

TENDER DOCUMENT GOODS AND SERVICES		 CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD
SUPPLY CHAIN MANAGEMENT		
SCM - 542	Approved by Branch Manager: February 2024	Version: 10

TENDER NO: 255G/2023/24

TENDER DESCRIPTION: THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SPECIALISED SCIENTIFIC EQUIPMENT FOR THE MONITORING OF VARIOUS ENVIRONMENTAL MEDIA IN THE CITY OF CAPE TOWN.

CONTRACT PERIOD: 36 MONTHS FROM DATE OF COMMENCEMENT OF CONTRACT

CLOSING DATE **18 June 2024**

CLOSING TIME **10:00 am**

TENDER BOX NUMBER **118**

TENDER FEE **R200**

Non – refundable tender fee payable to the City of Cape Town (CCT) for a hard copy of the tender document. This fee is not applicable to website downloads of the tender document.

TENDERER	
NAME of Company/Close Corporation or Partnership / Joint Venture/ Consortium or Sole Proprietor /Individual (hereinafter the "Tenderer")	
TRADING AS (if different from above)	
Registration number of Tenderer	
Physical address and chosen domicilium citandi et executandi of Tenderer	

NATURE OF TENDER OFFER (please indicate below)	
Main Offer (see clause 2.2.11.1)	
Alternative Offer (see clause 2.2.11.1)	

TENDER SERIAL NO.:
SIGNATURES OF CCT OFFICIALS AT TENDER OPENING
1
2
3

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THE TENDER

T.1 GENERAL TENDER INFORMATION

TENDER ADVERTISED	:	17 May 2024
SITE VISIT/CLARIFICATION MEETING	:	Non-compulsory but strongly recommended. Briefing session will be held on the 31 May 2024
VENUE FOR SITE VISIT/CLARIFICATION MEETING	:	Skype: https://meet.capetown.gov.za/christophersihlalo.mbandazayo/GZTFD2ZT?sl=1 at 10:00 till 11:30 AM. It is vital that all prospective tenderers attend the briefing session to familiarise themselves with the tender.
TENDER BOX & ADDRESS	:	Tender Box as per front cover at the Tender & Quotation Boxes Office , 2 nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town. The Tender Document (which includes the Form of Offer and Acceptance) completed and signed in all respects, plus any additional supporting documents required, must be submitted in a sealed envelope with the name and address of the tenderer, the endorsement "TENDER NO. DP7914G/2022/23 THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SPECIALISED SCIENTIFIC EQUIPMENT FOR THE MONITORING OF VARIOUS ENVIRONMENTAL MEDIA IN THE CITY OF CAPE TOWN" , the tender box number. and the closing date indicated on the envelope. The sealed envelope must be inserted into the appropriate official tender box before closing time. If the tender offer is too large to fit into the abovementioned box or the box is full, please enquire at the public counter (Tender Distribution Office) for alternative instructions. It remains the tenderer's responsibility to ensure that the tender is placed in either the original box or as alternatively instructed.
CCT TENDER REPRESENTATIVE:		Ansie Smith Email: SCM.WaterandSanitation@capetown.gov.za

TENDERERS MUST NOTE THAT WHEREVER THIS DOCUMENT REFERS TO ANY PARTICULAR TRADE MARK, NAME, PATENT, DESIGN, TYPE, SPECIFIC ORIGIN OR PRODUCER, SUCH REFERENCE SHALL BE DEEMED TO BE ACCOMPANIED BY THE WORDS "OR EQUIVALENT"

T.2 CONDITIONS OF TENDER

2.1 General

2.1.1 Actions

2.1.1.1 The City of Cape Town (hereafter referred to as the "CCT") and each tenderer submitting a tender offer (hereinafter referred to as the "tenderer" or the "supplier") shall comply with item T.2 of this Tender Document Goods and Services (hereinafter referred to as these "Conditions of Tender"). The tenderer and the CCT shall collectively hereinafter be referred to as the "Parties" and individually a "Party"). In their dealings with each other, the Parties shall discharge their duties and obligations as set out in these Conditions of Tender, timeously and with integrity, and behave equitably, honestly and transparently, and shall comply with all legal obligations imposed on the Parties herein and in accordance with all applicable laws.

The Parties agree that this tender Tender Document Goods and Services (hereinafter referred to as the "Tender" / "Tender Document"), its evaluation and acceptance and any resulting contract shall also be subject to the CCT's Supply Chain Management Policy ('SCM Policy') that was applicable on the date the bid was advertised and as amended from time to time. If the CCT adopts a new SCM Policy which contemplates that any clause therein would apply to the Contract emanating from this tender (hereinafter referred to as the "Contract"), such clause shall also be applicable to that Contract. Please refer to this document contained on the CCT's website.

Abuse of the supply chain management system is not permitted and may result, inter alia, (1) in the tender being rejected; (2) cancellation of the contract; (3) restriction of the supplier, and/or (4) the exercise by the CCT of any other remedies available to it as provided for in the SCM Policy and/or the the Contract and/or this tender and/or any applicable laws .

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

2.1.1.3 The CCT shall not seek, and a tenderer shall not submit a tender, without having a firm intention and capacity to proceed with the contract.

2.1.2 Interpretation

2.1.2.1 The additional requirements contained in Annexure F to the contract (hereinafter referred to as the "returnable documents" / "Returnable Schedules") are part of these Conditions of Tender and are specifically hereby incorporated into these Conditions of Tender.

2.1.2.2 These Conditions of Tender and returnable Documents which are required for CCT's tender evaluation purposes herein, shall form part of the Contract arising from the CCT's corresponding invitation to tender.

2.1.3 Communication during tender process

Verbal or any other form of communication, from the CCT, its employees, agents or advisors during site visits/clarification meetings or at any other time prior to the award of the Contract, will not be regarded as binding on the CCT, unless communicated by the CCT in writing to suppliers / tenderers by its Director: Supply Chain Management or his nominee. Similarly, any communication of the tenderer / supplier that is not reduced to writing by the tenderer / supplier, its employees, agents or advisors, shall not be regarded as binding on the CCT, unless communicated to the CCT in writing by the suppliers / tenderers, or their duly authorised representatives.

2.1.4 The CCT's right to accept or reject any tender offer

2.1.4.1 The CCT may accept or reject any tender offer and may cancel the corresponding tender process or reject all tender offers at any time before the formation of a contract. The CCT may, prior to the award of the tender, cancel a tender if:

- (a) due to changed circumstances, there is no longer a need for the services, works or goods requested;
or
- (b) funds are no longer available to cover the total envisaged expenditure; or
- (c) no acceptable tenders are received;
- (d) there is a material irregularity in the tender process; or
- (e) the Parties are unable to negotiate market related pricing.

The CCT shall not accept or incur any liability to a tenderer for such cancellation or rejection, but will give written reasons for such action upon receiving a written request to do so.

2.1.5 Procurement procedures

2.1.5.1 General

The CCT intends to appoint two tenderers (the highest ranked tenderer ("the winner") and in addition an "alternative tenderer" for the allocation of work per item. If insufficient responsive bids are received, the CCT reserves the right to appoint fewer tenderers, or not to appoint any tenderers at all.

Suppliers, once appointed and subject to operational requirements, will be invited to deliver the goods or services on a "winner-takes-all" basis, whereby the order will always be offered and, if accepted, allocated to the highest ranked tenderer ("the winner"), and only if he refuses will the work be offered to the next highest ranked tenderer (alternative tenderer).

The contract period shall be for a period of thirty four (36) months from the commencement date of the contract.

2.1.5.2 Proposal procedure using the two stage-system

A two-stage system will not be followed.

2.1.5.3 Nomination of Standby Bidder

"Standby Bidder" means a bidder, identified by the CCT at the time of awarding a bid that will be considered for award should the contract be terminated for any reason whatsoever. In the event that a contract is terminated during the execution thereof, the CCT may consider the award of the contract, or non-award, to the Standby Bidder in terms of the procedures included its SCM Policy, as amended from time to time.

2.1.6 Objections, complaints, queries and disputes/ Appeals in terms of Section 62 of the Systems Act/ Access to court

2.1.6.1 Disputes, objections, complaints and queries

In terms of Regulations 49 and 50 of the Local Government: Municipal Finance Management Act, 56 of 2003 Municipal Supply Chain Management Regulations (Board Notice 868 of 2005):

- a) Persons aggrieved by decisions or actions taken by the CCT in the implementation of its supply chain management system, may lodge within 14 days of the decision or action, a written objection or complaint or query or dispute against the decision or action.

2.1.6.2 Appeals

- a) In terms of Section 62 of the Local Government: Municipal Systems Act, 32 of 2000 a person whose rights are affected by a decision taken by the CCT, may appeal against that decision by giving written notice of the appeal and reasons to the City Manager within 21 days of the date of the notification of the decision.
- b) An appeal must contain the following:
 - i. Must be in writing

- ii. It must set out the reasons for the appeal
 - iii. It must state in which way the Appellant's rights were affected by the decision;
 - iv. It must state the remedy sought; and
 - v. It must be accompanied with a copy of the notification advising the person of the decision
- c) The relevant CCT appeal authority must consider the appeal and **may confirm, vary or revoke** the decision that has been appealed, but no such revocation of a decision may detract from any rights that may have accrued as a result of the decision.

2.1.6.3 Right to approach the courts and rights in terms of Promotion of Administrative Justice Act, 3 of 2000 and Promotion of Access to Information Act, 2 of 2000

The sub- clauses above do not influence any affected person's rights to approach the High Court at any time or its rights in terms of the Promotion of Administrative Justice Act (PAJA) and Promotion of Access to Information Act (PAIA).

2.1.6.4 All requests referring to sub clauses 2.1.6.1 and 2.1.6.2 must be submitted in writing to:

The City Manager - C/o the Manager: Legal Compliance Unit, Legal Services Department, Office of the City Manager

Via hand delivery at: 20th Floor, Tower Block, 12 Hertzog Boulevard, Cape Town 8001

Via post at: Private Bag X918, Cape Town, 8000

Via email at: MSA.Appeals@capetown.gov.za

2.1.6.5 All requests referring to clause 2.1.6.3 must be submitted in writing to:

The City Manager - C/o the Manager: Access to Information Unit, Legal Service Department, Office of the City Manager

Via hand delivery at: 20th Floor, Tower Block, 12 Hertzog Boulevard, Cape Town 8001

Via post at: Private Bag X918, Cape Town, 8000

Via email at: Access2info.Act@capetown.gov.za

2.1.6.6 The minimum standards regarding accessing and 'processing' of any personal information belonging to another in terms of Protection of Personal Information Act, 2013 (POPIA).

For purposes of this clause 2.1.6.6, the contract and these Conditions of Tender, the terms "data subject", "Personal Information" and "Processing" shall have the meaning as set out in section 1 of POPIA, and "Process" shall have the corresponding meaning.

The CCT, its employees, representatives and sub-contractors may, from time to time, Process the tenderer's and/or its employees', representatives' and/or sub-contractors' Personal Information, for purposes of, and/or relating to, the tender, the contract and these Conditions of Tender, for research purposes, and/or as otherwise may be envisaged in the CCT's Privacy Notice and/or in relation to the CCT's Supply Chain Management Policy or as may be otherwise permitted by law. This includes the Processing of the latter Personal Information by the CCT's due diligence assurance provider, professional advisors and the Appeal Authority as applicable. The CCT's justification for the processing of such aforesaid Personal Information is based on section 11(1)(b) of POPIA, i.e., in terms of which the CCT's Processing of the said Personal Information is necessary to carry out actions for the conclusion and/or performance of the contract, to which the applicable data subject (envisaged in this clause 2.1.6.6 above) is a party.

All requests relating to data protection must be submitted in writing to:

The City Manager - C/o the Information Officer, Office of the City Manager

Via hand delivery at: 20th Floor, Tower Block, 12 Hertzog Boulevard, Cape Town 8001

Via post at: Private Bag X9181, Cape Town, 8000

Via email at: Popia@capetown.gov.za.

2.1.6.7 Compliance to the CCTs Appeals Policy.

In terms of the CCT's Appeals Policy, a fixed upfront administration fee will be charged. In addition, a surcharge may be imposed for vexatious and frivolous or otherwise manifestly inappropriate tender related appeals.

The current approved administration fee is R300.00 and may be paid at any of the Municipal Offices or at the Civic Centre in Cape Town using the GL Data Capture Receipt attached as Annexure F.13: Appeal Application Form. Alternatively, via EFT into the CCT's NEDBANK Account: CITY OF CAPE TOWN and using Reference number: 198158966. You are required to send proof of

payment when lodging your appeal.

The current surcharge for vexatious and frivolous or otherwise manifestly inappropriate tender related appeals will be calculated as $\frac{1}{2}$ (Administrative cost of the tender appeal) + 0.25 % (Appellant's tender price).

Should the payment of the administration fee of R300.00 or the surcharge not be received, such fee or surcharge will be added as a Sundry Tariff to the bidder's municipal account.

In the event where the bidder does not have a Municipal account with the CCT, the fee or surcharge may be recovered in terms of the CCT's Credit Control and Debt Collection By-law, 2006 (as amended) and its Credit Control and Debt Collection Policy.

2.1.7 CCT Supplier Database Registration

Tenderers are required to be registered on the CCT Supplier Database as a service provider. Tenderers must register as such upon being requested to do so in writing and within the period contained in such a request, failing which no orders can be raised or payments processed from the resulting contract. In the case of Joint Venture partnerships this requirement will apply individually to each party of the Joint Venture.

Tenderers who wish to register on the CCT's Supplier Database may collect registration forms from the Supplier Management Unit located within the Supplier Management / Registration Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town (Tel 021 400 9242/3/4/5). Registration forms and related information are also available on the CCT's website www.capetown.gov.za (follow the Supply Chain Management link to Supplier registration).

It is each tenderer's responsibility to keep all the information on the CCT Supplier Database updated.

2.1.8 National Treasury Web Based Central Supplier Database (CSD) Registration

Tenderers are required to be registered on the National Treasury Web Based Central Supplier Database (CSD) as a service provider. Tenderers must register as such upon being requested to do so in writing and within the period contained in such a request, failing which no orders can be raised or payments processed from the resulting contract. In the case of Joint Venture partnerships this requirement will apply individually to each party of the Joint Venture.

Tenderers who wish to register on the National Treasury Web Based Central Supplier Database (CSD) may do so via the web address <https://secure.csd.gov.za>.

It is each tenderer's responsibility to keep all the information on the National Treasury Web Based Central Supplier Database (CSD) updated.

2.2 Tenderer's obligations

2.2.1 Eligibility Criteria

2.2.1.1 Tenderers are obligated to submit a tender offer that complies in all aspects to the conditions as detailed in this tender document and the Conditions of Tender. An 'acceptable tender must "COMPLY IN ALL" aspects with the tender, Conditions of Tender, all Specifications (i.e., item C.5 below, hereinafter the "Specifications"), pricing instructions herein and the Contract including its conditions.

2.2.1.1.1 Submit a tender offer

Only those tender submissions from which it can be established, *inter alia* that a clear, irrevocable and unambiguous offer has been made to CCT, by whom the offer has been made and what the offer constitutes, will be declared responsive.

2.2.1.1.2 Compliance with requirements of CCT SCM Policy and procedures

Only those tenders that are compliant with the requirements below will be declared responsive:

- a) A completed **Details of Tenderer** to be provided (applicable schedule below to be completed);

- b) A completed **Certificate of Authority for Partnerships/ Joint Ventures/ Consortiums** to be provided authorising the tender to be made and the signatory to sign the tender on the partnership /joint venture/consortium's (applicable schedule below to be completed);
- c) A copy of the partnership / joint venture / consortium agreement to be provided, where applicable.
- d) A completed **Declaration of Interest – State Employees** to be provided and which does not indicate any non-compliance with the legal requirements relating to state employees (applicable schedule below to be completed);
- e) A completed **Declaration – Conflict of Interest and Declaration of Bidders' past Supply Chain Management Practices** to be provided and which does not indicate any conflict or past practises that renders the tender non-responsive based on the conditions contained thereon (applicable schedules below to be completed);
- f) A completed **Certificate of Independent Bid Determination** to be provided and which does not indicate any non-compliance with the requirements of the schedule (applicable schedule below to be completed);
- g) The tenderer (including any of its representatives, directors or members), has not been restricted in terms of abuse of the Supply Chain Management Policy,
- h) The tenderer's tax matters with SARS are in order, or the tenderer is a foreign supplier that is not required to be registered for tax compliance with SARS;
- i) The tenderer is not an advisor or consultant contracted with the CCT whose prior or current obligations creates any conflict of interest or unfair advantage;
- j) The tenderer is not a person, advisor, corporate entity or a director of such corporate entity, who is directly or indirectly involved or associated with the bid specification committee;
- k) A completed **Authorisation for the Deduction of Outstanding Amounts Owed to the CCT** to be provided and which does not indicate any details that renders the tender non-responsive based on the conditions contained thereon (applicable schedules below to be completed);
- l) The tenderer (including any of its representatives, directors or members), has not been found guilty of contravening the Competition Act 89 of 1998, as amended from time to time;
- m) The tenderer (including any of its representatives, directors or members), has not been found guilty on any other basis listed in the Supply Chain Management Policy.

2.2.1.1.3 Compulsory clarification meeting

Not Applicable

2.2.1.1.4 Minimum score for functionality

Not applicable

2.2.1.1.7 Provision of samples

Not applicable

2.2.2 Cost of tendering

The CCT will not be liable for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

2.2.3 Check documents

The documents issued by the CCT for the purpose of a tender offer are listed in the index of this tender document.

Before submission of any tender, the tenderer should check the number of pages, and if any are found to be missing or duplicated, or the figures or writing is indistinct, or if the Price Schedule contains any obvious errors, the tenderer must apply to the CCT at once to have the same rectified.

2.2.4 Confidentiality and copyright of documents

The tenderer shall treat as strictly confidential all matters arising in connection with the tender. Use and copy the documents issued by the CCT only for the purpose of preparing and submitting a tender offer in response to the invitation.

2.2.5 Reference documents

The tenderer shall obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, Conditions of Contract and other publications, which are not attached but which are incorporated into the tender document(s) by reference.

2.2.6 Acknowledge and comply with notices

The tenderer shall acknowledge receipt of notices to the tender documents, which the CCT may issue, and shall fully comply with all instructions issued in the said notices, and if necessary, apply for an extension of the closing time stated on the front page of the tender document, in order to take the notices into account. Notwithstanding any requests for confirmation of receipt of the said notices issued, the tenderer shall be deemed to have received such notices if the CCT can show proof of transmission thereof via electronic mail, facsimile, or registered post or other lawful means.

2.2.7 Clarification meeting

The tenderer shall attend, where required, a clarification meeting at which tenderers may familiarise themselves with aspects of the proposed work, services or supply and pose questions. Details of the meeting(s) are stated in the General Tender Information (i.e., in item T.1 above).

Tenderers should be represented at the site visit/clarification meeting by a duly authorised person who is suitably qualified and experienced to comprehend the implications of the work involved.

2.2.8 Seek clarification

The tenderer shall request clarification of the tender documents, if necessary, by notifying the CCT at least one week before the closing time stated in the General Tender Information (i.e., in item T.1 above), where possible.

2.2.9 Pricing the tender offer

2.2.9.1 The tenderer shall comply with all pricing instructions as stated on the Price Schedule.

2.2.10 Alterations to documents

The tenderer shall not make any alterations or additions to the tender documents, except to comply with instructions issued by the CCT in writing, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations.

2.2.11 Alternative tender offers

2.2.11.1 Unless otherwise stated in the Conditions of Tender, the tenderers may submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted.

If a tenderer wishes to submit an alternative tender offer, he/she/it shall do so as a separate offer on a complete set of tender documents. The alternative tender offer shall be submitted in a separate sealed envelope clearly marked "Alternative Tender" in order to distinguish it from the main tender offer.

Only the alternative of the highest ranked acceptable main tender offer (that is, submitted by the same tenderer) will be considered, and if appropriate, recommended for award.

Alternative tender offers of any but the highest ranked main tender offer will not be considered.

An alternative tender offer to the highest ranked acceptable main tender offer that is priced higher than the main tender offer may be recommended for award, provided that the ranking of the alternative tender offer is higher than the ranking of the next ranked acceptable main tender offer.

The CCT will not be bound to consider alternative tenders and shall have sole discretion in this regard.

In the event that the alternative is accepted, the tenderer warrants that the alternative offer complies in all respects with the CCT's standards and requirements as set out in the tender document.

2.2.11.2 Acceptance of an alternative tender offer by the CCT may be based only on the criteria stated in the Conditions of Tender or applicable criteria otherwise acceptable to the CCT.

2.2.12 Submitting a tender offer

2.2.12.1 The tenderer is required to submit one tender offer only on the original tender documents as issued by the CCT, either as a single tendering entity or as a member in a joint venture to provide the whole of the works, services or supply identified in the Conditions of Contract and described in the Specifications. Only those tenders submitted on the tender documents as issued by the CCT together with all Tender Returnable Documents duly completed and signed will be declared responsive.

2.2.12.2 The tenderer shall return the entire tender document to the CCT after completing it in its entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.

2.2.12.3 The tenderer shall sign the original tender offer where required in terms of the Conditions of Tender. The tender shall be signed by a person duly authorised by the tenderer to do so. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation / founding document of the joint venture or any other document signed by all Parties, in which is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorised to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner.

2.2.12.4 Where a two-envelope system is required in terms of the Conditions of Tender, place and seal the returnable documents listed in the Conditions of Tender in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the CCT's address and identification details stated in the General Tender Information (i.e., item T.1 above), as well as the tenderer's name and contact address.

2.2.12.5 The tenderer shall seal the original tender offer and copy packages together in an outer package that states on the outside only the CCT's address and identification details as stated in the General Tender Information. . If it is not possible to submit the original tender and the required copies (see 2.2.12.3) in a single envelope, then the tenderer must seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY" in addition to the aforementioned tender submission details.

2.2.12.6 The CCT shall not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.

2.2.12.7 Tender offers submitted by facsimile or e-mail will be rejected by the CCT, unless stated otherwise in the Conditions of Tender.

2.2.12.8 By signing the offer part of the Form of Offer (**Section 5, Part A hereto**) the tenderer warrants and agrees that all information provided in the tender submission is true and correct.

2.2.12.9 Tenderers shall properly deposit its bid in the designated tender box (as detailed on the front page of this tender document) on or before the closing date and before the closing time, in the relevant tender box at the Tender & Quotation Boxes Office situated on the 2nd floor, Concourse Level, Civic Centre, 12 Hertzog Boulevard, Cape Town. If the tender submission is too large to fit in the allocated box, please enquire at the public counter for assistance.

2.2.12.10 The tenderer must record and reference all information submitted contained in other documents for example cover letters, brochures, catalogues, etc. in the Returnable Schedule titled **List of Other**

Documents Attached by Tenderer.

2.2.13 Information and data to be completed in all respects

Tender offers, which do not provide all the data or information requested completely and in the form required, may be regarded by the CCT as non-responsive.

2.2.14 Closing time

2.2.14.1 The tenderer shall ensure that the CCT receives the tender offer, together with all applicable documents specified herein, at the address specified in the General Tender Information herein prior to the closing time stated on the front page of the tender document.

2.2.14.2 If the CCT extends the closing time stated on the front page of the tender document for any reason, the requirements of these Conditions of Tender apply equally to the extended deadline.

2.2.14.3 The CCT shall not consider tenders that are received after the closing date and time for such a tender (late tenders).

2.2.15 Tender offer validity and withdrawal of tenders

2.2.15.1 The tenderer shall warrant that the tender offer(s) remains valid, irrevocable and open for acceptance by the CCT at any time for a period of 120 days after the closing date stated on the front page of the tender document.

2.2.15.2 Notwithstanding the period stated in clause 2.2.15.1 above, bids shall remain valid for acceptance for a period of twelve (12) months after the expiry of the original validity period, unless the CCT is notified in writing of anything to the contrary by the bidder. The validity of bids may be further extended by a period of not more than six months subject to mutual agreement by the parties, administrative processes and upon approval by the City Manager, unless the required extension is as a result of an appeal process or court ruling.

In circumstances where the validity period of a tender has expired, and the tender has not been awarded, the tender process is considered "completed", despite there being no decision (award or cancellation) made. This anomaly does not fall under any of the listed grounds of cancellation and should be treated as a "non award". A "non award" is supported as a recommendation to the CCT's Bid Adjudication Committee ("BAC") for noting.

2.2.15.3 A tenderer may request in writing, after the closing date, that its tender offer be withdrawn. Such withdrawal will be permitted or refused at the sole discretion of the CCT after consideration of the reasons for the withdrawal, which shall be fully set out by the tenderer in such written request for withdrawal. Should the tender offer be withdrawn in contravention hereof, the tenderer agrees that:

- a) it shall be liable to the CCT for any additional expense incurred or losses suffered by the CCT in having either to accept another tender or, if new tenders have to be invited, the additional expenses incurred or losses suffered by the invitation of new tenders and the subsequent acceptance of any other tender;
- b) the CCT shall also have the right to recover such additional expenses or losses by set-off against monies which may be due or become due to the tenderer under this or any other tender or contract or against any guarantee or deposit that may have been furnished by the tenderer or on its behalf for the due fulfilment of this or any other tender or contract. Pending the ascertainment of the amount of such additional expenses or losses, the CCT shall be entitled to retain such monies, guarantee or deposit as security for any such expenses or loss, without prejudice to the CCT's other rights and/or remedies available to it in accordance with any applicable laws.

2.2.16 Clarification of tender offer, or additional information, after submission

Tenderer's shall promptly provide clarification of its tender offer, or additional information, in response to a written request to do so from the CCT during the evaluation of tender offers within the time period stated in such request. No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

Note: This clause does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the CCT elect to do so.

Failure, or refusal, to provide such clarification or additional information within the time for submission stated in the CCT's written request may render the tender non-responsive.

2.2.17 Provide other material

2.2.17.1 Tenderer's shall promptly provide, upon request by the CCT, any other material that has a bearing on the tender offer, the tenderer's commercial position (including joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the CCT for the purpose of the evaluation of the tender. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the CCT's request, the CCT may regard the tender offer as non-responsive.

2.2.17.2 The tenderer shall provide, on written request by the CCT, where the transaction value inclusive of VAT **exceeds R 10 million**:

- a) audited annual financial statement for the past 3 years, or for the period since establishment if established during the past 3 years, if required by law to prepare annual financial statements for auditing;
- b) a certificate signed by the tenderer certifying that the tenderer has no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days;
- c) particulars of any contracts awarded to the tenderer by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract;
- d) a statement indicating whether any portion of the goods or services are expected to be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality or municipal entity is expected to be transferred out of the Republic.

Each entity to a Consortium/Joint Venture bid shall submit separate certificates/statements in the above regard.

2.2.17.3 Tenderers shall be required to undertake to fully cooperate with the CCT's external service provider appointed to perform a due diligence review and risk assessment upon receipt of such written instruction from the CCT.

2.2.18 Samples, Inspections, tests and analysis

Tenderers shall provide access during working hours to premises for inspections, tests and analysis as provided for in the Conditions of Tender or Specifications.

If the Specifications requires the tenderer to provide samples, these shall be provided strictly in accordance with the instructions set out in the Specification.

If such samples are not submitted as required in the bid documents or within any further time stipulated by the CCT in writing, then the bid concerned may be declared non-responsive.

The samples provided by all successful bidders will be retained by the CCT for the duration of any subsequent contract. Bidders are to note that samples are requested for testing purposes therefore samples submitted to the CCT may not in all instances be returned in the same state of supply and in other instances may not be returned at all. Unsuccessful bidders will be advised by the Project Manager or dedicated CCT Official to collect their samples, save in the aforementioned instances where the samples would not be returned.

2.2.19 Certificates

The tenderer must provide the CCT with all certificates as stated below:

2.2.19.1. Preference Points for Specific Goals

In order to qualify for preference points for HDI and/or Specific Goals, it is the responsibility of the tenderer to submit documentary proof (Company registration certification, Central Supplier Database report, BBBEE certificate, Proof of Disability, Financial Statements, commissioned sworn affidavits, etc.) in support of tenderer claims for such preference for that specific goal.

Tenderers are further referred to the content of the Preference Schedule for the full terms and conditions applicable to the awarding of preference points.

2.2.19.2 Evidence of tax compliance

Tenderers shall be registered with the South African Revenue Service (SARS) and their tax affairs must be in order and they must be tax compliant subject to the requirements of clause 2.2.1.1.2.h. In this regard, it is the responsibility of the Tenderer to submit evidence in the form of a valid Tax Compliance Status PIN issued by SARS to the CCT at the Supplier Management Unit located within the Supplier Management / Registration Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town (Tel 021 400 9242/3/4/5), or included with this tender. The tenderer must record its Tax Compliance Status PIN number on the **Details of Tenderer** pages of the tender submission.

Each party to a Consortium/Joint Venture shall submit a separate Tax Compliance Status Pin.

Before making an award the CCT must verify the bidder's tax compliance status. Where the recommended bidder is not tax compliant, the bidder should be notified of the non-compliant status and be requested to submit to the CCT, within 7 working days, written proof from SARS that they have made arrangement to meet their outstanding tax obligations. The proof of tax compliance submitted by the bidder must be verified by the CCT via CSD or e-Filing. The CCT should reject a bid submitted by the bidder if such bidder fails to provide proof of tax compliance within the timeframe stated herein.

Only foreign suppliers who have answered "NO" to all the questions contained in the Questionnaire to Bidding Foreign Suppliers section on the **Details of Tenderer** pages of the tender submission, are not required to register for a tax compliance status with SARS.

2.2.20 Compliance with Occupational Health and Safety Act, 85 of 1993

Tenderers are to note the requirements of the Occupational Health and Safety Act, 85 of 1993. The Tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

In this regard the Tenderer shall submit **upon written request to do so by the CCT**, a Health and Safety Plan in sufficient detail to demonstrate the necessary competencies and resources to deliver the goods or services all in accordance with the Act, Regulations and Health and Safety Specification.

2.2.21 Claims arising from submission of tender

By responding to the tender herein, the tenderer warrants that it has:

- a) Inspected the Specifications and read and fully understood the Conditions of Contract.
- b) Read and fully understood the whole text of the Specifications and Price Schedule and thoroughly acquainted himself with the nature of the goods or services proposed and generally of all matters which may influence the Contract.
- c) visited the site(s) where delivery of the proposed goods will take place, carefully examined existing conditions, the means of access to the site(s), the conditions under which the delivery is to be made, and acquainted himself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials, plant and equipment to and from the site(s) and made the necessary provisions for any additional costs involved thereby.
- d) requested the CCT to clarify the actual requirements of anything in the Specifications and Price Schedule, the exact meaning or interpretation of which is not clearly intelligible to the Tenderer.
- e) Received any notices to the tender documents which have been issued in accordance with the CCT's

The CCT will therefore not be liable for the payment of any extra costs or claims arising from the submission of the tender.

2.3 The CCT's undertakings

2.3.1 Respond to requests from the tenderer

2.3.1.1 Unless otherwise stated in the Conditions of Tender, the CCT shall respond to a request for clarification received up to one week (where possible) before the tender closing time stated on the front page of the tender document.

2.3.1.2 The CCT's duly authorised representative for the purpose of this tender is stated on the General Tender Information page above.

2.3.2 Issue Notices

If necessary, the CCT may issue addenda in writing that may amend or amplify the tender documents to each tenderer during the period from the date the tender documents are available until one week before the tender closing time stated in the Tender Data. The CCT reserves its rights to issue addenda less than one week before the tender closing time in exceptional circumstances. If, as a result a tenderer applies for an extension to the closing time stated on the front page of the tender document, the CCT may grant such extension and, shall then notify all tenderers who drew documents.

Notwithstanding any requests for confirmation of receipt of notices issued, the tenderer shall be deemed to have received such notices if the CCT can show proof of transmission thereof via electronic mail, facsimile or registered post.

2.3.3 Opening of tender submissions

2.3.3.1 Unless the two-envelope system is to be followed, CCT shall open tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the Conditions of Tender.

Tenders will be opened immediately after the closing time for receipt of tenders as stated on the front page of the tender document, or as stated in any Notice extending the closing date and at the closing venue as stated in the General Tender Information.

2.3.3.2 Announce at the meeting held immediately after the opening of tender submissions, at the closing venue as stated in the General Tender Information, the name of each tenderer whose tender offer is opened and, where possible, the prices indicated.

2.3.3.3 Make available a record of the details announced at the tender opening meeting on the CCT's website (<http://www.capetown.gov.za/en/SupplyChainManagement/Pages/default.aspx>.)

2.3.4 two-envelope system

2.3.4.1 Where stated in the Conditions of Tender that a two-envelope system is to be followed, the CCT shall open only the technical proposal of tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the Conditions of Tender and announce the name of each tenderer whose technical proposal is opened.

2.3.4.2 The CCT shall evaluate the quality of the technical proposals offered by tenderers, then advise tenderers who have submitted responsive technical proposals of the time and place when the financial proposals will be opened. The CCT shall open only the financial proposals of tenderers, who have submitted responsive technical proposals in accordance with the requirements as stated in the Conditions of Tender, and announce the total price and any preference claimed. Return unopened financial proposals to tenderers whose technical proposals were non responsive.

2.3.5 Non-disclosure

The CCT shall not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.

2.3.6 Grounds for rejection and disqualification

The CCT shall determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.

2.3.7 Test for responsiveness

2.3.7.1 Appoint a Bid Evaluation Committee and determine after opening whether each tender offer properly received:

- a) complies with the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

2.3.7.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the CCT's opinion, would:

- a) Detrimentially affect the scope, quality, or performance of the goods, services or supply identified in the Specifications,
- b) Significantly change the CCT's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of any material deviation or qualification.

The CCT reserves the right to accept a tender offer which does not, in the CCT's opinion, materially and/or substantially deviate from the terms, conditions, and specifications of the tender documents.

2.3.8 Arithmetical errors, omissions and discrepancies

2.3.8.1 Check the responsive tenders for:

- a) The gross misplacement of the decimal point in any unit rate;
- b) Omissions made in completing the Price Schedule; or
- c) Arithmetic errors in:
 - i) line item totals resulting from the product of a unit rate and a quantity in the Price Schedule; or
 - ii) The summation of the prices; or
 - iii) Calculation of individual rates.

2.3.8.2 The CCT must correct the arithmetical errors in the following manner:

- a) Where there is a discrepancy between the amounts in words and amounts in figures, the amount in words shall govern.
- b) If pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as tendered shall govern, and the unit rate shall be corrected.
- c) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall

govern and the tenderer will be asked to revise selected item prices (and their rates if Price Schedules apply) to achieve the tendered total of the prices.

Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above.

2.3.8.3 In the event of tendered rates or lump sums being declared by the CCT to be unacceptable to it because they are not priced, either excessively low or high, or not in proper balance with other rates or lump sums, the tenderer may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the CCT is still not satisfied with the tendered rates or lump sums objected to, it may request the tenderer to amend these rates and lump sums along the lines indicated by it.

The tenderer will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the CCT, but this shall be done without altering the tender offer in accordance with this clause.

Should the tenderer fail to amend his tender in a manner acceptable to and within the time stated by the CCT, the CCT may declare the tender as non-responsive.

2.3.9 Clarification of a tender offer

The CCT may, after the closing date, request additional information or clarification from tenderers, in writing on any matter affecting the evaluation of the tender offer or that could give rise to ambiguity in a contract arising from the tender offer, which written request and related response shall not change or affect their competitive position or the substance of their offer. Such request may only be made in writing by the Director: Supply Chain Management using any means as appropriate.

2.3.10 Evaluation of tender offers

2.3.10.1 General

2.3.10.1.1 The CCT may reduce each responsive tender offer to a comparative price and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the Conditions of Tender.

2.3.10.1.2 For evaluation purposes only, the effects of the relevant contract price adjustment methods will be considered in the determination of comparative prices as follows:

- a) If the selected method is based on bidders supplying rates or percentages for outer years, comparative prices would be determined over the entire contract period based on such rates or percentages.
- b) If the selected method is based on a formula, indices, coefficients, etc. that is the same for all bidders during the contract period, comparative prices would be the prices as tendered for year one.
- c) If the selected method is based on a formula, indices, coefficients, etc. that varies between bidders, comparative prices would be determined over the entire contract period based on published indices relevant during the 12 months prior to the closing date of tenders.
- d) If the selected method includes an imported content requiring rate of exchange variation, comparative prices would be determined based on the exchange rates tendered for the prices as tendered for year one. The rand equivalent of the applicable currency 14 days prior to the closing date of tender will be used (the CCT will check all quoted rates against those supplied by its own bank).
- e) If the selected method is based on suppliers' price lists, comparative prices would be the prices as tendered for year one.
- f) If the selected method is based on suppliers' price lists and / or rate of exchange, comparative prices would be determined as tendered for year one whilst taking into account the tendered percentage subject to rate of exchange (see sub clause (d) for details on the calculation of the rate of exchange).

2.3.10.1.3 Where the scoring of functionality forms part of a bid process, each member of the Bid Evaluation Committee must individually score functionality. The individual scores must then be interrogated and

calibrated if required where there are significant discrepancies. The individual scores must then be added together and averaged to determine the final score.

2.3.10.2 Decimal places

Score financial offers, preferences and functionality, as relevant, to two decimal places.

2.3.10.3 Scoring of tenders (price and preference)

2.3.10.3.1 Points for price will be allocated in accordance with the formula set out in this clause based on the price per item / rates as set out in the **Price Schedule (Section 7)**:

- Based on the sum of the prices/rates in relation to the estimated quantities.

2.3.10.3.2 Points for preference will be allocated in accordance with the provisions of **Preference Schedule** and the table in this clause.

2.3.10.3.3 The terms and conditions of **Preference Schedule** as it relates to preference shall apply in all respects to the tender evaluation process and any subsequent contract.

