project Reference Forms - 2

Project title:	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
Project Number:	SCMU5-20/21-0010ME CHR

NOTE: This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the bidder. This is important for the department in order to make a decision and will lead to elimination of bids.

I, _____ (name and surname) of
 _____ (company name) declare
 that I was the Project Manager on the following building construction project successfully
 executed by _____ (name of bidder):
 Project name: _____
 Project location: _____
 Construction period: _____ Completion date: _____
 Contract value: _____

A. Please evaluate the performance of the Bidder on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

Key Performance Indicators	Very Poor 1	Poor 2	Fair 3	Good 4	Excellent 5	Total
1. Project performance / time management / programming						
2. Quality of workmanship						
3. Resources: Personnel						
4. Resources: Plant						
5. Financial management / payment of subcontractors / cash flow, etc						
TOTAL						

B. Would you consider / recommend this bidder again:

YES	NO

C. Any other comments:

D. My contact details are:

Telephone: _____ Cellphone: _____ Fax: _____

E-mail: _____



Thus signed at _____ on this _____ day of _____ 20__.

Signature of principal agent

COMPANY STAMP

NOTE:

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the bidder to put referees who are reachable.

Name of Bidder

Signature of Bidder

Date



Evaluation Schedule 3 – Project Reference Forms - 3

Project title:	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
Project Number:	SCMU5-20/21-0010ME CHR

NOTE: This returnable document must be completed by the person who was the Engineer/Project Manager on a project of similar value and complexity that was completed successfully by the bidder. This is important for the department in order to make a decision and will lead to elimination of bids.

I, _____ (name and surname) of
_____ (company name) declare
that I was the Project Manager on the following building construction project successfully
executed by _____ (name of bidder):

Project name: _____

Project location: _____

Construction period: _____ Completion date: _____

Contract value: _____

A. Please evaluate the performance of the Bidder on the abovementioned project, on which you were the principal agent, by inserting "Yes" in the relevant box below:

Key Performance Indicators	Very Poor 1	Poor 2	Fair 3	Good 4	Excellent 5	Total
1. Project performance / time management / programming						
2. Quality of workmanship						
3. Resources: Personnel						
4. Resources: Plant						
5. Financial management / payment of subcontractors / cash flow, etc						
TOTAL						

B. Would you consider / recommend this bidder again:

YES	NO

C. Any other comments:

D. My contact details are:

Telephone: _____ Cellphone: _____ Fax: _____



E-mail: _____

Thus signed at _____ on this _____ day of _____ 20__.

Signature of principal agent

<i>COMPANY STAMP</i>

NOTE:

If reference cannot be verified due to the inability to get hold of the referee or failure on his/her part to respond to a written request to do so, that reference will not score any points. It is the responsibility of the bidder to put referees who are reachable.

Name of Bidder

Signature of Bidder

Date



N

BASELINE RISK ASSESSMENT

PROJECT TITLE	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
SCMU NUMBER	SCMU5-20/21-0010ME CHR
<i>PLEASE NOTE THAT THIS IS A BASELINE RISK ASSESSMENT AND NOT A DETAILED RISK ASSESSMENT OF ALL ANTICIPATED ACTIVITIES ON SITE</i>	

Activity	Risk to Safety	Risk to Health	Risk to Environmental	Risk to Public Safety	Control Measures

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

Signed

Date

Name

Position

Enterprise name



A. EASTERN CAPE INFRASTRUCTURE INPUT MATERIAL

PROJECT NAME	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
SCMU NUMBER	SCMU5-20/21-0010ME CHR
CONTRACTOR NAME:	

1. Below is the list of building material which must be sourced from Eastern Cape based suppliers, manufacturers or accredited agents.
2. On monthly basis, the contractor will report the purchasing of any of this material.
3. The report will then be communicated to PT & OTP on quarterly basis or in whichever intervals, as prescribed by PT & OTP.

B. BUILDING MATERIAL LISTS– BUILDING RELATED STRUCTURES (NEW, REFURBISHMENTS & RENOVATIONS)

ITEM	BUILDING MATERIAL (TYPE)	QUANTITY	ESTIMATE AMOUNT (Rands)
1	Aluminium doors and windows,		
2	Wooden doors,		
3	Windows and frames,		
4	Burglar-proofing,		
5	Metal Products,		
6	Bricks (all kinds),		
7	Cement		
8	Lintels (precast concrete),		
9	Paving blocks and bricks,		
10	Precast concrete kerbs,		
11	Tar products,		
12	Aluminium Shop Fronts (certain elements),		
13	Vinyl flooring,		
14	Ceramic tiles,		
15	Air conditioning units (some products),		
16	Fire Detection system,		
17	Dust Extraction products (some products),		
18	Ready Mix Concrete,		
19	Stone (all aggregates),		
20	Sand (for all purposes),		
21	PVC Tanks,		
22	Furniture (Offices),		
23	Fencing (certain products),		



24	Fencing Poles (all products),		
25	Roof Structure (timber and certain steel structures),		
26	Roof Covering (most roof products),		
27	Painting (for all purposes),		
28	Ceiling (most products),		
29	Partitioning (certain products),		
30	Branderings all products),		
31	Purlins (all products),		
32	Landscaping products (most products),		
33	Waterproofing products (some products),		
34	Rainwater goods (some products),		
35	Plumbing material (except Hi-Tech material which cannot be found in EC),		
36	Ironmongery (some products),		
37	Screws (some products),		
38	Skirting (most products),		
39	Cornices (most products),		
40	Blinds (most products),		
41	Electric (most products like lights, plugs, switches, etc.)		
42	Electric (most products like lights, plugs, switches, etc.)		
43	(Aluminium gutters and accessories most products).		
TOTAL			

C. CONFIRMATION

- I.....(**Contractor name**) acknowledge and confirm the above mentioned material will be sourced in the Eastern Cape Province, from Eastern Cape based material suppliers and manufacturers.
- I confirm that on monthly basis I will produce a proof of purchase of this material used or to be used, either in the form of delivery notes, tax invoices or any formal document which verifies that the material or goods were sourced from an Eastern Cape based supplier or manufacturer.

Representative of the Contractor (Name)

Signature

Date



COMPANY DETAILS

The following company details schedule must be completed to ensure that the prerequisite requirements to bidding are met.

Registered Company Name:

.....

Company Registration Number:

VAT Number:

Bank Name and Branch:

Bank Account Number:

Professional Registration Details (if applicable):

.....

.....

.....

.....

Professional Indemnity Details (if applicable):

.....

.....



DECLARATION (VALIDITY OF INFORMATION PROVIDED)

I.....declare that the information provided is true and correct, the signature to the bid document is duly authorised and documentary proof regarding any bidding issue will, when required, be submitted to the satisfaction of the EASTERN CAPE DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE.

.....
SIGNATURE OF DECLARER

.....
DATE

.....
POSITION OF DECLARER

.....
NAME OF COMPANY OF BIDDER

Should the bidder have, in the opinion of the DPW, acted fraudulently illegally, in bad faith or in any improper manner, misrepresented itself with regard to the bid, then the DPW may, in its sole discretion:

- * Ignore any bids without advising the bidder thereof
- * Cancel the contract without prejudice to any legal rights the DPW may have

Should the bidder disregard this or conduct affairs in a way that transgresses from good business practices, this could seriously impair future business relations between the DPW and such bidder.



PART C1 AGREEMENTS AND CONTRACT DATA

C1.1 Form of Offer and Acceptance
C1.2 Contract Data



C1.1- Form of Offer and Acceptance

Annex C (normative)

FORM OF OFFER AND ACCEPTANCE

Project title	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
SCMU number	SCMU5-20/21-0010ME CHR

OFFER

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

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

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

THE OFFERED TOTAL OF THE PRICES + DISBURSEMENTS + INCLUSIVE OF VALUE ADDED TAX AND MINUS ALL DISCOUNTS IS:

.....Rand (in words);
R (in figures) (or other suitable wording)

This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data.

Signature(s) _____

Tender's Name(s) _____

Authorized Person (Names) _____

Address of the Tenderer:

Witnesses (Signatures):

1. _____ Date: _____

2. _____ 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 form of offer and acceptance. No amendments to or deviations from said documents are valid unless contained in this schedule.

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

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

Signature
 Name
 Capacity
for the Employer
 (Name and address of organization)

Name and signature
 of witness Date



Schedule of Deviations

1 Subject _____
Details _____

2 Subject _____
Details _____

3 Subject _____
Details _____

4 Subject _____
Details _____

By the duly authorised representatives signing this agreement, the employer and the tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the tender schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender/ quotation 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 C1.2 CONTRACT DATA

C1.2 : CONTRACT DATA : JBCC 2000 PRINCIPAL BUILDING AGREEMENT
(Edition 4.1 of March 2005)

Tender No : SCMU5-20/21-0010ME CHR

Project title:	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
Tender No:	SCMU5-20/21-0010ME CHR

	<p>The Conditions of Contract are clauses 1 to 42 of the JBCC series 2000 Principal Building Agreement (Edition 4.1 of March 2005) prepared by the Joint Building Contracts Committee.</p> <p>Copies of these conditions of contract may be obtained from the Association of South African Quantity Surveyors, Master Builders Association, South African Association of Consulting Engineers, South African Institute of Architects, Association of Construction Project Managers, Building Industries Federation South Africa, South African Property Owners Association or Specialist Engineering Contractors Committee.</p>
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	<p>CONTRACT VARIABLES</p> <p>THE SCHEDULE</p> <p>The schedule contains all the variables referred to in this document and is divided into part 1: contract data completed by the employer and part 2: contract data completed by the contractor. Part 1 must be completed in full and included in the tender documents. Both part 1 and part 2 form part of this agreement.</p> <p>Spaces requiring information must be filled in, shown as “not applicable” or deleted but not left blank. Where choices are offered, the non-applicable items are to be deleted. Where insufficient space is provided the information should be annexed hereto and cross referenced to the applicable clause of the schedule. Key cross reference clauses are italicised in <i>[]</i> brackets.</p>
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42.0	Part 1: Contract Data completed by the Employer
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42.1	CONTRACTING AND OTHER PARTIES
42.1.1 [1.2]	<p>Employer: Department of Public Works and Infrastructure Postal address: Private Bag X7114 Queenstown 5320 Tel: 045-807 6764 Physical address: No 1 Creamery Road, Queenstown</p>

42.2	CONTRACT DETAILS
42.2.1 [1.1]	Works description: Refer to document C3.1 – Scope of Work.
42.2.2 [1.1]	Site description: Refer to document C4 – Site Information.
42.2.4 [41.0]	Specific options that are applicable to a State organ only Where so :



[31.1 #] [31.11.2 #] [31.12.2#]	1) Interest rate legislation: (a) in respect of interest owed by the employer , the interest rate as determined by the Minister of Justice and Constitutional Development from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No. 55 of 1975), will apply; and (b) in respect of interest owed to the employer , the interest rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999), will apply
[11.2.#]	2) Lateral support insurance to be effected by the contractor :
[31.4.2 #]	3) Payment will be made for materials and goods: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
[40.2.2.#]	4) Dispute resolution by adjudication Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
[26.1.2 #]	5) Extended defects liability period applicable to the following elements: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 3 months after the practical completion date. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
42.2.6 [15.3]	Period for the commencement of the works after the contractor takes possession of the site : Five (5) working days.
42.2.7 [24.3.1] [30.1]	For the works as a whole: The date for practical completion shall be 2 months from the commencement date and the penalty per calendar day shall be R 520.00/ Calendar day.
42.2.8 [24.3.1] [28.1]	For the works in sections: The date for practical completion from the commencement date and the penalty per calendar day: Not applicable
42.2.9 [1.2]	The law applicable to this agreement shall be that of the: Republic of South Africa

