


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

TENDER NO: 296S/2024/25

TENDER DESCRIPTION: MAINTENANCE AND ADMINISTRATION (SCADA, DATABASE MANAGEMENT SYSTEM INCLUDING SERVICING (INSTRUMENTATION & TELEMETRY EQUIPMENT) OF THE CATCHMENT, STORMWATER & RIVER MANAGEMENT HYDROLOGICAL MONITORING INFORMATION SYSTEM

CONTRACT PERIOD: 36 MONTHS FROM THE COMMENCEMENT DATE OF THE CONTRACT

CLOSING DATE 08 July 2025

CLOSING TIME 10:00 am

TENDER BOX NUMBER 206

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

TABLE OF CONTENTS

THE TENDER.....	3
T.1 GENERAL TENDER INFORMATION	3
T.2 CONDITIONS OF TENDER	4
2.1 General.....	4
2.2 Tenderer's obligations	8
2.3 The CCT's undertakings.....	16
THE CONTRACT	23
C.1 DETAILS OF TENDERER/SUPPLIER	24
C.2 FORM OF OFFER AND ACCEPTANCE	25
C.2.1 OFFER (TO BE COMPLETED BY THE TENDERER AS PART OF TENDER SUBMISSION).....	25
C.2.2 ACCEPTANCE (TO BE COMPLETED BY THE CCT)	26
C.2.3 SCHEDULE OF DEVIATIONS (TO BE COMPLETED BY THE CCT UPON ACCEPTANCE)	27
C.2.4 CONFIRMATION OF RECEIPT (TO BE COMPLETED BY SUPPLIER UPON ACCEPTANCE).....	29
C.3 OCCUPATIONAL HEALTH AND SAFETY AGREEMENT	30
C.4 PRICE SCHEDULE	31
C.5 SPECIFICATION(S).....	37
C.6 SPECIAL CONDITIONS OF CONTRACT	87
C.7 GENERAL CONDITIONS OF CONTRACT	98
C.8 ANNEXURES	108
ANNEXURE A – PRO FORMA INSURANCE BROKER'S WARRANTY	108
ANNEXURE B – MONTHLY PROJECT LABOUR REPORT	109
ANNEXURE C - PRO FORMA PERFORMANCE SECURITY/ GUARANTEE	111
ANNEXURE D - PRO FORMA ADVANCE PAYMENT GUARANTEE	114
ANNEXURE F - TENDER RETURNABLE DOCUMENTS.....	117
<i>Schedule F.1: Contract Price Adjustment</i>	<i>117</i>
<i>Schedule F.2: Certificate of Authority for Partnerships/ Joint Ventures/ Consortiums</i>	<i>122</i>
<i>Schedule F.3: Declaration for Procurement above R10 million</i>	<i>123</i>
<i>Schedule F.4: Preference Points Claim Form In Terms Of the Preferential Procurement Regulations 2022</i>	<i>124</i>
<i>Schedule F.5: Declaration of Interest – State Employees (MBD 4 amended).....</i>	<i>127</i>
<i>Schedule F.6: Conflict of Interest Declaration</i>	<i>129</i>
<i>Schedule F.7: Declaration of Tenderer's Past Supply Chain Management Practices (MBD 8)</i>	<i>130</i>
<i>Schedule F.8: Authorisation for the Deduction of Outstanding Amounts Owed to the CCT</i>	<i>132</i>
<i>Schedule F.9: Certificate of Independent Tender Determination</i>	<i>133</i>
<i>Schedule F.10: Proposed Deviations And Qualifications By Tenderer.....</i>	<i>134</i>
<i>Schedule F.11: List of Other Documents Attached By Tenderer.....</i>	<i>135</i>
<i>Schedule F.12: Record of Addenda to Tender Documents</i>	<i>136</i>
<i>Schedule F.13: Information to Be Provided With the Tender.....</i>	<i>137</i>
SCHEDULE F.13.A: TRACK RECORD OF SERVICE PROVIDER/TENDERER.....	138
SCHEDULE F.13.B: TRACK RECORD OF SERVICE PROVIDER/TENDERER(CONTINUED)	139
SCHEDULE F.13.C: KEY PERSONNEL - QUALIFICATIONS & EXPERIENCE.....	140
<i>Schedule F.14: Appeal Application</i>	<i>141</i>
ANNEXURE G: MONITORING STATION LIST.....	142
ANNEXURE G: MONITORING STATION LIST(CONT..)	143
ANNEXURE H: KEY PERFORMANCE INDICATOR(SAMPLE)	144

THE TENDER

T.1 GENERAL TENDER INFORMATION

TENDER ADVERTISED	:	296S/2024/25
SITE VISIT/CLARIFICATION MEETING	:	<p>Time: 10:00 on Date: 20 June 2025 non-compulsory but strongly recommended clarification meeting with representatives of the Employer will take in person at Water and Sanitation Head Office, 3rd Floor Reticulation Boardroom 2, 8 Voortrekker Road corner of Mike Pienaar Boulevard, Bellville, 7535 and virtually via Teams:</p> <p>Join the meeting now Meeting ID: 376 519 053 102 4 Passcode: xV2Xf2Uu</p>
VENUE FOR SITE VISIT/CLARIFICATION MEETING	:	3rd Floor Reticulation Boardroom 2, Water & Sanitation Head Office, 8 Voortrekker Road corner of Mike Pienaar Boulevard, Bellville, 7535
TENDER BOX & ADDRESS	:	<p>Tender Box as per front cover at the Tender & Quotation Boxes Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town.</p> <p>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. 296S/2024/25: - TENDER DESCRIPTION: MAINTENANCE AND ADMINISTRATION (SCADA, DATABASE MANAGEMENT SYSTEM) INCLUDING SERVICING (INSTRUMENTATION & TELEMETRY EQUIPMENT) OF THE CATCHMENT, STORMWATER & RIVER MANAGEMENT HYDROLOGICAL MONITORING SYSTEM", 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.</p> <p>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.</p>
CCT TENDER REPRESENTATIVE	:	Email: Jamaine.ruiters@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 one "alternative tenderer") for the allocation of work. 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 from the alternative tenderers.

The contract period shall be for a period of 36 months from the commencement date of the contract.

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 ½ (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

A non-compulsory but strongly recommended clarification meeting

2.2.1.1.4 Minimum score for functionality

Only those tenders submitted by tenderers who achieve the minimum score for functionality as stated below will be declared responsive.

The description of the functionality criteria and the maximum possible score for each is shown in the table below. The score achieved for functionality will be the sum of the scores achieved, in the evaluation process, for the individual criteria.

FUNCTIONALITY CRITERIA / SCORING			Maximum possible score
1. Track Record of Service Provider - Information to be completed and Attached to Schedule 14A The Tenderer must provide evidence of successfully completed projects with contactable references as per the project specification. All projects submitted as evidence shall be relevant to the discipline in terms of the specification			50
A. Maintenance & Administration of Instrumentation, SCADA Systems		20	
1.1 0 - 1 Project	1		
1.2 2 – 3 Projects	5		
1.3 4 – 5 Projects	10		
1.4 ≥ 6 Projects	20		
B. Maintenance & Administration of Database Management Systems & Telemetry Systems		15	
1.1 0 - 1 Project	1		
1.2 2 – 3 Projects	5		
1.3 4 – 5 Projects	10		
1.4 ≥ 6 Projects	15		
C. The Repairs, Maintenance & Installation of Measuring Instrumentation & Telemetry Systems		15	
1.1 0 - 1 Project	1		
1.2 2 – 3 Projects	5		
1.3 4 – 5 Projects	10		
1.4 ≥ 6 Projects	15		
2. Proof of Systems & Database Certification Attach copy of evidence to Schedule 14A The Tenderer must provide extensive evidence of certifications			10
1.1 No Proof of Microsoft Windows, Oracle, Linux or equivalent server certifications from server hardware/software providers demonstrating the company's expertise	0		
1.2 Proof of certifications from of Windows. Oracle, Linux or equivalent server hardware/software providers demonstrating the company's expertise.	5		
1.3 No Proof of certifications from database management system providers demonstrating the company's expertise.	0		
1.4 Proof of Microsoft SQL Database, Oracle Database or equivalent certifications from database management systems providers demonstrating the company's expertise.	5		
3. Project Management & Administration Attach copy of evidence to Schedule 14A			10
1.1 No Proof of sample project/works plans, schedules, and documentation outlining the company's project management methodologies, demonstrating their approach to planning, organizing, and executing projects.	0		
1.2 Proof of sample project/works plans, schedules, and documentation outlining the company's project management methodologies, demonstrating their approach to planning, organizing, and executing projects.	10		10
4. Key Project Staff Attach copy of evidence to Schedule 14B			
A. PROJECT MANAGER			
1.1 Minimum NQF 7 Qualification in Electrical Engineering or Computer Science or Mechatronics Engineering or Information Systems & Technology with 8 years or more relevant and related experience.			7
1.2 Minimum NQF 7 Qualification in Electrical Engineering or Computer Science or Mechatronics Engineering or Information Systems & Technology with between 5-7 years relevant and related experience.			5
1.3 Minimum NQF 7 Qualification in Electrical Engineering or Computer Science or Mechatronics Engineering or Information Systems & Technology with between 0-4 years relevant and related experience.			2