2.3.10.3.4 Applicable formula:

The 80/20 preference point system will apply to this tender and the lowest acceptable tender will be used to determine the applicable preferences

The 80/20 price/preference points system will be applied to the evaluation of responsive tenders up to and including a Rand value of R50'000'000 (all applicable taxes included), whereby the order(s) will be placed with the tenderer(s) scoring the highest total number of adjudication points.

Price shall be scored as follows:

$$Ps = 80 \times \left(1 - \frac{(Pt - Pmin)}{Pmin} \right)$$

Where: Ps is the number of points scored for price;
Pt is the price of the tender under consideration;
Pmin is the price of the lowest responsive tender.

Preference points shall be based on the Specific Goal as per below:

Table B1: Awards above R750 000 and up to R50 mil (VAT Inclusive)

#	Specific goals allocated points	Preference Points (80/20) <i>Equal/ below R50 mil</i>	Evidence	Additional Guidance
<i>Persons, or categories of persons, historically disadvantaged- (HDI) by unfair discrimination on the basis of</i>				
1	Gender are women (ownership)* >75% - 100% women ownership: 5 points >50% - 75% women ownership: 4 points >25% - 50% women ownership: 3 points >0% - 25% women ownership: 2 points 0% women ownership = 0 points	5	- Company Registration Certification - Central Supplier Database report	- Issued by the Companies and Intellectual Property Commission - Report name: CSD Registration report
2	Race are black persons (ownership)* >75% - 100% black ownership: 5 points >50% - 75% black ownership: 4 points >25% - 50% black ownership: 3 points >0% - 25% black ownership: 2 points	5	- B-BBEE certificate; - Company Registration Certification	- South African National Accreditation System approved certificate or commissioned sworn affidavit - Issued by the Companies and Intellectual Property Commission

	0% black ownership = 0 points		Central Supplier Database report	Report name: CSD Registration report
3	Disability are disabled persons (ownership)* WHO disability guideline >2% ownership: 3 points >0% - 2% ownership: 1.5 point 0% ownership = 0 points	3	- Proof of disability - Company Registration Certification	- Medical certificate/ South African Revenue Services disability registration - Issued by the Companies and Intellectual Property Commission
Reconstruction and Development Programme (RDP) as published in Government Gazette				
4	Promotion of Micro and Small Enterprises Micro with a turnover up to R20million and Small with a turnover up to R80 million as per National Small Enterprise Act, 1996 (Act No.102 of 1996) SME partnership, sub-contracting, joint venture or consortiums	7	- B-BBEE status level of contributor; - South African owned enterprises; - Financial Statement to determine annual turnover	- Specifically in line with the respective sector codes which the company operates, - South African National Accreditation System approved certificate or commissioned sworn affidavit - Certificate of incorporation or commissioned sworn affidavit - Latest financial statements (1 Year)
	Total points	20		

*Ownership: main tendering entity

2.3.10.5 Risk Analysis

Notwithstanding compliance with regard to any requirements of the tender, the CCT will perform a risk analysis in respect of the following:

- reasonableness of the financial offer
- reasonableness of unit rates and prices
- the tenderer's ability to fulfil its obligations in terms of the tender document, that is, that the tenderer can demonstrate that he/she possesses the necessary professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, capacity, experience, reputation, personnel to perform the contract, etc.; the CCT reserves the right to consider a tenderer's existing contracts with the CCT in this regard
- any other matter relating to the submitted bid, the tendering entity, matters of compliance, verification of submitted information and documents, etc.

The conclusions drawn from this risk analysis will be used by the CCT in determining the acceptability of the tender offer.

No tenderer will be recommended for an award unless the tenderer has demonstrated to the satisfaction of the CCT that he/she has the resources and skills required.

2.3.11 Negotiations with preferred tenderers

The CCT may negotiate the final terms of a contract with tenderers identified through a competitive tendering process as preferred tenderers provided that such negotiation:

- Does not allow any preferred tenderer a second or unfair opportunity;
- Is not to the detriment of any other tenderer; and
- Does not lead to a higher price than the tender as submitted.

If negotiations fail to result in acceptable contract terms, the City Manager (or his delegated authority) may terminate the negotiations and cancel the tender, or invite the next ranked tenderer for negotiations. The original preferred tenderer should be informed of the reasons for termination of the negotiations. If the decision is to invite the next highest ranked tenderer for negotiations, the failed earlier negotiations may not be reopened by the CCT.

Minutes of any such negotiations shall be kept for record purposes.

The provisions of this clause will be equally applicable to any invitation to negotiate with any other tenderers.

In terms of the CCT's SCM Policy, tenders must be cancelled in the event that negotiations fail to achieve a market related price with any of the three highest scoring tenderers.

2.3.12 Acceptance of tender offer

Notwithstanding any other provisions contained in the tender document, the CCT reserves the right to:

2.3.12.1 Accept a tender offer(s) which does not, in the CCT's opinion, materially and/or substantially deviate from the terms, conditions, and specifications of the tender document.

2.3.12.2 Accept the whole tender or part of a tender or any item or part of any item or items from multiple manufacturers, or to accept more than one tender (in the event of a number of items being offered), and the CCT is not obliged to accept the lowest or any tender.

2.3.12.3 Accept the tender offer(s), if in the opinion of the CCT, it does not present any material risk and only if the tenderer(s):

- a) is not under restrictions, has any principals who are under restrictions, or is not currently a supplier to whom notice has been served for abuse of the supply chain management system, preventing participation in the CCT's procurement,
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,
- c) has the legal capacity to enter into the contract,
- d) is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing, complies with the legal requirements, if any, stated in the tender data, and
- e) is able, in the opinion of the CCT, to perform the contract free of conflicts of interest.

If an award cannot be made in terms of anything contained herein, the CCT reserves the right to consider the next ranked tenderer(s).

2.3.12.4 The CCT reserves the right not to make an award, or revoke an award already made, where the implementation of the contract may result in reputational risk or harm to the CCT as a result of (inter alia):

- a) reports of poor governance or unethical behaviour, or both;
- b) association with known notorious individuals and family of notorious individuals;
- c) poor performance issues, known to the CCT;
- d) negative media reports, including negative social media reports;
- e) adverse assurance (e.g. due diligence) report outcomes; and
- f) circumstances where the relevant vendor has employed, or is directed by, anyone who was previously employed in the service of the state (as defined in clause 1.53 of the SCM Policy), where the person is or was negatively implicated in any SCM irregularity.

2.3.12.5 The CCT reserves the right to nominate an StandbyBidder at the time when an award is made and in the event that a contract is terminated during the execution thereof, the CCT may consider the award of the contract, or non-award, to the Standby Bidder in terms of the procedures included its SCM

Policy.

2.3.13 Prepare contract documents

2.3.13.1 If necessary, revise documents that shall form part of the contract and that were issued by the CCT as part of the tender documents to take account of:

- a) Notices issued during the tender period,
- b) Inclusion of some of the returnable documents, and
- c) Other revisions agreed between the CCT and the successful tenderer.

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

2.3.14 Notice to successful and unsuccessful tenderers

2.3.14.1 Before accepting the tender of the successful tenderer the CCT shall notify the successful tenderer in writing of the decision of the CCT's Bid Adjudication Committee to award the tender to the successful tenderer. No rights shall accrue to the successful tenderer in terms of this notice

2.3.14.2 The CCT shall, at the same time as notifying the successful tenderer of the Bid Adjudication Committee's decision to award the tender to the successful tenderer, also give written notice to the other tenderers informing them that they have been unsuccessful.

2.3.15 Provide written reasons for actions taken

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

TENDER DOCUMENT GOODS AND SERVICES		 CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD	
SUPPLY CHAIN MANAGEMENT			
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TENDER NO: [DP 7914G/2022/23]

TENDER DESCRIPTION: THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SPECIALISED SCIENTIFIC EQUIPMENT FOR THE MONITORING OF VARIOUS ENVIRONMENTAL MEDIA IN THE CITY OF CAPE TOWN.

CONTRACT PERIOD: 36 MONTHS FROM DATE OF COMMENCEMENT OF CONTRACT

THE CONTRACT

THE CITY OF CAPE TOWN	
A metropolitan municipality, established in terms of the Local Government: Municipal Structures Act, 117 of 1998 read with the Province of the Western Cape: Provincial Gazette 5588 dated 22 September 2000, as amended ("the Purchaser") herein represented by	
AUTHORISED REPRESENTATIVE	

AND

SUPPLIER	
NAME of Company/Close Corporation or Partnership / Joint Venture/ Consortium or Sole Proprietor /Individual (The "Supplier" / "tenderer")	
TRADING AS (if different from above)	
REGISTRATION NUMBER	
PHYSICAL ADDRESS / CHOSEN DOMICILIUM CITANI ET EXECTUANDI OF THE SUPPLIER	
AUTHORISED REPRESENTATIVE	
CAPACITY OF AUTHORISED REPRESENTATIVE	

(HEREINAFTER COLLECTIVELY REFERRED TO AS "THE PARTIES" AND INDIVIDUALLY A "PARTY")

NATURE OF TENDER OFFER (please indicate below)	
Main Offer (see clause 2.2.11.1)	
Alternative Offer (see clause 2.2.11.1)	

C.1 DETAILS OF TENDERER/SUPPLIER

1.1 Type of Entity (Please tick one box)

- ☐ Individual / Sole Proprietor
 ☐ Close Corporation
 ☐ Company
☐ Partnership or Joint Venture or Consortium
 ☐ Trust
 ☐ Other:

1.2 Required Details (Please provide applicable details in full):

Name of Company / Close Corporation or Partnership / Joint Venture / Consortium or Individual /Sole Proprietor	
Trading as (if different from above)	
Company / Close Corporation registration number (if applicable)	
Postal address	Postal Code _____
Physical address (Chosen Domicilium Citandi Et Executandi)	Postal Code _____
Contact details of the person duly authorised to represent the tenderer	Name: Mr/Ms _____ (Name & Surname) Telephone : (____) _____ Fax : (____) _____ Cellular Telephone: _____ E-mail address: _____
Income tax number	
VAT registration number	
SARS Tax Compliance Status PIN	
CCT Supplier Database Registration Number (See Conditions of Tender)	
National Treasury Central Supplier Database registration number (See Conditions of Tender)	
Is tenderer the accredited representative in South Africa for the Goods / Services / Works offered?	☐ Yes ☐ No If yes, enclose proof
Is tenderer a foreign based supplier for the Goods / Services / Works offered?	☐ Yes ☐ No If yes, answer the Questionnaire to Bidding Foreign Suppliers (below)
Questionnaire to Bidding Foreign Suppliers	a) Is the tenderer a resident of the Republic of South Africa or an entity registered in South Africa? ☐ Yes ☐ No
	b) Does the tenderer have a permanent establishment in the Republic of South Africa? ☐ Yes ☐ No
	c) Does the tenderer have any source of income in the Republic of South Africa? ☐ Yes ☐ No
	d) Is the tenderer liable in the Republic of South Africa for any form of taxation? ☐ Yes ☐ No

C.2 FORM OF OFFER AND ACCEPTANCE

TENDER [DP 7914G/2022/23 THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SPECIALISED SCIENTIFIC EQUIPMENT FOR THE MONITORING OF VARIOUS ENVIRONMENTAL MEDIA IN THE CITY OF CAPE TOWN]

C.2.1 Offer (To Be Completed by the Tenderer as Part of Tender Submission)

The tenderer, identified in the offer signature table below,

HEREBY AGREES THAT by signing the *Form of Offer and Acceptance*, the tenderer:

1. confirms that it has examined the documents listed in the Index (including Schedules and Annexures) and has accepted all the Conditions of Tender;
2. confirms that it has received and incorporated any and all notices issued to tenderers issued by the CCT;
3. confirms that it has satisfied itself as to the correctness and validity of the tender offer; that the price(s) and rate(s) offered cover all the goods and/or services specified in the tender documents; that the price(s) and rate(s) cover all its obligations and accepts that any mistakes regarding price(s), rate(s) and calculations will be at its own risk;
4. offers to supply all or any of the goods and/or render all or any of the services described in the tender document to the CCT in accordance with the:
 - 4.1 terms and conditions stipulated in this tender document;
 - 4.2 specifications stipulated in this tender document; and
 - 4.3 at the prices as set out in the **Price Schedule**.
5. accepts full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on it in terms of the Contract.

SIGNED AT _____ (PLACE) ON THE ____ (DAY) OF _____ (MONTH AND YEAR)

For and on behalf of the Supplier
(Duly Authorised)
Name and Surname:

Witness 1 Signature
Name and Surname:

Witness 2 Signature
Name and Surname:

INITIALS OF CCT OFFICIALS		
1	2	3

FORM OF OFFER AND ACCEPTANCE (continued)

TENDER [DP 7914G/2022/23 THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SPECIALISED SCIENTIFIC EQUIPMENT FOR THE MONITORING OF VARIOUS ENVIRONMENTAL MEDIA IN THE CITY OF CAPE TOWN]

C.2.2 Acceptance (To Be Completed by the CCT)

By signing this part of this *Form of Offer and Acceptance*, the CCT accepts the tenderer's (if awarded the Supplier's) offer. In consideration thereof, the CCT shall pay the Supplier the amount due in accordance with the conditions of contract. Acceptance of the Supplier's offer shall form an agreement between the CCT and the Supplier upon the terms and conditions contained in this document.

The terms of the agreement are contained in the Contract (as defined) including drawings and documents or parts thereof, which may be incorporated by reference.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the *Tender Returnable Documents* as well as any changes to the terms of the offer agreed by the tenderer and the CCT 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 the *Schedule of Deviations*.

The Supplier shall within 2 (two) weeks after receiving a complete, copy of the Contract, including the *Schedule of Deviations* (if any), contact the CCT to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documents to be provided in terms the *Special Conditions of Contract*. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation / breach of the agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the Commencement Date, being the date upon which the Supplier confirms receipt from the CCT of 1 (one) complete, signed copy of the Contract, including amendments or deviations contained in the *Schedule of Deviations* (if any).

For and on behalf of the City of Cape Town
(Duly Authorised)
Name and Surname:

Witness 1 Signature
Name and Surname:

Witness 2 Signature
Name and Surname:

FORM OF OFFER AND ACCEPTANCE (continued)

TENDER [DP 7914G/2022/23 THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SPECIALISED SCIENTIFIC EQUIPMENT FOR THE MONITORING OF VARIOUS ENVIRONMENTAL MEDIA IN THE CITY OF CAPE TOWN]

C.2.3 Schedule of Deviations (To be Completed by the CCT upon Acceptance)

Notes:

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

1 Subject
Details
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.....
.....

2 Subject
Details
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3 Subject
Details
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4 Subject
Details
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By the duly authorised representatives signing this agreement, the CCT and the tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to this tender document and addenda thereto as listed in the *Tender Returnable Documents*, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and the CCT during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the Commencement Date, shall have any meaning or effect between the Parties arising from the agreement.

ONLY TO BE
COMPLETED AT
ACCEPTANCE STAGE

FORM OF OFFER AND ACCEPTANCE (continued)

TENDER [DP 7914G/2022/23 THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SPECIALISED SCIENTIFIC EQUIPMENT FOR THE MONITORING OF VARIOUS ENVIRONMENTAL MEDIA IN THE CITY OF CAPE TOWN]

C.2.4 Confirmation of Receipt (To be Completed by Supplier upon Acceptance)

The Supplier identified in the offer part of the Contract hereby confirms receipt from the CCT of 1 (one) complete, signed copy of the Contract, including the *Schedule of Deviations* (if any) on:

The..... (Day)

Of..... (Month)

20..... (year)

At..... (Place)

For the Supplier: Signature(s)

Name(s)

Capacity

Signature and name of witness:

Signature Name

ONLY TO BE
COMPLETED AT
ACCEPTANCE STAGE

C.3 OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

AGREEMENT MADE AND ENTERED INTO BETWEEN THE CCT (HEREINAFTER CALLED THE "CCT")
AND

.....,
(Supplier/Mandatar y/Company/CC Name)

IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 85 OF 1993 AS
AMENDED.

I,, representing

....., as an employer
in its own right in its own right, do hereby undertake to ensure, as far as is reasonably practicable, that all work
will be performed, and all equipment, machinery or plant used in such a manner as to comply with the
provisions of the Occupational Health and Safety Act (hereafter "OHSA") and the Regulations promulgated
thereunder.

I furthermore confirm that I am/we are registered with the Compensation Commissioner and that all registration
and assessment monies due to the Compensation Commissioner have been fully paid or that I/We are insured
with an approved licensed compensation insurer.

COID ACT Registration Number:

OR Compensation Insurer: Policy No.:

I undertake to appoint, where required, suitable competent persons, in writing, in terms of the requirements of
OHSA and the Regulations and to charge him/them with the duty of ensuring that the provisions of OHSA and
Regulations as well as the Council's Special Conditions of Contract, Way Leave, Lock-Out and Work Permit
Procedures are adhered to as far as reasonably practicable.

I further undertake to ensure that any subcontractors employed by me will enter into an occupational health
and safety agreement separately, and that such subcontractors comply with the conditions set.

I hereby declare that I have read and understand the Occupational Health and Safety Specifications contained
in this tender and undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan submitted
and approved in terms thereof.

Signed aton the.....day of.....20....

Witness

Mandatar y

Signed at..... on the.....day of.....20

Witness

for and on behalf of
CCT

C.4 PRICE SCHEDULE

Bid specifications may not make any reference to any particular trade mark, name, patent, design, type, specific origin or producer, unless there is no other sufficiently precise or intelligible way of describing the characteristics of the work, in which case such reference must be accompanied by the words "or equivalent".

TENDERERS MUST NOTE THAT WHEREVER THIS DOCUMENT REFERS TO ANY PARTICULAR TRADE MARK, NAME, PATENT, DESIGN, TYPE, SPECIFIC ORIGIN OR PRODUCER, SUCH REFERENCE SHALL BE DEEMED TO BE ACCOMPANIED BY THE WORDS 'OR EQUIVALENT'

The supply, delivery, installation and commissioning of specialised scientific equipment for the monitoring of various environmental media to the City of Cape Town.

Specialised Instruments

The price set out in the tables below includes, but not limited, to the supply, delivery, installation and commissioning of the specialised equipment listed in the specifications, **inclusive** of ancillary components required to commission a fully operational instrument that is calibrated. Detailed technical specifications of the listed equipment is provided under section Specifications.

Ancillary Components

The ancillary components listed in the tables below is the minimum requirement as defined in the specifications. If the ancillary components is obsolete, the CCT must be engaged before the equivalent replacement is provided. The replacement components must be compatible with the instrument.

- a) The City will issue a Purchase Order for the procurement of ancillary components.
- b) Only upon receiving a Purchase Order from the CCT shall the Service Provider procure the ancillary components as listed in the tender document or its latest equivalent.
- c) The Service Provider shall deliver the procured ancillary components within 8 to 12 weeks upon receipt of the CCT's Purchase Order.

SECTION A: AIR QUALITY MONITORING EQUIPMENT

ITEM AQ1: To supply, install & commission a Hydrogen Sulphide analyser

ITEM AQ1: To supply, install & commission a Hydrogen Sulphide analyser			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ1	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a Hydrogen Sulphide analyser.	Per Instrument	
AQ1_A	Ancillary Components		
1	Supply of service and maintenance kit	Per item	
2	Service as per manufacturers specifications	Per Service	
3	UV light source as defined by manufacturer	Per Item	
4	Internal pump as defined by manufacturer	Per Item	
5	ISO 17025 calibration with metrological traceability to national or international standards	Per service	

ITEM AQ2: To supply, install & commission a Carbon Monoxide analyser

ITEM AQ2: To supply, install & commission a Carbon Monoxide analyser			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ2	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a Carbon Monoxide analyser	Per Instrument	
AQ2_A	Ancillary Components		
1	Supply of service and maintenance kit	Per Item	
2	Service as per manufacturers specifications	Per Service	
3	UV light source as defined by manufacturer	Per Item	
4	Internal pump as defined by manufacturer	Per Item	
5	ISO 17025 calibration with metrological traceability to national or international standards	Per service	

ITEM AQ3: To supply and commission a Dynamic Dilution Calibrator

ITEM AQ3: To supply and commission a Dynamic Dilution Calibrator			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ3	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply and commission a Dynamic Dilution Calibrator	Per Instrument	
AQ3_A	Ancillary Components		
1	Supply of service and maintenance kit	Per Item	
2	Service as per manufacturers specifications	Per Service	
3	ISO 17025 calibration with metrological traceability to national or international standards	Per service	

ITEM AQ4: To supply, install & commission a Zero Air system

ITEM AQ4: To supply, install & commission a Zero Air system			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ4	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a Zero Air system	Per Instrument	
AQ4_A	Ancillary Components		
1	Supply of service and maintenance kit	Per item	
2	Service as per manufacturers specifications	Per Service	

ITEM AQ5: To supply and commission a multi detector gas handheld analyser

ITEM AQ5: To supply & commission a multi detector gas handheld analyser			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ5	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply and commission a multi detector gas handheld analyser	Per Instrument	
AQ5_A	Ancillary Components		
1	Service as per manufacturers specifications	Per Service	
2	Calibration as per manufacturers specification	Per Service	

ITEM AQ6: To supply, install & commission a gas Flow Meter

ITEM AQ6: To supply, install & commission a gas Flow Meter			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ6	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a gas flow meter	Per Instrument	
AQ6_A	Ancillary Components		
1	Service as per manufacturers specifications	Per Service	
2	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM AQ7: To supply, install & commission a Carbon Dioxide (CO2) Analysers.

ITEM AQ7: Supply, install and commission a Carbon Dioxide (CO2) Analysers.			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ7	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install and commission a Carbon Dioxide (CO2) analysers.	Per Instrument	
AQ7_A	Ancillary Components		
1	Service as per manufacturers specifications	Per Service	
2	UV light source as defined by manufacturer	Per Item	
3	Internal pump as defined by manufacturer	Per Item	
4	Spares kit as defined by manufacturer	Per Item	
5	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM AQ8: To supply, install & commission a Particulate Matter (PM₁₀ and PM_{2.5}) analyser

ITEM AQ8: To supply, install and commission a Particulate Matter (PM10 and PM2.5) analyser			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ8	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a particulate matter (PM10 and PM2.5) analyser	Per Instrument	
AQ8_A	Ancillary Components		
1	Service as per manufacturers specifications	Per Service	
2	External pump as defined by manufacturer	Per Item	
3	Spares kit as defined by manufacturer	Per Item	
4	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM AQ9: To supply, install and commission a Sulphur Dioxide (SO₂) analyser

ITEM AQ9: To supply, install and commission a sulphur dioxide (SO2) analyser			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ9	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install and commission a Sulphur Dioxide (SO2) analyser	Per Instrument	
AQ9_A	Ancillary Components		
1	Service as per manufacturers specifications	Per Service	
2	UV light source as defined by manufacturer	Per Item	
3	Internal pump as defined by manufacturer	Per Item	
4	Spares kit as defined by manufacturer	Per Item	
5	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM AQ10: To supply, install and commission a oxides of nitrogen (NO_x) analyser

ITEM AQ10: To supply, install & commission a Oxides of Nitrogen (NO _x) analyser			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ10	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a Oxides of Nitrogen (NO _x) analyser	Per Instrument	
AQ10_A	Ancillary Components		
1	Service as per manufacturers specifications	Per Service	
2	UV light source as defined by manufacturer	Per Item	
3	Internal pump as defined by manufacturer	Per Item	
4	Spares kit as defined by manufacturer	Per Item	
5	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM AQ11: To supply, install & commission a Ozone (O₃) analyser

ITEM AQ11: To supply, install & commission a Ozone (O₃) analyser			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ11	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a Ozone (O ₃) analyser	Per Instrument	
AQ11_A	Ancillary Components		
1	Service as per manufacturers specifications	Per Service	
2	Ozone lamp source as defined by manufacturer	Per Item	
3	Ozone generator kit as defined by the manufacturer	Per Item	
4	Internal pump as defined by manufacturer	Per Item	
5	Spares kit as defined by manufacturer	Per Item	
6	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM AQ12: To supply, install & commission a Volatile Organic Compound (VOC) analyser equipped with a photo ionisation detector (PID)

ITEM AQ12: To supply, install & commission a Volatile Organic Compound (VOC) analyser equipped with a photo ionisation detector (PID)			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ12	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a volatile organic compound (VOC) analyser equipped with a photo ionisation detector (PID)	Per Instrument	
AQ12_A	Ancillary Components		
1	Service and verification as per manufacturers specifications	Per Service	
2	Column as defined by manufacturer	Per Item	
3	Light source (detector) as defined by the manufacturer	Per Item	
4	Spares kit as defined by the manufacturer	Per Item	

ITEM AQ13: To supply, install & commission a Pneumatic mast with a set of meteorological sensors

ITEM AQ13: To supply, install & commission a Pneumatic mast with a set of meteorological sensors			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ13	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a Pneumatic mast with a set of meteorological sensors	Per Instrument	
AQ13_A	Ancillary Components		
1	Service as per manufacturers specifications	Per Service	
2	Pneumatic mast with accessories	Per Item	
3	Anemometer	Per Item	
4	Relative humidity and temperature sensor	Per Item	
5	Solar radiation sensor	Per Item	
6	Barometric pressure sensor	Per Item	
7	Rain gauge with bird wire	Per Item	
8	Internal temperature sensor and controller	Per Item	
9	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM AQ14: To supply, install & commission a Mobile Ambient Air quality analyser housing unit

ITEM AQ14: To supply, install & commission a Mobile Ambient Air quality analyser housing unit			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ14	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a mobile ambient air quality analyser housing unit	Per Item	

ITEM AQ15: To supply & commission a Portable Multiple Parameter Continuous Ambient Air Quality monitoring analyser

ITEM AQ15: To supply & commission a Portable Multiple Parameter Continuous Ambient Air Quality monitoring analyser			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ15	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install & commission a portable multiple parameter continuous ambient air quality monitoring analyser	Per Instrument	
AQ15_A	Ancillary Components		
1	Service and verification as per manufacturers specifications	Per Service	

2	SO ₂ sensor units as per manufacturer specifications	Per Item	
3	NO _x sensor units as per manufacturer specifications	Per Item	
4	O ₃ sensor units as per manufacturer specifications	Per Item	
5	VOC sensor units as per manufacturer specifications	Per Item	
6	PM ₁₀ and PM _{2.5} sensor units as per manufacturer specifications	Per Item	
7	H ₂ S sensor units as per manufacturer specifications	Per Item	

ITEM AQ16: To supply and commission a Portable Particulate Matter Continuous Ambient Air quality monitoring analyser.

ITEM AQ16: To supply and commission a Portable Particulate Matter Continuous ambient air quality monitoring analyser			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ16	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply and commission a portable particulate matter continuous ambient air quality monitoring analyser	Per Instrument	
AQ16_A	Ancillary Components		
1	Service as per manufacturers specifications	Per Service	
2	PM ₁₀ and PM _{2.5} sensor units as per manufacturer specifications	Per Item	

ITEM AQ17: To supply, install and commission a ultimate Data Acquisition System (DAS) with software compatible with the ENVIDAS system to complement the air quality network

ITEM AQ17: To supply, install and commission a ultimate Data Acquisition System (DAS) with software compatible with the ENVIDAS system to complement the air quality network			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AQ17	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply, install and commission a ultimate Data Acquisition System (DAS) with software compatible with the ENVIDAS system to complement the air quality network	Per Instrument	
AQ17_A	Ancillary Components		
1	EnviDAQs 8017/8050 or equivalent to RS322	Per Item	
2	Multi-8-USB-232 converter from USB to 8 x RS232	Per Item	
3	USB or RJ45 (or equivalent) 8/16 port network hub	Per Item	

SECTION B: GROUND WATER MONITORING EQUIPMENT**ITEM GS1: To supply & commission a multimeter with a flow cell**

ITEM GS1: To supply & commission a Multimeter with a Flow cell			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
GS1	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply & commission a multimeter with a flow cell	Per Instrument	
GS1_A	Ancillary Components		
1	Service as per manufacturers specifications	Per Service	
2	Supply of a compatible flow cell	Per Item	
3	Supply of probes for Dissolved Oxygen (DO)	Per Item	
4	Supply of probes for pH	Per Item	
5	Supply of probes for Oxidation-reduction potential (ORP) or equivalent	Per Item	
6	Supply of probes for Conductivity (EC)	Per Item	
7	Supply of probes for Turbidity	Per Item	
8	Supply of probes for Temperature	Per Item	
9	Supply of probes for Total ammonia	Per Item	

ITEM GS2: To supply & commission a subsurface Gas Sampling monitor

ITEM GS2: To supply & commission a subsurface gas sampling monitor			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
GS2	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply & commission a subsurface gas sampling monitor	Per Instrument	
GS2_A	Ancillary Components		
1	Service and calibration as per manufacturers specifications	Per Service	

ITEM GS3: To supply & commission a Temperature, Conductivity and Water level meter for specific depth sampling

ITEM GS3: To supply & commission a temperature, conductivity and water level meter for specific depth sampling			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
GS3	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply & commission a temperature, conductivity and water level meter for specific depth sampling	Per Instrument	
GS3_A	<u>Ancillary Components</u>		
1	Service and calibration as per manufacturers specifications	Per Service	
2	Temperature sensor	Per item	
3	Conductivity sensor	Per item	
4	Water level sensor	Per item	

ITEM GS4: To supply & commission an interval/specific depth Sampling Bailer

ITEM GS4: To supply & commission an interval/specific depth sampling bailer			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
GS4	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply & commission an interval/specific depth sampling bailer	Per Instrument	
GS4_A	<u>Ancillary Components</u>		
1	Service as per manufacturers specifications	Per Service	
2	Supply of stainless steel bailer (1L capacity, 1m in length)	Per Item	
3	Supply of 100m tag line with 1M designated marking	Per Item	

ITEM GS5: To supply & commission a Soil Auger

ITEM GS5: To supply & commission a Soil Auger			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
GS5	Instrument (Please note the quotation must include all items listed in the specifications)		
	To supply & commission a soil auger	Per Instrument	

SECTION C: SAMPLING EQUIPMENT**ITEM SS1: To supply Transport Rechargeable Cooler with temperature display**

ITEM SS1: To supply Transport Rechargeable Cooler with temperature display			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
SS1	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply small transport cooler with temperature display (at least 20L)	Per Item	
2	To supply large transport cooler with temperature display (at least 60L)	Per Item	

ITEM SS2: To supply a water level indicator

ITEM SS2: To supply a water level indicator			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
SS2	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply a water level indicator containing reel assembly, tape, power source and water level indicator probe	Per Instrument	

ITEM SS3: To supply a Van Dorn water sampler

ITEM SS3: To supply a Van Dorn water sampler			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
SS3	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply a Van Dorn water sampler	Per Instrument	

ITEM SS4: To supply total algae sensors for detection of chlorophyll, phycocyanin and phycoerythrin in marine and freshwater cyanobacteria

ITEM SS4: To supply total algae sensors for detection of chlorophyll, phycocyanin and phycoerythrin in marine and freshwater cyanobacteria			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
SS4	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply a total algae sensor for chlorophyll	Per Instrument	

2	To supply a total algae sensor for phycocyanin	Per Instrument	
3	To supply a total algae sensor for phycoerythrin	Per Instrument	
SS4_A	<u>Ancillary Components</u>		
1	Service as per manufacturers specifications	Per Service	

ITEM SS5: To supply and commission a Portable Field Turbidity meter for onsite analysis

ITEM SS5: To supply and commission a portable field turbidity meter for onsite analysis			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
SS5	Instrument (Please note the quotation must include all items listed in the specifications)		
SS5_1	To supply and commission a portable field turbidity meter for onsite analysis	Per Instrument	
SS5_A	<u>Ancillary Components</u>		
1	Service as per manufacturers specifications	Per Service	

ITEM SS6: Supply & commission of digital portable free & total chlorine colorimeters to determine the chlorine concentration in water required for disinfection control

ITEM SS6: Supply & commission of digital portable free & total chlorine colorimeters to determine the chlorine concentration in water required for disinfection control			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
SS6	Instrument (Please note the quotation must include all items listed in the specifications)		
1	Supply & commission of digital portable free & total chlorine colorimeters to determine the chlorine concentration in water required for disinfection control	Per Instrument	
SS6_A	<u>Ancillary Components</u>		
1	Chlorine sensor unit	Per Item	
2	Reagents for 1000 free and 1000 total chlorine tests	Per Item	
3	2ml ampules certified reference material standards (with Certificate of Analysis) for free & total chlorine	Per Item	
4	Service as per manufacturers specifications.	Per Service	

ITEM SS7: The supply of a multi-parameter water quality sonde with titanium sensors and wet-mateable universal sensor ports.

ITEM SS7: The supply of a multi-parameter water quality sonde with titanium sensors and wet-mateable universal sensor ports.			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
SS7	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply of a multi-parameter water quality sonde with titanium sensors and wet-mateable universal sensor ports.	Per Instrument	
SS7_A	<u>Ancillary Components</u>		
1	Conductivity/Temperature sensor guard	Per Item	
2	pH/ORP sensor	Per Item	
3	Rhodamine sensor	Per Item	
4	Nitrate sensor	Per Item	
5	Dissolved oxygen	Per Item	
6	Total algae (phycocyanin and chlorophyll) sensor	Per Item	
7	Turbidity sensor	Per Item	
8	Ammonia	Per Item	
9	Cable length of 10m	Per Item	
10	Service as per manufacturers specifications.	Per Service	

ITEM SS8: The supply of a portable pH meter.

ITEM SS8: The supply of a Portable pH meter.			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
SS8	Instrument (Please note the quotation must include all items listed in the specifications)		
	The supply of a portable pH meter.	Per Instrument	
SS8_A	<u>Ancillary Components</u>		
1	Single junction electrodes	Per Item	
2	Double junction electrodes	Per Item	
3	A set of 500 pH 4 buffer solution sachets	Per Item	
4	A set of 500 pH 7 buffer solution sachets	Per Item	
5	A set of 500 pH 10 buffer solution sachets	Per Item	
6	500ml pH 4 buffer solution	Per item	
7	500ml pH 7 buffer solution	Per item	
8	500ml pH 10 buffer solution	Per item	
9	Specific and custom cable of 10 m length.	Per Item	
10	Service and verification as per manufacturers specifications.	Per Service	

ITEM SS9: The supply of a portable optical dissolved oxygen meter

ITEM SS9: The supply of a portable Optical Dissolved Oxygen meter			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
SS9	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply of a portable optical dissolved oxygen meter	Per Instrument	
SS9_A	Ancillary Components		
1	Dissolved Oxygen sensor	Per Item	
2	Dissolved Oxygen/Temperature sensor	Per Item	
3	Service as per manufacturer specifications	Per Service	

SECTION D: BIOLOGICAL LABORATORY EQUIPMENT**ITEM BS1: The supply & commissioning of a viewing cabinet with UV lamp**

ITEM BS1: The supply & commissioning of a viewing cabinet with UV lamp			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS1	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply & commissioning of a viewing cabinet with UV lamp	Per Instrument	
BS1_A	Ancillary Components		
1	UV lamp	Per Item	
2	Service as per manufacturer specifications	Per Service	

ITEM BS2: The supply, installation and commissioning of a quanti-tray sealer

ITEM BS2: The supply, installation and commissioning of a quanti-tray sealer			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS2	Instrument (Please note the quotation must include all items listed in the specifications)		
	The supply, installation and commissioning of a quanti-tray sealer	Per Instrument	
BS2_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM BS3: The supply, installation and commissioning of a calibrated incubator

ITEM BS3: The supply, installation and commission of a calibrated incubator			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS3	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a calibrated incubator (160L)	Per Instrument	
2	The supply, installation and commissioning of a calibrated incubator (500L)	Per Instrument	
BS3_A	Ancillary Components		
1	ISO 17025 calibration with metrological traceability to national or international standards	Per calibration	

ITEM BS4: The supply, installation and commissioning of a calibrated oven

ITEM BS4: The supply, installation and commission of a calibrated ovens			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS4	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commission of a calibrated oven (160L)	Per Instrument	
2	The supply, installation and commission of a calibrated oven (250L)	Per Instrument	
BS4_A	Ancillary Components		
1	ISO 17025 calibration with metrological traceability to national or international standards	Per calibration	

**ITEM BS5: The supply, installation and commission of a Filta-Max Xpress elution station for
Crypto/Giardia analysis**

ITEM BS5: The supply, installation and commission of a Filta-Max Xpress elution station for Crypto/Giardia analysis			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS5	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commission of a Filta-Max Xpress elution station for Crypto/Giardia analysis	Per Instrument	
BS5_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM BS6: The supply and commissioning of calibrated water bath circulators with water bath reservoirs

ITEM BS6: The supply and commissioning of calibrated water bath circulators with water bath reservoirs			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS6	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and commissioning of calibrated water bath circulators with water bath reservoirs	Per Instrument	
BS6_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	
2	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM BS7: The supply of calibrated stainless steel temperature loggers

ITEM BS7: The supply of calibrated stainless steel temperature loggers			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS7	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply of calibrated stainless steel temperature loggers	Per Instrument	
BS7_A	Ancillary Components		
1	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM BS8: The supply, installation and commissioning of an inverted light microscope with camera for microscopic analysis

ITEM BS8: The supply, installation and commissioning of an inverted light microscope with camera for microscopic analysis for the analysis of algal identification and enumeration as well as other required microscopy analysis of drinking and raw waters			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS8	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of an inverted light microscope with camera for microscopic analysis for the analysis of algal identification and enumeration as well as other required microscopy analysis of drinking and raw waters	Per Instrument	
BS8_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM BS9: The supply, installation and commissioning of a single tube luminometer

ITEM BS9: The supply, installation and commissioning of a single tube luminometer			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS9	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a single tube luminometer	Per Instrument	
BS9_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM BS10: The supply, installation and commissioning of a tintometer/thermostatically controlled cabinet

ITEM BS10: The supply, installation and commissioning of a tintometer/thermostatically controlled cabinet			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS10	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a tintometer/thermostatically controlled cabinet	Per Instrument	
BS10_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	
2	ISO 17025 calibration with metrological traceability to national or international standards	Per calibration	

ITEM BS11: The supply, installation and commissioning of a chiller

ITEM BS11: The supply, installation and commissioning of a chiller			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS11	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a chiller	Per Instrument	
BS11_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM BS12: The supply and commissioning of a digital micrometer

ITEM BS12: The supply and commissioning of a digital micrometer			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS12	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and delivery of a digital micrometer	Per Instrument	
BS12_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM BS13: The supply, installation and commissioning of an automated colony counter

ITEM BS13: The supply, installation and commissioning of an automated colony counter			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS13	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commission of an automated colony counter	Per Instrument	
BS13_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM BS14: To supply, install & commission a bench-top incubator for toxicity

ITEM BS14: To supply, install & commission a bench-top incubator for toxicity			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS14	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply, install & commission a bench-top tox incubator	Per Instrument	
BS14_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	
2	Set of lamps	Per item	
3	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM BS15: The supply and commissioning of a luxmeter

ITEM BS15: The supply and commissioning of a luxmeter			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS15	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply a luxmeter	Per Instrument	
BS14_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM BS16: To supply and commission a portable microscope for macroinvertebrate identification-biomonitoring

ITEM BS16: To supply and commission a portable microscope for macroinvertebrate identification-biomonitoring			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS16	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply and commission of a portable microscope for macroinvertebrate identification-biomonitoring	Per Instrument	
BS16_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM BS17: To supply and commission a Class II Type A2 Biological safety cabinet

ITEM BS17: To supply and commission a Class II Type A2 Biological safety cabinet			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS17	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply and commission a Class II Type A2 Biological safety cabinet	Per Instrument	
BS17_A	Ancillary Components		
1	Service and verification as per manufacturer specifications	Per Service	
2	UV lamp	Per item	
3	Set of 2 ULPA filters	Per item	

ITEM BS18: To supply and commission a compressed cooled incubator

ITEM BS18: To supply and commission a compressed cooled incubator			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS18	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply and commission a compressed cooled incubator (approximately 32L)	Per Instrument	
2	To supply and commission a compressed cooled incubator (approximately 700L)	Per Instrument	
BS18_A	Ancillary Components		
1	ISO 17025 calibration with metrological traceability to national or international standards	Per calibration	

ITEM BS19: To supply and commission a safety storage cabinet

ITEM BS19: To supply and commission a safety storage cabinet			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS19	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply and commission a safety storage cabinet	Per Instrument	

ITEM BS20: To supply and commission a ultra-low volume fogging machine

ITEM BS20: To supply and commission a ultra-low volume fogging machine			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
BS20	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply and commission of ultra-low volume fogging machine	Per Instrument	

SECTION E: MOLECULAR LABORATORY EQUIPMENT**ITEM ML1: To supply, install and commission a Capillary Electrophoresis: Sanger Sequencing****Instrument**

ITEM ML1: To supply, install and commission a Capillary Electrophoresis: Sanger Sequencing Instrument			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
ML1	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply, install and commission a Capillary Electrophoresis: Sanger Sequencing Instrument	Per Instrument	
ML1_A	Ancillary Components		
1	A set of 96 capillary arrays	Per Item	
2	A set of 100 pre-filled containers with buffer solutions	Per Item	
3	A set of 100 polymer pouches and conditioning reagents.	Per Item	
4	A set of polymer 96-well microtiter plates.	Per Item	
5	Microtiter plate holder.	Per Item	
6	Service as per manufacturer specifications	Per Service	

ITEM ML2: The supply and commissioning of a rapid, easy-to-use molecular based instrument to detect a range of high-risk pathogens (such as bacteria, parasites, viruses) in a single semi-solid or solid sample such as sludge or compost.