42.3	INSURANCES
42.3.1 [10.1 #, 10.2 # 12.1 #]	Contract works insurance to be effected by the contractor <input checked="" type="checkbox"/> To the minimum value of the contract sum plus 10% With a deductible not exceeding 5% of each and every claim Or <input type="checkbox"/> For the minimum sum of R (insert amount in words) With a deductible not exceeding 5% of each and every claim
42.3.2 [10.1#, 10.2 #, 12.1 #]	Supplementary insurance is required: Yes To the minimum value of the contract sum plus 10 %
42.3.3 [11.1#, 12.1 #]	Public liability insurance to be effected by the contractor <input checked="" type="checkbox"/> For the sum of R 5 million With a deductible not exceeding 5% of each and every claim

42.3.4 [11.2 #, 12.1 #]	Support insurance to be effected by the contractor
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	For the sum of R (insert amount in words)
	With a deductible of R (insert amount in words)

42.4	DOCUMENTS
42.4.2 [3.7]	Three (3) copies of the construction documents will be supplied to the contractor free of charge
42.4.3	Bills of quantities / Lump sum document schedule of rates drawn up in accordance with: Standard System of Measuring Building Work (sixth edition as amended)
42.4.5 [3.4]	JBCC Engineering General Conditions are to be included in the contract documents: No

42.4.6 [31.5.3]	The contract value is to be adjusted using CPAP Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
[32.13]	<p>Where CPAP is applicable, the contract sum will be adjusted in accordance with the JBCC Contract Price Adjustment Provisions (CPAP) as set out in the CPAP Indices Application Manual as prepared by the JBCC Series 2000, code 2118, dated May 2005 and any amendments thereto:</p> <ol style="list-style-type: none"> 1) Glass etc. measured in specialist section Metalwork, will be adjusted in terms of the index for that work group unless specifically stated otherwise in the bills of quantities 2) All electrical installations in buildings and power distribution systems shall be adjusted in terms of the index for Work Group 160 Electrical Installation. In case of uninterruptible power supplies, elevators, escalators and hoists, generating sets, motor-alternator sets and intercommunication systems shall be in accordance with Work Group 170 3) With reference to Work Group 190 a proportion of the value related preliminaries pro rata to the amount of work excluded from adjustment, shall be excluded from Contract Price Adjustment Provisions, if Option A has been selected for the adjustment of preliminaries 4) Further to clause 3.4.4 of the CPAP Indices Application Manual, the listing of additional items for exclusion by tenderers, will not be permitted 5) Where V results in a negative amount after application of the formula in clause 8.3 of the CPAP Indices Application Manual the factor of 0,55 shall be substituted by 1,45 <p style="text-align: center;">Alternative Indices: Not Applicable</p>
42.4.7 [3.10]	<p>Details of changes made to the provisions of JBCC standard documentation</p> <p>Clause 1.1</p> <p>COMMENCEMENT DATE – means the date that the possession of the site is given to the contractor</p> <p>CONSTRUCTION GUARANTEE – means a guarantee at call obtained by the contractor from an institution approved by the employer in terms of the employer’s construction guarantee form as selected in the schedule.</p> <p>CONSTRUCTION PERIOD – means the period commencing on the commencement date and ending on the date of practical completion</p> <p>CORRUPT PRACTICE – means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.</p> <p>FRAUDULENT PRACTICE – means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any tenderer, and includes collusive practice among tenderers (prior to and after the tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open competition.</p>



	<p>INTEREST – the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be in terms of the legislation of the Republic of South Africa, and in particular:</p> <p>(a) in respect of interest owed by the employer, the interest rate as determined by the Minister of Justice and Constitutional Development from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No. 55 of 1975), will apply; and</p> <p>(b) in respect of interest owed to the employer, the interest rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999), will apply</p> <p>SECURITY – means the form of security provided by the employer or contractor, as stated in the schedule, from which the contractor or employer may recover expenses or loss.</p> <p>1.6 Any notice given may be delivered by hand, sent by prepaid registered post or telefax. Notice shall be presumed to have been given when:</p> <p>1.6.4 No clause</p> <p>3.2.1 A construction guarantee in terms of 14.0, where so elected in his tender</p> <p>3.7 Add at the end thereof:</p> <p>The contractor shall supply and keep a copy of the JBCC Series 200 Principal Building Agreement and Preliminaries applicable to this contract on the site, to which the employer, principal agent and agents shall have access to at all times.</p> <p>3.10 Replace the second reference to “principal agent” with the word “employer”</p> <p>4.3 No clause</p> <p>5.1.2 under clause 41- Include reference to 32.6.3; 34.3 and 34.4 in terms of which the employer has retained its authority and has not given a mandate to the principal agent and in terms of which the employer shall sign all documents</p> <p>10.5 Add the following as 10.5</p> <p style="padding-left: 40px;">Damage to the works</p> <p>a) Without in any way limiting the contractor’s obligations in terms of the contract, the contractor shall bear the full risk of damage to and/or destruction of the works by whatever cause during construction of the works and hereby indemnifies and holds harmless the employer against any such damage. The contractor shall take such precautions and security measures and other steps for the protection and security of the works as the contractor may deem necessary</p> <p>b) The contractor shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works</p> <p>c) The employer shall carry the risk of damage to or destruction of the works and materials paid for by the employer that is the result of the excepted risks as set out in 10.6</p> <p>d) Where the employer bears the risk in terms of this contract, the contractor shall, if requested to do so, reinstate any damage or destroyed portions of the works and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof</p> <p>10.6 Add the following as 10.6</p> <p style="text-align: center;">Injury to Persons or loss of or damage to Properties</p>
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- a) The **contractor** shall be liable for and hereby indemnifies the **employer** against any liability, loss, claim or proceeding whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the **works** unless due to any act or neglect of any person for whose actions the **employer** is legally liable
- b) The **contractor** shall be liable for and hereby indemnifies the **employer** against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable or personal property or property contiguous to the **site**, whether belonging to or under the control of the **employer** or any other body or person, arising out of or in the course of or by reason of the execution of the **works** unless due to any act or neglect of any person for whose actions the **employer** is legally liable
- c) The **contractor** shall upon receiving a contract instruction from the **principal agent** cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the **employer** shall be entitled to cause it to be made good and to recover the cost thereof from the **contractor** or to deduct the same from amounts due to the **contractor**.
- d) The **contractor** shall be responsible for the protection and safety of such portions of the premises placed under his control by the **employer** for the purpose of executing the **works** until the issue of the **certificate of practical completion**.
- e) Where the execution of the **works** involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the **contractor**, shall and will remain adequately insured or insured against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the **works** has been completed
- f) The **contractor** shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the **works**

10.7 Add the following as 10.7

HIGH RISK INSURANCE

In the event of the project being executed in a geological area classified as a “High Risk Area”, that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply:

10.7.1 Damage to the works

The **contractor** shall, from the **commencement date** of the **works** until the date of the **certificate of practical completion**, bear the full risk of and hereby indemnifies and holds harmless the **employer** against any damage to and/or destruction of the **works** consequent upon a catastrophic ground movement as mentioned above. The **contractor** shall take such precautions and **security** measures and other steps for the protection of the **works** as he may deem necessary

When so instructed to do so by the **principal agent**, the **contractor** shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the **works** and to rebuild, restore, replace and/or repair the **works**, at the **contractor’s** own costs

10.7.2 Injury to persons or loss of or damage to property

The **contractor** shall be liable for and hereby indemnifies and holds harmless the **employer** against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon



	<p>personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above</p> <p>The contractor shall be liable for and hereby indemnifies the employer against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable or personal property or property contiguous to the site, whether belonging to or under the control of the employer or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract</p> <p>10.7.3 It is the responsibility of the contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.7.1 and 10.7.2. Without limiting the contractor's obligations in terms of the contract, the contractor shall, within twenty one (21) calendar days of the commencement date but before commencement of the works, submit to the employer proof of such insurance policy, if requested to do so</p> <p>10.7.4 The employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the contractor's default of his obligations as set out in 10.7.1; 10.7.2 and 10.7.3. Such losses or damages may be recovered from the contractor or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the employer and the contractor and for this purpose all these contracts shall be considered one indivisible whole</p> <p>14.0 Replace the entire clause 14.0 with the following:</p> <p>14.0 SECURITY</p> <p>14.1 In respect of contracts with a contract sum up to R1 million, the security to be submitted by the contractor to the employer will be as a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT)</p> <p>14.1.1 The payment reduction of the value certified in a payment certificate shall be mutatis mutandi in terms of 31.8(A)</p> <p>14.1.2 The employer shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the payment reduction security or portions thereof to the contractor</p> <p>14.2 In respect of contracts with a contract sum above R1 million, the contractor shall have the right to select the security to be provided in terms of 14.3, 14.4, 14.5, 14.6, or 14.7 as stated in the schedule. Such security shall be provided to the employer within twenty-one (21) calendar days from commencement date. Should the contractor fail to select the security to be provided or should the contractor fail to provide the employer with the selected security within twenty-one (21) calendar days from commencement date, the security in terms of 14.7 shall be deemed to have been selected.</p> <p>14.3 Where the security as a cash deposit of ten per cent (10%) of the contract sum (excluding VAT) has been selected:</p> <p>14.3.1 The contractor shall furnish the employer with a cash deposit equal in value to ten per cent (10%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date</p> <p>14.3.2 Within twenty-one (21) calendar days of the date of practical completion of the works the employer shall reduce the cash deposit to an amount equal to three per cent (3%) of the contract value (excluding VAT), and refund the balance to the contractor</p>
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	<p>14.3.3 Within twenty-one (21) calendar days of the date of final completion of the works the employer shall reduce the cash deposit to an amount equal to one per cent (1%) of the contract value (excluding VAT) and refund the balance to the contractor</p> <p>14.3.4 On the date of payment of the amount in the final payment certificate, the employer shall refund the remainder of the cash deposit to the contractor</p> <p>14.3.5 The employer shall be entitled to recover expense and loss from the cash deposit in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the cash deposit security or portions thereof to the contractor</p> <p>14.3.6 The parties expressly agree that neither the employer nor the contractor shall be entitled to cede the rights to the deposit to any third party</p> <p>14.4 Where security as a variable construction guarantee of ten per cent (10%) of the contract sum (excluding VAT) has been selected:</p> <p>14.4.1 The contractor shall furnish the employer with an acceptable variable construction guarantee equal in value to ten per cent (10%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date</p> <p>14.4.2 The variable construction guarantee shall reduce and expire in terms of the Variable Construction guarantee form included in the invitation to tender</p> <p>14.4.3 The employer shall return the variable construction guarantee to the contractor within fourteen (14) calendar days of it expiring</p> <p>14.4.4 Where the employer has a right of recovery against the contractor in terms of 33.0, the employer shall issue a written demand in terms of the variable construction guarantee</p> <p>14.5 Where security as a fixed construction guarantee of five per cent (5%) of the contract sum (excluding VAT) and a five per cent (5%) payment reduction of the value certified in the payment certificate (excluding VAT) has been selected:</p> <p>14.5.1 The contractor shall furnish a fixed construction guarantee to the employer equal in value to five per cent (5%) of the contract sum (excluding VAT)</p> <p>14.5.2 The fixed construction guarantee shall come into force on the date of issue and shall expire on the date of the last certificate of practical completion</p> <p>14.5.3 The employer shall return the fixed construction guarantee to the contractor within fourteen (14) calendar days of it expiring</p> <p>14.5.4 The payment reduction of the value certified in a payment certificate shall be in terms of 31.8(A) and 34.8</p> <p>14.5.5 Where the employer has a right of recovery against the contractor in terms of 33.0, the employer shall be entitled to issue a written demand in terms of the fixed construction guarantee or may recover from the payment reduction or may do both</p> <p>14.6 Where security as a cash deposit of five per cent (5%) of the contract sum (excluding VAT) and a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT) has been selected: in</p> <p>14.6.1 The contractor shall furnish the employer with a cash deposit equal in value to five per cent (5%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date</p> <p>14.6.2 Within twenty-one (21) calendar days of the date of practical completion of the works the employer shall refund the cash deposit in total to the contractor</p>
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	<p>14.6.3 The payment reduction of the value certified in a payment certificate shall be mutatis mutandi in terms of 31.8(A)</p> <p>14.6.4 Where the employer has a right of recovery against the contractor in terms of 33.0, the employer may issue a written notice in terms of 33.4 or may recover from the payment reduction or may do both</p> <p>14.7 Where security as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT) has been selected:</p> <p>14.7.1 The payment reduction of the value certified in a payment certificate shall be mutatis mutandi in terms of 31.8(B)</p> <p>14.7.2 The employer shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the payment reduction or portions thereof to the contractor</p> <p>14.8 Payments made by the guarantor to the employer in terms of the fixed or variable construction guarantee shall not prejudice the rights of the employer or contractor in terms of this agreement</p> <p>14.9 Should the contractor fail to furnish the security in terms of 14.2 the employer, in his sole discretion, and without notification to the contractor, is entitled to change the contractor's selected form of security to that of a ten per cent (10%) payment reduction of the value certified in the payment certificate (excluding VAT), whereafter 14.7 shall be applicable</p> <p>15.1.1 No clause</p> <p>15.1.4 Add 15.1.4 as follows: An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), within twenty-one (21) calendar days of commencement date</p> <p>15.2.1 Under 41: Amend to read as follows: "Give the contractor possession of the site within ten (10) working days of the contractor complying with the terms of 15.1.2 and 15.1.4</p> <p>17.1.11 Delete the words "and the appointment of nominated and selected subcontractors"</p> <p>20.1.3 No clause</p> <p>21.0 No clause</p> <p>29.2.5 No clause</p> <p>31.5.2 Security adjustments in terms of 14.0 and 31.8</p> <p>31.8 Amend as follows:</p> <p>31.8(A) Where a security is selected in terms of 14.1; 14.5 or 14.6, the value of the works in terms of 31.4.1 and of the materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:</p> <p>31.8(A).1 Ninety-five per cent (95%) of such value in interim payment certificates issued up to the date of practical completion</p>
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	<p>31.8.(A).2 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion</p> <p>31.8(A).3 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 34.6</p> <p>31.8(A).4 One hundred per cent (100%) of such value in the final payment certificate in terms of 34.6 except where the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate.</p> <p>31.8(B) Where security is a payment reduction in term of 14.7 has been selected the value of the works in terms of 31.4.1 and materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:</p> <p>31.8(B).1 Ninety per cent (90%) of such value in interim payment certificates issued up to the date of practical completion</p> <p>31.8(B).2 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion</p> <p>31.8(B).3 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 34.6</p> <p>31.8(B).4 One hundred per cent (100%) of such value in the final payment certificate in terms of 34.6 except were the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate</p> <p>31.12 Delete the following: "Payment shall be subject to the employer giving the contractor a tax invoice for the amount due."</p> <p>32.5.1 Add the following to the end of each of these clauses: "...due to no fault of the 32.5.4 contractor" and 32.5.7</p> <p>33.2 Add the following clauses 33.2.9 to 33.2.13:</p> <p>33.2.9 the contractor's failure or neglect to commence with the works on the dates prescribed in the contract</p> <p>33.2.10 the contractor's failure or neglect to proceed with the works in terms of the contract</p> <p>33.2.11 the contractor's failure or neglect for any reason to complete the works in accordance with the contract</p> <p>33.2.12 the contractor's refusal or neglect to comply strictly with any of the conditions of contract or any contract instructions and/or orders in writing given in terms of the contract</p> <p>33.2.13 the contractor's estate being sequestrated; liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa</p> <p>34.13 Replace "seven (7) calendar days" with "twenty one (21) calendar days" and delete the words: "subject to the employer giving the contractor a tax invoice for the amount due"</p>
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	<p>36.3 Remove reference to “No clause”, and replace “principal agent” with “employer”</p> <p>36.7 Add the following: “Notwithstanding any clause to the contrary, on cancellation of 37.5 this agreement either by the employer or the and contractor; or for any reason and whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site. The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever”</p> <p>37.3.5 Replace “ninety (90)” with “one hundred and twenty (120)” And 38.5.4</p> <p>39.3.5 Add the following words at the end thereof: :”within one hundred and twenty (120) working days of completion of such report”</p> <p>40.2.2 under clause 41 – Replace “one (1) year” with “three (3) years”</p> <p>40.6 under clause 41 – Remove reference to no clause</p> <p>40.7.1 Change “(10)” to “(15)”</p> <p>Add the following to the end thereof:</p> <p>Whether or not mediation resolves the dispute, the parties shall bear their own costs concerning the mediation and equally share the costs of the mediator and related costs.</p>
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42.0	<p>Part 2: Contract Data provided by the Contractor:</p> <p>POST-TENDER INFORMATION</p> <p>Note: All information for this section requires consultation with the contractor. The principal agent shall not pre-select any of the alternatives available to the contractor</p>
42.5	<p>CONTRACT DETAILS</p>
42.5.1	<p>Contractor:</p> <p>Postal address:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Tel: Fax: E-mail:</p> <p>TAX / VAT Registration No:</p> <p>Physical address:</p> <p>.....</p> <p>.....</p> <p>.....</p>
42.5.2	<p>The accepted contract sum inclusive of tax is R.....</p>



	Amount in words:								
42.5.3 [31.3]	The latest day of the month for the issue of an interim payment certificate :								
42.5.4 [32.12]	The preliminaries amounts shall be paid in terms of: Alternative A <input type="checkbox"/> Alternative B <input type="checkbox"/>								
42.5.5 [32.12]	The preliminaries amounts shall be adjusted in terms of: Alternative A <input type="checkbox"/> Alternative B <input type="checkbox"/>								
42.5.7 [14]	<p>The security to be provided by the contractor:</p> <p>(a) in respect of contracts up to R1 million, the contractor will provide security in terms of 14.1</p> <p>(b) in respect of contracts above R1 million, the contractor will provide, as security, one of the following:</p> <table border="1" style="width: 100%;"> <tr> <td>(1) cash deposit of 10 % of the contract sum</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td>(2) payment reduction of 10% of the value certified in the payment certificate</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td>(3) cash deposit of 5% of the contract sum and a payment reduction of 5% of the value certified in the payment certificate</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td>(4) fixed construction guarantee of 5% of the contract sum and a payment reduction of 5% of the value certified in the payment certificate</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> </table> <p>NB. Guarantees submitted must be issued by either an insurance company duly registered in terms of the Short-Term Insurance Act, 1998 (Act 35 of 1998) or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) on the pro-forma referred to above. No alterations or amendments of the wording of the pro-forma will be accepted.</p>	(1) cash deposit of 10 % of the contract sum	Yes <input type="checkbox"/> No <input type="checkbox"/>	(2) payment reduction of 10% of the value certified in the payment certificate	Yes <input type="checkbox"/> No <input type="checkbox"/>	(3) cash deposit of 5% of the contract sum and a payment reduction of 5% of the value certified in the payment certificate	Yes <input type="checkbox"/> No <input type="checkbox"/>	(4) fixed construction guarantee of 5% of the contract sum and a payment reduction of 5% of the value certified in the payment certificate	Yes <input type="checkbox"/> No <input type="checkbox"/>
(1) cash deposit of 10 % of the contract sum	Yes <input type="checkbox"/> No <input type="checkbox"/>								
(2) payment reduction of 10% of the value certified in the payment certificate	Yes <input type="checkbox"/> No <input type="checkbox"/>								
(3) cash deposit of 5% of the contract sum and a payment reduction of 5% of the value certified in the payment certificate	Yes <input type="checkbox"/> No <input type="checkbox"/>								
(4) fixed construction guarantee of 5% of the contract sum and a payment reduction of 5% of the value certified in the payment certificate	Yes <input type="checkbox"/> No <input type="checkbox"/>								
42.5.8 [29.7.2]	The annual building holiday period after the commencement of the construction period: from to								

42.6	DOCUMENTS															
42.6.1	<p>Contract documents marked and annexed hereto:</p> <table border="1" style="width: 100%;"> <tr> <td>Priced bills of quantities:</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> <td>Document marked as</td> </tr> <tr> <td>Lump sum document:</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> <td>Document marked as</td> </tr> <tr> <td>Guarantees:</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> <td>Document marked as</td> </tr> <tr> <td>Contract drawings:</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> <td>Document marked as</td> </tr> <tr> <td>Other documents</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> <td>(attach additional pages if more space is required)</td> </tr> </table> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	Priced bills of quantities:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Document marked as	Lump sum document:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Document marked as	Guarantees:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Document marked as	Contract drawings:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Document marked as	Other documents	Yes <input type="checkbox"/> No <input type="checkbox"/>	(attach additional pages if more space is required)
Priced bills of quantities:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Document marked as														
Lump sum document:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Document marked as														
Guarantees:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Document marked as														
Contract drawings:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Document marked as														
Other documents	Yes <input type="checkbox"/> No <input type="checkbox"/>	(attach additional pages if more space is required)														



42.8	SIGNATURES OF THE CONTRACTING PARTIES
	<p>Thus done and signed at _____ on _____</p> <p>_____ Name of signatory for and behalf of the Employer who by signature hereof warrants authorization hereto</p> <p>_____ Capacity of signatory as Witness</p> <p>Thus done and signed at _____ on _____</p> <p>_____ Name of signatory for and behalf of the Contractor who by signature hereof warrants authorization hereto</p> <p>_____ Capacity of signatory as Witness</p>



PART C2: PRICING DATA

- C2.1 Pricing Instructions**
- C2.2 Pricing Schedule**



C2.1 Pricing Instructions

Pricing Instructions mean the criteria as set out below, read together with all Parts of the contract document, which it will be deemed in the contract that the Tenderer has taken into account when developing his prices.

1. The agreement is based on the JBCC Series 2000 PBA, prepared by the Joint Building Contracts Committee, Edition 4.1, May 2005. The additions, deletions and alterations to the JBCC Principal Building Agreement as well as the contract specific variables are as stated in the Contract Data. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.
2. The bills of quantities forms part of and must be read and priced in conjunction with all the other documents forming part of the contract document, The Standard Conditions of Tender, Conditions of Contract, Specifications, Drawings, "Department of Public Works: Specifications of Materials and Methods to be used – PW371" and all other relevant documentation.
3. Mechanical work has been drawn up in accordance with the provisions of the latest edition of SABS 1200 Standardised Specifications for Mechanical Engineering Works.
4. For the purpose of the Activity Schedule, the following words shall have the meanings hereby assigned to them:
 - Unit: The unit of measurement for each item of work.
 - Quantity: The number of units of work for each item.
 - Rate: The agreed payment per unit of measurement.
 - Amount: The product of the quantity and the agreed rate for an item.
 - Sum: An agreed lump sum payment amount for an item, the extent of which is described in the Scope of Work, but the quantity of work which is not measured in any units.
 - Percentage Fee: The agreed fee for a service, the extent of which is described in the Scope of Work, expressed as a percentage of a construction contract value or part thereof.
5. The Bills of Quantities is not intended for the ordering of materials. Any ordering of materials, based on the Bills of Quantities, is at the Contractor's risk.
6. The rates, sums, percentage fees and prices in the Activity Schedule are to be fully inclusive prices for the work described under the several items. Such prices and rates are to cover all costs and expenses that may be required in and for the execution of the work described in accordance with



the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. Where time-based rates are quoted, such shall include for all payments to administrative, clerical and secretarial staff used to support professional and technical staff.