FUNCTIONALITY CRITERIA / SCORING(cont..)		Maximum possible score
5. Key Project Staff <u>Attach copy of evidence to Schedule 14B(cont..)</u>		
A. ENGINEER		30
1.1 NQF 7 Qualification in Electrical Engineering or Computer Science or Mechatronics Engineering or Information Systems & Technology with 8 years or more relevant and related experience.	7	
1.2 Minimum NQF 7 Qualification in Electrical Engineering or Computer Science or Mechatronics Engineering or Information Systems & Technology with between 5-7 years relevant and related experience.	5	
1.3 Minimum NQF 7 Qualification in Electrical Engineering or Computer Science or Mechatronics Engineering or Information Systems & Technology with between 0-4 years relevant and related experience.	2	
B. TECHNICIAN		
1.1 Minimum NQF 6 Qualification in Light Current Electrical Engineering & Instrumentation or Information Systems & Technology with 5 years or more relevant and related experience	7	
1.2 Minimum NQF 6 Qualification in Light Current Electrical Engineering & Instrumentation or Information Systems & Technology with between 3-4 years relevant and related experience.	3	
1.3 Minimum NQF 6 Qualification in Light Current Electrical Engineering & Instrumentation or Information Systems & Technology with between 0-2 years relevant and related experience.	1	
C. ARTISAN		
1.1 Minimum Qualification of an intrustry trade certificate in Light Current Electrical Engineering with 5 years or more relevant and related experience.	5	
1.2 Minimum Qualification of an intrustry trade certificate in Light Current Electrical Engineering with between 3-4 years relevant and related experience.	3	
1.3 Minimum Qualification of an intrustry trade certificate in Light Current Electrical Engineering with between 0-2 years relevant and related experience.	1	
E. PROJECT ADMINISTRATOR		
1.1 Minimum Qualification NQF 4 Qualification with relevant and related experience in project or contract administration with 5 years or more	4	
1.2 Minimum Qualification NQF 4 Qualification with relevant and related experience in project or contract administration with 3 - 4 years or more	3	
1.3 Minimum Qualification NQF 4 Qualification with relevant and related experience in project or contract administration with 0 - 2 years or more	1	
Maximum possible score for Functionality		100

NOTE: The roles fulfilled by the Project Manager, Engineer & Technician cannot be assigned to one individual on the above and in the project.

The minimum qualifying score for functionality is **60(60%)** out of a maximum of **[100]**.

Where the entity tendering is a Joint Venture, the tenderer's tender response must be accompanied by a statement describing exactly what aspects of the work will be undertaken by each party to the joint venture.

Tenderers shall ensure that all relevant information has been submitted with the tender offer in the prescribed format to ensure optimal scoring of functionality points for each Evaluation Criteria. Failure to provide all information **IN THIS TENDER SUBMISSION** could result in the tenderer not being able to achieve the specified minimum scoring.

A more detailed explanation of the functionality criteria is given below:

The tenderer will need to demonstrate its experience as outlined in the above table which is essential to the successful completion of the work outlined in the specification. The tenderer shall also demonstrate its methodology for performing the works outline in the tender scope.

The project staff will be integral to the success of the project and the tenderer will be required to ensure that the staff listed in the above table are in place to deliver on the objective of the tender. The tenderer shall demonstrate proof of the staff required as set out in the document by providing individual Curriculum Vitae of key project staff and complete Schedule 14B

2.2.1.1.7 Provision of samples

Only those tenders submitted by tenderers who provided acceptable samples as stated in the Tender Specifications will be declared responsive.

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 Bod 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 Supply Chain Management Policy.

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 a typical project/job.

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:

Either the 80/20 preference point system will apply to this tender or 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	<ul style="list-style-type: none"> Company Registration Certification Central Supplier Database report 	<ul style="list-style-type: none"> 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 0% black ownership = 0 points	5	<ul style="list-style-type: none"> B-BBEE certificate; Company Registration Certification Central Supplier Database report 	<ul style="list-style-type: none"> South African National Accreditation System approved certificate or commissioned sworn affidavit Issued by the Companies and Intellectual Property Commission 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	<ul style="list-style-type: none"> Proof of disability Company Registration Certification 	<ul style="list-style-type: none"> Medical certificate/ South African Revenue Services disability registration Issued by the Companies and Intellectual Property Commission
<i>Reconstruction and Development Programme (RDP) as published in Government Gazette</i>				
4	Promotion of Micro and Small Enterprises <i>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)</i> <i>SME partnership, sub-contracting, joint venture or consortiums</i>	7	<ul style="list-style-type: none"> B-BBEE status level of contributor; South African owned enterprises; Financial Statement to determine annual turnover 	<ul style="list-style-type: none"> 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:

- a) reasonableness of the financial offer
- b) reasonableness of unit rates and prices
- c) 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
- d) 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:

- a) Does not allow any preferred tenderer a second or unfair opportunity;
- b) Is not to the detriment of any other tenderer; and
- c) 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			
SCM - 542	Approved by Branch Manager: February 2024	Version: 10	Page 23 of 80

TENDER NO: 296S/2024/25

TENDER DESCRIPTION: MAINTENANCE AND ADMINISTRATION (SCADA, DATABASE MANAGEMENT SYSTEM) INCLUDING SERVICING (INSTRUMENTATION & TELEMTRY EQUIPMENT) OF THE CATCHMENT, STORMWATER & RIVER MANAGEMENT HYDROLOGICAL MONITORING INFORMATION SYSTEM

CONTRACT PERIOD: DATE OF COMMENCEMENT FOR A PERIOD OF 36

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?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, enclose proof
Is tenderer a foreign based supplier for the Goods / Services / Works offered?	<input type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No
	b) Does the tenderer have a permanent establishment in the Republic of South Africa? <input type="checkbox"/> Yes <input type="checkbox"/> No
	c) Does the tenderer have any source of income in the Republic of South Africa? <input type="checkbox"/> Yes <input type="checkbox"/> No
	d) Is the tenderer liable in the Republic of South Africa for any form of taxation? <input type="checkbox"/> Yes <input type="checkbox"/> No
Other Required registration numbers	

C.2 FORM OF OFFER AND ACCEPTANCE

TENDER 296S/2024/25 MAINTENANCE AND ADMINISTRATION (SCADA, DATABASE MANAGEMENT SYSTEM) INCLUDING SERVICING (INSTRUMENTATION & TELEMETRY EQUIPMENT) OF THE CATCHMENT, STORMWATER & RIVER MANAGEMENT HYDROLOGICAL MONITORING INFORMATION SYSTEM

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 296S/2024/25 MAINTENANCE AND ADMINISTRATION (SCADA, DATABASE MANAGEMENT SYSTEM) INCLUDING SERVICING (INSTRUMENTATION & TELEMETRY EQUIPMENT) OF THE CATCHMENT, STORMWATER & RIVER MANAGEMENT HYDROLOGICAL MONITORING INFORMATION SYSTEM

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 296S/2024/25 MAINTENANCE AND ADMINISTRATION (SCADA, DATABASE MANAGEMENT SYSTEM) INCLUDING SERVICING (INSTRUMENTATION & TELEMETRY EQUIPMENT) OF THE CATCHMENT, STORMWATER & RIVER MANAGEMENT HYDROLOGICAL MONITORING INFORMATION SYSTEM

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

2 Subject
Details

3 Subject
Details

4 Subject
Details

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 296S/2024/25 MAINTENANCE AND ADMINISTRATION (SCADA, DATABASE MANAGEMENT SYSTEM) INCLUDING SERVICING (INSTRUMENTATION & TELEMETRY EQUIPMENT) OF THE CATCHMENT, STORMWATER & RIVER MANAGEMENT HYDROLOGICAL MONITORING INFORMATION SYSTEM