ITEM ML2: The supply and commissioning of a rapid, easy-to-use molecular based instrument to detect a range of high-risk pathogens (such as bacteria, parasites, viruses) in a single semi-solid or solid sample such as sludge or compost.			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
ML2	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, delivery and commissioning of a rapid, easy-to-use molecular based instrument to detect a range of high-risk pathogens (such as bacteria, parasites, viruses) in a single semi-solid or solid sample such as sludge or compost.	Per Instrument	
ML2_A	Ancillary Components		
1	A set reagents/kits for the analysis of 100 samples.	Per Item	
2	A set of media and controls for 100 samples.	Per Item	
3	Service as per manufacturer specifications	Per Service	

ITEM ML3: To supply, install and commission a Next Generation Sequencing Instrument which is able to rapidly identify and group multiple micro-organisms, present in a sample, into specific levels/categories example class, family, genus, species.

ITEM ML3: To supply, install and commission a Next Generation Sequencing Instrument which is able to rapidly identify and group multiple micro-organisms, present in a sample, into specific levels/categories example class, family, genus, species.			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
ML3	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply, install and commission a Next Generation Sequencing Instrument which is able to rapidly identify and group multiple micro-organisms, present in a sample, into specific levels/categories example class, family, genus, species.	Per Instrument	
ML3_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM ML4: The supply and commissioning of a Laboratory Freezer, Upright model, 544L, -20°C to -40°C to be able to store extracted nucleic acid material (DNA and RNA) over longer periods of time (months).

ITEM ML4: The supply and commissioning of a Laboratory Freezer, Upright model, 544L, -20°C to -40°C to be able to store extracted nucleic acid material (DNA and RNA) over longer periods of time (months).			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
ML4	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and commissioning of a Laboratory Freezer, Upright model, 544L, -20°C to -40°C to be able to store extracted nucleic acid material (DNA and RNA) over longer periods of time (months).	Per Instrument	
ML4_A	Ancillary Components		
1	Service and verification as per manufacturer specifications	Per Service	

ITEM ML5: The supply and commissioning of a Laboratory Ultra low temperature (-80°C) freezer to be able to store extracted nucleic acid material (DNA and RNA) over long periods of time (years).

ITEM ML5: The supply and commissioning of a Laboratory Ultra low temperature (-80°C) freezer to be able to store extracted nucleic acid material (DNA and RNA) over long periods of time (years).			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
ML5	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and commissioning of a Laboratory Freezer, Upright model, 544L, -20°C to -40°C to be able to store extracted nucleic acid material (DNA and RNA) over longer periods of time (months).	Per Instrument	
ML5_A	<u>Ancillary Components</u>		
1	2 sets of Cryo safety gloves	Per Item	
2	Standard Cardboard minimum 60 Cell Divider	Per Item	
3	Modifiable Clip Rack for Standard 2-inch High Boxes and/or 3-inch High Boxes	Per Item	
4	Service as per manufacturer specifications	Per Service	

ITEM ML6: The supply, installation and commissioning of a floor-standing centrifuge to assist with processing/centrifuging large volume of samples and high volumes.

ITEM ML6: The supply, installation and commissioning of a floor-standing centrifuge to assist with processing/centrifuging large volume of samples and high volumes.			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
ML6	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a floor-standing centrifuge to assist with processing/centrifuging large volume of samples and high volumes.	Per Instrument	
ML6_A	<u>Ancillary Components</u>		
1	A set of 2 aluminium rotors	Per Item	
2	A fixed angle and swing bucket	Per Item	
3	A microtiter rotor kit	Per Item	
4	A set of 2 buckets	Per Item	
5	A set of 10 autoclavable tubes	Per Item	
6	Service as per manufacturer specifications	Per Service	
7	ISO 17025 calibration with metrological traceability to national or international standards	Per calibration	

ITEM ML7: The supply, installation and commissioning of an Incubator: CO2 for the Molecular laboratory

ITEM ML7: The supply, installation and commissioning of an Incubator: CO2 for the Molecular laboratory			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
ML7	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of an Incubator: CO2 for the Molecular laboratory	Per Instrument	
ML7_A	<u>Ancillary Components</u>		
1	A set of 2 incubator jars with petri-dish holders	Per Item	
2	Service as per manufacturer specifications	Per Service	
3	ISO 17025 calibration with metrological traceability to national or international standards	Per calibration	

ITEM ML8: The supply, installation and commissioning of a laboratory fridge/freezer combination to store water and environmental samples and extracted nucleic acid material (DNA and RNA) for short periods of time.

ITEM ML8: The supply, installation and commissioning of a laboratory fridge/freezer combination to store water and environmental samples and extracted nucleic acid material (DNA and RNA) for short periods of time.			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
ML8	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a laboratory fridge/freezer combination to store water and environmental samples and extracted nucleic acid material (DNA and RNA) for short periods of time.	Per Instrument	
ML8_A	<u>Ancillary Components</u>		
1	Service and verification as per manufacturer specifications	Per Service	

ITEM ML9: The supply, installation and commissioning of a Polymer Reaction (PCR) hoods with UV lamps

ITEM ML9: The supply, installation and commissioning of a Polymer Reaction (PCR) hoods with UV lamps			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
ML9	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a Polymer Reaction (PCR) hoods with UV lamps	Per Instrument	
ML9_A	<u>Ancillary Components</u>		
1	Service as per manufacturer specifications	Per Service	
2	UV lamps	Per item	

ITEM ML10: The supply, installation and commissioning of a laminar flow hood with UV lamp for downstream applications of PCR products in the molecular lab

ITEM ML10: The supply, installation and commissioning of a laminar flow hood with UV lamp for downstream applications of PCR products in the molecular lab			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
ML10	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a laminar flow hood with UV lamp for downstream applications of PCR products in the molecular lab	Per Instrument	
ML10_A	<u>Ancillary Components</u>		
1	A set of 2 ULPA filters	Per Item	
2	UV lamp	Per item	
3	Service as per manufacturer specifications	Per Service	

SECTION F: ANALYTICAL LABORATORY EQUIPMENT

ITEM AC1: The supply and commissioning of a bench-top high-frequency ultrasonic bath sonicator

ITEM AC1: The supply and commissioning of a bench-top high-frequency ultrasonic bath sonicator			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC1	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and commissioning of a bench-top high-frequency ultrasonic bath sonicator	Per Instrument	

AC1_A	<u>Ancillary Components</u>		
1	Mesh basket	Per Item	
2	Perforated tray	Per Item	
3	Solid tray	Per Item	
4	Lid	Per item	
5	Service as per manufacturer specifications	Per Service	

ITEM AC2: The supply of a benchtop oil-less vacuum pump

ITEM AC2: The supply of a benchtop oil-less vacuum pump			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC2	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply of a benchtop oil-less vacuum pump	Per Item	

ITEM AC3: The supply, installation and commissioning of a laboratory water purification system

ITEM AC3: The supply, installation and commissioning of a laboratory water purification system			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC3	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a laboratory water purification system	Per Instrument	
AC3_A	<u>Ancillary Components</u>		
1	Supply of pre-filters (activated charcoal, 1 µm, 0.5µm or equivalent)	Per Item	
2	Supply and replacement of tank level sensors	Per Item	
3	Supply and replacement of RO membranes (if applicable)	Per Item	
4	Service as per manufacturer specifications	Per Service	

ITEM AC4: The supply and commissioning of a calibrated analytical balance

ITEM AC4: The supply and commissioning of a calibrated analytical balance			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC4	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and commissioning of a calibrated analytical balance	Per Instrument	
AC4_A	<u>Ancillary Components</u>		
1	ISO 17025 calibration including certificate with metrological traceability to national or	Per service	

	international standards		
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ITEM AC5: The supply and commissioning of a calibrated laboratory top loading balance

ITEM AC5: The supply and commissioning of a calibrated laboratory top loading balance			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC5	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and commissioning of a calibrated laboratory top loading balance (5kg capacity)	Per Instrument	
2	The supply and commissioning of a calibrated laboratory top loading balance (10kg capacity)	Per Instrument	
AC5_A	<u>Ancillary Components</u>		
1	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM AC6: The supply and delivery of a set of ISO17025 calibrated automatic pipettes with tips

ITEM AC6: The supply and delivery of a set of ISO17025 calibrated automatic pipettes with tips			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC6	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and delivery of a set of ISO 17025 Calibrated Pipettes with tips	Per Set including all Ancillary components specified	
AC6_A	<u>Ancillary Components</u>		
1	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	
2	The supply of one automatic pipette (20 µL)	Per Item	
3	The supply of one automatic pipette (200 µL)	Per Item	
4	The supply of one automatic pipette (1000 µL)	Per Item	
5	The supply of one automatic pipette (5000 µL)	Per Item	
6	The supply of one automatic pipette (10000 µL)	Per Item	
7	The supply of 1000 x 10 000 µL autoclavable pipette tips	Per Item	
8	The supply of 1000 x 5 000 µL autoclavable pipette tips	Per Item	
9	The supply of 1000 x 1 000 µL autoclavable pipette tips	Per Item	
10	The supply of 1000 x 200 µL autoclavable pipette tips	Per Item	

11	The supply of 1000 x 20 µL autoclavable pipette tips	Per Item	
12	The supply of 1000 x 2 µL autoclavable pipette tips	Per Item	
13	Supply and Replace piston assembly	Per item	

ITEM AC7: Supply and commissioning of an ISO17025 calibrated vertical-type steam autoclave

ITEM AC7: Supply and commissioning of an ISO17025 calibrated vertical-type steam autoclave			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC7	Instrument (Please note the quotation must include all items listed in the specifications)		
1	Supply and commissioning of an ISO17025 calibrated vertical-type steam autoclave	Per Instrument	
AC7_A	Ancillary Components		
1	Supply and installation of heating element	Per Item	
2	Service as per manufacturer specifications	Per Service	
3	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM AC8: The supply, installation and commissioning of air compressor compatible with Milestone DMA 80 and DMA 80 evo mercury analyser

ITEM AC8: The supply, installation and commissioning of air compressor compatible with Milestone DMA 80 and DMA 80 evo mercury analyser			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC8	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of air compressor compatible with Milestone DMA 80 and DMA 80 evo mercury analyser	Per Instrument	
AC8_A	Ancillary Components		
1	Supply of carbon filters	Per Item	
2	Service as per manufacturer specifications	Per Service	

ITEM AC9: The supply, installation and commissioning of an inductively coupled plasma optical emission spectroscopy instrument (ICP-OES) for the analysis of metals in water, wastewater, sludge and soil.

ITEM AC9: The supply, installation and commissioning of an inductively coupled plasma optical emission spectroscopy instrument (ICP-OES) for the analysis of metals in water, wastewater, sludge and soil.			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC9	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of an inductively coupled plasma optical emission spectroscopy instrument (ICP-OES) for the analysis of metals in water, wastewater, sludge and soil.	Per Instrument	
AC9_A	Ancillary Components		
1	Supply of calibration standards (CRMs) with CoA's Multi-metal standard (1000 mg/L), 500 mL, each must have a different batch number	Per Item	
2	4 x sets of ICP peristaltic pump tubing	Per Item	
3	Supply of 100 sample cups	Per Item	
4	Supply and install peltier cooling device (or equivalent)	Per service	
5	Service as per manufacturer specifications	Per Service	

ITEM AC10: The supply, installation and commissioning of a discrete analyser for determination of organic and inorganic compounds in water samples

ITEM AC10: The supply, installation and commissioning of a discrete analyser for determination of organic and inorganic compounds in water samples			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC10	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a discrete analyser for determination of organic and inorganic compounds in water samples	Per Instrument	
AC10_A	Ancillary Components		
1	Electrochemical module for analysis of pH and EC	Per Item	
2	Service as per manufacturer specifications	Per Service	
3	Box of sample vials	Per box	
4	Box of cuvettes	Per box	

ITEM AC11: The supply, installation and commissioning of a laboratory glassware washer

ITEM AC11: The supply, installation and commissioning of a laboratory glassware washer			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC11	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a laboratory glassware washer	Per Instrument	
AC11_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM AC12: To supply, install & commission a open reflux chemical oxygen demand digestion unit

ITEM AC12: To supply, install & commission a open reflux chemical oxygen demand digestion unit			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC12	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply, install & commission a chemical oxygen demand digestion unit	Per Instrument	
AC12_A	Ancillary Components		
1	Supply of insert sample racks for 20 tubes	Per Item	
2	Supply of insert rack for water condensers (20 tubes)	Per Item	
3	Supply of COD Digestion round bottom tubes (250 mL)	Per Item	
4	Supply of COD Water Condensers	Per Item	
5	Service as per manufacturers specifications	Per Service	

ITEM AC13: To supply, install & commission an automated dilution system for preparation of primary standards

ITEM AC13: To supply, install & commission an automated dilution system for preparation of primary standards			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC13	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply, install & commission an automated dilution system for preparation of primary standards	Per Instrument	
AC13_A	Ancillary Components		
1	Amber bottles (1L) compatible with the automated dilution system	Per Item	
2	Clear bottles (1L) compatible with the automated dilution system	Per Item	
3	Service and verification as per manufacturer specification	Per Service	

ITEM AC14: To supply, install & commission a microwave digester

ITEM AC14: To supply, install & commission a microwave digester			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC14	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply, install & commission a microwave digester	Per Instrument	
AC14_A	Ancillary Components		
1	PTFE Teflon vessels with a volume of not less than 100 mL	Per Item	
2	Service and as per manufacturer specification	Per Service	
2	ISO 17025 calibration of temperature with metrological traceability of national or international standards	Per service	

ITEM AC15: To supply, install & commission an on-demand acid purification system

ITEM AC15: To supply, install & commission an on-demand acid purification system			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC15	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply, install & commission a on-demand acid purification system	Per Instrument	
AC15_A	Ancillary Components		
1	Collection vessel	Per Item	
2	Replacement condenser	Per Item	
3	Replacement heating element	Per Item	
4	Service as per manufacturer specification	Per Service	

ITEM AC16: To supply, install & commission a laboratory fume extraction cabinet

ITEM AC16: To supply, install & commission a laboratory fume extraction cabinet			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
AC16	Instrument (Please note the quotation must include all items listed in the specifications)		
1	To supply, install & commission a laboratory fume extraction cabinet	Per Instrument	
AC16_A	Ancillary Components		
1	Service verification and as per manufacturer specification	Per Service	
2	Stand for free standing option	Per item	

SECTION G: PROCESS TECHNOLOGY LABORATORY EQUIPMENT

ITEM PT1: The supply, installation and commissioning of a benchtop laboratory turbidity meter for the measurement of turbidity.

ITEM PT1: The supply, installation and commissioning of a benchtop laboratory turbidity meter for the measurement of turbidity.			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT1	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a bench top laboratory turbidity meter for the measurement of turbidity.	Per Instrument	
PT1_A	<u>Ancillary Components</u>		
1	A set of 10 sample vials	Per Item	
2	Service and verification as per manufacturer specifications	Per Service	

ITEM PT2: The supply, installation and commissioning of a bench top laboratory auto titrator for the measurement of alkalinity

ITEM PT2: The supply, installation and commissioning of a bench top laboratory auto titrator for the measurement of alkalinity			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT2	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a bench top laboratory auto titrator for the measurement of alkalinity	Per Instrument	
PT2_A	<u>Ancillary Components</u>		
1	A pH electrode as per manufacturer specifications	Per Item	
2	Service and verification as per manufacturer specifications	Per Service	

ITEM PT3: The supply, installation and commissioning of a bench top laboratory pH and conductivity meter.

ITEM PT3: The supply, installation and commissioning of a bench top laboratory pH and conductivity meter.			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT3	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a bench top laboratory pH and conductivity meter.	Per Instrument	
PT3_A	Ancillary Components		
1	A pH electrode as per manufacturer specifications	Per Item	
2	A EC (conductivity) electrode as per manufacturer specifications	Per Item	
3	Service and verification as per manufacturer specifications	Per Service	

ITEM PT4: The supply, installation and commissioning of a benchtop laboratory spectrophotometer, able to measure in the UV and VIS range to analyse for various water quality parameters at on-site and mobile laboratories

ITEM PT4: The supply, installation and commissioning of a benchtop laboratory spectrophotometer, able to measure in the UV and VIS range to analyse for various water quality parameters at on-site and mobile laboratories			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT4	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a benchtop laboratory spectrophotometer, able to measure in the UV and VIS range to analyse for various water quality parameters at on-site and mobile laboratories	Per Instrument	
PT4_A	Ancillary Components		
1	Al Cell or reagent test kits	Per Item	
2	Fe Cell or reagent test kits	Per Item	
3	Mn Cell or reagent test kits	Per Item	
4	Ca Cell or reagent test kits	Per Item	
5	Mg Cell or reagent test kits	Per Item	
6	K Cell or reagent test kits	Per Item	
7	PO ₄ Cell or reagent test kits	Per Item	
8	NO ₃ Cell or reagent test kits	Per Item	
9	NO ₂ Cell or reagent test kits	Per Item	
10	Cl Cell or reagent test kits	Per Item	
11	NH ₄ Cell or reagent test kits	Per Item	
12	BOD Cell or reagent test kits	Per Item	

13	10 mm quartz glass rectangular cuvette cells	Per Item	
14	Set of 50 x 10 mm glass rectangular cuvette cells	Per Item	
15	20 mm glass rectangular cuvette cells	Per Item	
16	50 mm glass rectangular cuvette cells	Per Item	
17	100 mm glass rectangular cuvette cells	Per Item	
18	Service as per manufacturer specifications	Per Service	

ITEM PT5: The supply, installation and commissioning of Vaccine Fridge/Freezer long holdover 180-220L

ITEM PT5: The supply, installation and commissioning of Vaccine Fridge/Freezer long holdover 180-220L			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT5	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and delivery of Vaccine Fridge/Freezer long holdover 180-220L	Per Item	
PT5_A	<u>Ancillary Components</u>		
1	Service and temperature verification as per manufacturer specifications to comply to ISO17025 requirements	Per Service	

ITEM PT6: The supply, installation and commissioning of Vaccine Fridge/Freezer long holdover 290-320L

ITEM PT6: The supply, installation and commissioning of Vaccine Fridge/Freezer long holdover 290-320L			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT6	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and delivery of Vaccine Fridge/Freezer long holdover 290-320L	Per Item	
PT6_A	<u>Ancillary Components</u>		
1	Service and temperature verification as per manufacturer specifications to comply to ISO17025 requirements	Per Service	

ITEM PT7: The supply and commissioning of a benchtop viscometer

ITEM PT7: The supply and commissioning of a benchtop viscometer			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT7	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and delivery of a benchtop viscometer	Per Instrument	
PT7_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM PT8: The supply, installation and commissioning of a flame atomic absorption spectrometer (FAAS)

ITEM PT8: The supply, installation and commissioning of a flame atomic absorption spectrometer (FAAS)			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT8	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a flame atomic absorption spectrometer (FAAS)	Per Instrument	
PT8_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	
2	Supply of calibration kits.	Per service	
3	Supply of optimised nebulizer assembly	Per Item	
4	Aluminium Single element AA lamp	Per Item	
5	Arsenic Single element AA lamp	Per Item	
6	Boron Single element AA lamp	Per Item	
7	Cadmium Single element AA lamp	Per Item	
8	Chromium Single element AA lamp	Per Item	
9	Iron Single element AA lamp	Per Item	
10	Lead Single element AA lamp	Per Item	
11	Manganese Single element AA lamp	Per Item	
12	Nickel Single element AA lamp	Per Item	
13	Selenium Single element AA lamp	Per Item	
14	Calcium / Magnesium Multi-element AA lamp	Per Item	
15	Copper / Zinc Multi-element AA lamp	Per Item	

ITEM PT9: The supply, installation and commissioning of a benchtop chamber furnace

ITEM PT9: The supply, installation and commissioning of a benchtop chamber furnace			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT9	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a benchtop chamber furnace	Per Instrument	
PT9_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM PT10: The supply and delivery of a portable digital water hardness meter

ITEM PT10: The supply and delivery of a portable digital water hardness meter			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT10	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and delivery of a portable digital water hardness meter	Per Instrument	
PT10_A	Ancillary Components		
1	Supply of robust and portable carrying case	Per Item	
2	Supply of reagent kits (total + calcium hardness)	Per Item	
3	Supply of calibration kits (total + calcium hardness)	Per Item	
4	Service as per manufacturer specifications	Per Service	

ITEM PT11: The supply and delivery of mesh screen sieve shaker and corresponding sieves

ITEM PT11: The supply and delivery of mesh screen sieve shaker and corresponding sieves			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT11	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and delivery of mesh screen sieve shaker and corresponding sieves	Per Instrument	
PT11_A	Ancillary Components		
1	Supply of US mesh size 4 mm	Per Item	
2	Supply of US mesh size 2 mm	Per Item	
3	Supply of US mesh size 1 mm	Per Item	
4	Supply of US mesh size 500 um	Per Item	
5	Supply of US mesh size 250 um	Per Item	
6	Supply of US mesh size 125 um	Per Item	
7	Supply of US mesh size 63 um	Per Item	
8	Supply of US mesh size 31 um	Per Item	
9	Supply of US mesh size 15. 6 um	Per Item	
10	Supply of US mesh size 7.8 um	Per Item	

11	Supply of US mesh size 3.9 um	Per Item	
12	Supply of US mesh size 0.06 um	Per Item	
13	Supply of fastening belts/clamps	Per Item	

ITEM PT12: The supply, delivery and commissioning of overhead stirrers

ITEM PT12: The supply, delivery and commissioning of overhead stirrers			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT12	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, delivery and commissioning of overhead stirrers	Per Instrument	
PT12_A	<u>Ancillary Components</u>		
1	Plate stands for overhead stirrers	Per item	
2	All straps/clamps to fasten the stirrer to the plate stand	Per item	
3	Agitator shafts and impellers	Per item	
4	Service as per manufacturer's specifications	Per service	

ITEM PT13: The supply, delivery and commissioning of tank agitators

ITEM PT13: The supply, delivery and commissioning of tank agitators			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT13	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, delivery and commissioning of tank agitators	Per Instrument	
PT13_A	<u>Ancillary Components</u>		
1	All straps/clamps to fasten the agitator to the horizontal base	Per item	
2	Agitator shafts and impellers	Per item	
3	Service as per manufacturer's specifications	Per Service	

ITEM PT14: The supply, delivery and commissioning of high precision peristaltic pump

ITEM PT14: The supply, delivery and commissioning of high precision peristaltic pump			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT14	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, delivery and commissioning of high precision peristaltic pump	Per Instrument	
PT14_A	<u>Ancillary Components</u>		

1	Service as per manufacturer's specifications	Per Service	
2	Pump Tubing	Per item	

ITEM PT15: The supply, delivery and commissioning of high flow peristaltic pump

ITEM PT15: The supply, delivery and commissioning of high flow peristaltic pump			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT15	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, delivery and commissioning of high flow peristaltic pump	Per Instrument	
PT15_A	Ancillary Components		
1	Service as per manufacturer's specifications	Per Service	
2	Pump Tubing	Per item	

ITEM PT16: The supply, delivery and commissioning of an automatic titrator

ITEM PT16: The supply, delivery and commissioning of an automatic titrator			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT16	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, delivery and commissioning of an automatic titrator	Per Instrument	
PT16_A	Ancillary Components		
1	Service and verification as per manufacturer's specifications	Per Service	

ITEM PT17: The supply of ISO17025 calibrated bottle top dispensers

ITEM PT17: The supply of ISO17025 calibrated bottle top dispensers			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT17	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply of an ISO17025 calibrated bottle top dispensers (0-10 mL)	Per Instrument	
2	The supply of an ISO17025 calibrated bottle top dispensers (2.5-25 mL)	Per Instrument	
3	The supply of an ISO17025 calibrated bottle top dispensers (5-50 mL)	Per Instrument	
4	The supply of an ISO17025 calibrated bottle top dispensers (10-100 mL)	Per Instrument	
PT17_A	Ancillary Components		

1	Service as per manufacturer's specifications	Per service	
2	ISO 17025 Calibration with metrological traceability to national or international standards	Per Service	

ITEM PT18: The supply of an ISO17025 calibrated benchtop centrifuge

ITEM PT18: The supply of an ISO17025 calibrated benchtop centrifuge			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT18	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply of an ISO17025 calibrated benchtop centrifuge	Per Instrument	
PT18_A	Ancillary Components		
1	Service as per manufacturer's specifications	Per Service	
2	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM PT19: The supply and commissioning of an ISO17025 calibrated water/oil bath

ITEM PT19: The supply and commissioning of an ISO17025 calibrated water/oil bath			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT19	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and commissioning of an ISO17025 calibrated water/oil bath (5L)	Per Instrument	
2	The supply of an ISO17025 calibrated water/oil bath (25L)	Per Instrument	
PT19_A	Ancillary Components		
1	Service as per manufacturer's specifications	Per Service	
2	ISO 17025 calibration with metrological traceability to national or international standards	Per Service	

ITEM PT20: The supply and installation of an overhead shaker

ITEM PT20: The supply and installation of an overhead shaker			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT20	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and installation of an overhead shaker	Per Instrument	
PT20_A	Ancillary Components		
1	Service as per manufacturer's specifications	Per Service	

ITEM PT21: The supply and installation of a laboratory platform shaker

ITEM PT21: The supply and installation of a laboratory platform shaker			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT21	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and installation of a laboratory platform shaker	Per Instrument	
PT21_A	Ancillary Components		
1	Service as per manufacturer's specifications	Per Service	

ITEM PT22: The supply of a calibrated handheld liquid flow meter

ITEM PT22: The supply of a calibrated handheld liquid flow meter			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT22	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply of a calibrated handheld liquid flow meter	Per Instrument	
PT22_A	Ancillary Components		
1	Service and verification as per manufacturer's specifications	Per Service	

ITEM PT23: The supply, delivery and commissioning of a benchtop Fourier-transform infrared (FT-IR) spectroscopy instrument

ITEM PT23: The supply, delivery and commissioning of a benchtop Fourier-transform infrared (FT-IR) spectroscopy instrument			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT23	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, delivery and commissioning of a benchtop Fourier-transform infrared (FT-IR) spectroscopy instrument	Per Instrument	
PT23_A	Ancillary Components		
1	Service as per manufacturer's specifications	Per Service	
2	Moving Mirror ASSY including all consumables required	Per service	
3	Replacement of KBR window	Per service	
4	Replacement of Dessicant	Per service	

ITEM PT24: The supply and delivery of Phipps and Bird (or equivalent) jar testers

ITEM PT24: The supply and delivery of Phipps and Bird (or equivalent) jar testers			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT24	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply and delivery of Phipps and Bird (or equivalent) jar testers	Per Instrument	

ITEM PT25: The design, supply, installation and commissioning of a modular drinking water and wastewater treatment plant

ITEM PT25: The design, supply, installation and commissioning of a modular drinking water and wastewater treatment plant			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT25	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The design, supply, installation and commissioning of a modular drinking water and wastewater treatment plant	Per Instrument	

ITEM PT26: The supply, installation and commissioning a rotary evaporation instrument

ITEM PT26: The supply, installation and commissioning a rotary evaporation instrument			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT26	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning a rotary evaporation instrument	Per Instrument	
PT26_A	Ancillary Components		
1	A set of 10 sample vials	Per Item	
2	Service as per manufacturer specifications	Per Service	

ITEM PT27: The supply, installation and commissioning of a mechanical high energy planetary ball mill

ITEM PT27: The supply, installation and commissioning of a mechanical high energy planetary ball mill			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT27	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a mechanical high energy planetary ball mill	Per Instrument	
PT27_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	

ITEM PT28: The supply, installation and commissioning of a gas chromatograph mass spectrometer for determination of organic compounds

ITEM PT28: The supply, installation and commissioning of a gas chromatograph mass spectrometer for determination of organic compounds			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT28	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The supply, installation and commissioning of a gas chromatograph mass spectrometer for determination of organic compounds	Per Instrument	
PT28_A	Ancillary Components		
1	Service as per manufacturer specifications	Per Service	
2	DB-5MS 30m x 0.25mm x 0.25um (or equivalent)	Per item	
3	DB-624 30m x 0.53mm x 3um (or equivalent)	Per item	
4	1000 crimp vials with caps (2ml)	Per item	
5	1000 vials and caps for purge and trap analysis	Per item	
6	Syringe 250 µl	Per item	
7	Syringe 500 µL	Per item	

ITEM PT29: The upgrade, installation and commissioning of a PAL rail on an Agilent 7890B GC-QqQMS a gas chromatograph mass spectrometer

ITEM PT29: The upgrade, installation and commissioning of a PAL rail on an Agilent 7890B GC-QqQMS a gas chromatograph mass spectrometer			
Item no	Description	Unit of measure	Price per unit (Excl VAT)
PT29	Instrument (Please note the quotation must include all items listed in the specifications)		
1	The upgrade, installation and commissioning of a PAL rail on an Agilent 7890B GC-QqQMS a gas chromatograph mass spectrometer	Per Instrument	
PT29_A	Ancillary Components		
1	Supply of 10 x SMART SPME arrow fibers (PDMS 100µm; 23ga; 1cm)	Per Item	
2	Supply of 10 x SMART SPME arrow fibers (PDMS 7µm; 23ga; 1cm)	Per Item	
3	Supply of 10 x SMART SPME arrow fibers (PA 85µm; 23ga; 1cm)	Per Item	
4	Supply of 10 x SMART SPME arrow fibers (PEG 60µm; 23ga; 1cm)	Per Item	
5	Supply of 10 x SMART SPME arrow fibers (PDMS/DVB 65µm; 23ga; 1cm)	Per Item	
6	Supply of 10 x SMART SPME arrow fibers (CAR/PDMS 75µm; 23ga; 1cm)	Per Item	
7	Supply of 10 x SMART SPME arrow fibers (DVB/CAR/PDMS 30/50µm; 23ga; 1cm)	Per Item	
8	Supply of 10 x SMART SPME arrow fibers (DVB/CAR/PDMS 30/50µm; 23ga; 2cm)	Per Item	
9	Service as per manufacturer specifications	Per Service	

Pricing Instructions:

- 5.1 State the rates and prices in Rand unless instructed otherwise in the Conditions of Tender.
- 5.2 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the General Tender Information.
- 5.3 All prices tendered must include all expenses, disbursements and costs (e.g. transport, accommodation etc.) that may be required for the execution of the tenderer's obligations in terms of the Contract, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the Contract as well as overhead charges and profit (in the event that the tender is successful). All prices tendered will be final and binding.
- 5.4 All prices shall be tendered in accordance with the units specified in this schedule.
- 5.5 Where a value is given in the Quantity column, a Rate and Price (the product of the Quantity and Rate) is required to be inserted in the relevant columns.
- 5.6 The successful tenderer is required to perform all tasks listed against each item. The tenderer must therefore tender prices/rates on all items as per the section in the Price Schedule. **An item against which no rate is/are entered, or if anything other than a rate or a nil rate (for example, a zero, a dash or the word "included" or abbreviations thereof) is entered against an item, it will also be regarded as a nil rate having been entered against that item, i.e. that there is no charge for that item. The Tenderer may be requested to clarify nil rates, or items regarded as having nil rates; and the CCT**

may also perform a risk analysis with regard to the reasonableness of such rates.

- 5.7 Provide fixed rates and prices for the duration of the contract that are not subject to adjustment except as otherwise provided for in clause 17 of the Conditions of Contract and as amplified in the Special Conditions of Contract.
- 5.8 Tenderers must submit prices for an item tendered on as well as all ancillary components listed for that item. The Items is divided into sections as per functional area within Scientific Services. The award will not be per section but per item. The CCT intends to appoint two tenderers (the highest ranked tenderer ("the winner") and in addition a "alternative tenderer" for the allocation of work per item. If insufficient responsive bids are received, the CCT reserves the right to appoint fewer tenderers, or not to appoint any tenderers at all.
- 5.9 Points for evaluation to be further updated according **2.3.10.3**

INITIALS OF CCT OFFICIALS		
1	2	3

C.5 SPECIFICATION(S)

The City will issue a Purchase Order for the ancillary items or service as specified.

- Only upon receiving a Purchase Order from the CCT shall the Service Provider proceed with delivery of the items or service.
- The initial installation and commissioning must include all components needed to have the instrument up and running including ISO 17025 calibration where applicable. Year 2 and 3 ancillary components (items, services and calibration) will be raised as needed.
- Off-site service and calibration: The Service Provider shall return the serviced unit including service certificate within 4 to 6 weeks upon receipt of the of the CCT's Purchase Order.
- On-site service and calibration: Must be completed within 2-3 weeks of PO date.
- When off-site calibration supplier must include courier and transport cost.
- The technical details, data sheets and brochures must be submitted for all the items quoted on

This tender makes provision for the Supply, Delivery and Installation and commissioning of various scientific instrumentation for the analysis of samples in all environmental media to Scientific Services

This tender is required for operational purposes in order to meet compliance requirements in terms of the National Water Act, National Environmental Management Act, SANS 241, Regulation 991 (1984), General Authorisation (2013) for Effluent discharge limits, Minimum requirements for boreholes and Guidelines for the disposal and utilisation of sludges (2006) including other regulatory requirements. The equipment is crucial for analysis of the New Water Schemes and supports the City's New Water Strategy.

Each tenderer is required to answer **YES or NO** to each of the following technical specifications with respect to the instrument they propose in their bid. All technical brochures must be submitted with the tender document.

NOTE: A direct reference to the submitted literature/technical documents and page verifying the answer must be provided for each item.