7. Where quantities are given in the Pricing Schedule, these are provisional and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the pricing schedule. In respect of time based services, the allocation of staff must be agreed with the employer before such services are rendered.
8. All other rates, sums, percentage fees or prices (as applicable) tendered in the pricing schedule shall be final and binding and shall **not** be subject to any variation throughout the period of the contract.
9. Provision for time-based services which fall beyond the scope of normal services as described in the Scope of Work has been made in the Activity Schedule. This provision is for services provided on instruction from the Employer and will be deducted in whole or part if not required. The estimated period of involvement of each category of person must be agreed with the Employer before any work in this regard commences.
10. Where provisional sums are provided in respect of additional services, these amounts may be omitted in part or full should the additional work not be required and/or at the discretion of the Employer. Where additional services are to be subcontracted out by the Service Provider, which do not exceed R30, 000.00 (including VAT) in value, the Service Provider will typically be required to invite three quotations from suitably qualified sub-consultants/sub-contractors. Where the services are likely to exceed R30, 000.00 (including VAT), the Employer reserves the right to follow a procurement process relevant to its supply chain management policy to procure such services in respect of this work. A mark-up in respect of all other costs, overhead charges and profit will be applicable in respect of all sub-consultants at rates/percentages as quoted by the Service Provider in the Activity Schedule.



C2.2 PRICING SCHEDULE

SCMU5-20/21-0010ME CHR

MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA GENERAL NOTES

The quotation from the service provider shall be deemed to be full compensation for the work as specified. The offer includes the supply of all materials, labour, supervision, tools, equipment, services and deliverables necessary to carry out and complete the required management of Mechanical equipment term contracts.

Further, the offer includes all transport, advertising, accommodation, safety, ECSA Act related costs, security, quality control, overheads, profit, risks, escalation and incidental costs incurred for the successful completion of the work.

The rates and prices submitted on the attached schedule are all-inclusive, and the Bidder will be required to submit a separate and detailed break-down schedule for each of the components as part of their Bid submission

DO NOT ALTER ANY FIGURES GIVEN IN THIS SCHEDULE. IF YOU WISH TO OFFER ALTERNATIVES, THESE MUST BE GIVEN IN A SEPARATE SUBMISSION



1. PRELIMINARY AND GENERAL

<u>NO.</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>
1.1	Compliance with General Conditions of Contract, Sureties, travelling, out of town alliance				
	Fixed	Sum	1		
	Value related	Sum	1		
	Time related	Sum	1		
1.2	Establishment on site and provision of buildings and storage facilities including de-establishment of site, cleaning and tidying up after completion of contract				
	Fixed	Sum	1		
	Value related	Sum	1		
	Time related	Sum	1		
1.3	Contract management and supervision of works				
	Fixed	Sum	1		
	Value related	Sum	1		
	Time related	Sum	1		
1.4	Provision of drawings and manuals as specified	Sum	1		
1.5	Compliance with the OHS Act, Local by-laws and other Statutory regulations	Sum	1		
1.6	Any additional item not specifically included in this Bill of Quantities that the Contractor may wish to detail	Sum	1		
1.7	Final inspection of the works by an accredited representative and signing off of the installation	Sum	1		
1.8	Money provision for additional requirements to engineers detail	Sum	1		
1.9	The bidder must price for his staff to wear distinctive overalls/work clothes and hard hats. For the duration of the contract name tags must be provided to all employees on site, whether in work clothes or not	Sum	1		
1.10	Provide for attendance of health and safety meetings called by the Main Contractor	Sum	1		
TOTAL CARRIED FORWARD TO SUMMARY					



2. FEMALE SURGICAL WARD

<u>ITEM NO</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	<u>TOTAL COST</u>
	Capillary type copper tube fittings to SABS1067 Part 2 including cutting, reaming and soldering of joints, hard type solder and pipe supports as specified. Pipework in walls is to be run in a conduit chased into the wall, or in bedhead ducting. NOTE: Straight couplers, fittings, reducers, T's, and bends will not be measured as separate items and are to be included in the rates for straight piping.				
2 1	Supply and delivery to site and installation to SABS1453 copper pipework as specified				
2.1.1	9.53mm dia (3/8")	Metre	130		
2.1.2	12.7mm dia (1/2")	Metre	130		
2.1.3	15.83mm dia (5/8")	Metre	130		
2.1.4	22.2mm dia (7/8")	Metre	130		
2 2	Pipe brackets and clips				
2.2.1	9.53mm dia (3/8")	No.	140		
2.2.2	12.7mm dia (1/2")	No.	140		
2.2.13	15.83mm dia (5/8")	No.	140		
2.2.4	22.2mm dia (7/8")	No.	140		
2 3	Oxygen outlets	No.	14		
2 4	Vacuum outlets	No.	11		
	Low Pressure Medical air outlets	No.	6		
TOTAL CARRIED FORWARD TO SUMMARY					R



3. MALE SURGICAL WARD

<u>ITEM NO</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	<u>TOTAL COST</u>
	Capillary type copper tube fittings to SABS1067 Part 2 including cutting, reaming and soldering of joints, hard type solder and pipe supports as specified. Pipework in walls is to be run in a conduit chased into the wall, or in bedhead ducting. NOTE: Straight couplers, fittings, reducers, T's, and bends will not be measured as separate items and are to be included in the rates for straight piping.				
3 1	Supply and delivery to site and installation to SABS1453 copper pipework as specified				
3.1.1	9.53mm dia (3/8")	Metre	130		
3.1.2	12.7mm dia (1/2")	Metre	130		
3.1.3	15.83mm dia (5/8")	Metre	130		
3.1.4	22.2mm dia (7/8")	Metre	130		
3 2	Pipe brackets and clips				
3.2.1	9.53mm dia (3/8")	No.	140		
3.2.2	12.7mm dia (1/2")	No.	140		
3.2.3	15.83mm dia (5/8")	No.	140		
3.2.4	22.2mm dia (7/8")	No.	140		
3 3	Oxygen outlets	No.	14		
3 4	Vacuum outlets	No.	11		
3 5	Low Pressure Medical air outlets	No.	6		
TOTAL CARRIED FORWARD TO SUMMARY					R



4. MATERNITY WARD

<u>ITEM NO</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	<u>TOTAL COST</u>
	Capillary type copper tube fittings to SABS1067 Part 2 including cutting, reaming and soldering of joints, hard type solder and pipe supports as specified. Pipework in walls is to be run in a conduit chased into the wall, or in bedhead ducting. NOTE: Straight couplers, fittings, reducers, T's, and bends will not be measured as separate items and are to be included in the rates for straight piping.				
4 1	Supply and delivery to site and installation to SABS1453 copper pipework as specified				
4.1.1	9.53mm dia (³ / ₈ "	Metre	130		
4.1.2	12.7mm dia (¹ / ₂ "	Metre	130		
4.1.3	15.83mm dia (⁵ / ₈ "	Metre	130		
4.1.4	22.2mm dia (⁷ / ₈ "	Metre	130		
4 2	Pipe brackets and clips				
4.2.1	9.53mm dia (³ / ₈ "	No.	140		
4.2.2	12.7mm dia (¹ / ₂ "	No.	140		
4.2.3	15.83mm dia (⁵ / ₈ "	No.	140		
4.2.4	22.2mm dia (⁷ / ₈ "	No.	140		
4 3	Oxygen outlets	No.	14		
4 4	Vacuum outlets	No.	11		
4 5	Low Pressure Medical air outlets	No.	6		
TOTAL CARRIED FORWARD TO SUMMARY					R



5. PEADIATRIC WARD

<u>NO.</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>
	<p>Capillary type copper tube fittings to SABS1067 Part 2 including cutting, reaming and soldering of joints, hard type solder and pipe supports as specified. Pipework in walls is to be run in a conduit chased into the wall, or in bedhead ducting.</p> <p>NOTE: Straight couplers, fittings, reducers, T's, and bends will not be measured as separate items and are to be included in the rates for straight piping.</p>				
5.1	Supply and delivery to site and installation to SABS1453 copper pipework as specified				
5.1.1	9.53mm dia (3/8")	Metre	130		
5.1.2	12.7mm dia (1/2")	Metre	130		
5.1.3	15.83mm dia (5/8")	Metre	130		
5.1.4	22.2mm dia (7/8")	Metre	130		
5.2	Pipe brackets and clips				
5.2.1	9.53mm dia (3/8")	No.	140		
5.2.2	12.7mm dia (1/2")	No.	140		
5.2.3	15.83mm dia (5/8")	No.	140		
5.2.4	22.2mm dia (7/8")	No.	140		
5.3	Oxygen outlets	No.	14		
5.4	Vacuum outlets	No.	11		
5.5	Low Pressure Medical air outlets	No.	6		
	TOTAL CARRIED FORWARD TO SUMMARY				R



6 PLANT ROOM

<u>NO.</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>
6.1	CYLINDER GAS BANKS				
6.1.1	Servicing of the existing Oxygen Gas cylinder banks and accessories as per manufacturers' standard specification	Sum	1		
6.1.2	Servicing of the existing Nitrous Gas cylinder banks and accessories as per manufacturers' standard specification.	Sum	1		
6.2	LP MEDICAL AIR				
6.2.1	Servicing of the existing LP Medical air systems (pump, air handler, traps, coolers and check air receiver)	Sum	1		
6.3	VACUUM PUMPS				
6.3.1	Servicing of the existing vacuum system (pumps and check vacuum tank)	Sum	1		
6.4	VALVES				
6.4.1	Supply and Install Isolating valves and Valves box (4 way)	No.	2		
6.4.2	Servicing of the existing Isolating Valve	No.	1		
6.5	PANELS				
6.5.1	Servicing of the existing panels in plant room	No.	5		
6.5.2	Servicing of the existing master alarm monitoring panel	No.	1		
6.5.3	Supply and Install slave alarm monitoring panels	No.	2		
TOTAL CARRIED FORWARD TO SUMMARY					R



6. DAY WORKS

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	<u>TOTAL AMOUNT</u>
7.1	Day works for unforeseen items to be approved by the Engineer prior to implementation				
7.1.1	Qualified Artisan	Hrs	40		
7.1.2	Semi-skilled labourer	Hrs	80		
7.1.3	Labourer	Hrs	160		
TOTAL CARRIED FORWARD TO SUMMARY					R



8 TESTING AND COMMISSIONING

<u>NO.</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY</u>	<u>RATE</u>	<u>TOTAL</u>
8.1	Testing complete installation	Item	1		
8.2	Commissioning of complete installation	Item	1		
TOTAL CARRIED FORWARD TO SUMMARY					R



9 FINAL SUMMARY

<u>NO.</u>	<u>DESCRIPTION</u>	<u>TOTAL</u>
1	Total Bill No. 1 - Preliminary and General	
2	Total Bill No. 2 - Female Surgical Ward	
3	Total Bill No. 3 - Male Surgical Ward	
4	Total Bill No. 4 - Maternity Ward	
5	Total Bill No. 5 - Peadiatric Ward	
6	Total Bill No. 6 - Plant Room	
7	Total Bill No. 7 - Day works	
8	Total Bill No. 8 - Testing and Commissioning	
9	SUB TOTAL	
10	10% Contingency amount to be spent at the Consultants discretion	
11	SUB-TOTAL	
12	15% vat	
	TOTAL CARRIED FORWARD TO FORM OF OFFER	

I,on behalf of the Tenderer.....advise that I have read and priced the installation in accordance with the specifications, drawings and schedules of quantities and that I have satisfied myself that no discrepancies exist between the various documents and the drawings.

TENDERER'S NAME

SIGNATURE

DATE



PART C3: SCOPE OF WORK

- C 3.1 Standard scope**
- C 3.2 Technical Specifications**



C 3.1 Scope of Works



Scope

The scope of work for this project includes:

- New installation of Oxygen outlet points, LP air and vacuum systems in Covid-19 Wards and servicing of the existing Medical Gas Equipment / Instruments in Hewu Hospital:

a) Female Surgical Ward:

Critical Care ward

- Provision of one (1) oxygen points, one (1) medical air point and one (1) vacuum point supply per bed.