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'

Item No	Description	Unit of measure	Price per unit (excl VAT)
SECTION A – PRELIMINARY AND GENERAL			
MAINTENANCE PLANNING & ADMINISTRATION			
1.	Work Planning & Scheduling <i>Refer to Tender Specification, Section A, item 2</i>	hr	
2.	Document Compellation & Submission <i>Refer to Tender Specification, Section A, item 4</i>	hr	
3.	Daily Health Checks <i>Refer to Tender Specification, Section A, item 5</i>	hr	
4.	User Training, Documentation & Knowledge Transfer	hr	
SECTION B – SERVER MAINTENANCE & ADMINISTRATION AND REMOTE STATION MAINTENANCE			
SERVER MAINTENANCE & ADMINISTRATION			
1	Server Hardware Maintenance <i>Refer to Tender Specification, Section B, item 1.1, Server Hardware</i>	hr	
2	Maintenance & Service of Uninterrupted Power Supply(UPS) <i>Refer to Tender Specification, Section B, item 1.2, Uninterrupted Power Supply</i>	hr	
3	Server Software Maintenance & Administration <i>Refer to Tender Specification, Section B, item 1.3 Software</i>	hr	
4	Software Application Maintenance & Administration <i>Refer to Tender Specification, Section B, items 1.4 , SCADA Application Maintenance & Administration, item 1.5, Protocol Reading Software Maintenance & Administration</i>	hr	
5	Replication Server Maintenance & Administration <i>Refer to Tender Specification, Section B, item 1.6, Replication Server Maintenance & Administration</i>	hr	
6	Database Management System Maintenance <i>Refer to Tender Specification, Section B, item 1.7, Database Management System(DBMS) Maintenance</i>	hr	
7	REMOTE STATION MAINTENANCE & SERVICE <i>Refer to Tender Specification, Section B, item 1.8 Remote Station Maintenance</i>		
7.1	Remote Station Service(Supervised) <i>Refer to Tender Specification: Section B, item 1.8 items 1.8.6 – 1.8.10</i>	Task	
7.2	Remote Station Maintenance Service(Unsupervised) <i>Refer to Tender Specification: Section B, item 1.8 items 1.8.6 – 1.8.10</i>	Task	
7.3	Maintain Programmable Logic Controller(PLC): <i>Refer to Tender Specification: , Section B, item 1.8.6</i>	Task	
7.4	Maintain Human Machine Interface(HMI): <i>Refer to Tender Specification: , Section B, item 1.8.7</i>	Task	
7.5	Maintain Data Logger(Hardware & Firmware) <i>Refer to Tender Specification: , Section B, item 1.8.8</i>	Task	
7.6	Inspect, Test & Clean Pressure Sensor: <i>Refer to Tender Specification: , Section B, item 1.8.14</i>	Task	
7.7	Clean Pressure Sensor(Unsupervised): <i>Refer to Tender Specification: , Section B, item 1.8.14</i>	Task	
7.8	Inspect,Test Ultrasonic Level Sensor: <i>Refer to Tender Specification: , Section B, item 1.8.15</i>	Task	
7.9	Clean Ultrasonic Level Sensor: <i>Refer to Tender Specification: , Section B, item 1.8.15</i>	Task	
7.10	Inspect. Test & Clean Rain Gauge <i>Refer to Tender Specification: , Section B, item 1.8.16</i>	Task	
7.11	Inspect & Test 2G/3G/4G GSM Communications Router <i>Refer to Tender Specification: , Section B, item 1.8.9</i>	Task	

7.12	Inspect & test 12V Power Supply/ Battery Charger Unit <i>Refer to Tender Specification: , Section B, item 1.8.10</i>	Task	
Item No	Description	Unit of measure	Price per unit (excl VAT)
	SERVER AND REMOTE STATION MAINTENANCE & SERVICE (CONT..)		
7.13	Instrumentation Fault Finding <i>Refer to Tender Specification: Section B, item 1.8.5, Fault Finding</i>	Task	
7.14	Battery Testing Service & Management <i>Refer to Tender Specification: Section B, item 1.8.12, Battery Testing, Service and Management</i>	Task	
7.15	Battery Charging <i>Refer to Tender Specification: Section B, item 1.8.12, Battery Charging</i>	Task	
7.16	Solar Panel Cleaning and Testing <i>Refer to Tender Specification: Section B, item 1.8.17, Solar Panel Cleaning and Testing</i>	Task	
7.17	Inverter Service & Maintenance <i>Refer to Tender Specification: Section B, item 1.8.18, Grid tied Inverter</i>	Task	
7.18	Lab Instrument Calibration <i>Refer to Tender Specification, Section B, item 1.9, Instrument Calibration</i>	Task	
7.19	On-Site Instrument Calibration <i>Refer to Tender Specification, Section B, item 1.8, Instrument Calibration</i>	Task	
7.20	Install & Test Solar Panels – (in line with SANS 959-2-4:2017) <i>Refer to Tender Specification, Section C, item 2.2, Solar Panel Installation</i>	Task	
8.	TRENCHING <i>Refer to Tender Specification, Section G, item 7, Trenching</i>		
8.1	Site Clearance <i>Refer to Tender Specification, Section G, item 7.1, Site Clearance</i>	m ²	
8.2	Excavation <i>Refer to Tender Specification, Section G, item 7.2, Excavation</i>	m ³	
8.3	Install Conduit <i>Refer to Tender Specification, Section G, item 7.3, Install uPVC Cable Sleeve:</i>	m	
8.4	Concrete Encase of conduit <i>Refer to Tender Specification, Section G, item 7.4 Concrete Encasement of PVC conduit</i>	m ³	
8.5	Backfill & Compact <i>Refer to Tender Specification, Section G, item 7.5 Backfill, Compaction & Reinstatement</i>	m ²	

Item No	Description	Unit of measure	Price per unit (excl VAT)
SECTION C – INFRASTRUCTURE TECHNICAL SPECIFICATIONS			
1.	INSTRUMENTATION		
1.1	Pressure Sensor: <i>Refer to Tender Specification, Section C, item 1.1, Pressure Sensor</i>	Each	
1.2	Ultrasonic Sensor: <i>Refer to Tender Specification, Section C, item 1.2, Ultrasonic Sensor</i>	Each	
1.3	Rain Collector: <i>Refer to Tender Specification, Section C, item 1.3, Rain Collector</i>	Each	
1.4	Data Logger: <i>Refer to Tender Specification, Section C, item 1.4, Data Logger</i>	Each	
2.	EQUIPMENT		
2.1	SOLAR PANELS		
2.1.1	40 WATT Solar Panel <i>Refer to Tender Specification, Section C, item 2.1.1, Solar Panels</i>	Each	
2.1.2	80 WATT Solar Panel <i>Refer to Tender Specification, Section C, item 2.1.2, Solar Panels</i>	Each	
2.1.3	100 WATT Solar Panel <i>Refer to Tender Specification, Section C, item 2.1.3, Solar Panels</i>	Each	
2.1.4	150 WATT Solar Panel <i>Refer to Tender Specification, Section C, item 2.1.4, Solar Panels</i>	Each	
3.	SOLAR PANEL INSTALLATION		
3.1	Solar Regulator <i>Refer to Tender Specification, Section C, item 2.3, Solar Regulation</i>	Each	
4.	BATTERIES		
4.1	12V, 7 AH BATTERY <i>Refer to Tender Specification, Section C, item 2.4.1.1 12V, 7AH Battery</i>	Each	
4.2	12V, 40 AH BATTERY <i>Refer to Tender Specification, Section C, item 2.4.1.2 12V, 40AH Battery</i>	Each	
4.3	12V, 100 AH BATTERY <i>Refer to Tender Specification, Section C, item 2.4.1.3 12V, 100AH Battery</i>	Each	
4.5	12V, 12V Lithium iron Phosphate <i>Refer to Tender Specification, Section C, item 2.4.2 12V Lithium iron Phosphate</i>	Each	
5.	POWER SUPPLY		
5.1	Supply 12V Power Supply/ Battery Charger Unit <i>Refer to Tender Specification, Section C, item 2.5.1, Power Supply/ Battery Charger Unit</i>	Each	
6.	COMMUNICATIONS ROUTER		
6.1	Supply Multi-Band Communications Router <i>Refer to Tender Specification, Section C, item 2.6.1, Multi-Band Communications Router</i>	Each	
7.	ANTENNAS		
7.1	Supply New IP68 Class Omnidirectional Cellular 3G/4G/LTE Antenna <i>Refer to Tender Specification, Section C, item 2.7.1, IP68 Class Omnidirectional Cellular Antenna</i>	Each	
8.	STEEL CONDUITS <i>Refer to Tender Specification, Section C, item 2.8.1.</i>		
8.1	20mm Steel Conduit <i>Refer to Tender Specification, Section C, item 2.8.1.1</i>	m	
8.2	25mm Steel Conduit <i>Refer to Tender Specification, Section C, item 2.8.1.2</i>	m	
8.3	32mm Steel Conduit <i>Refer to Tender Specification, Section C, item 2.8.1.3</i>	m	
8.4	50mm Steel Conduit <i>Refer to Tender Specification, Section C, item 2.8.1.4</i>	m	
8.5	75mm Steel Conduit <i>Refer to Tender Specification, Section C, item 2.8.1.5</i>	m	
8.6	20 mm 2 Way Through Conduit Box <i>Refer to Tender Specification, Section C, item 2.8.1.6</i>	m	
8.7	25 mm 2 Way Through Conduit Box <i>Refer to Tender Specification, Section C, item 2.8.1.7</i>	m	
8.8	20mm 2 Angle Conduit Box <i>Refer to Tender Specification, Section C, item 2.8.1.8</i>	m	
8.9	25 mm 2 Angle Conduit Box <i>Refer to Tender Specification, Section C, item 2.8.1.9</i>	m	