DETAILED SPECIFICATION OF INSTRUMENTS LISTED IN PRICING SCHEDULE

SECTION A: AIR QUALITY MONITORING EQUIPMENT

ITEM AQ1: TO SUPPLY, INSTALL & COMMISSION A HYDROGEN SULPHIDE ANALYSER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 certified or Equivalent			
<u>Equipment supplier</u>			
Supply Latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers - Provide service engineer(s) CV or certificate			
Provide - on-site training (10 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) - competency declarations and certifications must be issued to trained staff			
Guarantee minimum 12 month after commissioning			
Able to supply all the equipment spares & accessories			
<u>Equipment</u>			
Range 1 – 10 000ppb, must be user selectable			
Must be able to measure in ppb, ppm, µg/m³ units			
Operating temperature 5 - 40°C			
Ethernet, RS-232 and USB com ports must be available on the instrument			
Auto zero system function must be available			
Internal data logging must be available			
<u>Ancillary components</u>			
Supply of service and maintenance kit			
Service as per manufacturers specifications			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AQ2: TO SUPPLY, INSTALL & COMMISSION A CARBON MONOXIDE ANALYSER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 certified or Equivalent			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
• competency declarations and certifications must be issued to trained staff			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Range 1 – 1 000ppb, user selectable			
Must have selectable ranges with dual range capability			
Selectable measurement units ppb, ppm, µg/m³, mg/m³			
Operating temperature 5 - 40°C			
Ethernet, RS-232 and USB com ports must be available on the instrument			
Internal data logging with programmable average periods			
<u>Ancillary components</u>			
Supply of service and maintenance kit			
Service as per manufacturers specifications			
UV light source as defined by manufacturer			
Internal pump as defined by manufacturer			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AQ3: TO SUPPLY AND COMMISSION A DYNAMIC DILUTION CALIBRATOR			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			

Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers - Provide service engineer(s) CV or certificate			
Provide - on-site training (10 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) - competency declarations and certifications must be issued to trained staff			
Guarantee minimum 12 month after commissioning			
Able to supply all the equipment spares & accessories			
Equipment			
Be able to generate SO ₂ , H ₂ S, NO, NO ₂ , CO, CO ₂ , hydrocarbons and others			
Independent timers for sequences			
Operating temperature 5 - 40°C			
Ethernet, RS-232 and USB com ports must be available on the instrument			
Software linearization of mass flow controllers			
A minimum of 4 calibration ports must be available			
Gas phase titration chamber (GTP) or equivalent must be supplied			
Ozone generator and photometer allow use as a primary or transfer standard			
Inlets for external ozone reference sources must be supplied			
Ancillary components			
Supply of service and maintenance kit			
Service as per manufacturers specifications			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AQ4: TO SUPPLY, INSTALL & COMMISSION A ZERO AIR SYSTEM			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers - Provide service engineer(s) CV or certificate			
Provide - on-site training (10 staff members) as instruments are purchased - theoretical & practical training			

- competency assessment (theoretical, written & practical) - competency declarations and certifications must be issued to trained staff			
Guarantee			
minimum 12 month after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
Extended life scrubber for SO ₂ , NO, NO ₂ , O ₃ , H ₂ S and NH ₃			
CO and hydrocarbon scrubber			
Operating temperature 5 - 40°C			
Automatic pump control based on flow demand			
Automatic water drain			
Zero air for ozone generators			
Source of purge air for permeation tube ovens			
Ancillary components			
Supply of service and maintenance kit			
Service as per manufacturers specifications			

ITEM AQ5: TO SUPPLY AND COMMISSION A MULTI DETECTOR GAS HANDHELD ANALYSER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of delivery - commissioning by trained service engineers - Provide service engineer(s) CV or Certificate			
Guarantee minimum 12 month after commissioning			
Able to supply all the equipment spares & accessories			
Equipment			
The device should be able to monitor CH ₄ , CO ₂ , CO, O ₂ , H ₂ S, CO, NH ₃ , and C ₆ H ₆			
The device must be handheld. The dimensions should not exceed 200 x 100 x 50 mm. The device must weigh less than 1 kg, including the pump.			
The device must be housed in a durable hard-shell compartment or equivalent.			
The operating temperature range of the device must include - 20°C to 50°C, 700 – 1300 hPa and humidity range of 10 to 90%			
The device must have a minimum of three warning alerts for measurements that are above acceptable limits.			
Device must be rechargeable, the battery lifetime must be a minimum of 15 hours			
Charging to full capacity must be less than 8 hours.			
Data storage minimum capacity must be 15 MB			
The pump operation must be compatible with a 35 to 45 hose.			
Instrument must be ISO 17025 calibrated.			

Ancillary Components			
Service as per manufacturers specifications			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AQ6: TO SUPPLY, INSTALL & COMMISSION A GAS FLOW METER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Device must be able to measure temperature, pressure and flow			
Measurement range should be between 0 – 300 Std L/min			
Selectable flow units Std L/min or volumetric L/min selectable.			
Temperature measurement range should be 0 - 50°C			
Instrument must be ISO 17025 calibrated			
<u>Ancillary Components</u>			
Service as per manufacturers specifications			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AQ7: SUPPLY, INSTALL & COMMISSION A CARBON DIOXIDE (CO2) ANALYSERS.			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			

- theoretical & practical training - competency assessment (theoretical, written & practical) - competency declarations and certifications			
Guarantee			
minimum 12 month after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
be supplied with a complete set of instructions and service manuals or CD/DVDs, as required for successful operation and maintenance of the analysers.			
The design of the analysers must meet the requirements of the US EPA reference method for the ambient monitoring of Carbon Dioxide.			
Must be able to operate in conditions that range from 2 – 40°C and relative humidity from 20-80% non-condensing.			
The analyser must be able to provide short term averages (10 minutes) for pollutant source identification.			
The analysers must have a measurement range of Min: 0 – 2 ppm Full Scale Max: 0 – 20 000 ppm Full Scale			
The analyser must be able to produce readings in the following units of measurement: ppb, ppm, ug/m3, mg/m3. This must be user selectable.			
The analyser must have a Lower Detection Limit (LDL) of <0.2 ppm.			
The analysers must conform to the following stability factors; Zero Drift : < 0.25 ppm/24 Hours. Span Drift: < 0.5% of Full Scale/ 24 hours. Precision: 0.5% or reading			
The analysers must conform to the following measurement factors; Zero Noise : < 0.1 ppm ppm/24 Hours. Span Noise: < 0.5% of Full Scale/ 24 hours. Linearity: 0.5% or reading			
The sample flowrate of the analyser must not exceed 800 cm3/min +- 10%			
The analysers must have an internal logging system that allows for the logging of user specified variables and must be able to have a storage capacity of not less than 500 000 records.			
The data output must be through and Ethernet with embedded FTP server, RS232 or RS 485 ports.			
The analyser must have a USB connection to allow for easy downloads to a portable USB flash drive.			
The analysers must be able to integrate into the Envidas Air Quality Monitoring System of the City.			
The tenderer must provide a comprehensive spares kit adequate for a three year period. In addition the tenderer must provide all necessary auxiliaries, microprocessors, interface cables (Ethernet, Analog, and Digital) and service manuals.			
The analyser must be ISO 17025 calibrated			
Ancillary Components			
Service as per manufacturers specifications			
UV light source as defined by manufacturer			
Internal pump as defined by manufacturer			
Spares kit as defined by manufacturer			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AQ8: TO SUPPLY, INSTALL AND COMMISSION A PARTICULATE MATTER (PM10 AND PM2.5) ANALYSER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
latest model currently in production			
Provide			
at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
- commissioning within two weeks of installation - Installation and commissioning by trained service engineers - Provide service engineer(s) CV or certificate			
Provide			
- on-site training (10 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) - competency declarations and certifications			
Guarantee			
minimum 12 month after commissioning			
Able to			
supply all the equipment spares & accessories			
<u>Equipment</u>			
be supplied with a complete set of instructions and service manuals, as required for successful operation and maintenance of the analysers.			
The design of the analysers must meet the requirements of the US EPA reference method for the ambient monitoring of particulate matter.			
Must be able to operate in conditions that range from 2 – 40oC and relative humidity from 20-80% non-condensing.			
The analysers must be able to sample ambient air ranging in temperature from -40oC and 60oC.			
The analyser controls must be menu driven preferably via display with a touch screen interface.			
The analysers must be able to measure PM2.5 and PM10 simultaneously.			
The sensor and control units of the analysers must be weather protected and able to withstand temperatures of 0oC to 50oC.			
The analysers must have a measurement range of 0 – 10000 µg/m3 . The resolution of the measurement must be 0.1 µg/m3			
The analyser must be able to produce real time mass concentration average outputs with a 15 min default. The data output rate must not be longer than 2 seconds.			
The analyser must be able to produce long term averaging outputs of 30 min, 1 hour, 8 hour and 24 hours.			
The analysers must be able to produce a measurement accuracy of 1 µg/m3 for a 1 hour average			
The analysers must have two mass measurement units to continuously measure PM 2.5 and PM10			
The analysers must have an internal logging system that allows or the logging of user specified variables and must be able to have a storage capacity of not less than 500 000 records.			
the data output must be through and Ethernet with embedded			

FTP server, RS232 or RS 485 ports. The analysers must provide for 8 user defined outputs and 2 user defined contact closure alarms circuits. The analyser should also allow for 4 averaged analogue inputs with user defined conversion to engineering units.			
The analyser must have a USB connection to allow for easy downloads to a portable USB flash drive.			
the analyser setup and design must be such that it does not require a dedicated computer in field applications.			
The analysers must be able to integrate into the Envidas Air Quality Monitoring System of the City.			
The tenderer must provide a comprehensive spares kit adequate for a three year period. In addition the tenderer must provide all necessary auxiliaries, microprocessors, interface cables (Ethernet, Analog, and Digital) and service manuals.			
The analysers must have two mass measurement units to continuously measure PM 2.5 and PM10			
Instrument must be ISO 17025 calibrated			
Ancillary Components			
Service as per manufacturers specifications			
External pump as defined by manufacturer			
Spares kit as defined by manufacturer			

ITEM AQ9: TO SUPPLY, INSTALL & COMMISSION A SULPHUR DIOXIDE (SO ₂) ANALYSER			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
• competency declarations and certifications			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
The analysers must use an ultra violet fluorescent technique to continuously monitor ambient concentrations of sulphur dioxide as per US EPA reference method.			
The analyser must be able to provide short term averages (10 minutes) for pollutant source identification.			
The analyser must be provided with an IZS option (Internal Zero Span)			

The analysers must be able to withstand temperatures of 0oC to 40oC.			
The analysers must have a measurement range of Min: 0 – 50 ppb Full Scale Max: 0 – 20 000 ppb Full Scale			
The analyser must be able to produce readings in the following units of measurement: ppb, ppm, ug/m3, mg/m3. This must be user selectable.			
The analyser must have a Lower Detection Limit (LDL) of <0.4 ppb.			
The analysers must conform to the following stability factors; - Zero Drift : < 0.5 ppb/24 Hours , 1 ppb/7 days. - Span Drift: < 0.5% of Full Scale/ 24 hours, ≤ 1% of Full Scale / 7 days. - Precision: 0.5% above 50 ppb			
The analysers must have an internal logging system that allows for the logging of user specified variables and must be able to have a storage capacity of not less than 500 000 records.			
the data output must be through and Ethernet with embedded FTP server, RS232 or RS 485 ports.			
The analyser must have a USB connection to allow for easy downloads to a portable USB flash drive.			
The analysers must be able to integrate into the Envidas Air Quality Monitoring System of the City.			
The tenderer must provide a comprehensive spares kit adequate for a three year period. In addition the tenderer must provide all necessary auxiliaries, microprocessors, interface cables (Ethernet, Analog, and Digital) and service manuals.			
Instrument must be ISO 17025 calibrated			
Ancillary Components			
Service as per manufacturers specifications			
UV light source as defined by manufacturer			
Internal pump as defined by manufacturer			
Spares kit as defined by manufacturer			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AQ10: TO SUPPLY, INSTALL & COMMISSION A OXIDES OF NITROGEN (NOX) ANALYSER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers - Provide service engineer(s) CV or certificate			
Provide on-site training (10 staff members) as instruments are purchased			

- theoretical & practical training - competency assessment (theoretical, written & practical) - competency declarations and certifications			
Guarantee			
minimum 12 month after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
The analysers must be a single instrument able to continuously monitor ambient concentrations of NO, NO ₂ , NO _x as per US EPA reference method.			
The analyser must be able to provide short term averages (10 minutes) for pollutant source identification.			
The analyser must be provided with an IZS option (Internal Zero Span)			
The analysers must be able to withstand temperatures of 0oC to 40oC.			
The analysers must have a measurement range of: - Min: 0 – 50 ppb Full Scale - Max: 0 – 20 000 ppb Full Scale			
The analyser must be able to produce readings in the following units of measurement: ppb, ppm, ug/m ³ , mg/m ³ . This must be user selectable.			
The analyser must have a Lower Detection Limit (LDL) of <0.4 ppb.			
The analysers must conform to the following stability factors; - Zero Drift : < 0.5 ppb/24 Hours , 1 ppb/7 days. - Span Drift: < 0.5% of Full Scale/ 24 hours, ≤ 1% of Full Scale / 7 days. - Precision: 0.5% above 50 ppb			
The analysers must have an internal logging system that allows for the logging of user specified variables and must be able to have a storage capacity of not less than 500 000 records.			
The data output must be through and Ethernet with embedded FTP server, RS232 or RS 485 ports.			
The analyser must have a USB connection to allow for easy downloads to a portable USB flash drive.			
The analysers must be able to integrate into the Envidas Air Quality Monitoring System of the City.			
The tenderer must provide a comprehensive spares kit adequate for a three year period. In addition the tenderer must provide all necessary auxiliaries, microprocessors, interface cables (Ethernet, Analog, and Digital) and service manuals.			
Instrument must be ISO 17025 calibrated			
Ancillary Components			
Service as per manufacturers specifications			
UV light source as defined by manufacturer			
Internal pump as defined by manufacturer			
Spares kit as defined by manufacturer			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AQ11: TO SUPPLY, INSTALL & COMMISSION A OZONE (O3) ANALYSER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
latest model currently in production			
Provide			
at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
- commissioning within two weeks of installation - Installation and commissioning by trained service engineers - Provide service engineer(s) CV or certificate			
Provide			
- on-site training (10 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) - competency declarations and certifications			
Guarantee			
minimum 12 month after commissioning			
Able to			
supply all the equipment spares & accessories			
<u>Equipment</u>			
be supplied with a complete set of instructions and service manuals, as required for successful operation and maintenance of the analysers.			
The design of the analysers must meet the requirements of the US EPA reference method for the ambient monitoring of Ozone.			
The analyser must be able to provide short term averages (10 minutes) for pollutant source identification.			
Must be able to operate in conditions that range from 2 – 400C and relative humidity from 20-80% non-condensing.			
The analysers must be a single instrument able to continuously monitor ambient concentrations of O ₃ as per US EPA reference method.			
Analyzer must be supplied with an internal ozone generator			
The analyser must be provided with an IZS option (Internal Zero Span)			
The analysers must be able to withstand temperatures of 0oC to 40oC.			
The analysers must have a measurement range of			
- Min: 0 – 100 ppb Full Scale - Max: 0 – 10 000 ppb Full Scale			
The analyser must be able to produce readings in the following units of measurement: ppb, ppm, ug/m3, mg/m3. This must be user selectable.			
The analyser must have a Lower Detection Limit (LDL) of <0.4 ppb.			
The analysers must conform to the following stability factors;			
- Zero Drift: < 1.0 ppb/24 Hours. - Span Drift: < 1.0% of Full Scale. - Precision: 0.5% above 100 ppb			
The analysers must have an internal logging system that allows			

for the logging of user specified variables and must be able to have a storage capacity of not less than 500 000 records.			
the data output must be through and Ethernet with embedded FTP server, RS232 or RS 485 ports.			
The analyser must have a USB connection to allow for easy downloads to a portable USB flash drive.			
The analysers must be able to integrate into the Envidas Air Quality Monitoring System of the City.			
The tenderer must provide a comprehensive spares kit adequate for a three year period. In addition the tenderer must provide all necessary auxiliaries, microprocessors, interface cables (Ethernet, Analog, and Digital) and service manuals.			
Instrument must be ISO 17025 calibrated			
Ancillary Components			
Service as per manufacturers specifications			
Ozone lamp source as defined by manufacturer			
Ozone generator kit as defined by the manufacturer			
Internal pump as defined by manufacturer			
Spares kit as defined by manufacturer			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AQ12: TO SUPPLY, INSTALL & COMMISSION A VOLATILE ORGANIC COMPOUND (VOC) ANALYSER EQUIPPED WITH A PHOTO IONISATION DETECTOR (PID)			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
latest model currently in production			
Provide			
at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
- commissioning within two weeks of installation - Installation and commissioning by trained service engineers - Provide service engineer(s) CV or certificate			
Provide			
- on-site training (10 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) - competency declarations and certifications			
Guarantee			
minimum 12 month after commissioning			
Able to			
supply all the equipment spares & accessories			
<u>Equipment</u>			
be supplied with a complete set of instructions and service manuals or CD/DVDs, as required for successful operation and maintenance of the analysers.			
The design of the analysers must meet the requirements of the US EPA reference method for the ambient monitoring of Volatile organic Compounds, specifically Benzene, Ethylbenzene, Toluene and <i>o/m/p</i> -Xylene.			

Must be able to operate in conditions that range from 2 – 40°C and relative humidity from 20-80% non-condensing.			
The analysers must be a single instrument with a Photo Ionised Detector with capillary column for continuously monitoring ambient concentrations of VOC's as per US EPA reference method.			
The PID detector must have a lowest detection level of 0.1. µg/m3 (0.03 vppb).			
The analysers must be able to withstand temperatures of 0°C to 40°C.			
The analysers must have a measurement range of up to 300 ppb.			
The analyser must have a cycle time of 15 min and a temperature program of 50 – 70°C.			
The analyser must have a reproducibility typical of < 3% at 1 ppb (benzene with the capillary column).			
The analysers must use Nitrogen as carrier gas of quality 5.0 at 4 bar at 6ml/min.			
The analysers must have an internal logging system that allows for the logging of user specified variables and must be able to have a storage capacity of not less than 500 000 records.			
the data output must be through and Ethernet with embedded FTP server, RS232 or RS 485 ports.			
The analyser must have a USB connection to allow for easy downloads to a portable USB flash drive.			
The analysers must be able to integrate into the Envidas Air Quality Monitoring System of the City.			
The tenderer must provide a comprehensive spares kit adequate for a two year period. In addition the tenderer must provide all necessary auxiliaries, microprocessors, interface cables (Ethernet, Analog, and Digital) and service manuals.			
Instrument must be ISO 17025 calibrated			
Ancillary Components			
Service as per manufacturers specifications			
Column as defined by manufacturer			
Light source (detector) as defined by the manufacturer			
Spares kit as defined by the manufacturer			

ITEM AQ13: TO SUPPLY, INSTALL & COMMISSION A PNEUMATIC MAST WITH A SET OF METEOROLOGICAL SENSORS			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			

- theoretical & practical training - competency assessment (theoretical, written & practical) - competency declarations and certifications			
Guarantee			
minimum 12 month after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
be supplied with a complete set of instructions and service manuals or CD/DVDs, as required for successful operation and maintenance of the analysers.			
The design of the meteorological station must meet the testing and certification according to ISO/IEC 17025.			
Must be able to operate in conditions that range from -50 to +60°C and relative humidity from 20-80% non-condensing.			
The sensors must be able to sample ambient air ranging in temperature from -50oC to 50oC.			
The anemometer must have a measurement range of: Wind speed: 0 – 100m/s Azimuth: 360° Accuracy: Wind speed: ± 0.3 m/s (0.6 mph) or 1% of reading Wind direction: ± 3 degrees			
The relative humidity and temperature sensor must be able to have a measurement: Range: -50oC to 50oC Accuracy: ± 0.3 oC			
The solar radiation sensor must have a: Measurement Range: 400 - 1100 nanometers Sensitivity: Typically 80 μ A per 1000 W m ⁻² Linearity: 1% max up to 3000 W m ²			
The Barometric pressure sensor must have a: Pressure Range: 600 to 1100 hPa standard range Digital resolution: 0.1 hPa Accuracy: ± 0.3 hPa at 20 deg C and 1 hPa at -50 to +60 deg C			
The rain gauge with bird wire must conform to the following: Catchment area: 200 cm ² Resolution: 0.1 mm per tip Accuracy: 2% up to 25mm/h			
Equipment must be ISO 17025 calibrated			
Ancillary Components			
service as per manufacturers specifications			
Pneumatic mast with accessories			
Anemometer			
Relative humidity and temperature sensor			
Solar radiation sensor			
Barometric pressure sensor			
Rain gauge with bird wire			
Supply and installation of internal temperature sensor and controller			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AQ14: TO SUPPLY, INSTALL & COMMISSION A MOBILE AMBIENT AIR QUALITY ANALYSER HOUSING UNIT			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Perform			
• commissioning within two weeks of installation			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Housing Unit Specifications</u>			
Must be located on a movable A-frame chassis with wheels and brakes			
40 mm thick cromodec panels on walls and roof			
Grade 304 galvanized base frame			
18mm water proof boards with 2mm vinyl tiles flooring			
Natural anodized aluminium extrusions			
2 x 12000 BTU/hr (cooling and heating) split unit air conditioner with thermostat. The air conditioner must have an automatic restart function (in the case of power failures), and an automatic temperature control function for heating and cooling.			
Ladder and gantry permanently attached to allow for work on roof.			
Safety railings mounted on the roof of the housing unit. The railings should provide safety for staff, walking on the roof of the housing unit.			
External attached heavy-duty jacks able to support the shelter when the wheels are removed.			
Roadworthy certificate for the housing unit.			
Must be delivered, fully commissioned to the City of Cape Town's Scientific Services Branch			

ITEM AQ15: TO SUPPLY & COMMISSION A PORTABLE MULTIPLE PARAMETER CONTINUOUS AMBIENT AIR QUALITY MONITORING ANALYSER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			

- on-site training (10 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
be supplied with a complete set of instructions and service manuals or CD/DVDs, as required for successful operation and maintenance of the analyser.			
The design of the analyser must be traceable to USEPA and EU certified equivalence methods for SO ₂ , NO _x , O ₃ , H ₂ S, VOC and PM _{10,2.5} .			
Must be able to operate in conditions that range from 0 – 400C and relative humidity from 20-80% non-condensing.			
The analyser must be supplied with a meteorological component, capable of measuring standard meteorological parameters such as wind speed, wind direction, temperature, humidity and barometric pressure.			
The analysers must be able to provide short term averages (15 minutes) for pollutant source identification.			
The analyser must be able to produce readings in the following units of measurement: ppb, ppm and ug/m ³ , This must be user selectable.			
The analyser must have a detection limit of 1ppb for SO ₂ , NO _x , O ₃ , H ₂ S, VOC and PM _{10,2.5}			
The analyser must have a USB connection to allow for easy downloads to a portable USB flash drive.			
The analysers must be able to integrate into the Envidas Air Quality Monitoring System of the City.			
The tenderer must provide a comprehensive spares kit adequate for a two year period. In addition the tenderer must provide all necessary auxiliaries, microprocessors, interface cables (Ethernet, Analog, and Digital) and service manuals.			
Ancillary Components			
Service and verification as per manufacturers specifications			
SO ₂ sensor units as per manufacturer specifications			
NO _x sensor units as per manufacturer specifications			
O ₃ sensor units as per manufacturer specifications			
VOC sensor units as per manufacturer specifications			
PM ₁₀ and PM _{2.5} sensor units as per manufacturer specifications			
H ₂ S sensor units as per manufacturer specifications			

ITEM AQ16: TO SUPPLY AND COMMISSION A PORTABLE PARTICULATE MATTER CONTINUOUS AMBIENT AIR QUALITY MONITORING ANALYSER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			

- commissioning within two weeks of installation - Installation and commissioning by trained service engineers Provide service engineer(s) CV or certificate			
Provide - on-site training (10 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories			
Equipment			
be supplied with a complete set of instructions and service manuals or CD/DVDs, as required for successful operation and maintenance of the analyser.			
The design of the analyser must be a Near Reference Method for PM10 and PM2.5			
Must be able to operate in conditions that range from 0 – 400C and relative humidity from 20-80% non-condensing.			
The analyser must be supplied with a meteorological component, capable of measuring standard meteorological parameters such as wind speed, wind direction, temperature, humidity and barometric pressure.			
The analysers must be able to provide short term averages (10 minutes) for pollutant source identification.			
The analyser must be able to produce readings in the following units of measurement: ug/m3, ppb and ppm , This must be user selectable.			
The analyser must have precision of $\pm 2\%$			
The analyser must have flow range of 10 – 20lpm			
The analyser must have a USB connection to allow for easy downloads to a portable USB flash drive.			
The analysers must be allow for battery operation of 24+hours.			
The tenderer must provide a comprehensive spares kit adequate for a two year period. In addition the tenderer must provide all necessary auxiliaries, microprocessors, interface cables			
Ancillary Components			
Service and verification as per manufacturers specifications			
PM10 and PM2.5 sensor units as per manufacturer specifications			

ITEM AQ17: TO SUPPLY, INSTALL AND COMMISSION A ULTIMATE DATA ACQUISITION SYSTEM (DAS) WITH SOFTWARE COMPATIBLE TO THE ENVIDAS SYSTEM TO COMPLEMENT THE AIR QUALITY NETWORK			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply latest model currently in production			
Perform commissioning within two weeks of installation			
Guarantee a minimum 12 months after commissioning			
Equipment			

Supply of a 32 channel Envidas software			
Single site			
Web enabled			
Reporter			
Dynamic gauge setup			
Real time graph and SQL			
Single PC licence key for 32 channels			
Software license included for the full term			
Able to			
• supply all the equipment spares & accessories			
Ancillary Components			
EnvIDAQs 8017/8050 or equivalent to RS322			
Multi-8-USB-232 converter from USB to 8 x RS232			
USB or RJ45 (or equivalent) 8/16 port network hub			

SECTION B: GROUND WATER MONITORING EQUIPMENT

ITEM GS1: TO SUPPLY & COMMISSION A MULTIMETER WITH A FLOW CELL			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must include a cable of minimum 60m			
The instrument must be mobile			
The measurement parameters must include the following parameters: Dissolved Oxygen pH Oxidation-reduction potential or equivalent Conductivity Turbidity Temperature Total ammonia			
Must include digital smart sensors or equivalent			

Must be waterproof			
Must contain a chemical resistant stainless steel tank			
Digital LCD display or equivalent			
High frequency industrial inducer or 40 kHz or equivalent is required			
Must have an operating and storage temperature ranging from 0 – 50°C			
Must have a rechargeable battery			
Must have built in USB and micro SD port for data transfer			
Must be supplied with a protective case			
Ancillary Components			
Service as per manufacturers specifications			
Supply of a compatible flow cell			
Supply of probes for Dissolved Oxygen (DO)			
Supply of probes for pH			
Supply of probes for Oxidation-reduction potential (ORP) or equivalent			
Supply of probes for Conductivity (EC)			
Supply of probes for Turbidity			
Supply of probes for Temperature			
Supply of probes for Total ammonia			

ITEM GS2: TO SUPPLY & COMMISSION A SUBSURFACE GAS SAMPLING MONITOR			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must have energy supply that is rechargeable, Lithium-ion battery technology or equivalent and must allow for inductive charging			
Must be capable of measuring pressure 800 to 1100 hPa (use in explosion-hazard areas)			
Must be capable of operating for a minimum of 20 hours			
Must have Hose length of minimum 45 m in length			
Durable two – component protective housing			
Must be able to monitor the following gases:			
Methane (CH ₄)			
Carbon dioxide (CO ₂)			

Carbon monoxide (CO)			
Oxygen (O ₂)			
Hydrogen sulphide (H ₂ S)			
Ammonia (NH ₃)			
Benzene (C ₆ H ₆)			
Ancillary Components			
Service and calibration as per manufacturers specifications			

ITEM GS3: TO SUPPLY & COMMISSION A TEMPERATURE, CONDUCTIVITY AND WATER LEVEL METER FOR SPECIFIC DEPTH SAMPLING			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Tape length of minimum of 100m			
Capable of Conductivity measurements between 0 – 80 000 µS/cm			
Automated data logging function for water level, conductivity and temperature			
Equipment should be water proof			
Standalone unit			
Capable of reading temperatures from 1 - 50°C			
Probe diameter must range between 15 – 20 mm			
Ancillary Components			
Service and calibration as per manufacturers specifications			
Temperature sensor			
Conductivity sensor			
Water level sensor			

ITEM GS4: TO SUPPLY & COMMISSION AN INTERVAL/SPECIFIC DEPTH SAMPLING BAILER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Tape length of minimum of 100m			
Reel must contain a pressure attachment for a high pressure hand pump			
Volume range for the bailer must be 0.6 to 1L			
Device must include a pressure/vent switch			
<u>Ancillary Components</u>			
Service as per manufacturers specifications			
Supply of stainless steel bailer (1L capacity, 1m in length)			
Supply of 100m tag line with 1M designated marking			

ITEM GS5: TO SUPPLY & COMMISSION A SOIL AUGER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			

competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must be comprised of stainless steel or carbon steel			
Device to be used for environmental sampling			
Diameter must range between 50 – 90 mm			
Must be able to sample up to 4m			
Must be able to operate manually (hand use)			
Must be portable			
Must be extendable (use of extension rods will be accepted)			
Must include a portable carry case			

SECTION C: SAMPLING EQUIPMENT

ITEM SS1: TO SUPPLY TRANSPORT RECHARGEABLE COOLER WITH TEMPERATURE DISPLAY			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Temperature range: 0-10°C			
Duration: minimum 24hr holdover time			
Real time display of temperature inside the cooler container			
The material of the cooler must be of durable, non-toxic and UV-resistant.			
The container must allow for specially positioned ice packs			
The cooler must contain zero cold leakage and long-term cooling preservation			
Small transport cooler with temperature display (at least 20L)			
Large transport cooler with temperature display (at least 60L)			

ITEM SS2: TO SUPPLY A WATER LEVEL INDICATOR			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply latest model currently in production			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must be supplied with a reel not exceeding 3kg in weight (excluding tape)			
Must include an ergonomic brake dial			
Tape (water level indicator) guide must be included on the frame			
A minimum tape length of 60m is required			

The tape must be constructed of material of high tensile strength stainless steel, with minimum break strength of 120kg			
The jacketing must be comprised of water resistant material			
Markers must be included under the jacketing			
The electronic panel must have static and drawn down (or equivalent) operational functional modes			
A minimum of 9V power source (alkaline or equivalent) must be supplied with the instrument			
The probe supplied must be removable			
The probe supplied must have a depth rating of IP68 or equivalent			
A durable carry case must be included for the probe.			

ITEM SS3: TO SUPPLY A VAN DORN WATER SAMPLER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply latest model currently in production			
Guarantee a minimum 12 months after commissioning			
Training must include: - on-site training (15 staff members) as instruments are purchased - competency declaration must be provided for trainees			
Able to supply all the equipment spares & accessories			
Equipment			
Must include a minimum of 2.2L sampling capacity			
Cable length must be a minimum of 50m			
Cable material must be tagged with depth markers and must be of water resistant robust material			
Must be able to sample waters to a depth of minimum 30m			
Must be suitable for sampling of coastal waters			
Sampler position must be horizontal			
Sampler weight must not exceed 7 kg			
Must include a portable carry case			

ITEM SS4: TO SUPPLY TOTAL ALGAE SENSORS FOR DETECTION OF CHLOROPHYLL, PHYCOCYANIN AND PHYCOERYTHRIN IN MARINE AND FRESHWATER CYANOBACTERIA			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			

- on-site training (15 staff members) as instruments are purchased - competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
The sensor must be of dual channel fluorescence based technology or equivalent			
The sensor must be constructed of titanium or equivalent material			
Must be compatible with a YSI Pro Dss multimeter			
Chlorophyll sensor range accuracy must be from 0 to 100 RFU or 0 – 400 µg/L			
Phycocyanin sensor range accuracy must be from 0 to 100 RFU or 0 – 100 µg/L			
Phycocerythrin sensor range accuracy must be from 0 to 100 RFU or 0 – 280 µg/L			
Must be able to discriminate 0.01 RFU or 0.01 µg/L (resolution)			
Must be applicable to EPA ID E17164633 or equivalent			
Must be able to measure depths of a minimum of 100m			

ITEM SS5: TO SUPPLY AND COMMISSION A PORTABLE FIELD TURBIDITY METER FOR ONSITE ANALYSIS			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
- commissioning within two weeks of installation - Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
- on-site training (15 staff members) as instruments are purchased - competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
Instrument must be able to perform nephelometrical determination of turbidity in the field			
The unit must be portable and supplied with a hard-shell protective case or equivalent			
The instrument must be able to measure up to 1000 NTU			
Data management on the instrument must be GLP compliant			
Standards supplied must be traceable to NIST or equivalent			
Must include latest software package with portable instrument			
Must include a sealed calibration kit			
Must include a minimum of 5 empty vials			

Must include a set of optical cleaning tissues or equivalent			
Advantageous if the device is rechargeable			
A PC connection cable must be supplied for data transfer			
Must be applicable to DIN/ISO 7027; US EPA 180.1 or equivalent			

ITEM SS6: SUPPLY & COMMISSION OF DIGITAL PORTABLE FREE & TOTAL CHLORINE COLORIMETERS TO DETERMINE THE CHLORINE CONCENTRATION IN WATER REQUIRED FOR DISINFECTION CONTROL			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Able to analyse for free & total chlorine			
Methodology: free & total chlorine – ISO 7393-2			
Range of free chlorine between 0.00 to 6.00 mg/l Cl ₂			
Range of total chlorine between 0.00 to 5.00 mg/l Cl ₂			
Portable unit with battery power exceeding 8 hours			
The instrument be supplied in a robust and durable carry case.			
Store minimum of 10 results			
Must be able to transfer data (stored results) to PC (Laboratory Information Management System)			
Ancillary Components			
Reagents for 3000 free & 3000 total chlorine tests/colorimeter			
Three additional cuvette sets			
10 x 2ml ampules certified reference material standards (with Certificate of Analysis) for free & total chlorine			

ITEM SS7: THE SUPPLY OF A MULTI-PARAMETER WATER QUALITY SONDE WITH TITANIUM SENSORS AND WET-MATEBLE UNIVERSAL SENSOR PORTS.			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Should contain a minimum of seven titanium sensor ports with internal data logging and battery power.			
Should include a waterproof handheld device with USB connectivity, display and on-board memory			
The sensors should have wet-metable universal sensor ports to allow for swaps in wet conditions.			
The sonde should be able to fit in a <5.5cm diameter groundwater well			
The sonde should be able to automatically check for faults and errors to ensure successful deployments			
Able to monitor natural aquatic environments such as groundwater, rivers, estuaries, dams			
Able to calculate salinity, specific conductance, total dissolved solids and total suspended solids.			
Able to monitor various depths (up to at least 90m or more)			
Should contain a cable with 10 m length, with distance markings.			
Should contain Large, Hard-sided Carrying Case			
The water quality meter should make use of smart sensor technology that allows sensors to be automatically recognized while still keeping calibration data.			
Should have a sensor port for each of the following parameters:			
• Conductivity/Temperature			
• pH/ORP			
• Rhodamine			
• Nitrate			
• DO			
• Total algae (phycocyanin and chlorophyll)			
• Turbidity and Total Suspended Solids			
• Ammonia			
<u>Ancillary Components</u>			
Conductivity/Temperature sensor guard			
pH/ORP sensor			

Rhodamine sensor			
Nitrate sensor			
Dissolved oxygen			
Total algae (phycocyanin and chlorophyll) sensor			
Turbidity sensor			
Cable length of 10m			
Service as per manufacturers specifications.			

ITEM SS8: THE SUPPLY OF A PORTABLE PH METER.			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Should contain the following:			
An IP67 waterproof handheld device with USB connectivity, display and onboard memory.			
Automatic calibration and buffer recognition			
Automatic temperature compensation			
User-replaceable single- or double-junction electrodes			
GLP functionality (saves and displays last calibration data)			
1, 2, or 3-point calibration			
"Hold" feature locks readings on display			
Graphic display with on-screen instructions			
>200 hour battery life; low battery indicator			
Should contain a sensor port for pH measurement and temperature with operating pH Range: 0 to 14 units			
The unit must be provided with two types of sensors i.e. sensor for wastewater analysis and a sensor for clean water analysis.			
Should be able to measure temperature with range: -5 to 70°C			
Should have a cable with at least 10m length or more			
Should contain soft-sided carrying case			
Operational consumables:			
500 (20 -25 ml) pH Buffers 4, 7, and 10 buffer sachets each			
<u>Ancillary Components</u>			
Single junction electrodes			
Double junction electrodes			
A set of 500 pH 4 buffer solution sachets			
A set of 500 pH 7 buffer solution sachets			

A set of 500 pH 10 buffer solution sachets			
500ml pH 4 `buffer solution			
500ml pH 7 buffer solution			
500ml pH 10 buffer solution			
Specific and custom cable of 10 m length.			
Service as per manufacturers specifications.			