General ward one

- Provision of one (1) oxygen point per bed
- Four (4) vacuum point supply per ward.

General ward two

- Provision of one (1) oxygen outlet point
- One (1) vacuum point supply per ward

b) Male Surgical Ward:

Critical Care ward

- Provision of one (1) oxygen points, one (1) medical air point and one (1) vacuum point supply per bed.

General ward one

- Provision of one (1) oxygen point per bed
- Four (4) vacuum point supply per ward.

General ward two

- Provision of one (1) oxygen outlet point
- One (1) vacuum point supply per ward

c) Maternity Ward:

Critical Care ward

- Provision of one (1) oxygen points, one (1) medical air point and one (1) vacuum point supply per bed.

General ward one

- Provision of one (1) oxygen point per bed
- Four (4) vacuum point supply per ward.

General ward two

- Provision of one (1) oxygen outlet point
- One (1) vacuum point supply per ward



d) Paediatric Surgical Ward:

Critical Care ward

- Provision of one (1) oxygen points, one (1) medical air point and one (1) vacuum point supply per bed.

General ward one

- Provision of one (1) oxygen point per bed
- Four (4) vacuum point supply per ward.

General ward two

- Provision of one (1) oxygen outlet point
- One (1) vacuum point supply per ward

e) Refurbishing/Maintenance of the existing Plant Room system to suite new installation.



C 3.2 Technical Specifications

MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL

CONTENTS PAGE

DESCRIPTION

Notice to Tenderers

PW 379 Standard Conditions in respect of the Supply, Delivery and Installation of Mechanical and Electrical Equipment, Plant and Materials

Section 1: General Specifications

Section 2: Installation Details



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

The contractor shall be responsible for the testing of the system and shall supply the necessary testing equipment. All tests shall be recorded and issue to the consult after the completion of the tests. The pre-commissioning test shall be witnessed by the consultant and identity tests shall be witnessed by a hospital representative/clinical technician/medical officer. The following tests will be required:

Test Description	Form to record tests	Specification reference
Leakage from the compressed air system	B3	1.1.1
Leakage into vacuum system	B4	1.1.2
Closure of Isolating valves	B5	1.1.3
Zoning of Isolating valves	B6	1.1.4
Cross-connection	B7	1.1.5
Flow and pressure drop at terminal units	B7	1.1.5
Mechanical function of terminal units	B7	1.1.5
Gas specificity of terminal units	B7	1.1.5
NSIT connectors (Probes)	B7	1.1.5
Performance tests of the pipeline system	B8	1.1.6
Functional tests of supply system	B9	1.1.7
Pressure safety valves	B10	1.1.8
Warning system	B11	1.1.9
Record Drawings	B11	1.1.10
Filling with Medical air	B12	1.1.11
Purging and filling with specific gases	B13	1.1.12
Gas Identity	B14	1.1.13

1.1.1 Leakage from the Compressed air system

When the test commences, the installation should be satisfactory and all valves and fittings should be fitted. The test can be carried out in section at the same time. A suitable pressure measuring device shall be connected to the pipeline and the pipeline shall be filled with the testing gas. The filling of the test gas can also be used to measure the volume of gas. The pressure and temperature should be recorded at the beginning and at the end of the test period; results must be recorded in Form B3.

1.1.2 Leakage into Vacuum system

When the test commences, the installation should be satisfactory and all valves and fittings should be fitted. A vacuum gauge should be connected to the system. The vacuum supply should be running to maintain pipeline distribution pressure until the pipeline dries out. With the system at pipeline distribution pressure, isolate the vacuum supply system. The vacuum should be initially recorded and again after an hour. The results to be recorded in Form B4.

1.1.3 Closure of Isolating valves



When the test commences, the installation should be satisfactory and all valves and fittings should be fitted. A pressure measuring device must be connected to the system and the system should be at pipeline distribution pressure. All area valve service units should be closed. The pipeline downstream must be depressurised from the source to 1 bar pressure by opening a terminal unit valve. The total number of terminal units controlled by the AVSU (Area Valve Service Units) must be recorded. The terminal units must be checked for correctness in labelling and must be pressure tested. All results must be recorded in Form B5.

1.1.4 Cross Connection

These tests should be carried out on one pipeline at a time. All pipelines should be at atmospheric pressure and ASVUs should be open. A single pressure source should be used and connected to one pipeline at a time which should remain under pressure throughout the test. All results of the test should be recorded in Form B6.

1.1.5 Flow and Pressure drop at terminals

The following procedure must be followed:

- Before commencing the tests, check that the test equipment meets the requirements of pressure drop testing devices.
- Insert the test device into each terminal unit in turn on the system under test. Note that the pressure drop at the specified flow does not exceed 0.25% per hour.
- Check that the gas specific probe can be inserted, captured and released and that it does not swivel in horizontally mounted terminal units.
- Check that no gas is released at each terminal unit by the probes for all other gases used and that no probes can be engaged.
- Check that all NIST connectors (probes) accept the NIST probe for the correct gas and that mechanical connection is made. Check that the NIST probes for all other gases do not make mechanical connection.
- Note that the NIST self-sealing device functions correctly.
- NISTs incorporated in certified assemblies do not need to be tested.

All the results must be recorded in Form B7.

1.1.6 Performance Tests of the pipeline systems

During the performance test of the pipeline systems, all AVSUs should be open and tests should be carried out on system at a time. The procedure shall be, but not limited to, as follows:

- Insert leaks into selected terminal units, AVSUs and NISTs as required
- System must be operated so that the pressure/vacuum lines meet the specifications
- Gauge pressures at selected terminals must be checked so that they have the required or specified flows.
- Should the specification not be achieved, remedial work shall be required to comply with the specifications
- All results must be documented in form B8.

1.1.7 Functional tests of supply system

Oxygen, Nitrous Oxide and compressed air systems should be connected to normal and emergency supply power. The systems should be tested and shown to be operational on emergency power. All pipe work and joints should be tested for leaks at normal operating pressure. The compressed air plant should be tested for leaks during normal operation. All results of these tests should be recorded in form B9.

1.1.8 Pressure Safety valves

All safety valves should be checked for discharge capacity and that the pressure is set in accordance



with the specifications. The certification documents supplied with the valves should be checked. All results should be documented in form B10.

1.1.9 Warning System Tests

All alarm warning systems should be fully installed and operational, each system shall be individually tested. Warning system shall also be checked and tested for operation under emergency power. All results should be documented in form B11.

1.1.10 Record drawings

The medical gas subcontractor shall be responsible for producing record drawings as installed. Form B12 shall be used to record the drawings.

1.1.11 Filling with Medical Air

When an indefinite period may elapse before the system is taken into use, it should first be tested for particulate contamination using medical air as the test gas. The results can be recorded in form B14 when the results are satisfactory.

1.1.12 Purging and filling with Specific Gas

Each system should be purged with the working gas on completion of all other satisfactory tests. Each pipeline should be connected to its source of supply with all ASVUs open. All test gasses should be disconnected. After purging, the systems can be filled and recorded on form B13.

1.1.13 Gas Identification, Quality and Purity check

All gas identification tests should be conducted, preferably, at the same time. The tests shall be at all terminals by the appointed responsible person from the department using their own medical gas analyser. Form B14 shall be used to record the results of the tests.

1.2 **Medical Gas Piping Installation**

1.2.1 Identification and Packing

All straight pipe length tubes shall be the ends protected with red plastic caps to prevent ingress of foreign matter during storage and support. All straight length tubes shall be packed and delivered in timber cases of suitable size and capacity. All coiled tubes shall have their ends mechanically sealed and shall be marked M.G.

1.2.2 Compliance

The installation shall comply with the following standards:

- SANS 7396-1:2009 Medical gas pipeline systems. Part 1: Pipeline system for compressed medical gases and vacuum
- SANS 7396-1:2009 Medical gas pipeline systems. Part 2: Anaesthetic gas scavenging disposal systems
- Standard specification and drawings for medical gas and vacuum services -Province of KwaZulu-Natal Department of Health (July 2004)
- SANS 1409:2014 Outlet sockets and probes for medical (gas and vacuum) services used in hospitals
- SANS 1453:2011 Copper tubes for medical gas and vacuum services
- SANS 460:2011 Plain-ended solid drawn copper tubes for potable water



1.2.3 Valves

All valves shall be ball valves with stainless steel bodies and balls; seals shall be Teflon or PTFE. The valves shall be factory tested and suitable for working pressures of 1000kPa. Holderbats shall be mounted on either side of the valve, on the pipeline, to secure the valves.

1.2.4 Fittings

Bends and tees must be manufactured out of wrought copper capillary fittings with internal stops.

2 **CONTRACTOR'S LIABILITY IN RESPECT OF DEFECTS**

2.1 **Latent Defects Liability Period**

As prescribed in Clause 16 of the JBCC Conditions of 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:

- SANS 10400 (2011) The Application of National Building Regulations
- SANS 7396-1 (2009) Medical gas pipeline systems Part 1: Pipeline systems for compressed medical gases and vacuum
- SANS 7396-2 (2008) Medical gas pipeline systems Part 2: Anesthetic gas Scavenging disposal systems
- SANS 1453 (2011) Copper tubes for medical gas and vacuum services
- SANS 1409 (2008) Outlet sockets and probes for medical (gas and vacuum) services used in hospitals
- SANS 10140 (2003) Identification colour marking
- SANS 1091 National Colour Standard
- SANS 10224 Section 6. Master medical gas alarm system



MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL

SECTION 1: GENERAL SPECIFICATION FOR MEDICAL GAS INSTALLATION WORK

1 TESTS

After completion of the works and before practical completion is achieved, 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.

In areas where there is existing medical gas system, it would be a requirement that it is tested prior the installation of the new takes place.

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 GENERAL

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

The contractor shall include all items required for the proper functioning of the medical gas plant.

4 MATERIALS, SAMPLES AND SHOP DRAWING

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.

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

- Material specifications
- Shop drawings

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

5 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 tests shall be recorded



and completed on the test sheets document accompanying this document.

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 wire baskets; 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.



SECTION 2: INSTALLATION DETAILS

1 EXTENT OF WORK

The contractor shall be responsible for installing medical gas pipe lines at the existing Ward 16, Triage, ICU and Plantroom. The require pipe lines shall be oxygen, low pressure medical air and vacuum lines. The contractor shall be responsible that the compressors, vacuum pumps and oxygen banks are fully functional at the end of this installation.

2 PIPING AND FITTINGS

2.1 Identification and Packaging

All straight length tubes shall have the ends protected with red plastic caps to prevent ingress of foreign matter during storage and transport. All coiled tubes shall have their ends mechanically sealed and shall be marked M.G. All straight length tubes shall be packed and delivered in timber cases of suitable size and capacity.

All coiled tubes shall be packed in M.G. standard cardboard boxes and marked M.G.

2.2 Medical Grade Cleaning Specifications Before and After Annealing

The actual cleaning operations may be varied in order to satisfy final inspection requirements by the team of Responsible Persons. The following cleaning processes have to be undertaken on Medical Grade Copper Tubing before and after annealing at the Manufacturer's premises.

- (1) Blow pipes clean with medically pure compressed air.
- (2) Use Steam vapour aggravation next for cleaning inside of pipes.
- (3) Then use a hot detergent for washing of the pipes, internally.
- (4) Finally use a soft abrasive cleaning organic liquid. The final responsibility to ensure that clean tubing is used in the installation rests with the Contractor.

The above steps may have to be repeated on all the tubing sizes especially when uncleaned tubing e.g. domestic copper tubing has to be used due to site circumstances. The inside of this tube with sealed ends shall be sufficiently clean so that when the interior of the tube is washed with a solvent e.g. a trichloro ethylene, the residue remaining upon evaporation of the solvent shall not exceed 0,0376 g/m² of interior surface. Trichloro Ethane and Methylene Chloride may also be used as cleaning agents. The bore of the tubing shall be clean and free from deleterious films and deposits.