Item No	Description	Unit of measure	Price per unit (excl VAT)
8.10	20 mm 3 Way Side Entry Conduit Box <i>Refer to Tender Specification, Section C, item 2.8.1.10</i>	m	
8.11	25 mm 3 Way Side Entry Conduit Box <i>Refer to Tender Specification, Section C, item 2.8.1.11</i>	m	
8.12	20 mm 4 Way Side Entry Conduit Box <i>Refer to Tender Specification, Section C, item 2.8.1.12</i>	m	
8.13	25 mm 4 Way Side Entry Conduit Box <i>Refer to Tender Specification, Section C, item 2.8.1.13</i>	m	
9.	PVC CONDUIT <i>(including accessories & fittings)</i>		
9.1	20mm PVC Conduit <i>Refer to Tender Specification, Section C, item 2.8.2.1</i>	m	
9.2	25mm PVC Conduit <i>Refer to Tender Specification, Section C, item 2.8.2.2</i>	m	
9.3	32mm PVC Conduit <i>Refer to Tender Specification, Section C, item 2.8.2.3</i>	m	
9.4	50mm PVC Conduit <i>Refer to Tender Specification, Section C, item 2.8.2.4</i>	m	
9.5	75mm PVC Conduit <i>Refer to Tender Specification, Section C, item 2.8.2.5</i>	m	
10.	CABLING <i>Refer to Tender Specification, Section C, item 3</i>		
10.1	Instrumentation Cabling <i>Refer to Tender Specification, Section C, item 3.1</i>	m	

Item No	Description	Unit of measure	Price per unit (excl VAT)
SECTION D – DAYWORKS			
<ul style="list-style-type: none"> Working Hours: Works activities are to be scheduled between 08:30 – 17:00 during weekdays. Business Days: Monday to Friday (excluding public holidays) All Km rates shall be aligned with Department of Transport: Transport Handbook on Tariffs for the Use of Motor Transport as amended for official km rates for all kilometer related claims. 			
1.	VEHICLES, PLANT & EQUIPMENT		
1.1	LDV Minimum capacity 1800cc	Day	
1.2	Kilometer Rate: LDV	Km	
1.3	4 x 4 Double Cab minimum capacity 2500cc	Day	
1.4	4 x 4 Single Cab minimum capacity 2500cc	Day	
1.5	Kilometer Rate: 4 Wheel Drive Double Cab	Km	
1.6	Kilometer Rate: 4 Wheel Drive Single Cab	Km	
1.7	4 x 4 Self Propelled Arial Platform Cherry Picker(Including operator)	Day	
1.8	Generator (petrol, portable, 220V)	Day	
2.	TIMEBASED LABOUR:		
2.1	Project Manager	hr	
2.2	Electrical Light Current Engineer	hr	
2.3	Electronic Engineer	hr	
2.4	Instrumentation Technician	hr	
2.5	Database Administrator	hr	
2.6	Engineering Artisan	hr	
2.7	Driver	hr	
2.8	Health & Safety Officer	hr	
2.9	Maintenance Assistant	hr	
2.10	Project Administrator	hr	
3.	PROVISIONAL SUM Allowance for outsourced repairs (including parts and labour) and general items. Supplier to typically invite three quotations from suitably qualified sub-contractors for services for which the accepted quotation does not exceed R300 000 (including VAT). Where the sub-contracted services are likely to exceed R300 000, the Supplier shall follow an open tender procurement process.		
3.1	Allowance for outsourced repairs (parts and labour), general items such as tests and pre-approved disbursements refer to Specification Section E – Outsourced Work	Prov Sum	R1 000 000
3.1.1	Supplier's mark-up as a percentage of item 3.1 above. The tender shall include the percentage marked in Rand value aligned to the Provisional Sum amount allocation.	%	
		Rand	
3.2	Allowance for outsourced specialist work	Prov Sum	R 900000
3.2.1	Supplier's mark-up as a percentage of item 3.2 above Refer to specification Section E – Outsourced Work. The tender shall include the percentage marked in Rand value aligned to the Provisional Sum amount allocation.	%	
		Rand	
3.2.1.1	Software Developer	hr	
3.2.1.2	Systems Architect	hr	
3.2.1.3	Independent Safety Agent	hr	
3.2.1.4	Armed Security Service(PRISA Registered)	hr	
3.2.1.5	Unarmed Security Service(PRISA Registered)	hr	

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 A mark-up percentage for providing new and ad-hoc parts is to be added (refer to SECTION D, clause 4.1 Provisional SUM of the Specifications). This Sum is to be spent in accordance with the Purchaser's Supply Chain Management policy and at the discretion of the Purchaser.
- 5.9 A mark-up percentage for handling and managing the outsourced specialist functions is to be added (refer to SECTION D, clause 4.2 Provisional SUM of the Specifications). This Sum is to be spent in accordance with the Purchaser's Supply Chain Management policy and at the discretion of the Purchaser.
- 5.10 Prices tendered above shall be subjected to adjustment in accordance with **Schedule 8: Contract Price Adjustment and/or Rate of Exchange Variation. The Mark-up must remain the same for the duration of the contract.**
- 5.11 Prices tendered in Price Schedule **SECTION A – PRELIMINARY AND GENERAL & SECTION B - SERVER AND REMOTE STATION MAINTENANCE** shall have the following **CPI adjustment** as follow. In the **First Year** of the contract period, the Contract Price/s **shall be fixed** and not be subject to any contract price adjustment.
- 5.12 The following items in the Price Schedule are subject to **Supplier/Manufacturer Price List Variations**:
- i. **SECTION C – INFRASTRUCTURE TECHNICAL SPECIFICATIONS.** The Supplier will be entitled to claim only the difference between the cost of the part at the time of tendering (As per the price schedule) and the new part.

INITIALS OF CCT OFFICIALS		
1	2	3

C.5 SPECIFICATION(S)

BACKGROUND

The **Catchment, Stormwater, and River Management Branch (CSRM)** within the Water and Sanitation Department (WS) holds the responsibility for capturing and analyzing rainfall and river level data throughout the Cape Town Metropolitan area and the neighboring Stellenbosch Municipality. This data is critical in the operational activities of various Departmental Branches across Directorates.

Hydrological Monitoring System Infrastructure:

Our Hydrological Monitoring Infrastructure is a robust network of automated Hydrological Monitoring stations specially designed to collect and record Rainfall and River Levels. These advanced recording stations seamlessly transmit the data via an LTE-enabled Accelerated Private Network (APN) to a Primary SCADA System, backed up by a Secondary SCADA System located at the Disaster Risk Management Centre.

At the Data, Application and Technology layer, the recorded data finds its home on a SQL Database Server, with an additional backup stored on a secondary standby server. This data is also securely mirrored to a Virtual (Hyper-V) Server hosted by the City of Cape Town's corporate IT Department. The Hydrological Monitoring Section, responsible for the system's maintenance and administration, oversees this process.