ITEM SS9: THE SUPPLY OF A PORTABLE OPTICAL DISSOLVED OXYGEN METER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
a handheld device with a rugged, waterproof case (IP-67 rated) and a military-spec (MS) cable connector with USB connectivity, display and onboard memory.			
The instrument must include the DO sensor/electrode			
Should contain a sensor port for DO and temperature measurement			
Should be able to monitor DO range: 0 to 500%, 0 to 50 mg/L			
Should be able to measure temperature range: -5 to 70°C			
Meter able to compensate for salinity			
Should have a cable with atleast 10m length or more			
Should contain soft-sided carrying case			
Data memory:			
Should be able to store large onboard memory with storage capacity for over 100,000 data sets			
<u>Ancillary Components</u>			
Dissolved Oxygen sensor			
Dissolved Oxygen/Temperature sensor			
Service as per manufacturer specifications			

SECTION D: BIOLOGICAL LABORATORY EQUIPMENT

ITEM BS1: THE SUPPLY & COMMISSIONING OF A VIEWING CABINET WITH UV LAMP			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Long wavelength set at 365/366 nm			
Must be a 6W ultraviolet lamp or equivalent			
The viewing cabinet must have an access curtain			
The viewing cabinet must be comprised of aluminium or similar material			
The UV cabinet must contain a holding bracket for the lamp			
The lamp must have minimum dimension of 230 x 300 x 170 mm (HWD) to fit a colilert quanti-tray			

ITEM BS2: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A QUANTI-TRAY SEALER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Must be a motor driven heated roller			
Must be able to seal water samples inside colilert quanti-trays when used with any IDEXX reagent (such as Colilert, Colilert-18, Colisure, Enterolert, Pseudalert, or HPC for Quanti-Tray)			
Unit must include a base sealer unit, regional power cord and input shelf			
System should be a benchtop system and should not exceed the following size: Height between 30 and 40 cm Depth between 30 to 40 cm Width between 40 to 50 cm			
<u>Ancillary Components</u>			
Service as per manufacturer specifications			

ITEM BS3: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A CALIBRATED INCUBATOR			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Incubator with 160L capacity			
Incubator with 500L capacity			
Should have a temperature sensor alarm			
Should be easy to clean and decontaminate			
Should provide operation manual and trouble-shooting guide			
Over-protection system to ensure sample and operator			
Two point locking			
At least 2 grids			
Inner glass door			
Adaptive multifunctional digital microprocessor controller with high definition display.			
Adjustable electronic over temperature monitor			
Instrument must be ISO 17025 calibrated			
Auto diagnostic system			
<u>Equipment - Incubator</u>			
The interior of the instrument should inhibit growth of contaminants			
At least two shelving grids with antimicrobial properties; easy to service; easy to clean.			
Setting temperature range 20°C to 80°C			
protection;			
Consist of an with antimicrobial coating;			
able to eliminate surface bacteria within 1 day of exposure			
Air circulation through a fan which can be switched off			
<u>Ancillary Components</u>			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM BS4: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A CALIBRATED OVEN			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			

• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers Provide service engineer(s) CV or certificate			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories Equipment - Ovens			
supply a 160L capacity digital oven			
Supply a 250L capacity digital oven			
Brushed finish Grade 304 Stainless steel interior.			
High temperature glass wool insulation.			
Anti-tilt runners with wire shelves.			
Shelves are manufactured from Grade 304 Stainless steel.			
Forced air circulation and internal baffles for temperature stability			
Temperature range: 5°C above ambient to 200°C			
Accuracy $\pm 0.25^{\circ}\text{C}$			
Shelf runners/no of shelves: 5/2			
Ancillary Components			
ISO 17025 Calibration with metrological traceability to national or international standards including temperature mapping			

ITEM BS5: THE SUPPLY, INSTALLATION AND COMMISSION OF A FILTA-MAX XPRESS ELUTION STATION FOR CRYPTO/GIARDIA ANALYSIS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers Provide service engineer(s) CV or certificate			
Provide - on-site training (10 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories Equipment			
The elution station should contain the following:			
Pressure Elution Station current rating: 4.2–5.0 A @ 24 V DC			
Pressure chamber lid			

Buffer inlet with flow meter			
Pressure gauge fitting			
High-pressure gauge			
Low-pressure gauge			
Air inlet with relief valve			
Pressure chamber body			
Control panel			
Filter Housing/outlet diverter assembly sensor			
Collection vessel sensor			
Collection vessel holder			
Pressure chamber purge valve			
Quick connect stem for filter housing			
Minimum input pressure: 65 psig (4.5 bar)			
Maximum input pressure: 150 psig (10.3 bar)			
Must include the following components: Buffer reservoir kit (one 10L bottle and one 4L bottle with lids)			
Outlet diverter (5-pack kit)			
Hose kit			
Accessory kit:			
Power pack			
Pressure chamber O-ring			
Tool kit (2 hex wrenches, quick-connect fitting, screwdriver)			
Ancillary Components			
Service as per manufacturer specifications			

ITEM BS6: THE SUPPLY AND COMMISSIONING OF CALIBRATED WATER BATH CIRCULATORS WITH WATER BATH RESERVOIRS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
The device must be a benchtop model			
Dimensions should not exceed 700 x 250 x 400 mm (HWD)			
Capacity: minimum 45L			
The reservoir must be comprised of corrosion resistant stainless steel			
Temperature range must include 10 – 95°C			
The components must include a built in pump, controller for parameters such as temperature and time.			
An auto-diagnostic system with an alarm notification			
Ancillary Components			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM BS7: THE SUPPLY OF CALIBRATED STAINLESS STEEL TEMPERATURE LOGGERS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply - latest model currently in production - Include required software compatible with Windows 10 and Labware Laboratory Information Management System			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Provide - on-site training (5 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories			
<u>Equipment</u>			
The device must be stainless steel			
The device must be suitable for high pressure applications up to 2200 psi			
The device must be suitable for high temperature applications up to 130°C			
The logger must be comprised of corrosion resistant stainless steel			
The logger must allow for USB connectivity			
The logger must be able to fit into a vertical type steam autoclave (Dimensions must not exceed 5 x 130 mm)			
<u>Ancillary Components</u>			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM BS8: THE SUPPLY, INSTALLATION AND COMMISSIONING OF AN INVERTED LIGHT MICROSCOPE WITH CAMERA FOR MICROSCOPIC ANALYSIS FOR THE ANALYSIS OF ALGAL IDENTIFICATION AND ENUMERATION AS WELL AS OTHER REQUIRED MICROSCOPY ANALYSIS OF DRINKING AND RAW WATERS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers Provide service engineer(s) CV or certificate			

Provide - on-site training (10 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories			
Equipment			
Manual focus drive and focus stop			
Light manager built into the stand			
Camera Sideport left - minimum three switching positions			
Must have Mechanical stage ranging between 120mm x 90mm			
Universal mounting frame suitable for petri dishes and slides			
Must have innovation to prevent liquid spillage onto objective lenses and stands of microscope			
Must include a dust cover			
Halogen light source			
Must have objective lenses to ensure the minimizing of straylight; with a visible increase in contrast for all contrast methods e.g. Brightfield, Darkfield, Phase contrast, DIC, Fluorescence, Polarised light microscopy			
10 x 23mm focusable eyepieces			
Adjustable slide holder			
Must have condensers for both long-distance and DIC imaging			
DIC condenser rings and sliders			
Must have Digital camera attached with minimum 5 MP camera with complementary Metal Oxide Semi (CMOS) conductor			
User interface configurable, control of the microscope systems and components, extensive Acquisition and analysis. The following modules are included: - Module to allow accurate measurement - Module to take panoramic views - Module to extend the focus of images manually Extra modules are advantageous			
Software to be the City property with licences Software to be compatible with Windows 10 and upgradable. Software to be loaded on CoCT supplied PC			
PC/Software requirements			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
Service as per manufacturer specifications			

ITEM BS9: THE SUPPLY, INSTALLATION ND COMMISSIONING OF A SINGLE TUBE LUMINOMETER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Sample format must accommodate tubes for sizes 12x75mm, 12x55 mm tubes; 1.5ml and 2ml centrifuge tubes; and 35mm culture dishes			
Must have a detector photon PMT spectral range 300-600nm			
Must have measurement retractable drawers with interchangeable reflectors and sample adapter for different tubes			
Must include touch screen			
Must have USB port interface for PC connectivity			
Weight not more than 6kg			
Dimensions of at least (HxWxD): 45 x 30 x 10 cm			
Must have desktop power supply of 100-240V , AC			
Must be able to operate between 10-35 OC			
<u>PC/Software requirements</u>			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
<u>Ancillary Components</u>			
Service as per manufacturer specifications			

ITEM BS10: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A TINTOMETER/THERMOSTATICALLY CONTROLLED CABINET			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Minimum capacity of 180 Litres			
Maximum dimensions: 700 deep, 700 wide, 900 Height			
Maximum weight 42kg			
Must be fully insulated cabinet with universal plug-in temperature			
Must operate at range of 2 – 40 OC			
Ambient temperature range must include 10-35 OC			
Display must include at least 3 digits			
Must have a heating unit			
Fan must be radial with minimum discharge of 120 m3/h			
Power requirement must be 230V/50 hz or lower			
Must have a light unit with at least 4 energy lamps that can be used individually			
Power supply inside must have a minimum of 3 extra plug sockets			
<u>Ancillary Components</u>			
Service as per manufacturer specifications			
ISO 17025 calibration with metrological traceability to national or international standards			

ITEM BS11: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A CHILLER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			

Supply			
• latest model currently in production			
Provide			
at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must include 0 - 120°C temperature range			
Temperature accuracy must not exceed $\pm 0.3^{\circ}\text{C}$			
Timer must allow for a minimum of 99 minutes			
Cooling method used must be based on Peltier cooling technology or equivalent			
The unit must be benchtop and must not exceed mass of 10 kg			
Must include a built-in alarm if temperature exceeds the $\pm 0.3^{\circ}\text{C}$ threshold			
Chiller block must accommodate 24 x 12mm and 1 x 24mm sample inserts/holes.			
Ancillary Components			
Service as per manufacturer specifications			

ITEM BS12: THE SUPPLY AND COMMISSIONING OF A DIGITAL MICROMETER			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must be able to operate for a minimum of 90 minutes			
Must be able to measure distance ranging from 0 – 25 mm			
Ancillary Components			
Service as per manufacturer specifications			

ITEM BS13: THE SUPPLY, INSTALLATION AND COMMISSIONING OF AN AUTOMATED COLONY COUNTER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Must be able to display different colonies in different colonies			
Must be able to count at least 1000 colonies in 1 second			
The minimum size of detected colony must by 0.05mm			
Must be able to count colonies on chromogenic agar			
Must have optimized lighting and contrast functions			
Must have long-lasting LED lighting technology or equivalent			
Should allow for automatic archiving of results			
<u>PC/Software requirements</u>			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
<u>Ancillary Components</u>			
Service as per manufacturer specifications			

ITEM BS14: TO SUPPLY, INSTALL & COMMISSION A BENCH-TOP INCUBATOR FOR TOXICITY			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			

• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers Provide service engineer(s) CV or certificate			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories Equipment			
The instrument should have a temperature range of 2°C to 40 °C, and must be continuously adjustable in steps of 0.1°C			
Should have a minimum of 8 built in lights			
Illuminated display of preset/current temperature			
Capacity: minimum 135 L and mass must not exceed 45 kg			
The unit must be a benchtop model			
Power sockets must be fitted inside the incubator			
The unit must be a benchtop model			
The cabinet must be fully insulated			
Refrigerating unit must contain a compressor unit			
Ambient temperature range 10 – 35°C			
Heating unit must contain a heating element			
Ancillary Components			
Service as per manufacturer specifications			
Set of lamps			
ISO 17025 calibration with metrological traceability to national or international standards			

ITEM BS15: THE SUPPLY AND COMMISSIONING OF A LUXMETER			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Provide - on-site training (5 staff members) - theoretical & practical training - competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories Equipment			
Pocket size general purpose light meter supplied with a separate light sensor to allow optimum positioning			
Three measuring ranges provide versatility and high accuracy for laboratory use			
Display: LCD or equivalent. Should have 3 decimal place resolution (i.e 1.001)			
Measurement 0 – 50.000 lux in 3 ranges			

Resolution: 1,10 and 100 lux range dependant			
Battery: 9V or higher			
Supplied with a carry case			
Ancillary Components			
Service as per manufacturer specifications			

ITEM BS16: TO SUPPLY AND COMMISSION A PORTABLE MICROSCOPE FOR MACROINVERTEBRATE IDENTIFICATION-BIOMONITORING			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Provide - on-site training (6 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories			
Equipment			
Portable and independent			
Multiplication range; 1-1000X continuous amplification			
Power source: Built in lithium battery or equivalent. Must be able to operate for a minimum of 4 hours			
Must contain a high definition LCD display or equivalent			
Object distance: 10mm to ∞ (infinity)			
Must support a micro SD card			
Light source must be built in LED or equivalent. Must contain a minimum of 8 LED lights			
Must include an aluminium stand			
Ancillary Components			
Service as per manufacturer specifications			

ITEM BS17: TO SUPPLY AND COMMISSION A CLASS II TYPE A2 BIOLOGICAL SAFETY CABINET			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers			

Provide service engineer(s) CV or certificate			
Provide - on-site training (10 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories Equipment			
Class II Type A2 Biological safety cabinet			
Must be certified by the NRCS to VC 8041 and comply with SANS 1050			
Must have a LP gas tap with safety interlocked shut off valve			
Estimated size of cabinet is 1.2 m width			
With an audible and visible alarm system, digital display relevant safety information on a single screen			
Color LED screen, show the air velocity, time, fan station, filter life and alarm in real time.			
Support stand with caster wheels and suitable for 1.2 m BSC cabinets			
Must have a UV lamp			
ULPA filter to provide > 99% typical efficiency for particle size over 0.12 microns, and the materials is glass fiber.			
Work tray should be easy to contain spillage and clean with Isocide antimicrobial coating			
Should contain a service fixture inside the cabinet to allow the use of LPG gas Bunsen burners.			
Should have a sensor alarm indicating when the UV lamp is not working efficiently			
Should be serviced by qualified individuals and the service certificate clearly displayed with a reminder for the next service.			
Germicidal UV light with timer			
Safety interlocked to avoid Laboratory technician being exposed to UV light			
220V AC plug point inside the work chamber			
Glass door that slides closed (down and up)			
Ancillary Components			
UV lamp			
A set of 2 ULPA filters			
Service and verification as per manufacturer specifications			

ITEM BS18: TO SUPPLY AND COMMISSION A COMPRESSED COOLED INCUBATOR			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers			

Provide service engineer(s) CV or certificate			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Setting Temperature Range: +20 to +80°C			
Setting Accuracy: 0.1°C			
Digital Setting			
Equipment to be calibrated by ISO 17025 laboratory upon commissioning			
Must be based on fan-heating/cooling mechanism			
Fully Stainless Steel with Inner Glass Doors			
Ancillary Components			
Service as per manufacturer specifications			
ISO 17025 calibration with metrological traceability to national or international standards			

ITEM BS19: TO SUPPLY AND COMMISSION A SAFETY STORAGE CABINET			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Free standing unit			
Fire-resistant			
Acid-resistant			
Able to compensate for uneven flooring			
Tested against EN14470-1			
Dimensions must not exceed 1500 x 800 x 2000mm (WxDxH)			
Doors must be lockable			
Must be able to store acids, alkali's and hazardous material in the same cabinet			
Must have separate compartments for safe storage of acids, alkali's and hazardous material			

ITEM BS20: TO SUPPLY AND COMMISSION A ULTRA-LOW VOLUME FOGGING MACHINE			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			

- commissioning within two weeks of installation - Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Guarantee a minimum 12 months after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
Must have a tank capacity of at least 4.5 litres			
Must have a spraying range between 8-10 metres			
Must have an electrical wire length of 5 metres or more			
Must have a spraying rate ranging between 150-200 ml/min			
Must have an adjustable flow rate			

SECTION E: MOLECULAR LABORATORY EQUIPMENT

ITEM ML1: TO SUPPLY, INSTALL AND COMMISSION A CAPILLARY ELECTROPHORESIS: SANGER SEQUENCING INSTRUMENT			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
- commissioning within two weeks of installation - Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
- on-site training (5 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
Supply all accessories that is required for each technique the instrument is able to perform			
Automated sequencing (through selective incorporation of chain-terminating dideoxynucleotides fluorescent dyes which are labelled at the end of the DNA strand)			
Be able to validate/confirm DNA sequences			
Fragment analysis: separates DNA fragments according to its sizes.			
Supply all kits/reagents for sequencing: the reagents should be able to clean up the amplified products, premixed reagents for			

sequencing reactions as well as reagents to clean up the sequencing products in the shortest time with efficiency.			
Standards required for sequencing, reagents kits and consumables that are required for the different techniques the instrument is able to conduct.			
These including: pre-assembled set of 24 capillaries per capillary array (units), pre-filled containers with ready to use 1X buffer: one with Cathode buffer and other with Anode buffer for electrophoresis), polymer (pouches) and pre-filled conditioning reagent (pouch) to wash the polymer pump, 96-well microtiter plates to load samples for analysis, microtiter			
PC/Software requirements			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
A set of 96 capillary arrays			
A set of 100 pre-filled containers with buffer solutions			
A set of 100 polymer pouches and conditioning reagents.			
A set of polymer 96-well microtiter plates.			
Microtiter plate holder.			
Service as per manufacturer specifications			

ITEM ML2: THE SUPPLY AND COMMISSIONING OF A RAPID, EASY-TO-USE MOLECULAR BASED INSTRUMENT TO DETECT A RANGE OF HIGH-RISK PATHOGENS (SUCH AS BACTERIA, PARASITES, VIRUSES) IN A SINGLE SEMI-SOLID OR SOLID SAMPLE SUCH AS SLUDGE OR COMPOST.			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			

Able to			
• supply all the equipment spares & accessories			
Equipment			
Benchtop model			
Automated system to extract and purify nucleic acid material from the sample, followed by nested amplification of the target sequence on a single instrument.			
Evaluation of nested amplified products with DNA melting analysis, using fluorescence, to detect and identify the micro-organisms present in a tested sample.			
Sample preparation, amplification and detection should be done using one instrument.			
Should have a fast turnaround time (90min or less) from sample preparation, loading, amplification, detection, data generation and ultimately analysis.			
Should be able to rapidly and simultaneously detect pathogenic micro-organisms, associated with Gastro-intestinal diseases/illnesses, of the following classes: bacteria, viruses and parasites per sample tested.			
A test report should be generated and displayed upon completion of a run.			
PC/Software requirements			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
A set reagents/kits for the analysis of 100 samples.			
A set of media and controls for 100 samples.			
Service as per manufacturer specifications			

ITEM ML3: TO SUPPLY, INSTALL AND COMMISSION A NEXT GENERATION SEQUENCING INSTRUMENT WHICH IS ABLE TO RAPIDLY IDENTIFY AND GROUP MULTIPLE MICRO-ORGANISMS, PRESENT IN A SAMPLE, INTO SPECIFIC LEVELS/CATEGORIES EXAMPLE CLASS, FAMILY, GENUS, SPECIES.			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service			

engineers			
Provide service engineer(s) CV or certificate			
Provide			
- on-site training (5 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
Must be a benchtop instrument			
Able to analyse samples within 24hrs and able to sequence 2 x 96 well plates in a single run.			
Fit for use to rapidly identify a diverse range of bacteria, viruses and fungi in a range of water samples.			
Should be able to perform accurate discrimination to the genus and species level (bacteria).			
Able to type bacteria and viruses			
Able to interchange and perform whole-genome and targeted (amplicon) sequencing			
PC/Software requirements			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
Service as per manufacturer specifications			

ITEM ML4: THE SUPPLY AND COMMISSIONING OF A LABORATORY FREEZER, UPRIGHT MODEL, 544L, -20°C TO -40°C TO BE ABLE TO STORE EXTRACTED NUCLEIC ACID MATERIAL (DNA AND RNA) OVER LONGER PERIODS OF TIME (MONTHS).			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
- commissioning within two weeks of installation - Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			

Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Should have a temperature sensor alarm			
Should have an auto-defrost option and be easy to clean and decontaminate			
Should be a high quality instrument and efficient for laboratory use			
Able to reach the required temperature within a few minutes			
Able to seal tightly upon closure, should be compartmentalized.			
Ancillary Components			
Service as per manufacturer specifications			

ITEM ML5: THE SUPPLY AND COMMISSIONING OF A LABORATORY ULTRA LOW TEMPERATURE (-80°C) FREEZER TO BE ABLE TO STORE EXTRACTED NUCLEIC ACID MATERIAL (DNA AND RNA) OVER LONG PERIODS OF TIME (YEARS).			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Temperature Range must include: -25 to -80°C			
Approximately a 714L upright model with 3 inner doors, 230V and 50Hz; Freezer Accessory, LCO2 back-up system			
Should have a temperature sensor alarm			
Pressure equalization port			
Triple Gasket door seals			
Minimum of 3 individual inner door seals			
Outside material: Isozide antimicrobial coating			
Digital touch screen to display current temp, history temp, all alarm records and data			
2 sets of Cryo safety gloves			
Standard Cardboard minimum 60 Cell Divider			
Modifiable Clip Rack for Standard 2-inch High Boxes and/or 3-inch High Boxes			
Ancillary Components			
2 sets of Cryo safety gloves			
Standard Cardboard minimum 60 Cell Divider			
Modifiable Clip Rack for Standard 2-inch High Boxes and/or 3-inch High Boxes			
Service as per manufacturer specifications			

ITEM ML6: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A FLOOR-STANDING CENTRIFUGE TO ASSIST WITH PROCESSING/CENTRIFUGING LARGE VOLUME OF SAMPLES AND HIGH VOLUMES.			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Able to interchange Aluminium rotors (fixed angle) to centrifuge a range of sample tubes and bottles (15ml, 50ml, 250ml, 500ml).			
Should be able to centrifuge samples using a swing bucket rotor with the required buckets, tie-down knob and microtiter rotor/kit			
Should be equipped with pharmaceutical-grade sterilizing filters to eliminate contaminant concerns from entering the lab as a result of aerosols or leaks during the centrifugation cycle			
Maintenance-free vacuum pump			
Temperature range: able to set temperatures to around -10 to approximately 45°C			
Model must fit in a 1 square meter area within the laboratory			
Able to operate at various speeds 3000- 25000 rpm.			
Maintenance-free vacuum pump			
Ancillary Components			
A set of 2 aluminium rotors that can accommodate maximum 40 sample positions with cup size (15ml, 50ml, 250ml, 500ml).			
A fixed angle and swing bucket			
A microtiter rotor kit			
A set of 2 buckets			
A set of 10 autoclavable tubes			
Service as per manufacturer specifications			

ITEM ML7: THE SUPPLY, INSTALLATION AND COMMISSIONING OF AN INCUBATOR: CO2 FOR THE MOLECULAR LABORATORY			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Benchtop instrument			
Used to incubate cultures and processed samples at suitable temperatures to ensure growth of target micro-organisms on or in growth media. This is used to identify viable and culturable micro-organisms, relevant to public health, in a tested sample.			
Should have a temperature sensor alarm			
The interior of the instrument should have an antimicrobial coating that inhibits growth of microbial contaminants			
Incubator type capacity should more than 160L			
Must have an CO ₂ IR Sensor			
Must be able to control CO ₂			
Must have a ULPA filter to allow the chamber to return to Isoclass 5 cleanliness within 20 min of closing the door to prevent contamination			
Must have High Temperature Decontamination			
Must have a UV lamp for decontamination purposes			
Interior must be made of a surface that is easily cleaned.			
Must have shelving that can easily be cleaned			
Temperature range of the instrument should be ambient to 60°C			
Temperature recovery time must be under 10 min after closing the door			
CO ₂ range should be 0% to under 21%;			
CO ₂ recovery time must be under 5 min			
Inner glass door with two point locking system to minimize environmental influences that can negatively affect the growth of cultures and micro-organisms in processed samples.			
<u>Ancillary Components</u>			
A set of 2 incubator jars with petri-dish holders			
Service as per manufacturer specifications			

ITEM ML8: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A LABORATORY FRIDGE/FREEZER COMBINATION TO STORE WATER AND ENVIRONMENTAL SAMPLES AND EXTRACTED NUCLEIC ACID MATERIAL (DNA AND RNA) FOR SHORT PERIODS OF TIME.			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Should have a temperature sensor alarm			
Should have an auto-defrost option			
High quality interior and antimicrobial external surfaces			
Should be able to operate at temperature ranges of approximately 2-15°C (fridge) and at least -10 to -20°C for the freezer.			
Capacity: At least around 200L fridge and at least a 270L freezer capacity			
<u>Ancillary Components</u>			
Service and verification as per manufacturer specifications			

ITEM ML9: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A POLYMER REACTION (PCR) HOODS WITH UV LAMPS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			

Able to			
• supply all the equipment spares & accessories			
Equipment			
Should be approximately 1.0 m– 1.2 m in length with a secure stand approximate laminar airflow of 0.28-0.34m/s			
Contain a high quality pre-filter and HEPA-filter			
Filter of air should cover the entire working area			
Should have a UV lamp (which automatically de-activates when the safety cover is opened.)			
Should have a integral safety cover with two positions: fully open, self-supporting with long-lasting spring hinges during use and fully closed			
Efficient lighting inside the cabinet. Lighting should be mounted out of airstream to ensure uniform airflow			
Should be serviced by qualified individuals and the service certificate clearly displayed with a reminder for the next service.			
Ancillary Components			
Service as per manufacturer specifications			
UV lamps			

ITEM ML10: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A LAMINAR FLOW HOOD WITH UV LAMP FOR DOWNSTREAM APPLICATIONS OF PCR PRODUCTS IN THE MOLECULAR LAB			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
supply all the equipment spares & accessories			
Equipment			
Should be approximately 1.8 m in length			
Worktop and able to contain accidental liquid spills on the inside of the laminar flow			
The laminar flow must have low noise operation			
The laminar flow must have ULPA filters			
The unit must be energy efficient			
The unit must be constructed with Isocide antimicrobial coating surfaces to eliminate surface bacteria within 1 day			
The side walls on the unit must be made from material with antimicrobial coatings.			
The unit must have a sliding sash			

The unit must comply with ISO 14644.1 requirements to ensure a class 3 workzone within the unit.			
<u>Ancillary Components</u>			
A set of 2 ULPA filters			
UV lamp			
Service as per manufacturer specifications			

SECTION F: ANALYTICAL LABORATORY EQUIPMENT

ITEM AC1: THE SUPPLY AND COMMISSIONING OF A BENCH-TOP HIGH-FREQUENCY ULTRASONIC BATH SONICATOR			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Must contain a heating function up to and including 70°C.			
Must be capable of operating for at least 90 minutes			
Minimum water bath volume - 7 Litres			
Durable stainless steel tank which is chemically resistant			
Digital LED/LCD display or equivalent is required			
High frequency industrial inducer of 40 kHz or equivalent is required			
Multiple mode output with normal, pulse, sweep and degas functions must be included			
Drain valve must be included			
<u>Ancillary Components</u>			
Mesh basket			
Perforated tray			
Solid tray			
Lid			

ITEM AC2: THE SUPPLY OF A BENCHTOP OIL-LESS VACUUM PUMP			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• instrument performance verification (incl. chemicals & consumables required) within four weeks of commissioning			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Free standing benchtop unit			
Exhaust silencer/muffler or equivalent must be included			
Sound level: < 50 dB			
Vacuum pressure must be adjustable			
Operating vacuum range: 100 – 7 mbar			
Must include a vacuum/pressure regulator and gauge			
Flow range: 30 – 200 L/min			
Ancillary Components			
Service kit			
Service as per manufacturers specification			

ITEM AC3: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A LABORATORY WATER PURIFICATION SYSTEM			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• instrument performance verification (incl. chemicals & consumables required) within four weeks of commissioning			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Benchtop unit			

Must be able to provide grade/type 1 water according to ASTM D1193, ISO 3696 or equivalent			
Must be compliant to USP and EPA requirements			
Must include pre-filters in order to ensure feed water is of adequate quality and to prolong the life of the purification cartridges			
Must include on-line digital meter to monitor water quality, a touch screen monitor is advantageous			
Must include reservoir tank of minimum 100L.			
The reservoir must include recirculation module to ensure type 2 water quality is maintained			
Type 2 production rates must be equal to or exceed 10L/hour			
Reservoir must contain an UV light to prevent algae/bacterial growth			
Must be able to store water quality indicators such as conductivity, TOC and resistivity as part of instrument dispensing history			
Interfacing to LIMS is advantageous			
Ancillary Components			
Supply of pre-filters (activated charcoal, 1 µm, 0.5µm or equivalent)			
Supply and replacement of tank level sensors			
Supply and replacement of RO membranes (if applicable)			
Service as per manufacturer specifications			

ITEM AC4: THE SUPPLY AND COMMISSIONING OF A CALIBRATED ANALYTICAL BALANCE			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must be able to weigh up to 4 decimal places with a low minimum display of 0.1mg			
Must be supplied with a ISO 17025 calibration certificate according to R79			
Calibrate on an annual basis according to ISO 17025 requirements			
Balance should have all glass draft shield with 3 sides opening (left, right, top)			
Touch screen display			
Level indicator with adjustable levelling feet			
RS232 connection capability for LIMS interfacing			
weighing pan			
LCD display with backlight			
Auto zero setting and tare			
Calibration must be done on-site			
Ancillary Components			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AC5: THE SUPPLY AND COMMISSIONING OF A CALIBRATED LABORATORY TOP LOADING BALANCE			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Must be able to weigh up to 4 decimal places with a low minimum display of 0.1mg			
Must be supplied with a ISO 17025 calibration certificate according to R79			
Local vendor must be able to calibrate on an annual basis according to ISO 17025 requirements			
Touch screen display			
Level indicator with adjustable levelling feet			
RS232 connection capability for LIMS interfacing			
<u>Ancillary Components</u>			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AC6: THE SUPPLY AND DELIVERY OF A SET OF ISO17025 CALIBRATED AUTOMATIC PIPETTES WITH TIPS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
10ml Automatic pipette			
5000µl Automatic pipette			
1000µl Automatic pipette			
200µl Automatic pipette			
20µl Automatic pipette			
2µl Automatic pipette			
The 2, 20, 200 and 1000µl must have plastic tip ejectors			
Pipettes must be autoclavable			
Pipettes must be supplied calibrated			
Air-displacement technology			

Calibration is done off-site			
Ancillary Components			
ISO 17025 Calibration with metrological traceability to national or international standards			
Supply and Replace Piston assembly			

ITEM AC7: SUPPLY AND COMMISSIONING OF AN ISO17025 CALIBRATED VERTICAL-TYPE STEAM AUTOCLAVE			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
• SANS 347 compliant			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Autoclave must be calibrated and pressure tested on-site upon installation according to pressure vessels and ISO17025 requirements. Provide calibration certificates with metrological traceability.			
Pressure valve must be calibrated when installed. Provide calibration certificate with metrological traceability			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Upright vertical chamber of $\pm 100\text{L}$ capacity			
Electromechanical lock system			
Dual-sensing interlock mechanism for greater safety			
Double-sensing system for air evacuation.			
Air removal time setting			
Built-in timer programmable to automatically start a cycle			
Process status display			
Process mode for agar			
An auto steam-exhaust mechanism to release steam at pre-set percentage rate after sterilization is completed to avoid liquid boil-over			
Include autoclave baskets			
Ancillary Components			
Supply and installation of heating element			
Service as per manufacturer specifications			
ISO 17025 Calibration with metrological traceability to national or international standards			

ITEM AC8: THE SUPPLY, INSTALLATION AND COMMISSIONING OF AIR COMPRESSOR COMPATIBLE WITH MILESTONE DMA 80 AND DMA 80 EVO MERCURY ANALYSER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories			
<u>Equipment</u>			
Must be compatible with Milestone DMA-80 and DMA-80 evo mercury analyser			
Must be mercury and oil free			
Must supply clean and dry air			
At least two activated carbon filters must be supplied to purify air			
Silent running, noise sound must be less than 55dB			
Must supply stable and consistent air pressure			
Pressure supplied must not exceed 7 bar			
Maximum dimensions (cm) 50(W)x50(H)x50(L)			
<u>Ancillary Components</u>			
Supply of carbon filters			
Service as per manufacturer specifications			

ITEM AC9: THE SUPPLY, INSTALLATION AND COMMISSIONING OF AN INDUCTIVELY COUPLED PLASMA OPTICAL EMISSION SPECTROSCOPY INSTRUMENT (ICP-OES) FOR THE ANALYSIS OF METALS IN WATER, WASTEWATER, SLUDGE AND SOIL			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			

Provide service engineer(s) CV or certificate			
Provide - on-site training (20 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories			
Equipment			
Supply and installation of gas line and regulators to existing gas utilities			
Supply and installation of extractor system (including ducting and pump)			
Must be able to quantitate the following metals: Aluminium, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Titanium, Thallium, Uranium, Vanadium, Zinc			
Must be capable of analysing the following matrices: ground water; surface water; sea water; drinking water; storm water; sewage; treated effluent; industrial effluent; sludge; soil/compost			
Must comply with EPA 6020 and SM200.8 (or equivalent)			
Spectroscopy detector must include the following: -Reflective optical components with a minimum 10 year warranty -Fully automated internal neon correction for unique wavelength accuracy -Encapsulated and argon purged optical bench -Purge gas must be fully recycled and re-used as a counter gas at the cone for high sensitivity axial plasma views -Instrument must be configured for synchronous dual view -Automatic attenuation of radial/axial view without sample dilution for higher ranges -Wavelength range: 160 – 900nm -Wavelength accuracy must be less than 0.4pm -Spectral resolution: 1:70000 -Must include peltier cooling device (or equivalent) to obtain temperatures less than -10°C -Must be a high speed detector -Must allow for simultaneous detection of multiple elements and for full wavelength scan			
Sample introduction technology must include the following: -Plasma must tolerate complex matrices at high sample loading -Torch must be versatile for simultaneous measurements of hydride and non-hydride elements (aqueous; hydride mode and organic salts) -Automatic torch alignment of torch positioning without manual re-alignment -Nebulizer: Must be able to accommodate various applications (Aqueous, samples with Hydrofluoric acid, high salt/matrix, organic solvents) -Spray chamber: Glass cyclonic or equivalent for various applications (Aqueous, samples with Hydrofluoric acid, high salt/matrix, organic solvents) -Peristaltic Pump: PC controlled with variable speed with a minimum of 4 channels for simultaneous operation of multiple accessories -Gas control: All gas flows must be computer controlled and fully automated. Should have individual Mass Flow Controllers (MFC)			

for plasma, auxiliary and nebulizer gases. Plasma Gas consumption for argon should ideally be <20L/min, Purge gas consumption should ideally be <2L/min			
-The high frequency generator must include a solid state power supply which is maintenance free and water-cooled (or equivalent) -Incremental power variation must range between 700 – 1700W in 10W increments			
-Autosampler must be capable of unattended operation of a minimum of 150 samples -Must be compatible with various sample introduction accessories -Must include a rinse station -Must have an online dilution function -Tubes must be able to accommodate 10 and 50 mL sample sizes			
Instrument must include following sensors: -Gas and pressure flow rates -Temperatures (internal) -Extraction rate of exhaust systems -Plasma intensity and stability -Generator power			
Exhaust requirements include: -Corrosion-resistant materials and onboard fan to maintain internal pressure positive pressure -A dust/particulate filter must be included on the air supply			
PC/Software requirements			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
Supply of calibration standards (CRMs) with CoA's Multi-metal standard (1000 mg/L), 500 mL, each must have a different batch number			
4 x sets of ICP peristaltic pump tubing			
Supply of 100 sample cups			
Service as per manufacturer specifications			

ITEM AC10: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A DISCRETE ANALYSER FOR DETERMINATION OF ORGANIC AND INORGANIC COMPOUNDS IN WATER SAMPLES			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			

Installation and commissioning by trained service engineers Provide service engineer(s) CV or certificate			
Provide - on-site training (20 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Equipment			
Supply of a fully automated multicomponent simultaneous discrete analyser employing photometric, colorimetric, bichromatic and turbidimetric testing techniques			
Must be a benchtop model			
Must be able to quantitate the following analytes: - Ammonia (EPA 350.1; ISO7150) - Alkalinity (EPA310.2) - Chloride (EPA352.2; ENISO15682) - Hexavalent Chromium (ISO11083) - Phosphate (EPA365.1; ENISO6878) - Total Phosphorous (EPA365.4) - Thiocyanate (SMWW 4500-CN-M) - Free cyanide (SMWW 4500-CN-M) - Total cyanide (post distillation) (SMWW 4500-CN-M) - Total Kjeldahl Nitrogen (EPA351.2) - Fluoride (EPA340.3) - Nitrate (ASTM D7781-14) - Nitrite (EPA353.1) - Phenol (EPA420.1) - Silica (EPA370.1) - Sulfate (EPA375.4) - Colour (EPA140)			
Method detection limits for following SANS241 determinants must be less than the criteria below: Ammonia (2 µg N/L) Alkalinity (7 mg CaCO ₃ /L) Nitrite (2 µg/L) Nitrate (15 µg/L) Sulphate (2 mg/L) Fluoride (0.1 mg/L) Chloride (1 mg/L)			
Must be capable of analysing the following matrices: ground water; surface water; sea water; drinking water; storm water; sewage; treated effluent; industrial effluent; sludge; soil/compost			
Must be capable of analysing at least 330 photometric tests per hour for rapid, high throughput analysis			
Must have at least 100 sample loading capacity and 40 reagent capacity			
Must include designated positions for analyte determination reagents			
Must include a minimum of 12 different wavelength filters which covers a wavelength range from 340 – 880nm for the full suite of cationic and anionic analysis. Resolution must be equivalent or lower than 0.001 Absorbance units.			
Advantageous to include sample volumes up to 220 µL			
Advantageous to include an electrochemical module for determination of pH, EC, alkalinity and total hardness using an ion selective electrode or equivalent			
Must include a long life Xenon light source or equivalent			

Must include a barcode reader for automatic identification of sample racks			
Reagent cavity must include a Peltier cooling mechanism (between 2-8°C) or equivalent to maintain reagent integrity within the analyzer			
Must include relevant waste and water containers			
Supplier must include in their quotation the transfer of workflows/profiles from existing Thermoscientific Aquakem instrumentation			
Must be able to employ disposable cuvettes using zero carry-over measurements			
Must have continuous access to cuvettes without interrupting test processing			
<u>PC/Software requirements</u>			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
<u>Ancillary Components</u>			
Electrochemical module for analysis of pH and EC			
Service as per manufacturer specifications			
Box of sample vials			
Box of cuvettes			

ITEM AC11: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A LABORATORY GLASSWARE WASHER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			

Capacity more than 400L			
Programmable parameters user defined (Pre-cleaning; washing with cleaner; Rinse; Washing with neutralization; Rinse; Washing with hot water; Drying)			
Power failure protection			
Hot or cold water temperature			
Alarm system for temperature range and water pressure			
Cleaning, disinfecting and drying functions for all glassware types (i.e. beaker, flask, pipette, petri dish, burette, measuring cylinder, test tube etc.)			
Automatic door with safety lock to prevent opening while in use			
All accessories must be included for addressing the glassware types (must include but is not limited to beaker, flask, pipette, petri dish, burette, measuring cylinder, test tubes, etc)			
Height of 1.1m			
220V~240V50~60HZ			
All accessories included			
Ancillary Components			
Service as per manufacturer specifications			

ITEM AC12: TO SUPPLY, INSTALL & COMMISSION A OPEN REFLUX CHEMICAL OXYGEN DEMAND DIGESTION UNIT			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must be compatible with Metrohm 855 and 814 robotic titrosampler and sample processor respectively			
Typical dimensions of round bottom glassware tubes are:			
250 mL volume			
Length: 306mm			
Diameter: 42mm			
KS40 glass joint			
Must be made of durable glass material			
Applicable to DIN 38409 standard method H41 (or equivalent)			
The heating block must be comprised of aluminium			
Programmable digital temperature control			
Must have the ability to save digestion methods			
Must have the ability to heat at different speeds			
Enable heating of samples to 140 °C in less than 10 minutes			
Must contain a water condenser with cooling lines			
Must contain an acid-resistant drip tray			

Must including tubing for water condenser			
Must include a lift function			
The instrument must be corrosion protected			
Must include a minimum of 20 hotplates			
Must be able to export to LIMS for data management according to ISO17025			
Must include a recirculating chiller compatible with digestion systems			
Must include a cooling water valve for water temperature regulation			
Ancillary Components			
Supply of insert sample racks for 20 tubes			
Supply of insert rack for water condensers (20 tubes)			
Supply of COD Digestion round bottom tubes (250 mL)			
Supply of COD Water Condensers			
Service as per manufacturers specifications			

ITEM AC13: TO SUPPLY, INSTALL & COMMISSION AN AUTOMATED DILUTION SYSTEM FOR PREPARATION OF PRIMARY STANDARDS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• instrument performance verification (incl. chemicals & consumables required) within four weeks of commissioning			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Must include hardware and software required for operation			
Must include a dosing unit which is capable of being calibrated externally			
Must be capable of dispensing and aspirating sample			
Must include a minimum 25 mL sample transfer tubing for dispensing and aspiration			
Must include a support stand and supporting rod			
Must include a bottle holder and 1L glass bottle for dispensing			
Must include an electrode holder			
Must include a magnetic stirrer			
<u>PC/Software requirements</u>			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			

Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
Amber bottles (1L) compatible with the automated dilution system			
Clear bottles (1L) compatible with the automated dilution system			
Service and calibration as per manufacturer specification			

ITEM AC14: TO SUPPLY, INSTALL & COMMISSION A MICROWAVE DIGESTER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• instrument performance verification (incl. chemicals & consumables required) within four weeks of commissioning			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment & accessories			
<u>Equipment</u>			
high throughput rotor able to digest 40 – 44 samples			
Maximum temperature 300°C			
maximum pressure 35 bar (ca. 500 psi)			
Vent & Reseal technology for individual pressure control			
User interface through a control terminal touch-screen display,			
Operating software with multil evelaccess allowing the user/administrator the edit, save and run a unlimited number of methods			
Built-in application library with digestion parameters (sample amount, reagents type, volume, time, power, temperature, pressure)			
<u>Ancillary Components</u>			
PTFE Teflon vessels with a volume of not less than 100 mL.			