All valves and fittings shall be clean and degreased and supplied to site in individual heat sealed plastic bags which may only be opened prior to installation.

2.3 Pipe Sizing and Routing

The size of pipes for main runs and branch lines are as shown on the drawings. Branch connections to all outlet points, if not otherwise shown, shall not be less than 10 mm OD for oxygen, nitrous oxide and medical air and 12 mm O.D. for vacuum and scavenge piping. The routing shown on the drawings shall be adhered to, the exact positioning of the tubing being left to the contractor so as to suit the conditions on site. The Contractor is to verify all pipe sizing and bring any alterations to the attention of the Engineer.

All piping unless specifically so stated shall be run in the ceiling voids with no pipes mounted on the walls of the passages. Any valves that may be mounted above the ceilings are to be clearly indicated as such on the walls immediately under the valves below the ceiling. Where the



Contractor has a problem in mounting piping above the ceilings, this fact is to be brought to the attention of the Engineer for a decision.

All wall outlet points shall be centered 1,5 m above finished floor level, the position in the room being shown on the Supplementary Drawings. Alternative suggestions that a Tenderer considers may be an improvement, are permissible. Tenderers, however, must submit full particulars of such alternatives with their tenders. The same applies to contractors forwarding suggestions once on site. Written approval, however, must first be obtained before such alternatives are carried out from the Engineer (Mechanical).

- Only capillary hard solder fittings for M.G. copper classes 0 and 2 tubing, shall be used up to 50 mm outside diameter. Class 0 are preferred in all larger sizes.
- The fittings shall be degreased similar to the Medical Grade copper tubing. On site swaging is not acceptable unless carried out by technicians approved by the duly appointed Engineer/Technologist/Technician (Mechanical).
- Medical grade copper tubes joined by means of fittings suitable for capillary hard soldering shall be jointed with hard solder, not soft solder, with working temperatures between 600 deg C and 700 deg C, using:
- Self-fluxing copper/phosphorous/over 7 % content silver rod similar or equal to Afrox Silbralloy. The recommended heating source shall be an oxygen-liquified petroleum gas flame.
- When using self-fluxing hard solder care must be taken to ensure that the joint is not overheated. Oxygen - acetylene gas flames must be used with special care.
- ensure that the joint is not overheated. Oxygen - acetylene gas flames must be used with special care.

2.4 **Pipe Supports**

Where visible, interior wall mounted piping shall be secured in brass or plastic type holder brackets that can be used on tubing up to 50 mm outside diameter. Pipe runs in roof spaces, covered ways, under eaves and on the outside of buildings, i.e. where not in a space normally inhabited, shall be secured with brass type holder brackets for tubing up to 50 mm outside diameter. Other types of holder brackets that Tenderers may wish to offer, must first receive the approval of the duly appointed official (Mechanical). The centre distance of supports shall not exceed the following up to and including:-

up to 10 mm outside diameter pipe	- 1,00 m
12 to 15 mm outside diameter pipe	- 1,25 m
22 mm outside diameter pipe	- 1,80 m
28 mm outside diameter pipe	- 2,50 m
35 to 76 mm outside diameter pipe	-see Supplementary Drawings.

"Unistrut P4000" or other approved support shall be used for this duty. The support shall be fixed to the masonry by means of two suitable brackets, expanding and fixing bolts. The pipes shall be fixed to the support by means of Unistrut P1108 - 2025 series clamps or other approved. The pipes shall be wrapped with plastic tape to isolate them from the clamps. Fischer or equal plastic clamps are also acceptable. Hexagon head bolts and nuts shall be used with these clamps. All bolts and nuts shall be galvanised and painted as specified.



3. Optional Protection of Tubing

Where pipes are concealed (i.e. buried in walls or structures) they shall run in conduit for easy removal and replacement or other suitable hard protective piping or run in metal channels built in and flush with the finished wall surface, with suitable covers painted to match the wall finish. Piping buried in walls shall be avoided and shall only be allowed in exceptional cases, such as operating theatres, unless the tubing is passing through walls.

Where pipes are to be run in a location where they may be damaged by trolleys, stretchers or similar mobile equipment, or where they may be interfered with by the general public or other unauthorised persons, they shall be protected by encasement in pipes or metal channels up to a height of 2 m. The route of the pipes shall be so selected that they are out of the reach of traffic and the general public.

All medical copper tubing in ducts, roof spaces or above suspended ceilings shall be laid in Admiralty type cable trays which shall be installed 150 mm clear of any other piping or conduits run in the same roof space wherever possible, and shall not bear against any galvanised surface.

Surface mounting in existing buildings will be considered in all areas by the duly appointed officer (Mechanical). Where the pipes pass through walls and ceilings, etc., they shall be sleeved and provided with wall plates, which shall be rust free and painted to match the general wall finish. Where several pipes, of different diameter, are surface mounted side by side, the saddle centre distance appropriate for the smallest diameter pipe shall also be used for the larger pipes. The method of mounting and installation shall be as indicated on the drawings and specified in the Supplementary Specification. No dead ends on medical gas installations are permissible to avoid bacterial contamination.

4 Pipe Bends

Bends in Class 2 tubing shall be free from flattening, buckling or thinning of the tube wall at any point. Form bends are permissible up to 28 mm. Elbow type fittings shall not be used unless for special purposes specified in the contract. Only slow bends shall be used. Both horizontal and vertical pipe runs shall conform to the following sequence. From top to bottom and from left to right as appropriate: Oxygen, Vacuum, Medical Air, Nitrous Oxide and Scavenging.

Horizontal pipe runs shall whenever possible not be lower than 2 400 mm above the floor level, unless they are suitably protected and accessible for maintenance staff.

5 Painting

Pipe support brackets and clamps shall be hot dipped galvanised to S.A.N.S. 121. In addition they shall be painted for protection with one primer coat followed by two finishing coats of enamel paint in accordance with the paint manufacturer's recommendations. The piping shall be painted and labelled to comply with the Identification Colour Marking specified hereafter.

6 Quality of Medical Gas ('MG') copper tubing

6.1 General description

The Medical Gas ('MG') tubing shall meet the stringent requirement laid down for the distribution of medical gases in hospital; services. Two categories are included (a) For high pressure coils and (b) for low pressure distribution. The tube sizes shall generally conform to metric domestic copper tube sizes specially cleaned and labelled. Special emphasis shall be placed on the tube bore cleanliness of the copper tubing.

6.2 Compliance with S.A.N.S.1409 & S.A.N.S. 1453 (Vacuum system piping)

All copper vacuum tubing shall comply with the latest edition of S.A.N.S. 1409 and 1453, shall be in metric sizes and shall be class 2 only.



6.3 Compliance with S.A.N.S.7396 (Medical gas pipeline systems)

All copper medical gas piping shall comply with the latest edition of S.A.N.S. 7396, (Maksal type "MG" only) and shall be in new metric sizes. Class 2 (half hard) up to 28 mm outside diameter and Class 0 (hard drawn) above this size. Annealed Class 2 MG tubing to be used where it is necessary to manipulate the tubing inside conduit droppers, etc.

7 High and Low Pressure Tubing

7.1 High Pressure Applications

Flexible connections are preferred. Stainless steel braid reinforced flexible connections may be used.

Alternatively "Serpentine" of soft annealed copper coils Class 2 are preferred. "Manifolds" shall be of "hard" Class 0 straight copper in suitable lengths.

7.2 Low Pressure Applications

All tubes will normally be in the class annealed condition as standard, up to 28 mm outside diameter to facilitate bending but when preferred tubes can be specified to be in Class 0 "hard" condition as well.

7.3 Freedom from Defects

Eddy current testing shall be carried out on all tubes to ensure freedom from physical defects; the standards for such inspection shall be as specified in ASTM E. 243.

7.4 Bore Cleanliness

All tubes shall be processed in such a manner that the bores are bright and clean. The use of carbon tetrachloride as a cleaning agent is not permissible.

The measure of acceptable cleanliness shall be that specified in ASTM B.290. This requires that when the interior of a test sample of the tube is washed with trichloro-ethylene, or other solvent such as redistilled chloroform or redistilled trichloro-ethylene, the residue remaining upon evaporation of the solvent shall not exceed 0,0376 g/m². Refer maximum allowable residue per 5,5 m length listed in the Table above.

Size range available

O.D. = Outside diameter
W.T. = Wall thickness
S.W.P. = Safe working pressure
M.A.S. = maximum allowable stress).

All medical gas piping shall be copper tube and shall be Maksal type "MG" only. The tubing shall be in new metric sizes and shall be Class 2 (half hard) in all sizes up to 1 1/8 O.D. and Class 0 (hard drawn) above this size. Annealed Class 2 MG tubing shall be used where it is necessary to manipulate the tubing inside conduit droppers, etc. All vacuum piping shall be SABS 460 Class 2 up to 28 O.D. and Class 0 above this size.

The jointing of piping shall be by capillary hard soldering using silver-copper-phosphorous fluxless rod and



an oxygen/L.P. Gas heat source using capillary fittings which have been cleaned and degreased to the same standard as the piping.

Running joints may be made by swaging of the piping with a suitably calibrated tool provided that this is done in such a manner that flow of gas will be from the straight pipe end to the swaged pipe end. Class O piping shall not be swaged under any circumstances. Capillary joints between copper and brass or stainless steel shall be made using 40% silver solder with the recommended flux.

All bends in piping of 1 1/8 and 28 diameter and less shall be easy bends made with recognised bending equipment. No elbows will be accepted except with prior approval in piping exposed to public view, where it is necessary to achieve sharp bends for the sake of appearances.

Piping shall be installed generally as shown on the drawings in neat straight runs. Piping in roof spaces shall be positioned and protected so that the possibility of damage by persons in the roof space is kept to a minimum.

Any piping passing through walls, etc., shall be sleeved with stainless steel or P.V.C. sleeves. Piping shall be saddled to roof trusses using U-type saddles screwed to the trusses, and where fixed to Unistrut, similar proprietary made saddles shall be used bolted to the Unistrut using the standard spring loaded nuts. The saddles shall allow free movement of the piping to cater for thermal expansion and for movement of buildings at construction and expansion joints.

The offsets into the roof spaces of the various blocks of the main runs are also designed to allow for a certain amount of flexibility in the piping. All piping fixed to walls shall be fixed with saddles with plastic or rubber inserts; all piping running externally shall be fixed to unistrut type brackets as described above.

The drilling of brick walls for the penetration of piping shall be the responsibility of the Gas Contractor; holes for penetration of walls shall only be formed using suitable and approved impact tools. Any damage to walls shall be for the Gas Contractor's account.

8 Medical Gas Outlets

Identification of Medical Gas Outlets by Colour and Terminal Pipe Sizing

In order to assist in the prevention of installation errors, the following colour coding and terminal pipe sizing for droppers to the service outlet points shall be used.

Medical Gas Service	Pipe Line Colour Code	Cover Plate Probe Colour	Droppers to Service Outlet points O.D. mm
Oxygen	White	White Black letters	9.53
Nitrous Oxide	Ultramarine Blue F09	Ultramarine Blue F09 White letters	9.53
LP Medical Air	Dark Admiralty Grey G.12	Dark Admiralty Grey G.12 with Black Letters	9.53
Vacuum	Cornflower Yellow C.67	Cornflower Yellow C.67 Black letters	15
Scavenging	Light Orange B26	Light Orange B26 Black letters	15



All wall outlets shall be preferably centered 1,5 m above floor level in positions shown on the drawings

Outlet points on all new hospital installations shall be flush mounted, non protruding, quick coupling, self-isolating types with safety keyed connections, similar or equal to Dragger or Heyer outlets to the configurations outlined in the enclosed Addendum All probes shall be to the most recent S.A.N.S. Specification for outlet sockets and probes for medical gas. The probes must be marked the same colour as the cover plate. For new installations in existing hospitals where surface mounting of tubing and fittings is specified, outlet points shall be as above and be of the surface mounted type. The use of check valves incorporated in the outlet point is optional and depends on the project design.