It's essential to note that the Hydrological Monitoring System operates within the 3rd Party Zone, adhering strictly to the policies and procedures outlined by the City of Cape Town's Corporate IT Department to ensure full compliance and security.

TENDER PURPOSE

The purpose of this tender is to select a qualified and capable service provider to undertake essential maintenance tasks for automated rainfall and river level monitoring stations, as well as the associated server infrastructure. The appointed service provider will be granted managed access to the CSRM SCADA system, with the responsibility to manage and administer the SCADA and SQL Database Management System. This work must be carried out in strict compliance with the established processes and procedures defined by the Hydrological Monitoring Section, a specialized operational unit within the City. The overarching goal is to ensure the consistent delivery of accurate, reliable, and timely hydrological data to our valued stakeholders, aligning with the operational standards outlined in the tender specifications.

SECTION A – MAINTENANCE PLANNING & ADMINISTRATION

1. MAINTENANCE PLANNING AND ADMINISTRATION

This section outlines the guidelines and expectations for project execution.

Definitions:

- **Working Hours:** Works activities are to be scheduled between 08:30 – 17:00 during weekdays.
- **Business Days:** Monday to Friday (excluding public holidays)
- **After Hours:** Monday to Friday(After 17:00)
- **Weekends:** Saturday and Sunday

2. PLANNING:

2.1 Meetings:

The City of Cape Town Team (CCT) will develop the work plan in collaboration with the appointed service provider. The final plan will be agreed upon through meetings held in person or online.

3.3.1 Meeting Types:

- Operational Planning & Review – Covers maintenance and repairs.
- Contractual Performance – Evaluates the service provider's adherence to the contract.
- Project-Related Meetings – Addresses non-maintenance work projects.

3. ADMINISTRATION:

3.1 Meeting Coordination:

- **Maintenance Meetings:** The Project Administrator (PA) will schedule, document, and distribute minutes.
- **Performance Meetings:** The service provider must attend at their own cost when required.
- **Project Work Meetings:** The PA will handle scheduling, minute-taking, and distribution.

3.2 Timelines:

Activity	Requirement
Meeting Scheduling	Confirm schedules promptly after request.
Minutes Submission	Submit draft within 3 days; distribute approved minutes within 1 day.
Work Planning	Submit alternatives within agreed timeframe.
Project Works Plan	Submit within 3 days of receiving a purchase order.
Service Provider Feedback	Provide findings within 2 hours of assessment.
Purchase Order	Acknowledge receipt within 1 working day.
Quotation Requests	Submit within 2 working days for: a) Tender items; b) Finalized plans; c) Approved project scope.
Invoices	Submit by the 1st working day of the month following approved work.
Works Reports	Submit within 2 working days of completion (excluding call-out reports).

3.2.1 Call-Out Response Times:

- **May–September:** Address issues within 24 hours of written notification.
- **October–April:** Address issues within 48 hours of written notification.
- Submit a call-out investigation report within two hours of completion.

3.2.2 System Health Check Report:

- Submit daily reports by 10:00 AM.
- Monday reports must include information from Saturday and Sunday.
- Reports should cover communication status, battery voltage, power status, kilowatt-hour readings, and mains failure count.

3.2.3 Risk Assessment:

Assess risks associated with delays or inability to perform planned work.

- Equipment failures/faults.

- Data integrity issues.

3.3.2 Documentation:

- Maintain records of all work activities, including failures, faults, and equipment replacements.
- Track system performance metrics and identify recurring issues.
- Provide analysis reports on maintenance trends and opportunities for process improvement.

5. System Monitoring and Daily Health Checks

The SCADA system generates a status report on the following parameters:

- Battery voltage data.
- Electrical mains status (failures and restorations).
- Communication (COMMS).
- KWh reader.

The Daily Health Report provides a snapshot of system conditions at specific time intervals for all Remote Monitoring Stations (RMS). When required, the service provider must compile a report summarizing daily results for each station, covering all parameters listed above.

5.1 Battery Monitoring and Recharge

Batteries at remote stations must be routinely monitored to ensure reliability, particularly when they serve as the primary power source. If a battery registers a voltage of 11 volts or less, a recharge is required. The contractor must perform voltage and load tests and report findings to the CCT Representative via email or another approved electronic medium. If intervention is required, a formal quotation will be requested, and work can proceed only after receiving an official purchase order. The contractor must commence the recharge process within 48 hours of purchase order receipt.

BATTERY RECHARGE PROCESS

1. Testing

- Conduct voltage and load tests on all batteries.
- Notify the CCT Representative if a battery registers 11 volts or less.
- If required, submit a formal quotation for the recharge process.

2. Recharging

- Ensure a fully charged and tested replacement battery is available onsite.
- Remove and replace the discharged battery.
- Monitor the system for at least 10 minutes to verify proper operation.

5.2 Electrical Mains Status Protocols and Procedures

If electrical mains fail for three consecutive days, a Maintenance Call-Out will be initiated at the discretion of the CCT Representative. The service provider must notify the CCT Representative of the failure and, if instructed, submit a formal quotation. Upon receipt of a purchase order, the service provider must restore power within 24 hours.

5.3 Remote Station Connectivity Monitoring and Recovery

If remote station communication is lost for three consecutive days, a Maintenance Call-Out will be initiated at the discretion of the CCT Representative. The service provider must notify the CCT Representative

and, if required, submit a formal quotation. Upon receipt of a purchase order, the service provider must restore communication within 24 hours.

5.4 Energy Usage Tracking and Power Supply Reliability

To ensure efficiency, the service provider must track:

- Weekly total kilowatt-hours (KWh).
- Monthly cumulative KWh usage.
- Weekly number of mains failures.
- Monthly cumulative mains failures.

These checks are crucial for maintaining a comprehensive understanding of energy usage and electrical supply reliability.

6. The Tenderer Performance Monitoring KPI

The service provider's performance will be evaluated using a Key Performance Indicator (KPI) system based on the impact on service delivery. The overall performance will be categorized as follows:

Overall Result (Weighted result based on the Impact on Service Delivery)		
GREEN		EXPECTATION MET
AMBER		SOME INTERVENTION REQUIRED
RED		POOR PERFORMANCE

Quarterly meetings will be held with the service provider to review performance, discuss any concerns from the previous quarter, and evaluate KPI results. The KPI criteria may be adjusted as needed, with input from the service provider.

If the service provider consistently falls within the AMBER zone for three consecutive months, the City of Cape Town may initiate default procedures. If performance remains in the RED zone, default procedures will be implemented immediately.

During any period in which the service provider is given the opportunity to address and improve substandard performance, the City of Cape Town reserves the right to engage alternative providers to prevent any negative impact on operations.

SECTION B – SERVER AND REMOTE STATION MAINTENANCE

B.1 SERVER HARDWARE MAINTENANCE & ADMINISTRATION

B.1.1 SERVER HARDWARE

The tenderer is responsible for the performing on-premises maintenance and upkeep of the rack-mounted server units and associated infrastructure, including but not limited to servers, routers, rack fans, monitors, and related components.

B.1.1.1 FREQUENCY OF MAINTENANCE

Regular maintenance will be conducted on a quarterly basis, with additional on-demand services as required. The following maintenance activities need to be performed, but are limited to the following functions:

B.1.1.2 Server Units Maintenance

a. Inspection and Cleaning:

- Visual inspection for physical damage or anomalies.
- Cleaning of server components to remove dust and debris.
- Verification of proper cable management.

b. Hardware Check:

- Examination of server hardware for wear and tear.
- Re-seating of components if necessary.
- Testing and verification of RAID configurations (if applicable).

c. Firmware and Software Updates:

- Evaluation of available firmware and software updates.
- Application of updates in a controlled manner, ensuring minimal downtime.

B.1.1.3 Rack Infrastructure Maintenance

a. Rack Inspection:

- Examination of the server rack for structural integrity.
- Verification of proper grounding and cable management.
- Inspection of rack fans, ensuring proper functioning.

b. Cooling System Maintenance:

- Cleaning or replacement of rack fans to maintain optimal cooling.
- Temperature monitoring and adjustments as needed.

B.1.1.4 Network Infrastructure Maintenance

a. Hardware Check:

- Inspection of network equipment including network cabling, routers and switches for any physical damage.

b. Configuration Review:

- Periodic review of network configurations for security and efficiency.
- Implementation of necessary updates or adjustments.