Service and as per manufacturer specification			
ISO 17025 calibration of temperature with metrological traceability of national or international standards			

ITEM AC15: TO SUPPLY, INSTALL & COMMISSION AN ON-DEMAND ACID PURIFICATION SYSTEM			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• instrument performance verification (incl. chemicals & consumables required) within four weeks of commissioning			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Sub-boiling distillation for acid purification with water cooled condenser and collection vessel			
Ability to purify 2 different acids simultaneously			
Maximum of 400 mL of ultrapure acid per hour			
Operating software with stored methods to select			
automatic loading / draining module minimizing exposure to any acid			
<u>Ancillary Components</u>			
Collection vessel			
Replacement condenser			
Replacement heating element			
Service and as per manufacturer specification			

ITEM AC16: TO SUPPLY, INSTALL & COMMISSION A LABORATORY FUME EXTRACTION CABINET			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			

Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• instrument performance verification (incl. chemicals & consumables required) within four weeks of commissioning			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
competency declarations and certifications			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Maximum vertical sash height setting: approximately 430mm			
Maximum work access opening dimensions: approximately: 1.8m x 0.43m			
Exhaust system included			
Air intake velocity from not less than 0,5 m/s with the sash fully open to approximately 1.2 m/s with the sash fully closed.			
The outer cabinet constructed from mild steel epoxy powder coated			
The inner casing constructed from contour moulded resin impregnated fiberglass. No nuts and bolts protruding into the work area			
Ancillary Components			
Service as per manufacturers specifications			
Stand for free standing option			

SECTION G: PROCESS TECHNOLOGY LABORATORY EQUIPMENT

ITEM PT1: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A BENCHTOP LABORATORY TURBIDITY METER FOR THE MEASUREMENT OF TURBIDITY.			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			

- theoretical & practical training - competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories			
Equipment			
Must be a benchtop instrument			
Must report turbidity in nephelometric turbidity units			
Range must include 0 – 1000 NTU			
Resolution: less than 0.001 NTU			
Light source: Laser			
Detection system: 360° x 90°			
Must be capable of analysing SANS375; SANS5197; ISO7027 and SM2130 methods			
Reference standards with CoA must be provided (one set of each reference standard)			
Gelex secondary standard			
StablCal formazin standard (at least 10; 20 and 600 NTU)			
Must include 10 sample vials			
PC/Software requirements			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
A set of 10 sample vials			
Service as per manufacturer specifications			

ITEM PT2: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A BENCH TOP LABORATORY AUTO TITRATOR FOR THE MEASUREMENT OF ALKALINITY			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
- commissioning within two weeks of installation - Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
- on-site training (5 staff members) as instruments are purchased - theoretical & practical training			

• competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Auto titrator			
Benchtop model			
Peristaltic pump for reagent addition			
One burette system			
One pH electrode			
Include sample stand and stand to mount pH electrode			
Integrated Magnetic Stirrer			
Ability to measure alkalinity between 10 and 100 mg/L as CaCO ₃			
Able to store at least 500 results in internal memory			
Display calibration and titration curves			
Determine / calculate titration endpoints			
pH Alkalinity – ISO 9963 or similar			
Buffer standards with CoA (6 x 250 ml of each with each unit) -Buffer 2 -Buffer 4 -Buffer 9 Electrolyte Solution (250 ml of each with each unit) -3 mol/L KCl -1 mol/L HNO ₃			
pH Electrode Electrode and cable combination (can be unit or separate) 4 x pH general purpose pH electrodes			
PC/Software requirements			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
A pH electrode as per manufacturer specifications			
Service and verification as per manufacturer specifications			

ITEM PT3: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A BENCH TOP LABORATORY PH AND CONDUCTIVITY METER.			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			

Perform - commissioning within two weeks of installation - Installation and commissioning by trained service engineers Provide service engineer(s) CV or certificate			
Provide - on-site training (5 staff members) as instruments are purchased - theoretical & practical training - competency assessment (theoretical, written & practical) competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories			
Equipment			
pH & EC meter			
Benchtop model			
Dual Channel			
Include stand to mount pH and Conductivity electrode			
pH range: 0 pH units – 14 pH units			
Automatic Temperature correction			
Conductivity range: 0.001 $\mu\text{S}/\text{cm}$ – 1000 mS/cm			
Integrated Magnetic Stirrer			
Ability to connect barcode reader			
Able to store at least 500 results in internal memory			
pH and Conductivity – ISO 10523 (pH) and ISO 7888 (conductivity) or similar			
Buffer standards with CoA (6 x 250 ml of each with each unit) -Buffer 2 -Buffer 4 -Buffer 9 Electrolyte Solution (250 ml of each with each unit) -3 mol/L KCl -1 mol/L HNO_3			
Conductivity standard (1 x 250 mL of each for each unit) -1 $\mu\text{S}/\text{cm}$ (approximate conductivity) -5 $\mu\text{S}/\text{cm}$ (approximate conductivity) -10 $\mu\text{S}/\text{cm}$ (approximate conductivity) -100 $\mu\text{S}/\text{cm}$ (approximate conductivity) -500 $\mu\text{S}/\text{cm}$ (approximate conductivity) -1500 $\mu\text{S}/\text{cm}$ (approximate conductivity)			
<u>pH electrode</u> -3 in 1 electrode (pH & Reference & Temperature) -2 x pH electrodes specifically for Drinking Water -2 x pH electrodes specifically for Waste Water -2 x pH electrodes specifically for low conductivity water -2 x pH electrodes specifically for brine (highly saline) water -2 x pH electrodes specifically for water samples containing organics, oils or emulsions			
<u>Conductivity Electrodes</u> -2 x Conductivity electrodes specifically for Drinking Water -2 x Conductivity electrodes specifically for Low Conductivity Water -2 x Conductivity electrodes specifically for Sea Water			
<u>Redox Electrodes</u> -2 x Combination ORP electrode with platinum ring indicator			
<u>Dissolved Oxygen Sensor</u>			

-2 x Dissolved Oxygen Sensors for general application			
Electrode and cable combination (can be unit or separate)			
PC/Software requirements			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
A pH electrode as per manufacturer specifications			
A EC (conductivity) electrode as per manufacturer specifications			
Service and verification as per manufacturer specifications			

ITEM PT4: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A BENCHTOP LABORATORY SPECTROPHOTOMETER, ABLE TO MEASURE IN THE UV AND VIS RANGE TO ANALYSE FOR VARIOUS WATER QUALITY PARAMETERS AT ON-SITE AND MOBILE LABORATORIES			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories			
Equipment			
Spectrophotometer with reference beam technology			
Benchtop model			
Capable to measure UV VIS range – approx. 200 nm to 1000 nm			
Scientific Services currently uses HACH test kits. The equipment must be able to utilise these kits.			
Capable to accommodate 16 mm round cells			
Capable to accommodate 10, 20, 50 and 100 mm rectangular cells with automatic recognition			

Instrument capable to analyse for the following – using Cell and Reagent Tests: Aluminium Iron Manganese Calcium Magnesium Potassium Phosphate Nitrate Nitrite Chloride Ammonia (Ammonium) COD			
Utilize barcode identification and RFID to recognise Cell and Reagent Tests			
Must Include -2 x 10 mm quartz glass rectangular cuvette cells -2 x 10 mm glass rectangular cuvette cells -2 x 20 mm glass rectangular cuvette cells -2 x 50 mm glass rectangular cuvette cells -2 x 100 mm glass rectangular cuvette cells			
PC/Software requirements			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
Al Cell or reagent test kits			
Fe Cell or reagent test kits			
Mn Cell or reagent test kits			
Ca Cell or reagent test kits			
Mg Cell or reagent test kits			
K Cell or reagent test kits			
PO ₄ Cell or reagent test kits			
NO ₃ Cell or reagent test kits			
NO ₂ Cell or reagent test kits			
Cl Cell or reagent test kits			
NH ₄ Cell or reagent test kits			
BOD Cell or reagent test kits			
10 mm quartz glass rectangular cuvette cells			
Set of 50 x 10 mm glass rectangular cuvette cells			
20 mm glass rectangular cuvette cells			
50 mm glass rectangular cuvette cells			
100 mm glass rectangular cuvette cells			
Service as per manufacturer specifications			

ITEM PT5: THE SUPPLY, INSTALLATION AND COMMISSIONING OF VACCINE FRIDGE/FREEZER LONG HOLDOVER 180-220L			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee a minimum 12 months after commissioning			
Able to supply all the equipment spares & accessories			
<u>Equipment</u>			
Vaccine Fridge/Freezer long holdover 180-220L designed to maintain temperature during the loss of power for 50 consecutive hours or more at an ambient room temperature of 30°C			
Fridge capacity: 200L capacity with a 10% variance			
Freezer capacity: 30-40 Litres			
Fridge temp range: 2-8°C			
Freezer range: less than -10°C			
Standards: World health organisation specification or Global Health cold specification compliant			
Robust build structure with Solid door. Lockable			
LED lighting (Bacteria growth prevention)			
Single compressor system			
Audio or visual alarm for high or low temperature alerts			
Automatic defrost system			
Must include voltage regulator			
<u>Ancillary Components</u>			
Service and temperature verification as per manufacturer specifications to comply to ISO17025 requirements			

ITEM PT6: THE SUPPLY, INSTALLATION AND COMMISSIONING OF VACCINE FRIDGE/FREEZER LONG HOLDOVER 290-320L			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee a minimum 12 months after commissioning			
<u>Equipment</u>			
Vaccine Fridge/Freezer long holdover 290-320L designed to maintain temperature during the loss of power for 50 consecutive hours or more at an ambient room temperature of 30°C			
Fridge capacity: 300L capacity with a 5% variance			
Freezer capacity: 40-50 Litres			
Fridge temp range: 2-8°C			
Freezer range: less than -10°C			
Standards: World health organisation specification or Global			

Health cold specification compliant			
Robust build structure with Solid door. Lockable			
LED lighting (Bacteria growth prevention)			
Single compressor system			
Audio or visual alarm for high or low temperature alerts			
Automatic defrost system			
Must include voltage regulator			
Ancillary Components			
Service and temperature verification as per manufacturer specifications to comply to ISO17025 requirements			

ITEM PT7: THE SUPPLY AND COMMISSIONING OF A BENCHTOP VISCOMETER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical and practical training			
• competency declarations to be provided			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must be able to measure viscosity in the following range: 1 – 1 000 000 mPa.s			
Must be able to measure density			
Must be able to measure temperature			
Must include a working temperature range of at least 0 – 50 °C.			
Must be able to measure acidic and basic samples in the following pH range: 2 – 12			
All components and/or consumables necessary for a fully functional viscometer related to the equipment specifications above. These might include, but are not limited to, spindle sets/temperature sensors/etc.			
Ancillary Components			
Service as per manufacturer specifications			

ITEM PT8: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A FLAME ATOMIC ABSORPTION SPECTROMETER (FAAS)			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
A flame-only benchtop atomic absorption system is required.			
Corrosion-resistant sample introduction components.			
Single element AA lamps (10 elements).			
Multi-element AA lamps (2 elemental sets).			
<u>PC/Software requirements</u>			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
<u>Ancillary Components</u>			
Supply of auto-sampler unit			
Service as per manufacturer specifications			
Supply of calibration kits.			
Supply of optimised nebulizer assembly			
Aluminium Single element AA lamp			
Arsenic Single element AA lamp			
Boron Single element AA lamp			
Cadmium Single element AA lamp			
Chromium Single element AA lamp			
Iron Single element AA lamp			
Lead Single element AA lamp			
Manganese Single element AA lamp			
Nickel Single element AA lamp			

Selenium Single element AA lamp			
Calcium / Magnesium Multi-element AA lamp			
Copper / Zinc Multi-element AA lamp			

ITEM PT9: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A BENCHTOP CHAMBER FURNACE			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Maximum temperature (T_{max}) of up to 850 °C.			
Air circulation and/or convection.			
At least two (2) charging racks.			
Interior volume of at least 30 L.			
Electrical connection: 1-phase.			
Heat-up time to T_{max} must not exceed 5 hours.			
Supply of extraction system (venting, ducting and extraction fan)			
<u>Ancillary Components</u>			
Service as per manufacturer specifications			

ITEM PT10: THE SUPPLY AND DELIVERY OF A PORTABLE DIGITAL WATER HARDNESS METER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Provide			
• on-site training (5 staff members) as instruments are purchased			

practical training competency declarations and certifications			
Equipment			
Measuring range of at least 0 – 500 mg/L CaCO ₃ .			
Must be able to determine “total hardness” as well as “calcium hardness”.			
Data storage capacity.			
Ancillary Components			
Supply of robust and portable carrying case			
Supply of reagent kits (total + calcium hardness)			
Supply of calibration kits (total + calcium hardness)			
Service as per manufacturer’s specifications			

ITEM PT11: THE SUPPLY AND DELIVERY OF MESH SCREEN SIEVE SHAKER AND CORRESPONDING SIEVES			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
latest model currently in production			
Provide			
at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee			
minimum 12 month after commissioning			
Able to			
- supply all the equipment spares & accessories - Include dry sieve Head-window 200 mm diameter - Include wet sieving head 200 mm diameter - Include receiver wet 200 mm diameter			
Equipment			
Must be able to handle up to 10 kg of solid material.			
Measurement range: 20 um – 125 mm (ISO 3310-1; ASTM E-11-1995).			
Up to 12 test sieves usable per run.			
Universal support plate for sieves with the following diameters: Ø 200, 250, 300, 315, 350, 400, 450 mm and 8, 12, 16, 18 inch. Must be able to support 200 mm diameter sieves.			
Must be stable, balanced and not move during runs.			
Ancillary Components			
Supply of US mesh size 4 mm			
Supply of US mesh size 2 mm			
Supply of US mesh size 1 mm			
Supply of US mesh size 500 um			
Supply of US mesh size 250 um			
Supply of US mesh size 125 um			
Supply of US mesh size 63 um			
Supply of US mesh size 31 um			
Supply of US mesh size 15. 6 um			
Supply of US mesh size 7.8 um			
Supply of US mesh size 3.9 um			
Supply of US mesh size 0.06 um			
Supply of fastening belts/clamps			

ITEM PT12: THE SUPPLY, DELIVERY AND COMMISSIONING OF OVERHEAD STIRRERS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
For stirring up to 25 L of water.			
Stirring speed of up to 2000 rpm.			
Digital speed display.			
Push-through agitator shafts operational design required			
<u>Ancillary components</u>			
Plate stands for overhead stirrers			
All straps/clamps to fasten the stirrer to the plate stand			
Agitator shafts and impellers			
Service as per manufacturer's specifications			

ITEM PT13: THE SUPPLY, DELIVERY AND COMMISSIONING OF TANK AGITATORS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical and practical training			
• competency declarations to be provided			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			

Equipment			
For stirring up to 5000 L of water.			
Stirring speed of up to 1000 rpm.			
Driven by a 0.5 – 8 kW motor.			
Rust and acid resistant shaft and impeller components.			
Ancillary components			
All straps/clamps to fasten the agitator to the horizontal base			
Agitator shafts and impellers			
Service as per manufacturer's specifications			

ITEM PT14: THE SUPPLY, DELIVERY AND COMMISSIONING OF HIGH PRECISION PERISTALTIC PUMP			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Flow rate: 0 – 2000 mL/min.			
Digital display			
Timer functionality.			
Must include all tubes, fasteners and clamps required for operation of pump			
Ancillary components			
Service as per manufacturer's specifications			
Pump tubing			

ITEM PT15: THE SUPPLY, DELIVERY AND COMMISSIONING OF HIGH FLOW PERISTALTIC PUMP			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			

• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Flow rate: 0 – 12000 mL/min.			
Digital display			
Timer functionality.			
Must include supply of all tubes, fasteners and clamps			
Ancillary components			
Service as per manufacturer's specifications			
Pump tubing			

ITEM PT16: THE SUPPLY, DELIVERY AND COMMISSIONING OF AN AUTOMATIC TITRATOR			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (10 staff members) as instruments are purchased			
• theoretical and practical training			
• competency declarations to be provided			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must have a high resolution pH/mV-electrode (pH readings up to two decimal places).			
Single and continuous measuring functions.			
Magnetic stirring function.			
Accurately measure pH in the following range: 1 – 13.			
Operable under ambient conditions (10 – 40 °C).			
Must be able to perform standard titration methods such as (but not limited to) alkalinity, hardness, chloride content, etc.			
Digital display			
Must include amber bottle for titrant			
Must include bottle adapters, tubes (including drip tubes) and titration tips.			
All components necessary for a fully functional unit.			
Ancillary Components			
Service and verification as per manufacturer's specifications			

ITEM PT17: THE SUPPLY OF ISO17025 CALIBRATED BOTTLE TOP DISPENSERS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Must include all relevant bottle top adapters/connectors/fasteners			
Systematic error must be less than 2%			
Random error must be less than 1%			
Dispensers must be autoclavable			
Must be ISO 17025 calibrated			
Ancillary Components			
service as per manufacturer's specifications			
ISO 17025 calibration with metrological traceability to national or international standards			

ITEM PT18: THE SUPPLY OF AN ISO17025 CALIBRATED BENCHTOP CENTRIFUGE			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical and practical training			
• competency declarations to be provided			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Capacity of up to 4 x 750 mL (or in an angle rotor: 6 x 250 mL)			

Must be capable of operating at speed of up to 3000- 5 000 rpm.			
Imbalance switch-off function is advantageous			
Motor overheating protection must be included			
Ancillary Components			
Service as per manufacturer's specifications			
ISO 17025 calibration with metrological traceability to national or international standards			

ITEM PT19: THE SUPPLY AND COMMISSIONING OF AN ISO17025 CALIBRATED WATER/OIL BATH			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
Equipment			
Two volumes: 1) Must have a volume of at least 25 L; and 2) up to 5 L.			
Digital display.			
Temperature range: ambient – 150 °C.			
Temperature control.			
Corrosion resistant stainless steel.			
Built-in drain valve.			
Ancillary Components			
Service as per manufacturer's specifications			
ISO 17025 calibration with metrological traceability to national and international standards			

ITEM PT20: THE SUPPLY AND INSTALLATION OF AN OVERHEAD SHAKER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			

• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
The overhead shaker must be able to accommodate at least six (6) 1 L bottles.			
The overhead shaker must also be able to accommodate 0.5 L bottles.			
The rotation speed should at least be in the following range: 0 – 30 rpm.			
The shaker must be able to accommodate a combined load of at least 20 kg.			
Must be equipped with an emergency stop switch or have an emergency stop function.			
All components and/or consumables necessary for a fully functional overhead shaker related to the equipment specifications above. These might include, but are not limited to, tension plates/ 0.5 L and 1 L attachments/etc.			
<u>Ancillary Components</u>			
Service as per manufacturer's specifications			

ITEM PT21: THE SUPPLY AND INSTALLATION OF A LABORATORY PLATFORM SHAKER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
The platform shaker may either be a horizontal or orbital shaker.			
Must be able to accommodate a load capacity of 25 kg.			
Must produce an oscillating speed ("shake" speed) of up to 250 rpm.			
Must have a built-in timer function.			
Horizontal tube fasteners/clamps must be included			
Rubber mat must be included			
Applicable screws and fasteners must be provided for operation of the instrument			
<u>Ancillary Components</u>			
Service as per manufacturer's specifications			

ITEM PT22: THE SUPPLY OF A CALIBRATED HANDHELD LIQUID FLOW METER			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical and practical training			
• competency declarations to be provided			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Must be robust and suitable for environmental and wastewater flow monitoring.			
Must be able to operate in turbulent, sediment-rich and rocky environments.			
All components necessary for a fully functional liquid (water) flow meter. These might include, but are not limited to, wading rod kits/mounts/etc.			
Robust and portable carrying case.			
<u>Ancillary Components</u>			
Service as per manufacturer's specifications			

ITEM PT23: THE SUPPLY, DELIVERY AND COMMISSIONING OF A BENCHTOP FOURIER-TRANSFORM INFRARED (FT-IR) SPECTROSCOPY INSTRUMENT			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical & practical training			
• competency assessment (theoretical, written & practical)			
competency declarations and certifications			
Guarantee			
• minimum 12 month after commissioning			

Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
Should not exceed a 40 x 40 cm footprint.			
Must be robust and user friendly.			
Resolution: $\leq 2 \text{ cm}^{-1}$			
Sample types: solids/pellets/liquids/pastes/powders/gels			
Spectral range: 400 – 4000 cm^{-1}			
Single and/or multi-reflection ATR module/component/add-on.			
Must include relevant software for processing			
<u>PC/Software requirements</u>			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
<u>Ancillary Components</u>			
Service as per manufacturer specifications			
Moving Mirror ASSY including all consumables required			
Replacement of KBR window			
Replacement of Dessicant			

ITEM PT24: THE SUPPLY AND DELIVERY OF PHIPPS AND BIRD (OR EQUIVALENT) JAR TESTERS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
6-Bank jar/flocculation tester.			
Digital speed display.			
Adjustable speed settings (0 – 250 rpm).			
Base illumination with dark background.			
Accepts beakers of up to 1000 mL.			

ITEM PT25: THE DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF A MODULAR DRINKING WATER AND WASTEWATER TREATMENT PLANT			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide			
• at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
• Provide service engineer(s) CV or Certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical and practical training			
• competency declarations to be provided			
Guarantee			
• minimum 12 month after commissioning			
Able to			
• supply all the equipment spares & accessories			
<u>Equipment</u>			
The modular water treatment plant must include, but are not limited to, the following modular advanced water treatment units:			
Must include sediment removal unit			
Must include ozone treatment and dosing unit			
Must include coagulation unit			
Must include flocculation unit			
Must include sedimentation unit			
Must include sand filtration unit			
Must include carbon filter unit			
Must include ultra/nano membrane filtration units			
Must include reverse osmosis unit			
Must include resin-type heavy metal chelators			
Must include water softener unit			
Must include anti-scalant unit			
Must include UV irradiation disinfection unit			
Must include PAC/GAC contactor unit			
Must include ozone neutralising unit			
Must include chlorine dosing unit			
Must include finished water storage tank			
Additional advanced water treatment modules m			
The modular units must be easily decoupled from the small-scale pilot plant and reconnected when necessary.			
Two advanced modular water treatment pilot plants are to be designed, supplied, installed and commissioned.			
The pilot plants must be able to treat up to 10 000 L of raw/untreated water per day.			
Must include relevant tanks, flow meters, temperature sensors, gauges, pumps and ancillary equipment required for the operation of the model plant.			

ITEM PT26: THE SUPPLY, INSTALLATION AND COMMISSIONING A ROTARY EVAPORATION INSTRUMENT			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
Able to			
• supply all the equipment spares & accessories			
Guarantee a minimum 12 months after commissioning			
<u>Equipment</u>			
The rotary immersion angle must be adjustable			
Instrument must allow for unattended distillations, programmable based on solvents required to distil.			
Must include relevant solvent libraries			
Maximum evaporation flask size must be 5L			
Heating bath must be supplied, must be compatible with water or silicon oil			
Heating bath must be able to heat up to 200°C			
Rotary mechanism must range from 10 – 250 rpm			
Instrument must include a vacuum pump for high boiling solvents such as water			
Vacuum pump must have a secondary condenser attached as a safety mechanism			
Instrument must include a recirculating chiller capable of cooling at temperatures ranging from -10 to 25°C. The chiller must be controlled by the rotary evaporator interface			
A condenser for sample evaporation must be supplied			
A condenser for Soxhlet extraction must be supplied			
Instrument must include the following safety sensor's:			
Foam sensor			
Vapour pressure sensor			
Level sensor			
Instrument must include all accessories for operation of rotary evaporation instrument, these include but are not limited to Woulff bottles, combi clips, vertical condenser, cold trap, SJ24/40 and SJ29/32 standard joint evaporating flasks with vapour ducts.			
Interfacing to LIMS is advantageous			
<u>Ancillary Components</u>			
Service as per manufacturer specifications			

ITEM PT27: THE SUPPLY, INSTALLATION AND COMMISSIONING OF A MECHANICAL HIGH ENERGY BALL MILL			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• practical training			
Guarantee a minimum 12 months after commissioning			
<u>Equipment</u>			
Grinding station must allow for 250 or 500mL grinding jar			
3 x 250mL grinding jar must be included			
3 x 500mL grinding jar must be included			
Must include a safe and robust clamping system			
Must be of high energy or high shearing technology			
Must be able to pulverize soil/sludge/rocks to analytical fineness			
Must be able to pulverise for at least 60 minutes			
A touch screen display is advantageous			
Must include three sets of stainless steel balls compatible with the ball mill			
<u>Ancillary Components</u>			
Service as per manufacturer specifications			

ITEM PT28: THE SUPPLY, INSTALLATION AND COMMISSIONING A GAS CHROMATOGRAPH MASS SPECTROMETER FOR DETERMINATION OF ORGANIC COMPOUNDS			
DETAILS	COMPLIANCE		COMMENTS & REFERENCE
	YES	NO	
<u>Equipment manufacturer</u>			
ISO 9001 or Equivalent certified			
<u>Equipment supplier</u>			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			
Provide			
• on-site training (5 staff members) as instruments are purchased			
• theoretical and practical training			

• competency declarations to be provided			
Guarantee a minimum 12 months after commissioning			
Equipment			
Mus be suitable to handle the following analytes: Geosmin, 2-methylisoborneol, chloroform, bromoform, dibromochloroform, dichlorobromoform, benzene, toluene, ethylbenzene and o/m/p-xylene.			
Methods include USEPA 502.1; 524.2; 524.3 and 5035			
Must include two split/splitless inlets			
One inlet must be coupled to purge and trap technology			
Sample capacity – minimum 80 positions			
Must be able to use programmable automatic aqueous dilutions			
A recirculating chiller must be supplied for the purge and trap system			
Two capillary columns fitted.			
DB-5MS 30m x 0.25mm x 0.25um (or equivalent)			
DB-624 30m x 0.53mm x 3um (or equivalent)			
Electronic Pressure Control (or similar) for inlets and detectors.			
Injection tower with minimum 50 vial capacity turret			
Sample introduction via any third party device acceptable.			
Support various syringe volumes (must incl. 250 µl and 500 µL)			
Quadrupole			
Capable to analyse in Electrical Ionization and Chemical Ionization modes			
Instrument must be capable of SIM and SCAN modes			
Jet optimized for capillary columns			
Neat chemical with CoA's for each compound (at least 100ml)			
Include set of spares (three years supply)			
Include 1000 crimp vials with caps			
Include 1000 vials and caps for purge and trap analysis			
Sample vial crimper			
Include latest version of the NIST Library bundle AND Wiley library			
Ancillary Components			
Service as per manufacturer specifications			
DB-5MS 30m x 0.25mm x 0.25um (or equivalent)			
DB-624 30m x 0.53mm x 3um (or equivalent)			
1000 crimp vials with caps (2ml)			
1000 vials and caps for purge and trap analysis			
Syringe 250 µl			
Syringe 500 µL			

ITEM PT29: THE UPGRADE, INSTALLATION AND COMMISSIONING OF A PAL RAIL ON AN AGILENT 7890B GC-QQMS A GAS CHROMATOGRAPH MASS SPECTROMETER			
DETAILS	COMPLIANCE		& COMMENTS REFERENCE
	YES	NO	
Equipment manufacturer			
ISO 9001 or Equivalent certified			
Equipment supplier			
Supply			
• latest model currently in production			
Provide at shipment a declaration of conformity to specifications describing tests performed as well as analyser serial numbers			
Perform			
• commissioning within two weeks of installation			
• Installation and commissioning by trained service engineers			
Provide service engineer(s) CV or certificate			

Provide			
- on-site training (5 staff members) as instruments are purchased - theoretical and practical training - competency declarations to be provided			
Guarantee a minimum 12 months after commissioning			
Equipment			
Supply, installation and commissioning of a SMART PAL tool compatible with a 7850B GC and PAL RSI 85 autosampler			
Must be provided with an agitator module			
Must be provided with inlet adaptor (if applicable) with larger diameter turn top assembly compatible with S/SL inlet			
Must be provided with Smart SPME arrow tool			
Must be provided with a SPME arrow conditioning module			
PC/Software requirements			
Able to Communicate with computer system in order to transfer results to LIMS system via the PC Ethernet port			
Assist with the configuration of the export file template to our LIMS			
Include all peripherals (cables, interface equipment etc.) required for connection to PC			
Must be compatible with the latest Microsoft desktop operating system			
Supply a hard or soft copy of instrument software (if applicable) and user manual			
Instrument drivers for the latest windows environment to be supplied (if applicable)			
Instrument software to be loaded on CoCT supplied PC			
Ancillary Components			
Supply of 10 x SMART SPME arrow fibers (PDMS 100µm; 23ga; 1cm)			
Supply of 10 x SMART SPME arrow fibers (PDMS 7µm; 23ga; 1cm)			
Supply of 10 x SMART SPME arrow fibers (PA 85µm; 23ga; 1cm)			
Supply of 10 x SMART SPME arrow fibers (PEG 60µm; 23ga; 1cm)			
Supply of 10 x SMART SPME arrow fibers (PDMS/DVB 65µm; 23ga; 1cm)			
Supply of 10 x SMART SPME arrow fibers (CAR/PDMS 75µm; 23ga; 1cm)			
Supply of 10 x SMART SPME arrow fibers (DVB/CAR/PDMS 30/50µm; 23ga; 1cm)			
Supply of 10 x SMART SPME arrow fibers (DVB/CAR/PDMS 30/50µm; 23ga; 2cm)			
Service as per manufacturer's specifications			

TRADE NAMES OR PROPRIETARY PRODUCTS

Tenderers/Suppliers must note that wherever this document refers to any particular trade mark, name, patent, design, type, specific origin or producer, such reference shall be deemed to be accompanied by the words “or equivalent”.

C.6 SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract, referring to the National Treasury – Conditions of Contract (revised July 2010), are applicable to this agreement.

1. Definitions

Insert new clause 1.1A with the following:

- 1.1A “Commencement Date” means the date the Supplier confirms receipt from the Purchaser of 1 (one) complete, signed copy of the Contract, the *Schedule of Deviations* (if any).
- 1.1B “Conditions of Contract” means the general conditions of contract and special conditions of contract including all other contract data incorporated by reference.

Delete Clause 1.15 and substitute with the following

- 1.15 The word ‘Goods’ is to be replaced everywhere it occurs in the GCC with the phrase ‘Goods and / or Services’ which means all of the equipment, machinery, materials, services, products, consumables, etc. that the Supplier is required to deliver to the Purchaser under the agreement. This definition shall also be applicable, as the context requires, anywhere where the words “supplies” and “services” occurs in the GCC.

Delete Clause 1.19 and substitute with the following

- 1.19 The word ‘Order’ is to be replaced everywhere it occurs in the GCC with the words ‘Purchase Order’ which means the official purchase order authorised and released on the Purchaser’s SAP System.

Delete Clause 1.21 and substitute with the following:

- 1.21 ‘Purchaser’ means the City of Cape Town. The address of the Purchaser is 12 Hertzog Boulevard, Cape Town, 8001 (chosen domicilium citandi et executandi).

Add the following after Clause 1.25:

- 1.26 ‘Supplier’ means the provider of Goods and / or Services with whom the Contract is concluded also referred to as “contractor” in the GCC.
- 1.27 "Intellectual Property" means any and all intellectual property rights of any nature anywhere in the world whether registered, registerable or otherwise, including patents, trademarks, registered designs and domain names, applications for any of the foregoing, trade or business names, copyright and rights in the nature of copyright, design rights, rights in databases, know-how, trade secrets and any other intellectual property rights which subsist in computer software, computer programs, websites, documents, information, techniques, business methods, drawings, logos, instruction manuals, lists and procedures and particulars of customers, marketing methods and procedures and advertising literature, including the "look and feel" of any websites
- 1.28 “Working Day” means Monday to Friday excluding weekends and Public Holidays (in the Republic of Sotuh Africa).

3. General Obligations

Delete Clause 3.2 in its entirety and replace with the following clauses.

- 3.2 The Parties will be liable to each other arising out of or in connection with any breach of the obligations detailed or implied in this contract, subject to clause 28.
- 3.3 If the Supplier is a joint venture, all parties in a joint venture or consortium shall be jointly and severally liable to the Purchaser in terms of the Contract and shall carry individually the minimum levels of insurance stated in the Contract, if any.

- 3.4 The Parties shall comply with all laws, regulations and bylaws of local or other authorities having jurisdiction regarding the Delivery of the Goods and/or Services and give all notices and pay all charges required by such authorities.
- 3.4.1 The Parties agree that this Contract shall also be subject to the CCT's Supply Chain Management Policy ("SCM Policy") that was applicable on the date the bid was advertised as amended from time to time. If the Purchaser adopts a new SCM Policy which contemplates that any clause therein would apply to the Contract emanating from this tender, such clause shall also be applicable to the Contract. Please refer to this document contained on the CCT's website.
- 3.4.2 Abuse of the supply chain management system is not permitted and may result in termination of the Contract, restriction of the Supplier, and/or the exercise by the CCT of any other remedies available to it as described in the SCM Policy or in law.
- 3.5 The Supplier shall:
- 3.5.1 Arrange for the documents listed below to be provided to the Purchaser prior to the issuing of the Purchase Order by the Purchaser and no later than the periods as set out in the Contract:
- a) Proof of Insurance (Refer to Clause 11) or Insurance Broker's Warrantee,
 - b) Letter of good standing from the Compensation Commissioner, or a licensed compensation insurer (Refer to Clause 11),
 - c) Initial delivery programme, and
 - d) Other requirements as detailed in the Contract.
- 3.5.2 Only when notified of the acceptance of the bid on the Date of Commencement of Contract, the Supplier shall commence with and carry out the Delivery of the Goods and/or Services in accordance with the Contract, to the satisfaction, of the Purchaser.
- 3.5.3 Provide all of the necessary materials, labour, plant and equipment required for the delivery of the Goods and/or Services including any temporary services that may be required.
- 3.5.4 Insure his workmen and employees against death or injury arising out of the delivery of the Goods.
- 3.5.5 Be continuously represented during the Delivery of the Goods and/or Services by a competent representative duly authorised to execute instructions.
- 3.5.6 In the event of a loss resulting in a claim against the insurance policies stated in clause 11, pay the first amount (excess) as required by the insurance policy.
- 3.5.7 Comply with all written instructions from the Purchaser subject to clause 18.
- 3.5.8 Complete and Deliver the goods within the period stated in clause 10, or any extensions thereof in terms of clause 21.
- 3.5.9 Make good at his own expense, all incomplete and defective Goods during the warranty period.
- 3.5.10 Pay to the Purchaser any penalty for delay as due on demand by the Purchaser. The Supplier hereby consents to such amounts being deducted from any payment due to the Supplier.
- 3.5.11 Comply with the provisions of the OHAS Act & all relevant regulations.
- 3.5.12 Comply with all laws relating to wages and conditions generally governing the employment of labour in the Cape Town area and any applicable Bargaining Council agreements.
- 3.5.13 Deliver the Goods in accordance with the Contract and with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards.
- 3.6 The Purchaser shall:
- 3.6.1 Issue Purchaser Orders for the Goods and/or Services required under this Contract. No liability for payment will ensue for arising out of the Delivery of the Goods and/or Services, unless a Purchase Order

has been issued to the Supplier.