The medical gas outlets and probes shall be indexed and mated such that only the correct probe be inserted into the appropriate gas outlet; for example, it shall not be possible to insert a N2O probe into an oxygen outlet or vice versa. The probes and outlets shall also be correctly identified. This shall be achieved by easily distinguishable shapes of probes and outlets and by permanent colouring of the probes and outlets.

In compliance with par. 3.4.1 of S.A.N.S. 1409 specification for outlet sockets and probes for medical gas the outlet socket main body and base piece shall be mated as described in ISO 407 for Small Medical Gas Cylinders yoke type valve connections.

Each probe shall have permanently and clearly engraved upon it, the identification of the service, e.g. O2, N2O, Vac, Medical Air and Scavenging. Each outlet and/or cover-plate shall be identified in English.

When a group of outlets are installed adjacent to each other the order from left to right as given above, shall always be followed.

The outlets shall be such that the valve mechanism is easily accessible for maintenance purposes without having to unsolder pipe connections or break into the wall etc. Outlets shall first receive the approval of the duly appointed Engineer/Technologist/Technician (Mechanical) before installation.

Probes used in outlets under pressure shall have unidirectional flow.

Cover plates

Each outlet shall have permanently and clearly engraved on the cover plate:

The full word Oxygen/in English.

The full words Nitrous Oxide/in English.

The full words Low Pressure Medical Air /in English.

The full word Vacuum/in English.

The full word Scavenge/ in English.

The outlets supplied under this contract shall be of the flush or bedhead mounted standard medical type, non interchangeable between services, and complete with colour-coded plastic cover plates in the instance of wall mounted outlets.

The outlets shall be arranged in the following sequence from left to right:

Oxygen
Vacuum
Nitrous Oxide
Low Pressure Medical Air
Scavenge



They shall be "Heyer" type or equivalent and approved by the Department of Works or Health and shall comply with SANS 1409 1986 as amended.

The outlets shall be mounted in bedhead ducts. The duct shall allow easy entry of the piping without kinks or other strain being placed on it.

9 Isolating Valves

Isolating valves shall be installed wherever shown on the drawings. They shall be of a size equal to that indicated for the pipe line in which they will be installed and shall be full bore. All valves except those mounted in the roof space and gas bank room shall be housed in valve boxes as described hereafter.

Isolating valves for gases, air and vacuum may be of the ball type with bronze or stainless steel bodies. Diaphragm type valves are equally acceptable for all gases including air and vacuum. All valves must be certified to be oil and grease free, suitable for the gas to be handled. They shall be suitable for a working pressure of 1 000 kPa gauge. Pipelines must be properly secured by holder bats in close proximity to and on either side of each valve. Approved diaphragm type valves may be offered as an alternative.

Valves shall be fitted into the pipe line by means of capillary hard soldered joints containing silver.

The ball-cock type isolating valves shall be replaceable using a flanged swing away body or removable ball and seal type system. They shall have bronze or stainless steel balls. All types of valves tendered shall be submitted for approval to the duly appointed Engineer/Technologist/Technician (Mechanical) prior to installation. The valve handle shall be the same colour as allocated to the gas.

An adequate supply of valves to allow for maintenance of the various sections of the line are to be provided. This is over and above the valve boxes that are indicated on the drawings.

A service point is to be provided immediately inside the hospital on the downstream side of the Pressure Reducing Valve Box.

Valves are to be arranged in such a manner that critical areas such as the Theatres and the ICU and Burns Unit can be supplied by individual cylinders fitted with Pressure Regulators. These cylinders are to be connected on the downstream side of the isolating valves, The connection points shall consist of standard outlet sockets with the non-return portion of the socket removed. These sockets are to be fitted with lock-shields to prevent unauthorised use thereof.

9.1 Positioning of isolating valves - Main and Branch lines

The positions of these valves shall be as indicated on the drawings supplied with this Specification. No valve shall be positioned such that tampering by unauthorised persons is possible. The heights of these valves shall preferably be not less than 2,4 meters above finished floor level. All valve handles shall lift up to close off the service.

9.2 Isolating valves serving outlets

Isolating valves serving outlets that are located either singly or in groups shall be placed in the same area as the outlet or outlets they are intended to serve and on the same floor in isolation valve boxes. They shall not be placed in the roof or inaccessible spaces but high up on the wall under the ceiling where they can be reached by skilled maintenance staff. Where the above is not possible, isolating valves in a false ceiling are acceptable. Their location shall be indicated by suitable marking on the wall below. The ceiling panels shall be provided with a suitable trap door.

9.3 Isolating valve boxes and pressure reducing valve stations



The design of the valve boxes shall be similar to the distribution board used for electrical distribution in buildings and shall be complete with architrave frame and flush piano hinged door with catch. The valve boxes shall be large enough to accommodate the number of isolating valves that shall serve the branch lines shown on the drawings.

All valve boxes situated in passages are to be of the surface mounted type and are to be positioned close under the ceiling.

Where surface mounted pipelines are specified in this Specification, valve boxes shall be of the surface mounted type and the complete box is to be painted white.

Where concealed pipelines are specified in this Specification, valve boxes shall be of the flush mounted type and the frame and door shall be painted white.

In the case of ceiling mounted valve boxes, the frame shall be suspended from the concrete ceiling or roof timbers by adjustable hangers designed to suit the installation and which allows the frame to sit neatly and securely against the underside of the false ceiling or ceiling panel.

9.4 Valve Boxes – Paint finishes

All metal parts shall be degreased, rinsed, pickled, rinsed, phosphated, neutralized and then thoroughly dried. This process shall be followed up within 48 hours by white epoxy coating or one layer of a high-quality zinc chromate primer, followed by two coats of good quality alkyd-based enamel, colour white. The minimum film thickness of the paint shall not be less than 63 micrometer. Care shall be taken that all edges are properly covered by paint.

9.5 Valve Boxes – Markings

An engraved red on white Ivorine nameplate shall be fitted to the door of each valve box to read as follows:

**AUTHORISED PERSONS ONLY
MEDICAL GAS
ISOLATING VALVES
DO NOT CLOSE**

Engraved Ivorine nameplates shall be provided inside the cabinet to identify each valve. Each valve shall be painted according to the colour(s) specified in the colour code. A notice indicating the room(s) fed shall be fixed inside each box room identification is to be obtained from the Architect and shall be by means of room number only descriptive terms shall not be used. Valve boxes shall be installed to suit the valve height of 2,4 m. Suitably sized switch board type enclosures are acceptable. Valve boxes and control cabinet doors shall have handles incorporating a mechanical door catch. Control cabinets and valve boxes shall not be locked.

All isolating valves shall be clearly and permanently labelled indicating the area served. This labelling shall be done by the Medical Gas Contractor.

All isolating valves shall be of the bronze or stainless steel, three-piece, full bore ball cock type with lever operation.

The ends shall preferably be of the capillary type suitable for silver brazing into the pipeline. The gland packing shall be of a type requiring no lubrication and shall consist of either a PTFE seal or an "O" Ring and the ball seat shall be suitable for use with all the medical gases concerned. It must be confirmed that the valve selected is pressure tight under negative pressure to prevent leakage at the stem when used on the vacuum service. The valves shall be certified oil free.



The valves isolating each department, wing or area shall be mounted inside valve boxes, which must be provided under this contract.

The valve box shall be manufactured of pickled and passivated 3CR12 with a hinged door or doors, depending on the size. The doors of the boxes shall have catches in the handles of the doors. No locks are required. The metal work shall be suitably treated against corrosion with a self-etch primer, undercoat and two coats of high gloss enamel, spray applied. The colour shall be white.

One isolating valve shall control the supply of each gas to the operating theatre.

The order of installation of valves in the valve boxes shall be as for the terminal outlets.

Chrome plated ball valves, PTFE renewable seals and seats, stainless steel ball and PTFE seats and seals may be used in the vacuum installation within the plant room where permitted

10 Control Panels

The control panels shall be of the surface mounted type, robustly fabricated of 3CR12 sheet with lockable doors.

All metalwork shall be suitably treated against corrosion and shall be coated with a self-etching primer, two coats of a good quality orange hard gloss enamel.

No hammertone or similar finish will be accepted.

All control equipment is to be chassis mounted behind a lockable door through which only toggles, reset and push buttons, hour meters, etc., protrude. Equipment shall not be fixed to the door. Isolator handles shall be external to the panel, the door being interlocked with the isolator. Pilot lights etc., shall be mounted in the panel door. Each control panel shall be complete with pilot power on, run and trip and indicator lights, lamp test button, control equipment and main isolator. The isolator shall have two auxiliary contacts to break the separate alarm supply. The position of the panel shall be as shown on the drawings.

Panel Wiring is to be neatly run, strapped into neat bunches. All wiring to external equipment shall terminate in a numbered terminal block into which external wiring is to be connected. Terminals shall be of rating suitable to each circuit. All connections to equipment, etc., are to carry similarly numbered ferrules.

The function of each item protruding through the board face of cover plate is to be clearly indicated by "Ivory" or similar labels screwed or riveted, directly adjacent to each item. Each item within the panel is to be labelled to correspond to its reference on the wiring diagram. Glued labels will not be accepted.

All relays, lights, etc., shall be of the best quality. Pilot lights shall be of the transformer-operated type.

11 Oxygen supply system requirements

Low pressure Oxygen shall be supplied to the outlet points inside the hospital. The nominal pressure of the oxygen will be 450kPa.

An adequate supply of valves to allow for maintenance of the various sections of the line are to be provided. This is over and above the valve boxes that are indicated on the drawings.

A service point is to be provided immediately inside the hospital on the downstream side of the Pressure Reducing Valve Box.

Valves are to be arranged in such a manner that critical areas such as the Theatres and the ICU and Burns Unit can be supplied by individual cylinders fitted with Pressure Regulators. These cylinders are to be connected on the downstream side of the isolating valves; the connection points shall consist of standard



outlet sockets with the non-return portion of the socket removed. These sockets are to be fitted with lock-shields to prevent unauthorised use thereof.

12 Vacuum supply system requirements

All vacuum piping is to be Class 2 copper piping with soldered joints. (Compression couplings and flanges are only permitted where joints are to be dismountable.)

Vacuum traps shall be installed in the locations as identified on the drawings in an effort to limit the amount of solid matter deposited in the vacuum receiver in the plant room.

13 Medical air supply system requirements

High pressure air at 800 kPa shall be taken to the OPD operating theatre area to drive medical tools. 800 to 450 kPa Pressure Reducing Valves shall be fitted adjacent to the theatres for the low pressure medical air.

Low pressure Medical Air shall be supplied to the outlet points inside the hospital. The nominal pressure of the oxygen will be 450kPa.

An adequate supply of valves to allow for maintenance of the various sections of the line are to be provided. This is over and above the valve boxes that are indicated on the drawings.

A service point is to be provided immediately inside the hospital on the downstream side of the Pressure Reducing Valve Box.

Valves are to be arranged in such a manner that critical areas such as the Theatres and the ICU and Burns Unit can be supplied by individual cylinders fitted with Pressure Regulators. These cylinders are to be connected on the downstream side of the isolating valves; the connection points shall consist of standard outlet sockets with the non-return portion of the socket removed. These sockets are to be fitted with lock-shields to prevent un-authorized use thereof.



14 Alarm panels

There is an existing alarm system for the medical gas systems at the hospital and as such alarm panels as required in this specification shall be linked into that system.

The slave alarm panels are to be sited as indicated on the drawings and are to meet the requirements as specified below.