B.1.1.5 Documentation

a. Maintenance Records:

- Detailed records of all maintenance activities performed will be issued.
- Documentation of any issues discovered and actions taken will be issued.

b. Asset Inventory:

- Updated inventory of all server and network component(name/number tags)

B.1.1.6 Reporting

The tenderer shall provide regular reports summarizing maintenance activities and recommendations for improvements or upgrades to enhance system performance.

B.1.1.7 Compliance and Security

All maintenance activities must comply with relevant industry standards and security protocols.

B.2 UNINTERRUPTED POWER SUPPLY(UPS)

The tenderer is responsible for the performing on-premises maintenance and upkeep of the Uninterrupted Power Supply(UPS) units and associated infrastructure, including but not limited to the the following:

- Inspect the UPS unit for any visible damage or unusual indicators on the display.
- Check the battery status and any warning lights related to battery health.
- Test the UPS battery runtime periodically by simulating a power outage.
- Replace UPS batteries as per the manufacturer's recommended interval.
- Ensure that all connections are secure and properly seated.

B.3 SOFTWARE

All Software Asset Management during under this tender shall be done in line with international Standard **SAM ISO 19770-1** from the Framework of the International Association for IT Asset Management(IAITAM) and ITIL Principles.

The tenderer therefore, through leveraging their expertise, is entrusted with the responsibility to guarantee the smooth operation, security, and reliability of our digital infrastructure. This obligation is achieved through the meticulous execution of the following recommended server software maintenance tasks.

B.3.1 SERVER SOFTWARE MAINTENANCE & ADMINISTRATION SCOPE OF WORK

The outlined tasks and responsibilities are fundamental to the flawless performance of our server software. The contractor's role encompasses a diverse range of critical activities, each pivotal to the stability, security, and efficiency of our systems, as detailed below:

B.3.1.1 Updates and Patch Management:

- Monitor and apply software updates, security patches, and bug fixes.
- Prioritize and apply critical security patches promptly.
- Document the update process, including any issues or conflicts.

B.3.1.2 Data Backup and Recovery:

- Conduct backups of critical data and server configurations.
- Test data restoration procedures periodically.
- Ensure secure offsite storage of backups.

B.3.1.3 Security Audits and Vulnerability Scanning:

- Perform security audits to identify vulnerabilities.
- Conduct vulnerability scans using reputable security tools.
- Address identified vulnerabilities promptly and document remediation efforts.

B.3.1.4 Log and Event Monitoring:

- Set up centralized logging for server events.
- Regularly review logs for unusual or suspicious activities.

- Implement alerting systems for critical events.

B.3.1.5 Performance Monitoring and Optimization:

- Monitor server performance metrics (CPU, RAM, disk usage).
- Identify and address performance bottlenecks.
- Scale resources or hardware as necessary.

B.3.1.6 User Account Management:

- Review and manage user accounts and access permissions.
- Remove or disable inactive or unnecessary accounts.
- Enforce strong password policies and MFA where applicable.

B.3.1.7 Security Policies and Access Controls:

- Review and update security policies and access controls.
- Ensure authorized personnel have access to server software.

B.3.1.8 Disaster Recovery Planning:

- Review and update disaster recovery and business continuity plans.
- Test disaster recovery procedures.

B.3.1.9 Documentation and Knowledge Sharing:

- Maintain up-to-date documentation of server software configurations and procedures.
- Share knowledge among Employers representatives.

B.3.1.10 Compliance and Regulations:

- Ensure compliance with relevant industry standards and regulations.
- Address compliance gaps and document remediation efforts.

B.3.1.11 Change Management:

- Implement a change management process.
- Review and submit for approval all changes before implementation.

B.3.1.12 Regular Testing:

- Conduct periodic testing of disaster recovery plans, security measures, and system configurations.

B.3.1.13 Reporting

- The contractor shall provide regular reports summarizing maintenance activities, issues discovered, remediation efforts, and recommendations for improvements.

B.4 SOFTWARE APPLICATION MAINTENANCE

B.4.1 SCADA APPLICATION MAINTENANCE & ADMINISTRATION

The tenderer is responsible for ensuring ongoing maintenance of the SCADA system with pertinent industry standards and regulations. Updates and adjustments to the system will be implemented as necessary to align with evolving requirements. This scope of work delineates the essential responsibilities and tasks for SCADA application maintenance. The contractor is required to execute these tasks meticulously, guaranteeing the

system's reliability, security, and adherence to industry standards. This mandate is achieved through the meticulous execution of the following recommended maintenance tasks.

B.4.1.1 Regular Backups:

- The tenderer shall schedule and execute regular backups of the entire SCADA system, including configurations, databases, and historical data.
- Backups shall be stored both on-site and off-site to ensure data availability in case of hardware failures or disasters.

B.4.1.2 Software Updates and Patches:

- The tenderer shall monitor and stay informed about the latest updates and patches for the SCADA software and underlying components.
- Prior to deployment, updates shall be tested in a controlled environment to ensure compatibility and stability.
- Security patches shall be applied promptly to mitigate potential vulnerabilities.

B.4.1.3 Hardware Health Check:

- The tenderer shall conduct routine inspections of hardware components, such as servers, network switches, and communication devices.
- System resource utilization shall be monitored to identify and address any performance bottlenecks or issues.

B.4.1.4 Database Maintenance:

- The tenderer shall optimize and clean the SCADA database periodically to enhance query performance and prevent data fragmentation.
- Historical data that is no longer required shall be archived or purged to optimize storage usage.

B.4.1.5 Data Transformation:

- Monitor any data transformation processes to ensure the format and structure are maintained.

B.4.1.6 Timestamps:

- Verify that timestamps align with the expected timeline, ensuring data sequencing and accuracy.

B.4.1.7 Data Reception logs & Data Processing Errors:

- Monitor logs to ensure all incoming data is received without errors or loss.
- Track errors or inconsistencies during data processing to identify issues in real-time.

B.4.1.8 Security Audits:

- The tenderer shall perform regular security audits to identify vulnerabilities within the SCADA system.
- Measures such as access controls, strong authentication, and data encryption shall be implemented to safeguard sensitive information.
- Track user interactions to ensure that authorized users are accessing the system appropriately.

B.4.1.9 Monitoring and Alerting:

- The tenderer shall set up monitoring tools to track system performance, network traffic, and critical process variables.
- Alerts shall be configured to notify the system administrator promptly of any abnormal conditions or potential issues.
- Monitor alarm and event logs to verify the integrity of triggered alarms and events

B.4.1.10 Disaster Recovery Planning:

- The tenderer shall develop and maintain a comprehensive disaster recovery plan outlining steps to recover the system in case of significant failures.
- Periodic drills shall be conducted to validate the effectiveness of the recovery plan.

B.4.1.11 User Training and Support:

- The tenderer shall provide ongoing training to SCADA operators and users to ensure familiarity with system features and best practices.
- Timely support shall be available to address user inquiries and troubleshoot problems.

B.4.1.12 Documentation:

- The tenderer shall maintain up-to-date documentation encompassing system architecture, configurations, procedures, and troubleshooting guides.
- Any modifications or customizations made to the system shall be thoroughly documented.

B.4.1.13 Regular Testing:

- The tenderer shall perform routine testing of the SCADA system to verify its functionality and responsiveness.
- Various scenarios shall be simulated to ensure proper functioning of alarms, controls, and data collection mechanisms.

B.4.1.14 Performance Optimization:

- The tenderer shall periodically review system performance and identify opportunities for optimization.
- Configurations, databases, and network settings shall be fine-tuned to ensure optimal efficiency.

B.4.1.15 Compliance and Regulations:

- The tenderer shall ensure that the SCADA system remains compliant with relevant industry standards and regulations.

B.5 PROTOCOL READING SOFTWARE MAINTENANCE & ADMINISTRATION

The tenderer is responsible for conducting maintenance on the protocol reading software, ensuring its peak performance and strict adherence to industry and developer standards. It is imperative that the contractor adheres to the following guidelines to preserve the integrity of our network communication. This mandate is achieved through the meticulous execution of the following recommended maintenance tasks.

B.5.1 Regular Updates and Patch Management:

- Monitor and apply software updates, security patches, and bug fixes promptly.
- Document the update process, including any issues or conflicts encountered during the update.