- 3.6.2 Make payment to the Supplier for the Goods and/or Services as set out herein.
- 3.6.3 Take possession of the Goods and /or Services upon Delivery by the Supplier.
- 3.6.4 Regularly inspect the Goods to establish that it is being delivered in compliance with the Contract.
- 3.6.5 Give any instructions and/or explanations and/or variations to the Supplier including any relevant advice to assist the Supplier to understand the Contract.
- 3.6.6 Grant or refuse any extension of time requested by the Supplier of the period stated in clause 10.
- 3.6.7 Inspect the Goods and/or Services to determine if, in the opinion of the Purchaser, it has been delivered in compliance with the Contract, alternatively in such a state that it can be properly used for the purpose for which it was intended.
- 3.6.8 Brief the Supplier and issue all documents, information, etc. in accordance with the contract.

5. Use of contract documents and information; inspection, copyright, confidentiality, etc.

Add the following after clause 5.4:

- 5.5 Copyright of all documents prepared by the Supplier in accordance with the relevant provisions of the Copyright Act (Act 98 of 1978) relating to the Contract shall be vested in the Purchaser. Where copyright is vested in the Supplier, the Purchaser shall be entitled to use the documents or copy them only for the purposes for which they are intended in regard to the agreement and need not obtain the Supplier's permission to copy it for such use. Where copyright is vested in the Purchaser, the Supplier shall not be liable in any way for the use of any of the information other than as originally intended in terms of the agreement and the Purchaser hereby indemnifies the Supplier against any claim which may be made against it by any person / entity, arising from the use of such documentation for other purposes.

The ownership of data and factual information collected by the Supplier and paid for by the Purchaser shall, after payment, vest with the Purchaser.

- 5.6 **Publicity and publication**
The Supplier shall not release public or media statements or publish material related to the services or agreement within two (2) years of Delivery of the Goods, without the written approval of the Purchaser, which approval shall not be unreasonably withheld.
- 5.7 **Confidentiality**
Both Parties shall keep all information obtained by them in the context of the agreement, confidential and shall not divulge it without the written approval of the other Party.
- 5.8 **Intellectual Property**
 - 5.8.1 The Supplier acknowledges that it shall not acquire any right, title or interest in or to the Intellectual Property of the Purchaser.
 - 5.8.2 The Supplier hereby assigns to the Purchaser, all Intellectual Property created, developed or otherwise brought into existence by it for the purposes of the agreement, unless the Parties expressly agree otherwise in writing.
 - 5.8.3 The Supplier shall, and warrants that it shall:
 - 5.8.3.1 Not be entitled to use the Purchaser's Intellectual Property for any purpose other than as contemplated in the agreement;
 - 5.8.3.2 not modify, add to, change or alter the Purchaser's Intellectual Property, or any information or data related thereto, nor may the Supplier produce any product as a result of, including and/or arising from any such information, data and Intellectual Property, and in the event that it does produce any such product, the product shall be, and be deemed in law to be, owned by the Purchaser;

- 5.8.3.3 Not apply for or obtain registration of any domain name, trademark or design which is similar to any Intellectual Property of the Purchaser;
- 5.8.3.4 Comply with all reasonable directions or instructions given to it by the Purchaser in relation to the form and manner of use of the CCT Intellectual Property, including without limitation, any brand guidelines which the Purchaser may provide to the Supplier from time to time;
- 5.8.3.5 Ensure that its employees, directors, members and contractors comply strictly with the provisions of this Clause 5.8.4 above unless the Purchaser expressly agrees to the contrary, in writing and only after obtaining due internal authority for such agreement.
- 5.8.4 The Supplier represents and warrants to the Purchaser that, in providing Goods and/or Services for the duration of the agreement it will not infringe or make unauthorised use of the Intellectual Property rights of any third party and hereby indemnifies the Purchaser from any claims, liability, loss, damages, costs, and expenses arising from the infringement or unauthorised use by the Supplier of any third party's Intellectual Property rights.
- 5.8.5 Upon expiry of the contract period and in the event that the Contract is terminated, ended or is declared void, any and all of the Purchaser's Intellectual Property, and any and all information and data related thereto, shall be immediately handed over to the Purchaser by the Supplier and no copies thereof shall be retained by the Supplier unless the Purchaser expressly and in writing, after obtaining due internal authority, agrees otherwise.

Add the following after clause 5.8:

5.9 Protection of Personal Information Act of 2013

By submitting a tender to the Purchaser, (and by concluding any ensuing related agreement with the City of Cape Town, if applicable), the Tenderer thereby acknowledges and unconditionally agrees:

- 5.9.1 that the tenderer has been informed of the purpose of the collection and processing of its personal information as defined in the Protection of Personal Information Act of 2013 ("POPIA"), which, for the avoidance of doubt is for, and in relation to, the tender process and the negotiation, conclusion, performance and enforcement of the ensuing agreement, if applicable, as well as for the City of Cape Town's reporting purposes;
- 5.9.2 to the collection and processing of the tenderer's personal information by the City of Cape Town and agrees to make available to the City of Cape Town, all information reasonably required by the City of Cape Town for the above purposes;
- 5.9.3 that the personal information the City of Cape Town collects from the tenderer or about the tenderer may be further processed for other activities and/or purposes which are lawful, reasonable, relevant and not excessive in relation to the purposes set out above, for which it was originally collected;
- 5.9.4 that, the tenderer indemnifies the City of Cape Town and its officials, employees, and directors and undertakes to keep the City of Cape Town and its officials, employees, and directors indemnified in respect of any claim, loss, demands, liability, costs and expenses of whatsoever nature which may be made against the City of Cape Town (including the costs incurred in defending or contesting any such claim) in relation to the tenderer or the tenderer's employees', representatives' and/or sub-Suppliers' non-compliance with POPIA and/or the City of Cape Town's failure to obtain the tenderer's consent or to notify the tenderer of the reason for the processing of the tenderer's personal information;
- 5.9.5 to the disclosure of the tenderer's personal information by the City of Cape Town to any third party, where the City of Cape Town has a legal or contractual obligation to disclose such personal information to the third party (or a legitimate interest exists therein);
- 5.9.6 that, under POPIA, the tenderer may request to access, confirm, request the correction, destruction, or deletion of, or request a description of, personal information held by the City of Cape Town in relation to you, subject to applicable law; and

that under POPIA, subject to applicable law, the tenderer also has the right to be notified of a personal information breach and the right to object to, or restrict, the City of Cape Town's processing of its personal information.

5.10 **PERFORMANCE MONITORING**

- 5.10.1 As required by section 116(2)(b) of the Local Government: Municipal Financial Management Act 56 of 2003, the CCT shall monitor the performance of the Supplier on at least a monthly basis, and the Supplier agrees to provide the CCT with its full cooperation in this regard.

7. Performance Security

Delete clause 7.1 to 7.4 and replace with the following:

Not Applicable. Tenderers must disregard the **Pro Forma Performance Security/ Guarantee** and are not required to furnish same.

8. Inspections, tests and analyses

Delete Clause 8.2 and substitute with the following:

- 8.2 If it is a bid condition that Goods and/or Services to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or Supplier shall be open, at all reasonable hours, for inspection by a representative of the Purchaser or an organisation acting on behalf of the Purchaser.

10. Delivery and documents

Delete clauses 10.1 and 10.2 and replace with the following:

- 10.1 Delivery of the goods shall be made by the Supplier in accordance with the terms specified in the contract. The time for Delivery of the goods shall be the date as stated on the Purchase Order. In the case of agreements for Delivery of goods in terms of framework or panel agreements, Purchase Orders for the supply and delivery of goods may be raised up until the expiry of a framework or panel agreement, provided that the goods can be delivered within 30 (thirty) days of expiry of the framework or panel agreement. In this context, the "goods" does not include services and carries its ordinary meaning. All Purchase Orders other than for the supply and Delivery of goods (i.e. supply of services, professional services or constructions works), must be completed prior to the expiry of the contract period.
- 10.2 The Purchaser shall determine, in its sole discretion, whether the Goods and/or Services have been delivered in compliance with the Contract, alternatively in such a state that it can be properly used for the purpose for which it was intended. When the Purchaser determines that the Goods and/or Services have been satisfactorily delivered, the Purchaser must issue an appropriate certification, or written approval, to that effect. Invoicing may only occur, and must be dated, on or after the date of such written acceptance of the Goods.

11. Insurance

Add the following after clause 11.1:

- 11.2 Without limiting the obligations of the Supplier in terms of this Contract, the Supplier shall effect and maintain the following additional insurances:
- 11.2.1 Public liability insurances, in the name of the Supplier, covering the Supplier and the Purchaser against liability for the death of or injury to any person, or loss of or damage to any property, arising out of or in the course of this Contract, in an amount not less than **R20 million** for any single claim;
- 11.2.2 Motor Vehicle Liability Insurance, in respect of all vehicles owned and / or leased by the Supplier, comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability Indemnity;
- 11.2.3 Registration / insurance in terms of the Compensation for Occupational Injuries and Disease Act, Act 130 of 1993. This can either take the form of a certified copy of a valid Letter of Good Standing issued by the Compensation Commissioner, or proof of insurance with a licenced compensation insurer, from either the Supplier's broker or the insurance company itself (see the Pro Forma Insurance Broker's Warranty).

11.2.5 In the event of under insurance or the insurer's repudiation of any claim for whatever reason, the Purchaser will retain its right of recourse against the Supplier.

11.3 The Supplier shall be obliged to furnish the Purchaser with proof of such insurance as the Purchaser may require from time to time for the duration of this Contract. Evidence that the insurances have been effected in terms of this clause, shall be either in the form of an insurance broker's warranty worded precisely as per the pro forma version contained in the Pro forma Insurance Broker's Warranty or copies of the insurance policies.

15. Warranty

Add to Clause 15.2:

15.2 The warranty for this Contract shall remain valid for six (6) months from date of Delivery of the Goods and/or Services.

16. Payment

Delete Clause 16.1 in its entirety and replace with the following:

16.1 Payment of invoices will be made within 30 days of receiving the relevant invoice or statement, unless otherwise prescribed for certain categories of expenditure or specific contractual requirements in accordance with any other applicable policies of the City. All completed invoices for goods and services will be paid on a weekly basis and construction related invoices will be paid daily.

Notwithstanding anything contained above, the City shall not be liable for payment of any invoice that pre dates the date of delivery of any goods or services, or the date of certification for construction works.

Should the processing of a payment be delayed due to the late submission of documentation, any penalties imposed will be for the account of the functional business area. Any queries will also be referred to such line department.

No official shall commit Council to making a payment outside the scheduled payment terms

Delete Clause 16.2 in its entirety and replace with the following:

16.2 The Supplier shall furnish the purchaser's Accounts Payable Department with an original tax invoice, clearly showing the amount due in respect of each and every claim for payment.

Add the following after clause 16.4

16.5 Notwithstanding any amount stated on the Purchase Order, the Supplier shall only be entitled to payment for Goods and/or Services actually delivered in terms of the Specification and Drawings, or any variations thereof made in accordance with clause 18. Any contingency sum included shall be for the sole use, and at the discretion, of the Purchaser.

16.6 The Purchaser will only make advanced payments to the Supplier in strict compliance with the terms and conditions as contained in the Pro forma Advanced Payment Guarantee and only once the authenticity of such guarantee has been verified by the Purchaser's Treasury Department.

16.6.1 The Advance Payment Schedule applicable to this Contract is set out below. The items of plant and materials which have been identified by the Purchaser as being suitable for advance payment in terms of this Contract are listed in the table below, and for which the Purchaser is prepared to make advance payment to the Supplier, subject to the conditions below. Should an item or items be added to the list at tender stage by a tenderer, no obligation to advance payment shall be incurred by the Purchaser, for such items added by the tenderer except as provided for herein.

Plant and materials which have been manufactured and are stored by the supplier	Plant and materials yet to be manufactured and for which a deposit with order is required from the supplier by a third party manufacturer/supplier, and which may be stored by the supplier:

- 16.6.2 The Supplier can only rely on advance payment being permitted by the Purchaser in respect of the plant and materials listed in the table above. The Purchaser may, however, permit advance payment for other plant and materials in exceptional circumstances and at its sole discretion, during the course of the Contract, and upon reasonable request from the Supplier.
- 16.6.3 Advance payment for the purposes of deposits will only be provided up to a limit of **[DRAFTER TO SELECT PERCENTAGE: %]** of the value of any one item being claimed.
- 16.6.4 The Supplier shall provide the Purchaser with documentary evidence of the terms and conditions for which a deposit with order is required by a third party manufacturer/supplier, together with the advance payment guarantee.
- 16.6.5 The Supplier will also be permitted to obtain advance payment for the balance of the value of the plant and materials in respect of which he has paid a deposit, for an item which after manufacture is stored by the Supplier. The Supplier shall, in respect of such payment, provide an advance payment guarantee, either for such balance or, if the advance payment guarantee in respect of the deposit is to be returned by the Purchaser upon request, for the whole value of the item.

17. Prices

Add the following after clause 17.1

- 17.2 If as a result of an award of a contract beyond the original tender validity period, the contract execution will be completed beyond a period of twelve (12) months from the expiry of the original tender validity period, then the contract may be subject to contract price adjustment for that period beyond such twelve (12) months. An appropriate contract price adjustment formula will be determined by the Purchaser delegated authority if such was not included in the bid documents.
- 17.3 If as a result of any extension of time granted, the contract execution will be completed beyond a period of twelve (12) months from the expiry of the original tender validity period, then contract price adjustment may apply to that period beyond such twelve (12) months. An appropriate contract price adjustment formula will be determined by the Director: Supply Chain Management if such was not included in the bid documents.

- 17.4 The prices for the goods and/or Services delivered and services performed shall be subject to contract price adjustment in terms of Schedule F.1 Contract Price Adjustment and/or Rate of Exchange Variations and the following conditions will be applicable:

18. Contract Amendments

Delete the heading of clause 18 and replace with the following:

18. Contract Amendments and Variations

Add the following to clause 18.1:

Variations means changes to the Goods and/or Services, extension of the contract period or increases in the value of the Contract as a result of written instructions issued by the Purchaser to the Supplier. Such changes are subject to prior approval by the Purchaser's delegated authority. Should the Supplier deliver any Goods not described in a written instruction from the Purchaser, the Purchaser's liability for payment shall no arise until such time as the change has been duly approved and such approval communicated to the Purchaser.

20. Subcontracts

Add the following after clause 20.1:

- 20.2 The Supplier shall be liable for the acts, defaults and negligence of any subcontractor, his agents or employees as fully as if they were the acts, defaults or negligence of the Supplier.

- 20.3 Any appointment of a subcontractor shall not amount to a contract between the Purchaser and the subcontractor, or a responsibility or liability on the part of the Purchaser to the subcontractor and shall not relieve the Supplier from any liability or obligation under the Contract.

21. Delays in the supplier's performance

Delete Clause 21.2 in its entirety and replace with the following:

- 21.2 If at any time during the performance of obligations contained in the Contract the Supplier or its subcontractors should encounter conditions beyond their reasonable control which impede the timely delivery of the Goods and/or Services, the Supplier shall notify the Purchaser in writing, within 7 (seven) days of first having become aware of these conditions, of the facts of the delay, its cause(s) and its probable duration. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation, and may at his discretion extend the time for Delivery.

Where additional time is granted, the Purchaser shall also determine whether or not the Supplier is entitled to payment for additional costs in respect thereof. The principle to be applied in this regard is that where the Purchaser or any of its agents are responsible for the delay, reasonable costs shall be paid. In respect of delays that were beyond the reasonable control of both the Supplier and the Purchaser, additional time only (no costs) will be granted.

The Purchaser shall notify the Supplier in writing of his decision(s) in the above regard.

- 21.3 No provision in this Contract shall be deemed to prohibit the obtaining of Goods and/or Services from a national department, provincial department, or a local authority.

22. Penalties

Delete clause 22.1 and replace with the following:

- 22.1 Subject to GCC Clause 25, if the Supplier fails to deliver any or all of the Goods and/or Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from amounts payable, as a penalty, a sum as stated herein for each day of the delay until actual Delivery or performance.

The penalty for this contract shall be **[0.1%]**

- 22.2 The Purchaser shall, without prejudice to its other remedies under the contract, deduct from amounts payable, financial penalties as contained on the Preference Schedule for breaches of the conditions upon which preference points were awarded.

23. Termination for default

Delete the heading of clause 23 and replace with the following:

23. Termination

Add the following to the end of clause 23.1:

If the Supplier fails to remedy the breach in terms of such notice.

Add the following after clause 23.7:

- 23.8 In addition to the grounds for termination due to default by the Supplier, the Contract may also be terminated:

- 23.8.1 Upon the death of the Supplier who was a Sole Proprietor, or a sole member of a Close Corporation, in which case the contract will terminate forthwith.

- 23.8.2 If the Parties, by mutual agreement, terminate the Contract.

23.8.3 If a material irregularity vitiates the procurement process leading to the conclusion of the Contract, rendering the procurement process and the conclusion of the resulting Contract unfair, inequitable, non-transparent, uncompetitive or not cost-effective the Contract may be terminated by the Purchaser (upon conclusion of applicable processes by the City Manager as described in the Purchaser's SCM Policy).

23.8.4 Reputational risk or harm to the Purchaser

The Purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, may terminate the contract if the implementation of the contract may result in reputational risk or harm to the Purchaser as a result of (inter alia):

- a) reports of poor governance and/or unethical behaviour;
- b) association with known notorious individuals and family of notorious individuals;
- c) poor performance issues, known to the Purchaser
- d) negative social media reports;
- e) adverse assurance (e.g. due diligence) report outcomes; or
- f) circumstances where the relevant vendor has employed, or is directed by, anyone who was previously employed in the service of the state (as defined in clause 1.53), where the person is or was negatively implicated in any SCM irregularity.

By or in relation to the Supplier, the Contract may be terminated by the Purchaser after providing notice to the Supplier.

23.9 If the Contract is terminated in terms of clause 23.8, all obligations that were due and enforceable prior to the date of the termination, must be performed by the relevant Party.

26. Termination for insolvency

Delete clause 26.1 and replace with the following:

26.1 In the event of the Supplier becoming bankrupt or otherwise insolvent the Purchaser may elect to:

26.1.1 At any time, terminate the Contract by giving written notice to the Supplier; or

26.1.2 Accept a Supplier's proposal (via the liquidator) to render delivery utilising the appropriate contractual mechanisms or takes steps to ensure its rights are protected and any negative impact on service delivery is mitigated.

26.2 In the event of the Purchaser electing to cancel the Contract in accordance with clause 26.1.1 above, the Purchaser shall make payment of all verified and signed off invoices. In the event of there being any dispute in respect of any outstanding invoices such dispute shall be dealt with in accordance with the dispute resolution mechanism in the Contract.

27. Settlement of Disputes

Amend clause 27.1 as follows:

27.1 If any dispute or difference of any kind whatsoever, with the exception of termination in terms of clause 23 arises between the Purchaser and the Supplier in connection with or arising out of the Contract, the Parties shall make every effort to resolve such dispute or difference amicably, by mutual consultation.

Delete Clause 27.2 in its entirety and replace with the following:

27.2 Should the Parties fail to resolve any dispute by way of mutual consultation, either party shall be entitled to refer the matter for mediation before an independent and impartial person appointed by the City Manager in accordance with Regulation 50(1) of the Local Government: Municipal Finance Management Act, 56 of 2003 – Municipal Supply Chain Management Regulations (Notice 868 of 2005). Such referral shall be done by either party giving written notice to the other of its intention to commence with mediation. No mediation may be commenced unless such notice is given to the other party.

Irrespective whether the mediation resolves the dispute, the Parties shall bear their own costs concerning the mediation and share the costs of the mediator and related costs equally.

The mediator shall agree the procedures, representation and dates for the mediation process with the Parties. The mediator may meet the Parties together or individually to enable a settlement.

Where the Parties reach settlement of the dispute or any part thereof, the mediator shall record such agreement and on signing thereof by the Parties the agreement shall be final and binding.

Save for reference to any portion of any settlement or decision which has been agreed to be final and binding on the Parties, no reference shall be made by or on behalf of either party in any subsequent court proceedings, to any outcome of an amicable settlement by mutual consultation, or the fact that any particular evidence was given, or to any submission, statement or admission made in the course of amicable settlement by mutual consultation or mediation.

28. Limitation of Liability

Delete clause 28.1 (a) and (b) and replace with the following:

- (a) notwithstanding any provision to the contrary contained in this contract, neither the supplier nor any of its officers, directors, employees, agents contractors, consultants or other representatives shall be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect, incidental, special or consequential loss or damage of any kind, including without limitation the loss of use, loss of production, or loss of profits or interest costs, loss of goodwill, lost or damaged data or software, costs of substitute products/services and/or loss of business or business opportunities (whether foreseeable or unforeseeable), provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser;
- (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the sums insured in terms of clause 11 in respect of insurable events, or where no such amounts are stated, to an amount equal to twice the Contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

Add the following after clause 28.1:

28.2 Without detracting from, and in addition to, any of the other indemnities in this Contract, the Supplier shall be solely liable for and hereby indemnifies and holds harmless the Purchaser against all claims, charges, damages, costs, actions, liability, demands and/or proceedings and expense in connection with:

- a) personal injury or loss of life to any individual;
- b) loss of or damage to property;

arising from, out of, or in connection with the performance by the Supplier in terms of this Contract, save to the extent caused by the gross negligence or wilful misconduct of the Purchaser.

28.3 The Supplier and/or its employees, agents, concessionaires, suppliers, sub-contractors or customers shall not have any claim of any nature against the purchaser for any loss, damage, injury or death which any of them may directly or indirectly suffer, whether or not such loss, damages, injury or death is caused through negligence of the Purchaser or its agents or employees.

28.4 Notwithstanding anything to the contrary contained in this Contract, under no circumstances whatsoever, including as a result of its negligent (including grossly negligent) acts or omissions or those of its servants, agents or contractors or other persons for whom in law it may be liable, shall any party or its servants (in whose favour this constitutes a *stipulatio alteri*) be liable for any indirect, extrinsic, special, penal, punitive, exemplary or consequential loss or damage of any kind whatsoever, whether or not the loss was actually foreseen or reasonably foreseeable), sustained by the other party, its directors and/or servants, including but not limited to any loss of profits, loss of operation time, corruption or loss of information and/or loss of contracts.

28.5 Each party agrees to waive all claims against the other insofar as the aggregate of compensation which might otherwise be payable exceeds the aforesaid maximum amounts payable.

31. Notices

Delete clauses 31.1 and 31.2 and replace with the following:

- 31.1 Any notice, request, consent, approvals or other communications made between the Parties pursuant to the Contract shall be in writing and forwarded to the addresses specified in the Contract and may be given as set out hereunder and shall be deemed to have been received when:
- a) hand delivered – on the day delivery of delivery or the next Working Day,
 - b) sent by registered mail – five (5) Working Days after mailing,
 - c) sent by email or telefax – one (1) Working Day after transmission.

32. Taxes and Duties

Delete the final sentence of 32.3 and replace with the following:

. In this regard, it is the responsibility of the Tenderer to submit evidence in the form of a valid Tax Compliance Status PIN issued by SARS to the CCT at the Supplier Management Unit located within the Supplier Management / Registration Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town (Tel 021 400 9242/3/4/5), or included with this tender.

Add the following after clause 32.3:

32.4 The VAT registration number of the CCT is 4500193497.

ADDITIONAL CONDITIONS OF CONTRACT

Add the following Clause after Clause 34:

35. Reporting Obligations

35.1 The Supplier shall complete, sign and submit with each delivery note, all the documents as required in the Specifications including Monthly Project Labour Reports (Annexure B). Any failure in this regard may result in a delay in the processing of payments.

C.7 GENERAL CONDITIONS OF CONTRACT

(National Treasury - General Conditions of Contract (revised July 2010))

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1. Definitions

1. The following terms shall be interpreted as indicated:

- 1.1 'Closing time' means the date and hour specified in the bidding documents for the receipt of bids.
- 1.2 'Contract' means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the Parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.3 'Contract price' means the price payable to the supplier under the contract for the full and proper performance of his or her contractual obligations.
- 1.4 '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.
- 1.5 'Countervailing duties' are imposed in cases in which an enterprise abroad is subsidised by its government and encouraged to market its products internationally.

- 1.6 'Country of origin' means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognised new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 1.7 'Day' means calendar day.
- 1.8 'Delivery' means delivery in compliance with the conditions of the contract or order.
- 1.9 'Delivery ex stock' means immediate delivery directly from stock actually on hand.
- 1.10 'Delivery into consignee's store or to his site' means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
- 1.11 'Dumping' occurs when a private enterprise abroad markets its goods on its own initiative in the RSA at lower prices than that of the country of origin, and which action has the potential to harm the local industries in the RSA.
- 1.12 'Force majeure' means an event beyond the control of the supplier, not involving the supplier's fault or negligence, and not foreseeable. Such events may include, but are not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 'Fraudulent practice' means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 'GCC' means the General Conditions of Contract.
- 1.15 'Goods' means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 'Imported content' means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17 'Local content' means that portion of the bidding price which is not included in the imported content, provided that local manufacture does take place.
- 1.18 'Manufacture' means the production of products in a factory using labour, materials, components and machinery, and includes other, related value-adding activities.
- 1.19 'Order' means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 'Project site', where applicable, means the place indicated in bidding documents.
- 1.21 'Purchaser' means the organisation purchasing the goods.
- 1.22 'Republic' means the Republic of South Africa.
- 1.23 'SCC' means the Special Conditions of Contract.

1.24 'Services' means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance, and other such obligations of the supplier covered under the contract.

1.25 'Written' or 'in writing' means handwritten in ink or any form of electronic or mechanical writing.

2. Application

2.1 These general conditions are applicable to all bids, contracts and orders, including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.

2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.

2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable, a non-refundable fee for documents may be charged.

3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za.

4. Standards

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

5. Use of contract documents and information; inspection.

5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for the purposes of such performance.

5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1, except for purposes of performing the contract.

5.3 Any document, other than the contract itself, mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.

5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent rights

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

7. Performance Security

7.1 Within 30 (thirty) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in the SCC.

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

8. Inspections, tests and analyses

- 8.1 All pre-bidding testing will be for the account of the bidder.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organisation acting on behalf of the Department.
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention of such is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier, who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal, the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.
- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of the GCC.

9. Packing

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in the SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

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

- 10.2 Documents to be submitted by the supplier are specified in the SCC.

11. Insurance

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

12. Transportation

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

13. Incidental Services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services (if any) specified in the SCC:
- (a) performance or supervision of on-site assembly, and/or commissioning of the supplied goods;
 - (b) furnishing of tools required for the assembly and/or maintenance of the supplied goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
 - (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the Parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
 - (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
- 13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the Parties and shall not exceed the prevailing rates charged to other Parties by the supplier for similar services.

14. Spare parts

- 14.1 As specified in the SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:
- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
 - (b) in the event of termination of production of the spare parts:
 - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

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

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

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

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

15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in the SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in the SCC.

16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfilment of any other obligations stipulated in the contract.

16.3 Payments shall be made promptly by the purchaser, but in no case later than 30 (thirty) days after submission of an invoice or claim by the supplier.

16.4 Payment will be made in Rand unless otherwise stipulated in the SCC.

17. Prices

17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices tendered by the supplier in his bid, with the exception of any price adjustments authorized in the SCC or in the purchaser's request for bid validity extension, as the case may be.

18. Contract Amendments

18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the Parties concerned.

19. Assignment

19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the supplier's performance

21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.

21.2 If at any time during the performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his or her discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the Parties by amendment of contract.

- 21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
- 21.4 The right is reserved to procure, outside of the contract, small quantities of supplies; or to have minor essential services executed if an emergency arises, or the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.
- 21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.
- 21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without cancelling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and, without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

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

23. Termination for default

- 23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:
- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
 - (b) if the supplier fails to perform any other obligation(s) under the contract; or
 - (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
- 23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
- 23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
- 23.4 If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than 14 (fourteen) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated 14 (fourteen) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.
- 23.5 Any restriction imposed on any person by the Accounting Officer/Authority will, at the discretion of the Accounting Officer/Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person is or was, in the opinion of the Accounting Officer/Authority, actively associated.

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

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

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

23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, Act 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period of not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction, and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Anti-dumping and countervailing duties and rights

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

25. Force majeure

25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if, and to the extent that, his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.

25.2 If a force majeure situation arises, the supplier shall notify the purchaser promptly, in writing, of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

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

27. Settlement of Disputes

27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the Parties shall make every effort to resolve such dispute or difference amicably, by mutual consultation.

27.2 If, after 30 (thirty) days, the Parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.

27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.

27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.

27.5 Notwithstanding any reference to mediation and/or court proceedings herein,

- (a) the Parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
- (b) the purchaser shall pay the supplier any monies due to the supplier.

28. Limitation of Liability

28.1 Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to Clause 6:

- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and
- (b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

29. Governing language

29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the Parties shall also be written in English.

30. Applicable Law

30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in the SCC.

31. Notices

31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail, and any other notice to him shall be posted by ordinary mail, to the address furnished in his bid or to the address notified later by him in writing; and such posting shall be deemed to be proper service of such notice.

31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.

32. Taxes and Duties

32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, licence fees, and other such levies imposed outside the purchaser's country.

32.2 A local supplier shall be entirely responsible for all taxes, duties, licence fees, etc., incurred until delivery of the contracted goods to the purchaser.

32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.

33. National Industrial Participation (NIP) Programme

33.1 The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.

34 Prohibition of Restrictive practices

34.1 In terms of section 4 (1) (b) (iii) of the Competition Act, Act 89 of 1998, as amended, an agreement between or concerted practice by firms, or a decision by an association of firms, is prohibited if it is between Parties in a horizontal relationship and if a bidder(s) is/are or a contractor(s) was/were involved in collusive bidding (or bid rigging).

- 34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has/have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act, Act 89 of 1998.
- 34.3 If a bidder(s) or contractor(s) has/have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and/or terminate the contract in whole or part, and/or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding 10 (ten) years and/or claim damages from the bidder(s) or contractor(s) concerned.

C.8 ANNEXURES

Annexure A – Pro Forma Insurance Broker’s Warranty

Broker Logo

Letterhead of supplier’s Insurance Broker

Date _____

CCT
City Manager
Civic Centre
12 Hertzog Boulevard
Cape Town
8000

Dear Sir

TENDER NO.: **DP7914G/2022/23**

TENDER DESCRIPTION: **THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SPECIALISED SCIENTIFIC EQUIPMENT FOR THE MONITORING OF VARIOUS ENVIRONMENTAL MEDIA IN THE CITY OF CAPE TOWN.**

NAME OF SUPPLIER: _____

I, the undersigned, do hereby confirm and warrant that all the insurances required in terms of the abovementioned contract have been issued and/or in the case of blanket/umbrella policies, have been endorsed to reflect the interests of the CCT with regard to the abovementioned contract, and that all the insurances and endorsements, etc., are all in accordance with the requirements of the contract.

I furthermore confirm that all premiums in the above regard have been paid.

Yours faithfully

Signed: _____

For: _____ (Supplier’s Insurance Broker)

Annexure B – Monthly Project Labour Report

ANNEX 1

CITY OF CAPE TOWN
MONTHLY PROJECT LABOUR REPORT



**CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD**

Instructions for completing and submitting forms

General

- 1 The Monthly Project Labour Reports must be completed in full, using typed, proper case characters; alternatively, should a computer not be available, handwritten in black ink.
- 2 Incomplete / incorrect / illegible forms will not be accepted.
- 3 Any conditions relating to targeted labour stipulated in the Contract (in the case of contracted out services or works) shall apply to the completion and submission of these forms.
- 4 This document is available in Microsoft Excel format upon request from the City's EPWP office, tel 021 400 9406, email EPWPLR@capetown.gov.za.

Project Details

- 5 If a field is not applicable insert the letters: NA
- 6 Only the Project Number supplied by the Corporate EPWP Office must be inserted.
The Project Number can be obtained from the Coordinator or Project Manager or from the
e-mail address in point 4 above.
- 7 On completion of the contract or works project the anticipated end date must be updated to
reflect the actual end date.

Beneficiary Details and Work Information

- 8 Care must be taken to ensure that beneficiary details correspond accurately with the beneficiary's ID document.

- 9 A new beneficiary is one in respect of which a new employment contract is signed in the current month. A certified ID copy must accompany this labour report on submission.
- 10 Was the beneficiary sourced from the City's job seeker database?
- 11 The contract end date as stated in the beneficiary's employment contract.
- 12 Where a beneficiary has not worked in a particular month, the beneficiary's name shall not be reflected on this form at all for the month in question.
- 13 Training will be recorded separately from normal working days and together shall not exceed the maximum of 23 days per month
- 14 Workers earning more than the maximum daily rate (currently R450 excluding any benefits) shall not be reflected on this form at all.

Submission of Forms

- 15 Signed hardcopy forms must be scanned and submitted to the City's project manager in electronic (.pdf) format, together with the completed form in Microsoft Excel format.
- 16 Scanned copies of all applicable supporting documentation must be submitted along with each monthly project labour report. Copies of employment contracts and ID documents are only required in respect of new beneficiaries.
- 17 If a computer is not available hardcopy forms and supporting documentation will be accepted.

PROJECT DETAILS

Numbers in cells below e.g (6) refer to the relevant instruction above for completing and submitting forms

[illegible]

ACTUAL START DATE (yyyy/mm/dd)								ANTICIPATED / ACTUAL END DATE (yyyy/mm/dd) (7)							
TOTAL PROJECT EXPENDITURE / VALUE OF WORK DONE TO-DATE (INCLUDING ALL COSTS, BUT EXCLUDING VAT)															
R															

ANNEX 1 (continued)

MONTHLY PROJECT LABOUR REPORT

BENEFICIARY DETAILS AND WORK INFORMATION

CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

CONTRACT OR WORKS PROJECT NUMBER:				Year		Month		Sheet				
								1 of				

No.	(8) First name	(8) Surname	(8) ID number	(9) New Beneficiary (Y/N)	Gender (M/F)	Disabled (Y/N)	(10) Job seeker database (Y/N)	Contract start date (DDMMYY)	Contract end date (DDMMYY)	(12) No. days worked this month (excl. training)	(13) Training days	(14) Rate of pay per day (R – c)
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

0 0 R -

Declared by Contractor or Vendor to be true and correct:	Name		Signature	
	Date			

Received by Employer's Agent / Representative:	Name		Signature	
	Date			

Annexure C - Pro Forma Performance Security/ Guarantee

GUARANTEE PERFORMANCE SECURITY

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address of Guarantor:

"Supplier" means:

"Contract Sum" means: The accepted tender amount (INCLUSIVE OF VAT) of R

Amount in words:

"Guaranteed Sum" means: The maximum amount of R

Amount in words:

"Contract" means: The agreement made in terms of the Form of Offer and Acceptance for tender no ...and such amendments or additions to the contract as may be agreed in writing between the Parties.

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Guarantee/Performance Security up to and including the termination of the Contract or the date of payment in full of the Guaranteed Sum, whichever occurs first.
3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Guarantee/Performance to "Contract" is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;
 - 3.2 Its obligation under this Guarantee/Performance Security is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the CCT the sum due and payable upon receipt of the documents identified in 4.1 to 4.2:
 - 4.1 A copy of a first written demand issued by the CCT to the Supplier stating that payment of a sum which is due and payable has not been made by the Supplier in terms of the Contract and failing such payment within seven (7) calendar days, the CCT intends to call upon the Guarantor to make payment in terms of 4.2;
 - 4.2 A first written demand issued by the CCT to the Guarantor at the Guarantor's physical address with a copy to the Supplier stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum has still not been paid.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the CCT the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the CCT to the Guarantor at the Guarantor's physical address calling up this Guarantee / Performance Security, such demand stating that:
 - 5.1 The Contract has been terminated due to the Supplier's default and that this Guarantee/Performance Security is called up in terms of 5; or
 - 5.2 a provisional or final sequestration or liquidation court order has been granted against the

Supplier and that the Guarantee/Performance Guarantee is called up in terms of 5; and

- 5.3 *The aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.*
6. *It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.*
7. *Where the Guarantor has made payment in terms of 5, the CCT shall upon the termination date of the Contract, submit an expense account to the Guarantor showing how all monies received in terms of this Guarantee/Performance Security have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Guarantee/Performance Security shall bear interest at the prime overdraft rate of the CCT's bank compounded monthly and calculated from the date payment was made by the Guarantor to the CCT until the date of refund.*
8. *Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.*
9. *The CCT shall have the absolute right to arrange its affairs with the Supplier in any manner which the CCT may deem fit and the Guarantor shall not have the right to claim his release from this Guarantee /Performance Security on account of any conduct alleged to be prejudicial to the Guarantor.*
10. *The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.*
11. *This Guarantee/Performance Security is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee / Performance Security shall be returned to the Guarantor after it has expired.*
12. *This Guarantee/Performance Security, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.*
13. *Where this Guarantee/Performance Security is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.*

Signed at

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)

Annexure D - Pro Forma Advance Payment Guarantee

ADVANCE PAYMENT GUARANTEE

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address of guarantor:

"Supplier" means:

"Contract Sum" means: The accepted tender amount (INCLUSIVE of VAT) of R

Amount in words:

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

"Plant and materials" means: The Plant and materials in respect of which an advance payment prior to manufacture is required, which the CCT has agreed may be subject to advance payment, such Plant and materials being listed in the Schedule of Plant and materials.