Wiring for the alarms from the plant room to the main section of the hospital is to run inside galvanised wire-ways/ducting in the underground ducting used for the medical gas piping. Inside the main section of the hospital the wiring is to be inside trunking provided by others for low voltage alarm and communication wiring.

The alarm panels shall include an audible alarm buzzer which can be cancelled (muted) while leaving the indicator light in operation until the cause of the signal has been attended to. The cancelling of the buzzer for an incoming signal shall not render it inoperative for further incoming signals.

Resetting of the alarm condition must only be possible from the control panel in the cylinder room. The alarm must be of the latching type and it must only be possible to reset it once the alarm condition has been rectified.

The entire alarm system shall operate on low voltage DC, and shall employ solid state circuitry. The alarm cabling used is to be PEX type cabling as used for fire detection systems, but with a different colour serving and is to be run in the ducting alongside the medical gas lines.

The system shall be designed to be failsafe, so that should any wiring become damaged or disconnected, an alarm signal will be generated.

The following indications and alarms are required:

General	- Alarm system power on	- green
Oxygen	- Liquid oxygen tank empty	- red
	- Left cylinder bank empty	- red
	- Right cylinder bank empty	- red
	- Line pressure abnormal	- red
Nitrous Oxide	- Left cylinder bank empty	- red
	- Right cylinder bank empty	- red
	- Line pressure abnormal	- red
Vacuum	- Standby pump running	- red
	- Line pressure abnormal	- red
Low Pressure Medical Air	- Stand-by compressor running	- red
	- Line pressure abnormal	- red

Abnormal pressures shall be 10% above or below nominal pressure for oxygen, nitrous oxide and medical air and 20% above or below nominal pressure for the vacuum system.

The duly appointed official (Mechanical) shall be consulted in each case for final approval of the selected position.



15 Testing and acceptance of equipment

The Contractor will be responsible for the supply of all test equipment necessary to carry out all tests required. Performance tests shall be carried out in the presence of the Consultants and, if required, other Client representatives

16 Testing and evaluation requirements

In general, extreme care shall be taken to ensure that the piping system remains clean and oil free during installation, with all open ends of pipes capped during construction/installation.

After installation of the medical gas outlets, each system shall be blown through and purged with dry, oil free medical grade compressed air at high pressure to clear any particles or moisture from the pipelines. Each outlet valve shall be operated during this procedure. Thereafter each system shall be pressure tested at 1000kPa using medical grade air for 24 hours, using a recording pressure gauge.

At the completion of the pressure tests, valve leak tests for 15 minutes per valve shall be conducted.

The installation shall then be tested for continuity with pressure or vacuum, as appropriate, this only being applied to the system actually under test. Each system shall be tested in turn, but all outlets shall be checked with each test, to ensure that only the correct one is under pressure. Gas banks on systems not under test shall be disconnected, and the system pressure dropped.

In addition to the above, the whole system shall be tested for the correct operation of all changeover valves, safety valves, regulators, alarms, etc.

During continuity testing, a flow test shall be carried out at each outlet to confirm that flows, as listed below, are achieved. A flow meter/pressure gauge test unit shall be used.

Gas	Flow Rate litres/min.	Pressure Drop not exceeding kPa
Oxygen	40	30
Nitrous Oxide	15	30
Vacuum	40	7
Low Pressure Medical Air	50	30

All gas for the above tests shall be supplied by the Contractor. The Client's gas cylinders shall only be connected to the manifolds after satisfactory completion of all purging and continuity testing.

All the above tests shall be witnessed and signed off by the Engineer and a responsible person authorised by the Client.

17 Testing and commissioning

The Contractor shall allow for testing and commissioning of the complete installation which shall include the following procedures:

- (a) Cleaning of the Medical Gas Pipeline by the Project Contractor.
- (b) Safety tests i.e. pressure and gas Continuity Tests by the Responsible Persons Team Specified in the Addendum and duly appointed.
- (c) Purity Tests by the Hospital Anaesthetist and Hospital Medical Pipeline Technician duly appointed.



17.1 Cleaning with Medically Pure Air

After installation of the medical gas outlets, but before the system is handed over, each gas system shall be purged by the Contractor with medical air. The piping shall first be blown through to clear all dirt and moisture with medical compressed air as supplied in cylinders and produced by an oil free compressor. The medical air shall be supplied by a recognised medical gas supplier. This blowing out shall be done in the presence of the Responsible Person or his duly authorised representative. All air for this purpose shall be supplied by the Contractor.

17.2 Pressure and Vacuum Testing

After fitting the medical gas outlets, a pressure of 1000 kPa shall be applied, using medical compressed air. All joints shall be tested with soapsuds for leaks. This pressure shall be maintained over 24 hours without dropping pressure, using a recording pressure meter.

Alternatively the pressure tests may be as follows as indicated in the supplementary specifications:-

Pressure test of the pipeline-system inclusive of the base block of terminal unit. This test should last over 24hr. at 1,5 times of operating pressure. Pressure drop is not allowed.

Pressure test of the complete system after final installation: Draeger recommendation:-

- Put all pressure gas pipes under operation pressure.
- Switch pressure and close valves.
- Mark positions of gauge needles.
- Close all stop cocks
- Check pressure and vacuum gauges after 1 hour. Permissible pressure increase for vacuum 0,1 bar. Alternatively the pressure tests according to ISO/DIS. 7396 may be used.

17.3 Gas Continuity Tests

A test shall be carried out with medical compressed air to determine whether each outlet supplies the correct gas and that the correct safety keyed probe only fits that particular outlet. This test shall be carried out by putting only one system under pressure at a time. Each network shall be brought to a pressure of 400 kPa.

All similar medical gas outlets shall be checked with each test. Only the one under pressure shall indicate the pressure at the appropriate medical gas outlet. Gas banks not under test during this test shall be disconnected. This test shall be done at the time of "taking over" under supervision and in the presence of the Responsible Persons. All isolating valves shall be operated at the time of test to certify that they are correctly installed.

17.4 Flow Gauge Test

A flow meter pressure gauge probe assembly shall be plugged into each medical gas outlet. A flow of 30 litres per minute shall be recorded at a pressure drop not exceeding 35 kPa.

17.5 Purity Test

A flow meter pressure gauge probe assembly shall be plugged into each medical gas outlet. A flow of 30 litres per minute shall be recorded at a pressure drop not exceeding 35 kPa.



17.6 Acceptance Criteria

The Engineer shall have the exclusive right to accept or reject the results of the tests carried out.

After fitting the medical gas outlets, a pressure of 1 000 kPa shall be applied, using medical compressed air. All joints shall be tested with soapsuds for leaks. This pressure shall be maintained over 24 hours without dropping pressure, using a recording pressure meter.

Vacuum piping shall be similarly tested with the medical gas outlets using a vacuum of at least –80 kPa which shall be applied to the system and held without loss over 24 hours using a recording meter. Only a vacuum recorder will be acceptable on the vacuum system and not a pressure recording.

A test shall be carried out with medical compressed air to determine whether each outlet supplies the correct gas and that the correct safety keyed probe only fits that particular outlet. This test shall be carried out by putting only one system under pressure at a time. Each network shall be brought to a pressure of 400 kPa. The vacuum system shall be similarly tested to –80 kPa.

All similar medical gas outlets shall be checked with each test. Only the one under pressure shall indicate the pressure at the appropriate medical gas outlet. Gas banks not under test during this test shall be disconnected. This test shall be done at the time of “taking over” under supervision and in the presence of the Responsible Persons. All isolating valves shall be operated at the time of test to certify that they are correctly installed.

Flow gauge tests shall be carried out by using a flow meter pressure gauge probe assembly plugged into each medical gas outlet. A flow of 30 litres per minute shall be recorded at a pressure drop not exceeding 35 kPa.

Purity Tests on the medical gases shall be done by the appointed Responsible Persons for all the outlets including the theatres, induction and delivery rooms, etc.

18 Maintenance and Service Contract

The Contractor shall provide for servicing and maintaining the installation on behalf of the Client for the Guarantee period.

The Contractor shall provide for at least **one year** of free service at quarterly intervals after completion and hand-over of the system.

Unless otherwise specified the entire installation (for this contract) shall be subject to a 12 month guarantee of each item of equipment.

It is a requirement of the Client that the Contractor have staff permanently available on a 24hour basis to be able to assist the hospital staff to effect emergency repairs to the equipment installed under this contract.

19 Operating Manuals

Where possible instructions that have been laminated in plastic are to be supplied for easy dissemination of information to personnel who are required to make use of the equipment.

Three complete sets of operating manuals shall be supplied by the Contractor, one set to the Engineer for onward forwarding to the Employer and one for the User Department's use.

Manuals must be compiled in layman's language.

At least one month before commissioning, one draft copy shall be submitted to the Department/Engineer for comments and approval.



Operating manuals shall give a clear description of and the purpose of the installation.

- (a) Paper copies of all approved drawings and diagrams.
- (b) Detailed description of the different components used in the installation.
- (c) On- and off switching procedures.
- (d) Guidelines for routine-test to be carried out by the User Department inclusive of the periods during which tests are to be undertaken.
- (e) Detailed instructions for procedures to be followed during a fault.

20 Maintenance Manuals

Two complete sets of maintenance manuals (Technical) prepared in English, shall be supplied by the Contractor.

At least one month before commissioning a draft copy shall be submitted to the Department/Engineer for comments and approval.

Maintenance manuals shall consist of the following:

- (a) A general description of the system.
- (b) A general description of the controls.
- (c) Schedule of equipment, model numbers, optional extras, modifications, electrical power requirements, etc.
- (d) Detailed monthly, quarterly, semi-annually and annual preventative maintenance procedures.
- (e) Manufacturer's catalogues clearly indicating type, size and model of equipment supplied.
- (f) Tabulated commissioning data of all equipment and the system, indicating- as measured and according to specification - requirements.
- (g) List of suppliers, addresses and telephone numbers.
- (h) List of spare parts for all equipment.
- (i) Fault tracing/finding procedures.

Manuals shall be bound in a firm hard cover.

The information shall be clear and readable and supplied with an index.

The above-mentioned manuals shall be available at first delivery. Delivery of the installation will not be accepted without the manuals.

21 Employer Training

A representative of the Contractor shall be available to instruct the proprietor's building maintenance staff (or his appointed representative) in the operation of his system, and to ensure that such persons are fully conversant with the control and operation of the system.

This instruction exercise is to take place prior to the system being left operational. The Engineers are to be informed in writing as to when this instruction period is scheduled to commence. Upon completion of the exercise the contractor is to obtain the Proprietor's representative's written acceptance of the hand-over tuition, thus acknowledging his complete understanding of the operational procedures for this installation.

22 Record drawings

The contractor is responsible for the production of record drawings, and for the issue of one laminated copy of each drawing to the proprietor's maintenance engineer. A further 3 paper print copies are required, these forming an integral part of his Maintenance Manuals.



These drawings are to illustrate any changes in the pipework and other equipment layouts. The record drawings are to include for control diagrams, board diagrams, and other electrical diagrams.

Electronic copies of the Consulting Engineer's original drawings may be obtained from the Engineers, and these modified by the sub-contractor such that they become the master record originals.



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.



PART C4: SITE INFORMATION



PART C4: SITE INFORMATION

Project Title:	MEDICAL GAS SYSTEM UPGRADES FOR COVID-19 WARDS AT HEWU HOSPITAL, WHITTLESEA
Tender No.:	SCMU5-20/21-0010ME CHR

4.1 GENERAL

The Hospital is located in Whittlesea, Ekuphumleni, **Lukhanji**, 5630

4.2 Underground Services

Responsibility of Contractor.

4.3 Environmental Issues

Contractors to be compliant to Environmental Management Act.

4.4 Adjacent Buildings

Hospital Wards



4.5 Location Map

EMERGENCY REPAIRS AND RENOVATIONS TO HEWU HOSPITAL, WHITTLESEA