B.5.2 Security Audits and Vulnerability Assessment:

- Conduct regular security audits to identify vulnerabilities in the protocol reading software.
- Utilize reputable security tools to perform vulnerability scans.
- Address identified vulnerabilities promptly and document the remediation efforts.

B.5.3 Performance Optimization:

- Monitor the software's performance metrics regularly, identifying and addressing any bottlenecks.
- Optimize the software settings and configurations to ensure efficient protocol reading.

B.5.4 User Training and Support:

- Provide necessary training to end-users regarding the proper usage and features of the protocol reading software.
- Offer technical support to resolve any issues faced by users during operation.

B.5.5 Backup and Disaster Recovery:

- Regularly backup software configurations and critical data related to protocol reading.
- Establish and test disaster recovery procedures to ensure the rapid recovery of the software in case of failure.

B.5.6 Compliance and Regulations:

- Ensure that the protocol reading software complies with relevant industry standards and regulations.
- Address any compliance gaps promptly and document the remediation efforts.

B.5.7 Documentation and Reporting:

- Maintain up-to-date documentation of software configurations, updates, and security measures.
- Provide regular reports summarizing maintenance activities, identified vulnerabilities, remediation efforts, and recommendations for improvements.

B.5.8 Collaboration and Knowledge Sharing:

- Collaborate with the IT team to share insights and knowledge related to protocol reading software.
- Stay updated with the latest industry trends and advancements in protocol reading technologies.

B.5.9 Change Management:

- Implement a change management process for any modifications or updates to the protocol reading software.
- Review and approve changes before implementation to prevent disruptions in the network communication.

B.6 REPLICATION SERVER MAINTENANCE & ADMINISTRATION

The tenderer to provide comprehensive maintenance and administration of a virtual/replication server that is closely integrated with a SCADA & Data system. The contractor will be responsible for ensuring the efficient operation, security, and reliability of the virtual environment and its synchronization with the SCADA database management system (DBMS) through completing the following tasks

B.6.1 Regular Backups:

- Schedule and perform routine backups of both the SCADA DBMS and the virtual/replication server to ensure data integrity and facilitate quick recovery in case of system failures.

B.6.2 Security Updates:

- Monitor and apply necessary security updates to the operating system, virtualization software, and all applications to safeguard against potential vulnerabilities.

B.6.3 Monitoring:

- Implement a robust monitoring system to track server performance metrics, including CPU usage, memory utilization, disk space, network activity, and replication status.
- Configure alert notifications for critical conditions requiring immediate attention.

B.6.4 Performance Optimization:

- Regularly assess server performance metrics and adjust resource allocations (CPU, memory, disk) within the virtual environment to maintain optimal performance.

B.6.5 Database Maintenance:

- Perform routine maintenance tasks for the SCADA DBMS, such as index optimization, table maintenance, and data cleanup, to ensure efficient data retrieval and storage.

B.6.6 Replication Monitoring:

- Monitor the replication process between the SCADA DBMS and the virtual/replication server.
- Promptly identify and address any errors or delays in data synchronization.

B.6.7 Disaster Recovery Plan:

- Develop and maintain a comprehensive disaster recovery plan outlining steps to follow in case of server failures, data corruption, or emergencies.
- Conduct periodic testing of the recovery process to validate its effectiveness.

B.6.8 Security Audits:

- Conduct regular security audits to identify and address potential vulnerabilities.
- Review access controls, user privileges, firewall settings, and encryption mechanisms.

B.6.9 Log Analysis:

- Regularly review and analyze server logs, including system logs, application logs, and database logs, to identify unusual activities or errors.

B.6.10 Capacity Planning:

- Monitor resource usage trends and provide recommendations for capacity planning to accommodate future growth in data volume and user load.

B.6.11 Data Retention Policies:

- Define and enforce data retention policies for the SCADA DBMS and the virtual/replication server.
- Regularly archive or delete outdated data to optimize resource usage.

B.6.12 User Access Management:

- Review and Recommend user access privileges as necessary to ensure authorized personnel have

appropriate access to the system and data.

B.6.13 Testing and Validation:

- Conduct testing and validation of the replication process and virtual environment.
- Create and execute test scenarios to ensure accurate data replication.

B.6.14 Documentation:

- Maintain detailed documentation that includes server configurations, maintenance procedures, disaster recovery steps, and changes made to the system.

B.6.15 Training:

- Provide training to our internal HMS team on maintenance procedures and best practices.
- Ensure team members are equipped to handle routine tasks and address potential issues.

B.7 DATABASE MANAGEMENT SYSTEM(DBMS) MAINTENANCE

The tenderer shall perform the Database Maintenance is to ensure the optimal performance, security, and reliability of our SQL Server environment, with the primary objectives of the maintenance activities is improving performance, optimizing queries, ensuring data integrity, and enhancing security through performing the following tasks.

B.7.1 Data Entry Logs:

- Monitor logs for new data entries to confirm the addition of data records without errors.

B.7.2 Data Modification Logs:

- Track any modifications made to existing data records to ensure changes are authorized and accurate.

B.7.3 Data Deletion Logs:

- Monitor logs for deleted data to confirm that data removal is authorized and logged appropriately.

B.7.4 Backup and Recovery:

- Configure and maintain regular automated backups for all databases, including hydrological data.
- Test and verify the restore process for backups to ensure data recoverability in case of system failures.

B.7.5 Performance Optimization:

- Review and optimize the database schema, indexes, and queries to improve overall performance of data retrieval and storage.
- Monitor and address any performance bottlenecks in the SQL Server instance hosting the DBMS.
- Implement best practices for query performance tuning, ensuring efficient data processing.

B.7.6 Security Enhancements:

- Review and update user access and permissions within the DBMS to ensure the principle of least privilege is adhered to.
- Implement necessary security patches and updates for the SQL Server instance to protect against vulnerabilities.

- Configure and maintain security features such as encryption and auditing to safeguard sensitive hydrological data.

B.7.7 Monitoring and Alerting:

- Set up monitoring tools to track server and database performance metrics, ensuring optimal performance of the DBMS.
- Configure alerts to notify relevant personnel in case of performance degradation, security breaches, or system failures.

B.7.8 High Availability and Disaster Recovery:

- Evaluate the current high availability and disaster recovery setup (e.g., failover clustering, AlwaysOn Availability Groups) and make recommendations for improvements if needed.
- Test failover scenarios to ensure seamless transition in case of server failure, minimizing downtime and data loss.

B.7.9 Maintenance Plans:

- Create and schedule maintenance plans for tasks such as database integrity checks and index maintenance, ensuring data consistency and optimal performance.
- Regularly review and update these plans as needed based on system requirements and performance metrics.

B.7.10 Reporting:

- Provide regular reports detailing the work performed within the DBMS, changes made, and the impact on performance and security.
- Include any recommendations for future enhancements or improvements, fostering continuous optimization.

B.7.11 Timeline:

- Provide an estimated timeline for the completion of each maintenance task, facilitating strategic planning and resource allocation. This can be broken down into phases or specific dates.

B.7.12 Deliverables:

- Present a detailed report after each maintenance task outlining the actions taken within the DBMS, issues addressed, and any recommendations for further improvements.
- Document changes made, including scripts, configurations, and any relevant logs for future reference.
- Update diagrams or documentation reflecting any changes to the SQL Server environment, ensuring documentation accuracy.

B.8 REMOTE STATION MAINTENANCE SERVICE

The purpose of this tender is to establish a high-quality maintenance program for the Automated Remote Monitoring Stations (ARMS). This program ensures that historical hydrological data is collected, transferred, validated, and warehoused in a timely and accurate manner. This data is critical for effective water resource management within the CCT.

Our comprehensive maintenance strategy, supported by diligent supervision, includes the testing, calibration, and servicing of the Remote Terminal Unit (RTU) and all other instruments and equipment installed at the ARMS. Maintenance tasks at these stations will be performed by a dedicated team consisting of an Engineering Artisan and a Maintenance Assistant, both of whom must be formally appointed by the contractor.

A Technician—who will also serve as the Supervisor and is similarly appointed in writing by the contractor—must be present onsite whenever technical tasks are executed. In cases where unsupervised work is necessary, strict adherence to high-quality standards is required.

In addition to the work report, the tenderer must complete a fault-finding checklist covering any instrumentation that is found to be faulty, non-operational, or damaged.