"Schedule of Plant and materials" means: A list of Plant and materials which shows the value thereof to be included in the Guaranteed Advance Payment Sum.

"Guaranteed Advance Payment Sum" means: The maximum amount of R.....

Amount in words:

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Advance Payment Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Advance Payment Guarantee and up to and including the termination of the Contract or the date of payment in full of the Guaranteed Advance Payment Sum, whichever occurs first.
3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Advance Payment Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;
 - 3.2 Its obligation under this Advance Payment Guarantee is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the CCT the sum advanced to the Supplier upon receipt of the documents identified in 4.1 to 4.2:
 - 4.1 A copy of a first written demand issued by the CCT to the Supplier stating that payment of a sum advanced by the CCT has not been repaid by the Supplier in terms of the Contract ("default") and failing such payment within seven (7) calendar days, the CCT intends to call upon the Guarantor to make payment in terms of 4.2;
 - 4.2 A first written demand issued by the CCT to the Guarantor at the Guarantor's physical address with a copy to the Supplier stating that a period of seven (7) calendar days has elapsed since the first written demand in terms of 4.1 and the sum advanced has still not been repaid by the Supplier.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the CCT the Guaranteed Advance Payment Sum or the full outstanding balance not repaid upon receipt of a first written demand from the CCT to the Guarantor at the Guarantor's physical address calling up this Advance Payment Guarantee, such demand stating that:

- 5.1 *the Contract has been terminated due to the Supplier's default and that this Advance Payment Guarantee is called up in terms of 5; or*
- 5.2 *a provisional or final sequestration or liquidation court order has been granted against the Supplier and that the Advance Payment Guarantee is called up in terms of 5; and*
- 5.3 *The aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.*
6. *It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.*
7. *Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.*
9. *The CCT shall have the absolute right to arrange its affairs with the Supplier in any manner which the CCT may deem fit and the Guarantor shall not have the right to claim his release from this Advance Payment Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.*
10. *The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.*
11. *This Advance Payment Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.*
12. *This Advance Payment Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.*
13. *Where this Guarantee/Performance Security is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.*

Signed at

Date

Guarantor's signatory (1)

Capacity

Guarantor's signatory (2)

Capacity

Witness signatory (1)

Witness signatory (2)

Approved Financial Institution as at 28 February 2023:

1.1 National Banks

ABSA Bank Limited
Firststrand Bank Limited
Investec Bank Limited
Nedbank Limited
Standard Bank of South Africa Limited

1.2 International Banks (with branches in South Africa)

Barclays Bank PLC
Citibank NA
Credit Agricole Corporate and Investment Bank
HSBC Bank PLC
JPMorgan Chase Bank
Societe Generale
Standard Chartered Bank

1.3 Insurance Companies

American International Group Inc (AIG)
Bryte Insurance Company Limited
Coface SA
Compass Insurance Company Limited
Credit Guarantee Insurance Corporation of Africa Limited
Guardrisk Insurance Company Limited
Hollard Insurance Company Limited
Infiniti Insurance Limited
Lombard Insurance Company Limited
Mutual and Federal Risk Financing Limited
New National Assurance Company Limited
PSG Konsult Ltd (previously Absa Insurance)
Regent Insurance Company Limited
Renasa Insurance Company Limited
Santam Limited...]

Annexure F - Tender Returnable Documents

Schedule F.1: Contract Price Adjustment

CONTRACT PRICE ADJUSTMENT MECHANISM:

- 8.1.1 Tenderers must choose the Contract Price Adjustment mechanism as listed in the table below and adhere to the CPA instructions dictated by the mechanism chosen by the Tenderer. Tenderers must note that the CPA mechanism chosen by the tenderer, will be binding at contract phase, for the duration of the contract period.

No	CPA Mechanism	Tick the appropriate box
1	CPA based on CPI Indexes.	
2	CPA based on Rate of Exchange	
3	CPA based on Manufacturers Price List	

ITEM	CPI	ROE	MPL
AQ1: To supply, install & commission a hydrogen sulphide analyser			
AQ2: To supply, install & commission a Carbon Monoxide analyser			
AQ3: To supply and commission a Dynamic Dilution Calibrator			
AQ4: To supply, install & commission a Zero Air system			
AQ5: To supply and commission a multi detector gas handheld analyser			
AQ6: To supply, install & commission a GAS flow meter			
AQ7: Supply, install & commission a Carbon Dioxide (CO ₂) Analysers			
AQ8: To supply, install & commission a Particulate Matter (PM ₁₀ and PM _{2.5}) analyser			
AQ9: To supply, install & commission a sulphur dioxide (SO ₂) analyser			
AQ10: To supply, install & commission a Oxides of Nitrogen (NO _x) analyser			
AQ11: To supply, install & commission a Ozone (O ₃) analyser			
AQ12: To supply, install & commission a Volatile Organic Compound (VOC) analyser			
AQ13: To supply, install & commission a Pneumatic mast with a set of meteorological sensors			
AQ14: To supply, install & commission a Mobile Ambient Air quality analyser housing unit			
AQ15: To supply & commission a Portable Multiple Parameter Continuous Ambient Air Quality monitoring analyser			

AQ16: To supply and commission a Portable Particulate Matter Continuous Ambient Air quality monitoring analyser.			
AQ17: To supply, install and commission a ultimate Data Acquisition System (DAS)			
GS1: To supply & commission a multimeter with a flow cell			
GS2: To supply & commission a subsurface Gas Sampling monitor			
GS3: To supply & commission a Temperature, Conductivity and Water level meter for specific depth sampling			
GS4: To supply & commission an interval/specific depth Sampling Bailer			
GS5: To supply & commission a Soil Auger			
SS1: To supply transport rechargeable cooler with temperature display			
SS2: To supply a water level indicator			
SS3: To supply a Van Dorn water sampler			
SS4: To supply total algae sensors for detection of chlorophyll, phycocyanin and phycoerythrin in marine and freshwater cyanobacteria			
SS5: To supply and commission a Portable Field Turbidity meter for onsite analysis			
SS6: Supply & commission of digital portable free & total chlorine colorimeters			
SS7: The supply of a multi-parameter water quality sonde with titanium sensors and wet-mateble universal sensor ports			
SS8: The supply of a portable pH meter.			
SS9: The supply of a portable optical dissolved oxygen meter			
BS1: The supply % commissioning of a viewing cabinet with UV lamp			
BS2: The supply, installation and commissioning of a quanti-tray sealer			
BS3: The supply, installation and commissioning of a calibrated incubator			
BS4: The supply, installation and commissioning of a calibrated oven			
BS5: The supply, installation and commission of a Filta-Max Xpress elution station for Crypto/Giardia analysis			
BS6: The supply and commissioning of calibrated water bath circulators with water bath			

BS7: The supply of calibrated stainless steel temperature loggers			
BS8: The supply, installation and commissioning of an inverted light microscope with camera for microscopic analysis			
BS9: The supply, installation and commissioning of a single tube luminometer			
BS10: The supply, installation and commissioning of a tintometer/thermostatically controlled cabinet			
BS11: The supply, installation and commissioning of a chiller			
BS12: The supply and commissioning of a digital micrometer			
BS13: The supply, installation and commissioning of an automated colony counter			
BS14: To supply, install & commission a bench-top incubator for toxicity			
BS15: The supply and commissioning of a luxmeter			
BS16: To supply and commission a portable microscope for macroinvertebrate identification-biomonitoring			
BS17: To supply and commission of a Class II Type A2 Biological safety cabinet			
BS18: To supply and commission a compressed cooled incubator			
BS19: To supply and commission a safety storage cabinet			
BS20: To supply and commission a ultra-low volume fogging machine			
ML1: To supply, install and commission a Capillary Electrophoresis: Sanger Sequencing Instrument			
ML2: : The supply and commissioning of a rapid, easy-to-use molecular based instrument to detect a range of high-risk pathogens			
ML3: To supply, install and commission a Next Generation Sequencing Instrument which is able to rapidly identify and group multiple micro-organisms			
ML4: The supply and commissioning of a Laboratory Freezer, Upright model, 544L, -20°C to -40°C			
ML5: The supply and commissioning of a Laboratory Ultra low temperature (-80°C) freezer			
ML6: The supply, installation and commissioning of a floor-standing centrifuge			

ML7: The supply, installation and commissioning of an Incubator: CO2 for the Molecular laboratory			
ML8: The supply, installation and commissioning of a laboratory fridge/freezer			
ML9: The supply, installation and commissioning of a Polymer Reaction (PCR) hoods with UV lamps			
ML10: The supply, installation and commissioning of a laminar flow hood with UV lamp			
AC1: The supply and commissioning of a bench-top high-frequency ultrasonic bath sonicator			
AC2: The supply of a benchtop oil-less vacuum pump			
AC3: The supply, installation and commissioning of a laboratory water purification system			
AC4: The supply and commissioning of a calibrated analytical balance			
AC5: The supply and commissioning of a calibrated top loading balance			
AC6: The supply and delivery of a set of ISO17025 calibrated automatic pipettes with tips			
AC7: Supply and commissioning of an ISO17025 calibrated vertical-type steam autoclave			
AC8: The supply, installation and commissioning of air compressor compatible with Milestone DMA 80 and DMA 80 evo mercury analyser			
AC9: The supply, installation and commissioning of an inductively coupled plasma optical emission spectroscopy instrument (ICP-OES)			
AC10: The supply, installation and commissioning of a discrete analyser for determination of organic and inorganic compounds in water samples			
AC11: The supply, installation and commissioning of a laboratory glassware washer			
AC12: To supply, install & commission a open reflux chemical oxygen demand digestion unit			
AC13: To supply, install & commission an automated dilution system for preparation of primary standards			
AC14: To supply, install & commission a microwave digester			
AC15: To supply, install & commission an on-demand acid purification system			
AC16: To supply, install & commission a laboratory fume extraction cabinet			
PT1: The supply, installation and commissioning of a benchtop			

laboratory turbidity meter for the measurement of turbidity			
PT2: The supply, installation and commissioning of a bench top laboratory auto titrator for the measurement of alkalinity			
PT3: The supply, installation and commissioning of a bench top laboratory pH and conductivity meter			
PT4: The supply, installation and commissioning of a benchtop laboratory spectrophotometer			
PT5: The supply, installation and commissioning of Vaccine Fridge/Freezer long holdover 180-220L			
PT6: The supply, installation and commissioning of Vaccine Fridge/Freezer long holdover 290-320L			
PT7: The supply and commissioning of a benchtop viscometer			
PT8: The supply, installation and commissioning of a flame atomic absorption spectrometer (FAAS)			
PT9: The supply, installation and commissioning of a benchtop chamber furnace			
PT10: The supply and delivery of a portable digital water hardness meter			
PT11: The supply and delivery of mesh screen sieve shaker and corresponding sieves			
PT12: The supply, delivery and commissioning of overhead stirrers			
PT13: The supply, delivery and commissioning of tank agitators			
PT14: The supply, delivery and commissioning of high precision peristaltic pump			
PT15: The supply, delivery and commissioning of high flow peristaltic pump			
PT16: The supply, delivery and commissioning of an automatic titrator			
PT17: The supply of ISO17025 calibrated bottle top dispensers			
PT18: The supply of an ISO17025 calibrated benchtop centrifuge			
PT19: The supply of an ISO17025 calibrated water/oil bath			
PT20: The supply and installation of an overhead shaker			
PT21: The supply and installation of a laboratory platform shaker			
PT22: The supply of a calibrated handheld liquid flow meter			
PT23: The supply, delivery and commissioning of a benchtop Fourier-transform infrared (FT-IR) spectroscopy instrument			
PT24: The supply and delivery of Phipps and Bird (or equivalent) jar testers			

PT25: The design, supply, installation and commissioning of a modular drinking water and wastewater treatment plant			
PT26: The supply, installation and commissioning a rotary evaporation instrument			
PT27: The supply, installation and commissioning of a mechanical high energy planetary ball mill			
PT28: The supply, installation and commissioning of a gas chromatograph mass spectrometer			
PT29: The upgrade, installation and commissioning of a PAL rail on an Agilent 7890B GC-QqQMS a gas chromatograph mass spectrometer			

8.1.1 PRICE ADJUSTMENT MECHANISM: CONSUMER PRICE INDEX (CPI)

8.1.1.1 Tenderers shall be entitled to claim contract price adjustment in accordance with the Consumer Price Index as published by STATSSA: Consumer Price Index headline year-on-year rates):.

The contract prices shall remain firm for the first 12 months (from date of closing of tender) and no claims for contract price adjustment will be considered. 90% of the selected portion will be subject to adjustment annually based on the average Consumer Price Index (CPI) as follows;

- a) **90%** of the tendered price will be subject to adjustment annually based on the average Consumer Price Index (CPI) as follows:
- b) From start of the **13th month-end of the 24th month** subject to price adjustment in accordance with the CPI. Base month shall be 2 calendar months prior to the date of the commencement and the End month, 2 months prior to the 13th month of the contract period.
- c) For the period commencing from the start of the 25th month (from the date of closing) and concluding at the end of the 36th month (from the date of closing), any price adjustments shall be determined according to the Consumer Price Index (CPI) as follows:
- d) From start of **25th month** (from date of closing) to **36th month** (from date of closing):
The base month for the price adjustment shall be three (3) calendar months prior to the 12th month from date of closing of tender. The end month shall be two (2) calendar months prior to 24th month from date of closing of tender.
- e) The average CPI calculated, the base month-end month, divided by the number of months. The claim will be based on the average between the base month and the end month.
- f) **10%** of the rate will remain fixed.

8.1.2 PRICE ADJUSTMENT MECHANISM: RATE OF EXCHANGE VARIATIONS

Only tenderers who are the direct importer of the goods may claim rate of exchange price variations.
(Refer to Clause 8.2 below).

Exchange Rate on which tender is based: _____ 1 = SA Rand _____

Name of Bank: _____

Date of quoted rate of exchange: _____

The end date applicable for variation shall be the date of shipment received (ie. The date of the Bill of

Lading / Waybill / Customs Invoice)

Tenderer to indicate applicable documentation (Bill of Lading / Waybill / Customs Invoice) :

If any other documentation other than those indicated above is applicable, the tenderer is to indicate this clearly and identify the applicable documentation in the space provided above.

[illegible]

TENDER NO: DP7914G/2022/23

[illegible]

TENDER NO: DP7914G/2022/23

[illegible]

TENDER NO: DP7914G/2022/23

[illegible]

Item No.	Amount and denomination of foreign currency required (1)	Rate of exchange as at 14 days prior to date of tender (2)	Equivalent in Rand, of foreign currency content (columns 1&2) (3)	Amount of South African Content (4)	Total amount (equivalent in Rand of columns 3+4) (Excl. VAT) (5)

8.2 Rate of Exchange Variations (Refer to 8.1.2 above):

If the Contract price is subject to variations in **RATES OF EXCHANGE** the Tenderer SHALL complete the appropriate section in **Schedule 8 (table)**, failing which no claim for contract price adjustment on the basis of rate of exchange variations will be granted.

8.2.1 Contractors shall note the following:

- a) Only Contractors that are directly importing the goods may claim rate of exchange variations.
- b) Contractors shall take out Forward Cover on each purchase order.

8.2.1.1 The process to be followed by Contractors for claims for Rate of Exchange Variations shall be as follows:

- 8.2.1.1.1 On receipt of a purchase order, the Contractor shall arrange for a quotation for Forward Cover from their banking institution.
- 8.2.1.1.2 This Forward Cover quotation shall be submitted to the City for approval of the Forward Cover rate within seven days from date of receipt of the purchase order.
- 8.2.1.1.3 Only once the Forward Cover rate is approved may the Contractor engage in a formalised contract with their banking institution and submit the Forward Cover contract to the City. This shall be done within two days from the City's approval.
- 8.2.1.1.4 The Forward Cover Contract shall refer to the purchase order number, shall be signed by both parties (the Contractor and the Banking Institution) and shall be valid until such time as the goods are delivered to the City.

8.2.1.2 On delivery of the goods to the City the Contractor shall submit the following documentation:

- 8.2.1.2.1 The Bill of Lading/Waybill/Customs Invoice (clearly indicating the items as identified on the purchase order).
- 8.2.1.2.2 Calculations detailing the difference in the rate of exchange at the time of entry and the date of tender. These shall be submitted on a covering letter.

8.3. SUPPLIER/MANUFACTURER PRICE LIST VARIATIONS

If the contract is subject to variation based on **SUPPLIER/MANUFACTURER PRICE LIST VARIATIONS**, the following will be applicable:

The tenderer may apply for an adjustment on a 6 monthly basis (as from date of tender closing). Tenderers must supply the following documentation when applying for a price variation:

- The price list that the tender was based upon **clearly indicating the item numbered according to the tender pricing schedule**.
- The new price list **clearly indicating the item according to the tender pricing schedule** from the same supplier/manufacturer from date of tender
- **Detailed calculations** indicating how the "new" price is established
- Covering letter on a letterhead from contractor requesting the variation.
- All documentation to be signed by relevant parties (supplier/manufacturer and contractor)

prior to the date upon which the price variation would become effective. The effective date of any price increases granted will be at the date when all the above mentioned documentation is submitted. In instances where the contractors price claimed is less than entitled, the lesser price will be accepted. Orders placed prior to the effective date will not be allowed to be varied.

The CPA calculation is based on a manufacturers price change with a mark-up component. Only the difference in cost will be allowed to be varied and under no circumstances may the contractor increase their profit margin.

In the event of a contractor changing their supplier/manufacturer during the tenure of the contract, any request for price variations will not be considered unless the contractor obtains prior approval from the City.

Process that will be followed:

Contractor submits all the documentation indicated above prior to the effective date of the variation.

The City will consider the variation and based on the documentary evidence, the City may approve the variation.

Letters authorising the price variation will be communicated to the contractor.

All purchase orders from the effective date will be generated at the approved contract price.

TENDERS WHO ARE NOT THE MANUFACTURER/SUPPLIER

NOTE: TENDERERS ARE REQUIRED TO COMPLETE BELOW.

Increase using Supplier/Manufacturer Price Lists

The tender price shall be subject to adjustment based on Supplier's/Manufacturer's Price Lists.

Supplier/Manufacturer _____

Date of Price List/Quotation upon which tender is based _____

Price List/Quotation Reference Number _____

N.B. The above information must be provided for each item supplied to the Tenderer.

Copies of price lists on which tender prices are based must be enclosed for all items. The items referenced to the Pricing Schedule must be clearly identified on the price list.

Tenderers will be entitled to claim only the difference between the cost of the product at the time of tendering and the new cost. Documentation together with detailed calculations to this effect must be submitted.

8.4. Contract Price Adjustment – General

The City reserves the right to request the supplier to submit an Auditor's Certificate or such other documentary proof as it may require in order to verify a claim for contract price adjustment. Such Auditor's Certificate shall be in addition to the documentation required in terms of clauses 8.1.1, 8.1.2 and 8.2.1.2. Should the supplier fail to submit such Auditor's Certificate or other documentary proof to the City within a period of 30 (thirty) days from the date of the request, it shall be presumed that the supplier has abandoned his claim and no further communication shall be considered.

Schedule F.2: Certificate of Authority for Partnerships/ Joint Ventures/ Consortia

This schedule is to be completed if the tender is submitted by a partnership/joint venture/ consortium.

1. We, the undersigned, are submitting this tender offer as a partnership/ joint venture/ consortium and hereby authorize Mr/Ms _____, of the authorised entity _____, acting in the capacity of Lead Partner, to sign all documents in connection with the tender offer and any contract resulting from it on the partnership/joint venture/ consortium's behalf.
2. By signing this schedule the partners to the partnership/joint venture/ consortium:
 - 2.1 warrant that the tender submitted is in accordance with the main business and objectives of the partnership/joint venture/ consortium;
 - 2.2 agree that the CCT shall make all payments in terms of this Contract into the following bank account of the Lead Partner:
 Account Holder: _____
 Financial Institution: _____
 Branch Code: _____
 Account No.: _____
 - 2.3 agree that in the event that there is a change in the partnership/ joint venture/ consortium and/or should a dispute arise between the partnership/joint venture/ consortium partners, that the CCT shall continue to make any/all payments due and payable in terms of the Contract into the aforesaid bank account until such time as the CCT is presented with a Court Order or an original agreement (signed by each and every partner of the partnership/joint venture/ consortium) notifying the CCT of the details of the new bank account into which it is required to make payment.
 - 2.4 agree that they shall be jointly and severally liable to the CCT for the due and proper fulfilment by the successful tenderer/supplier of its obligations in terms of the Contract as well as any damages suffered by the CCT as a result of breach by the successful tenderer/supplier. The partnership/joint venture/ consortium partners hereby renounce the benefits of excussion and division.

SIGNED BY THE PARTNERS OF THE PARTNERSHIP/ JOINT VENTURE/ CONSORTIUM		
NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature..... Name..... Designation.....
		Signature..... Name..... Designation.....
		Signature..... Name..... Designation.....
		Signature..... Name..... Designation.....

Note: A copy of the Joint Venture Agreement shall be appended to *List of Other Documents Attached by Tenderer Schedule*.

Schedule F.3: Declaration for Procurement above R10 million

If the value of the transaction is expected to exceed R10 million (VAT included) the tenderer shall complete the following questionnaire, attach the necessary documents and sign this schedule:

1. Are you by law required to prepare annual financial statements for auditing? **(Please mark with X)**

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

If YES, submit audited annual financial statements:

(i) For the past three years, or

(ii) Since the date of establishment of the tenderer (if established during the past three years)

By attaching such audited financial statements to **List of Other Documents Attached by Tenderer Schedule**.

2. Do you have any outstanding undisputed commitments for municipal services towards the CCT or other municipality in respect of which payment is overdue for more than 30 (thirty) days? **(Please mark with X)**

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

2.1 If NO, this serves to certify that the tenderer has no undisputed commitments for municipal services towards any municipality for more than three (3) (three) months in respect of which payment is overdue for more than 30 (thirty) days.

2.2 If YES, provide particulars:

3. Has any contract been awarded to you by an organ of state during the past five (5) years? **(Please mark with X)**

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

If YES, insert particulars in the table below including particulars of any material non-compliance or dispute concerning the execution of such contract. Alternatively attach the particulars to **List of Other Documents Attached by Tenderer** schedule in the same format as the table below:

Organ of State	Contract Description	Contract Period	Non-compliance/dispute (if any)

4. Will any portion of the goods or services be sourced from outside the Republic, and if so, what portion and whether any portion of payment from the CCT is expected to be transferred out of the Republic? **(Please mark with X)**

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

If YES, furnish particulars below

The tenderer hereby certifies that the information set out in this schedule and/or attached hereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in steps being taken against the tenderer, the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract, restriction of the tenderer or the exercise by the CCT of any other remedies available to it.

Signature
Print name:
On behalf of the tenderer (duly authorised)

Date

Schedule F.4: Preference Points Claim Form In Terms Of the Preferential Procurement Regulations 2022

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).
- 1.2 **To be completed by the organ of state**
The applicable preference point system for this tender is the 80/20 preference point system.
- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
- (a) Price; and
 - (b) Specific Goals.
- 1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

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

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

The following definitions shall apply to this schedule:

- (a) "tender" means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) "price" means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) "tender for income-generating contracts" means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) "The Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES**POINTS AWARDED FOR PRICE****THE 80/20 PREFERENCE POINT SYSTEMS**

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

80/20

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

(Not applicable)

POINTS AWARDED FOR PRICE

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

80/20

Where:

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

5. POINTS AWARDED FOR SPECIFIC GOALS

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

5.2 In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
- (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

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

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

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

The specific goals allocated points in terms of this tender	To be Completed by the Organ of State		To be Completed by the Tenderer	
	Number of points Allocated (90/10 system)	Number of points Allocated (80/20 system)	Number of points claimed (90/10 system)	Number of points claimed (80/20 system)
Gender	3	5		
Race	3	5		
Disability	1	3		

Promotion of Micro and Small Enterprises	3	7		
--	---	---	--	--

DECLARATION WITH REGARD TO COMPANY/FIRM

5.3 Name of company/firm.....

5.4 Company registration number:

5.5 TYPE OF COMPANY/ FIRM

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

[Tick applicable box]

5.6 I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 4.1 and 4.2, the Supplier may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or Supplier, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

Signature of Tenderer	Date	Name and Surname	Address

For official use.

SIGNATURE OF CCT OFFICIALS AT
TENDER OPENING

1. 2. 3.

Schedule F.5: Declaration of Interest – State Employees (MBD 4 amended)

1. No bid will be accepted from:
 - 1.1 persons in the service of the state¹, or
 - 1.2 if the person is not a natural person, of which any director, manager or principal shareholder or stakeholder is in the service of the state, or
 - 1.3 from persons, or entities of which any director, manager or principal shareholder or stakeholder, has been in the service of the City of Cape Town (CCT) during the previous twelve (12) months, or
 - 1.4 from an entity who has employed a former CCT employee who was at a level of T14 or higher at the time of leaving the CCT's employ and involved in any of the CCT's bid committees for the bid submitted, if:
 - 1.4.1 the CCT employee left the CCT's employment voluntarily, during the previous twelve (12) months;
 - 1.5 a person who was a CCT employee, or an entity that employs a CCT employee, if
 - 1.5.1 the CCT employee left the CCT's employment whilst under investigation for alleged misconduct, or
 - 1.5.2 was facing disciplinary action or potential disciplinary action by the CCT, or
 - 1.5.3 was involved in a dispute against the CCT during the previous thirty six (36) months.

2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the tenderer or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.
 - 3.1 Full Name of tenderer or his or her representative: _____
 - 3.2 Identity Number: _____
 - 3.3 Position occupied in the Company (director, trustee, shareholder²): _____
 - 3.4 Company or Close Corporation Registration Number: _____
 - 3.5 Tax Reference Number: _____
 - 3.6 VAT Registration Number: _____
 - 3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
 - 3.8 Are you presently in the service of the state? **YES / NO**
 - 3.8.1 If yes, furnish particulars: _____
 - 3.9 Have you been in the service of the state for the past twelve months? **YES / NO**
 - 3.9.1 If yes, furnish particulars: _____
 - 3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**
 - 3.10.1 If yes, furnish particulars: _____
 - 3.11 Are you, aware of any relationship (family, friend, other) between any other tenderer and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? **YES / NO**
 - 3.11.1 If yes, furnish particulars: _____
 - 3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? **YES / NO**
 - 3.12.1 If yes, furnish particulars: _____

3.13 Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? **YES / NO**

3.13.1 If yes, furnish particulars: _____

3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract? **YES / NO**

3.14.1 If yes, furnish particulars: _____

3.15 Have you, or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company been in the service of the CCT in the past twelve months? **YES / NO**

3.15.1 If yes, furnish particulars: _____

3.16 Do you have any employees who was in the service of the CCT at a level of T14 or higher at the time they left the employ of the CCT, and who was involved in any of the CCT's bid committees for this bid? **YES / NO**

3.16.1 If yes, furnish particulars: _____

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

Full Name	Identity Number	State Employee Number

If the above table does not sufficient to provide the details of all directors / trustees / shareholders, please append full details to the tender submission.

The tenderer hereby certifies that the information set out in this schedule and/or attached hereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in steps being taken against the tenderer, the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract, restriction of the tenderer or the exercise by the CCT of any other remedies available to it.

Signature
Print name:
On behalf of the tenderer (duly authorised)

Date

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

- (a) a member of –
 (i) any municipal council;
 (ii) any provincial legislature; or
 (iii) the national Assembly or the national Council of provinces;

- (b) a member of the board of directors of any municipal entity;
 (c) an official of any municipality or municipal entity;
 (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
 (e) an executive member of the accounting authority of any national or provincial public entity; or
 (f) an employee of Parliament or a provincial legislature.

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

Schedule F.6: Conflict of Interest Declaration

1. The tenderer shall declare whether it has any conflict of interest in the transaction for which the tender is submitted. **(Please mark with X)**

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

1.1 If yes, the tenderer is required to set out the particulars in the table below:

2. The tenderer shall declare whether it has directly or through a representative or intermediary promised, offered or granted:

2.1 Any inducement or reward to the CCT for or in connection with the award of this contract; or

2.2 Any reward, gift, favour or hospitality to any official or any other role player involved in the implementation of the supply chain management policy. **(Please mark with X)**

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

If yes, the tenderer is required to set out the particulars in the table below:

Should the tenderer be aware of any corrupt or fraudulent transactions relating to the procurement process of the CCT, please contact the following:

The CCT's anti-corruption hotline at 0800 32 31 30 (toll free)

The tenderer hereby certifies that the information set out in this schedule and/or attached hereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in steps being taken against the tenderer, the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract, restriction of the tenderer or the exercise by the CCT of any other remedies available to it.

Signature
Print name:
On behalf of the tenderer (duly authorised)

Date

Schedule F.7: Declaration of Tenderer's Past Supply Chain Management Practices (MBD 8)

Where the entity tendering is a partnership/joint venture/consortium, each party to the partnership/joint venture/consortium must sign a declaration in terms of the Municipal Finance Management Act, Act 56 of 2003, and attach it to this schedule.

- 1 The tender offer of any tenderer may be rejected if that tenderer or any of its directors/members have:
 - a) abused the municipality's / municipal entity's supply chain management system or committed any fraudulent conduct in relation to such system;
 - b) been convicted for fraud or corruption during the past five years;
 - c) willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d) been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or Database of Restricted Suppliers.
- 2 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
2.1	Is the tenderer or any of its directors/members listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	Yes ☐	No ☐
2.1.1	If so, furnish particulars:		
2.2	Is the tenderer or any of its directors/members listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or Database of Restricted Suppliers? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes ☐	No ☐
2.2.1	If so, furnish particulars:		
2.3	Was the tenderer or any of its directors/members convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes ☐	No ☐
2.3.1	If so, furnish particulars:		

Item	Question	Yes	No
2.4	Does the tenderer or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes ☐	No ☐
2.4.1	If so, furnish particulars:		
2.5	Was any contract between the tenderer and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes ☐	No ☐
2.5.1	If so, furnish particulars:		

The tenderer hereby certifies that the information set out in this schedule and/or attached hereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in steps being taken against the tenderer, the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract,, restriction of the tenderer or the exercise by the CCT of any other remedies available to it.

 Signature
 Print name:
 On behalf of the tenderer (duly authorised)

 Date

Schedule F.8: Authorisation for the Deduction of Outstanding Amounts Owed to the CCT

To: THE CITY MANAGER, City of Cape Town

From: _____
(Name of tenderer)

RE: AUTHORISATION FOR THE DEDUCTION OF OUTSTANDING AMOUNTS OWED TO THE CCT

The tenderer:

- a) hereby acknowledges that according to SCM Regulation 38(1)(d)(i) the City Manager may reject the tender of the tenderer if any municipal rates and taxes or municipal service charges owed by the tenderer (or any of its directors/members/partners) to the CCT, or to any other municipality or municipal entity, are in arrears for more than 3 (three) months; and
- b) therefore hereby agrees and authorises the CCT to deduct the full amount outstanding by the Tenderer or any of its directors/members/partners from any payment due to the tenderer; and
- c) confirms the information as set out in the tables below for the purpose of giving effect to b) above;

Physical Business address(es) of the tenderer	Municipal Account number(s)	Inside the CCT municipal boundary (Yes/No)

If there is not enough space for all the names, please attach the information to **List of other documents attached by tenderer** schedule in the same format:

Name of Director / Member / Partner	Identity Number	Physical residential address of Director / Member / Partner	Municipal Account number(s)	Inside the CCT municipal boundary (Yes/No)

The tenderer hereby certifies that the information set out in this schedule and/or attached hereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in steps being taken against the tenderer, the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract, restriction of the tenderer or the exercise by the CCT of any other remedies available to it.

Signature
Print name:
On behalf of the tenderer (duly authorised)

Date

Schedule F.9: Certificate of Independent Tender Determination
--

I, the undersigned, in submitting this tender number **DP7914G/2023/24** and tender description: **THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SPECIALISED SCIENTIFIC EQUIPMENT FOR THE MONITORING OF VARIOUS ENVIRONMENTAL MEDIA IN THE CITY OF CAPE TOWN.** in response to the tender invitation made by THE CCT, do hereby make the following statements, which I certify to be true and complete in every respect:

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

1. I have read and I understand the contents of this Certificate;
2. I understand that this tender will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorised by the tenderer to sign this Certificate, and to submit this tender, on behalf of the tenderer;
4. Each person whose signature appears on this tender has been authorised by the tenderer to determine the terms of, and to sign, the tender on behalf of the tenderer;
5. For the purposes of this Certificate and this tender, I understand that the word 'competitor' shall include any individual or organisation other than the tenderer, whether or not affiliated with the tenderer, who:
 - (a) has been requested to submit a tender in response to this tender invitation;
 - (b) could potentially submit a tender in response to this tender invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the tenderer and/or is in the same line of business as the tenderer.
6. The tenderer has arrived at this tender independently from and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium¹ will not be construed as collusive price quoting.
7. In particular, without limiting the generality of paragraphs 5 and 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 tender;
 - (e) the submission of a tender which does not meet the specifications and conditions of the tender; or
 - (f) tendering with the intention not to win the contract.
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 tender invitation relates.
9. The terms of this tender have not been and will not be disclosed by the tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to tenders and contracts, tenders 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, Act 89 of 1998, and/o/r 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 10 (ten) years in terms of the Prevention and Combating of Corrupt Activities Act, Act 12 of 2004, or any other applicable legislation.

Signature

Print name:

On behalf of the tenderer (duly authorised)

Date

(¹ Consortium: 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.)

Schedule F.10: Proposed Deviations And Qualifications By Tenderer

The Tenderer should record any **proposed** deviations or qualifications they may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such proposed deviations and qualifications in a covering letter attached to his tender and reference such letter in this schedule. Any proposed deviations or qualifications contained in a covering letter which is not referenced in this schedule will not be considered.

The Tenderer's attention is drawn to clause 2.3.7.2 of the Standard Conditions of Tender referenced in the Tender Data regarding the CCT's handling of material deviations and qualifications.

If no deviations or qualifications are proposed, the schedule hereunder is to be marked NIL and signed by the Tenderer.

PAGE	CLAUSE OR ITEM	PROPOSED DEVIATION OR QUALIFICATION

List relevant documentation attached in Schedule F.10 below.

 Signature
 Print name:
 On behalf of the tenderer (duly authorised)

 Date

Schedule F.11: List of Other Documents Attached By Tenderer
--

The tenderer has attached to this schedule, the following additional documentation:

	Date of Document	Title of Document or Description (refer to clauses / schedules of this tender document where applicable)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		

Attach additional pages if more space is required.

 Signature
 Print name:
 On behalf of the tenderer (duly authorised)

 Date

Schedule F.12: Record of Addenda to Tender Documents

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

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

Attach additional pages if more space is required.

 Signature
 Print name:
 On behalf of the tenderer (duly authorised)

 Date

Schedule F.13: Information to Be Provided With the Tender

The following information shall be provided with the Tender:

- a. The various technical details and data required by the Technical Data Sheets and information required in the Returnable Schedules.
- b. ISO 9001 or equivalent certificates.

Signature
Print name:
On behalf of the tenderer (duly authorised)

Date

Schedule F.14: Appeal Application

annexure 'B'

OFFICIAL RECEIPT
(Valid only if printed
by official cash
receipting machine)

IRISITI ESESIKWENI
(Isemthethweni kuphela
xa ishicilelwe
ngumatshini wokukhupa
irisiti osesikweni.)

AMPTELIKE KWITANSIE
(Geldig alleenlik indien deur
amptelike kontantvangs
masjien gedruk.)

GL DATA CAPTURE RECEIPT (CASHIERTO RETAIN A COPY)

RECEIPT NO: _____

DATE: _____

SAP GL:

8	1	0	1	0	0
---	---	---	---	---	---

PROFIT CENTRE:

1	3	0	5	0	0	0	1
---	---	---	---	---	---	---	---

NAME/COMPANY NAME:

AMOUNT:

						R	3	0	0	-	0	0
--	--	--	--	--	--	---	---	---	---	---	---	---

SERVICE DEPARTMENT DETAILS-

DEPARTMENT: LEGAL SERVICES: APPEALS UNIT

CONTACT PERSON: CHARLENE CEBEKHULU / MELANIE CLOETE

PHONE NO: 021 400 2503 / 021 400 3788

OFFICIAL RECEIPT
(Valid only if printed
by official cash
receipting machine)

IRISITI ESESIKWENI
(Isemthethweni kuphela
xa ishicilelwe
ngumatshini wokukhupa
irisiti osesikweni.)

AMPTELIKE KWITANSIE
(Geldig alleenlik indien deur
amptelike kontantvangs
masjien gedruk.)

GL DATA CAPTURE RECEIPT (CASHIERTO RETAIN A COPY)

RECEIPT NO: _____

DATE: _____

SAP GL:

8	1	0	1	0	0
---	---	---	---	---	---

PROFIT CENTRE:

1	3	0	5	0	0	0	1
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NAME/COMPANY NAME:

AMOUNT:

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SERVICE DEPARTMENT DETAILS-

DEPARTMENT: LEGAL SERVICES: APPEALS UNIT

CONTACT PERSON: CHARLENE CEBEKHULU / MELANIE CLOETE

PHONE NO: 021 400 2503 / 021 400 3788

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