Maintenance servicing is designed to extend the lifecycle of the equipment and enhance the efficiency and performance of the instrumentation. The tenderer is expected to review **SECTION A: MAINTENANCE PLANNING AND ADMINISTRATION** to fully understand the maintenance process requirements and deliverables.

The maintenance and serviceable items are detailed below:

B.8.1 COMPREHENSIVE MAINTENANCE SERVICE

The tenderer shall perform comprehensive maintenance at the Automated Remote Station according to the minimum recommended maintenance items outlined below. In addition, the tenderer must ensure that, when commissioning all work at the automated remote stations, the following items are addressed:

- The maintenance team shall perform all work functions as defined.
- All software and firmware updates on the RMS equipment must first be rolled out in a tested environment identical to the RMS before installation on the live system.
- A Works Report must be produced, including a fault-finding checklist with inspection results, recommendations, and outcomes.
- The maintenance service must be performed as defined.
- All OHS protocols must be observed, and safe working procedures practiced at all times.
- The team must be equipped with a service vehicle for the maintenance service.

B.8.2 VISUAL AND CONDITION ASSESSMENT OF THE STATION INFRASTRUCTURE

Upon arrival and prior to commencing maintenance activities, the contractor shall conduct a comprehensive personal safety and condition assessment of the designated infrastructure. This assessment must include a thorough examination to identify any damage or faults, along with detailed recommendations for remedial action. The observations must be documented using a checklist that includes, but is not limited to, the following items:

A. RMS Facilities

- Gate, perimeter fencing, and high-security cage
- Mast
- Inside the perimeter (vegetation/cleanliness)
- Type and condition of RMS facility/cubicle/building
- Type and condition of sump (where applicable)
- Electrical supply, source of power, voltage, and available EDU units

B. Equipment List

- Remote Terminal Unit (RTU)
- Instrumentation
- Communication

Photographic evidence should be provided where applicable.

B.8.3 REMOTE TERMANEL UNIT(RTU) EQUIPMENT

The tenderer shall perform comprehensive maintenance on the following equipment, either in full or in part:

- Programmable Logic Controller (PLC),
- Human Machine Interface,
- Data Logger,
- GSM Communication Router and antenna,
- Power Supply and Battery Charger Unit,
- 3KWh measurement unit

B.8.4 ANCILIARY INSTRUMENTATION

The Tenderer shall perform the comprehensive maintenance service on the equipment listed below:

- Level Sensor (Ultrasonic or Pressure),
- Rain Gauge,
- Solar Panel and Solar Regulator,
- Grid tied Inverter

B.8.5 FAULT FINDING

- Test results for instrumentation/equipment shall serve as the baseline for fault finding.
- The tenderer must use the relevant checklist for all ancillary equipment and instrumentation.
- All electrical and signal cables, including connectors, must be checked and secured.
- All cabling must be inspected to ensure it is of good standard and undamaged.
- The electrical power supply from the distribution board to the instrumentation/equipment—including the PSU, circuit breakers, and fuses—must be checked.
- The final report shall clearly define:
 - The condition and cause of any fault
 - Recommendations for replacement
 - Measures to prevent recurrence

B.8.6 PROGRAMMABLE LOGIC CONTROLLER (PLC) UPDATE AND TESTING

The tenderer shall service the PLC to extend its longevity and reduce the chance of failure during peak operating times through.

- Ensuring the PLC has the latest firmware.
- The current model is still supported.
- If an update is needed, the tenderer shall download the latest firmware prior to servicing.
- The update shall be executed in a testing environment to ensure proper functionality.
- The following tasks must be performed:
 - Back up the PLC programming
 - Check all LED indicators
 - Verify operating environments
 - Inspect for any signs of overheating
 - Clear dust and check ventilation
 - Check and secure all connections
 - Execute the firmware update and configuration

B.8.7 HUMAN MACHINE INTERFACE (HMI) UPDATE AND TESTING

The tenderer shall service the Delta HMI to enhance longevity and minimize failure during peak operations through:

- The HMI has the latest firmware.
- The current model is still manufactured and supported.
- If the firmware is outdated, the tenderer shall download the latest version before servicing.
- The update shall be performed in a testing environment to confirm proper functionality.
- The following tasks must be completed:

- Update the date and time
- Back up the HMI configuration
- Check all LED indicators
- Verify battery status and replace if necessary (if at or below 50%)
- Check operating environments and for overheating
- Clear dust and check ventilation
- Secure all connections
- Update and configure HMI firmware
- Check touch display responsiveness

B.8.8 DATA LOGGER UPDATE AND TESTING

The tenderer shall service the tele-logger to extend its longevity and minimize failure during peak operations by ensuring:

- The tele-logger has the latest firmware.
- The current model is still manufactured and supported.
- The firmware update shall be executed in a testing environment before implementation
- Additional tasks must be completed include:
 - Updating the date and time
 - Back up the tele-logger configuration onto external drive provide to CCT
 - Check all LED indicators
 - Test the voltage to ensure proper power supply and communications
 - Check operating environments and for signs of overheating
 - Clear dust and check ventilation
 - Secure all connections
 - Update and configure the tele-logger firmware
 - Re-establish onsite communications protocols after the update
 - Confirm that correct measurements are recorded, displayed, and transmitted according to the system architecture for raw rainfall and river level data
 - Ensure integration with all onsite instruments and equipment
 - Verify that rainfall and river level parameters are correctly calibrated and recorded
 - Confirm that the correct values and statements are displayed on the HMI
 - Ensure firm antenna connections

B.8.9 GSM COMMUNICATION MODEM / ROUTER TESTING PROCESS

The Tenderer shall be required to perform a maintenance service on the modem / router with aim of increasing the longevity of the unit and minimizing the chance of equipment failure during peak operating time.

B.8.10 POWER SUPPLY / BATTERY CHARGER UNIT (PSU) INSPECTION AND TESTING

The Tenderer shall inspected & tested the full functionality and the tenderer shall record status findings of the Power Supply.

- The condition and type of existing fuse voltage must be verified according to the electrical wire diagram.
- Replace any fuses as required by the wire diagram.
- The tenderer shall check and report on:
 - Operational status (Yes/No)
 - Output voltage of the PSU and battery charger
 - Whether the device functions according to manufacturer specifications (with detailed comments)
 - Whether the installation meets site-specific specifications or best practices (with identification and detailed comments)

- Overall condition of the device (rated as Excellent, Functional, or Poor with detailed comments)
- The CCT will provide recharge vouchers for the electrical dispenser unit (EDU) at the remote station as part of the maintenance service.

B.8.11 BATTERY TESTING,SERVICE AND MANAGEMENT

The tenderer shall inspect, test, and maintain existing backup batteries, recording all findings on the relevant checklist. Battery type, operating conditions, labeling, terminal heads, and connections must be verified.

A. Cleaning and Testing

- Assess the battery casing for cracks, swelling, or other defects that may affect performance.
- Inspect the battery bracket to ensure it is secure and in good condition.
- Check the battery terminals; apply approved corrosion protection and remove any acid buildup.
- Perform either a SCADA trend report or a load test to evaluate battery performance.

B. SCADA Trend Report (Monthly)

- Evaluate a three-week data set of battery voltage from the RMS.
- Log on to the primary SCADA (via Remote Desktop Connection) and load the battery voltage trend graph.
- Calculate the minimum, maximum, and average voltages for the period.
- Record all battery voltage trend data for each station in the works report.
- Advise if the average trend voltage is 11.0 volts or less.

C. Load Test (Quarterly)

- Perform a quarterly load test on all batteries connected to the electricity grid.
- Ensure the remote monitoring station is switched off and the battery is not under load before starting.
- Measure and record the battery voltage before and after applying a 2-amp load for 30 seconds.
- Do not perform load testing immediately after a load-shedding interval; reschedule if necessary.
- Record the discharge results.

D. Management System

- Maintain a basic register of battery history including manufacturer details, type (Ah), warranty, recharge cycles, recharge dates, station history, and discharge performance.

B.8.12 BATTERY RECHARGING

- Recharge any battery found below the required voltage of 11.5 volts, provided it is still functional.
- Battery recharging must include the removal of the existing 12V battery from the site, recharging it in a safe location, and then reinstalling it.
- A replacement battery must be available onsite at all solar power sites to ensure full operational capacity until the original battery is recharged.

B.8.13 KWh Measurement Unit

The tenderer must verify that KWh measurements correspond with the HMI readings. If discrepancies occur, the fault-finding process must be followed.

B.8.14 PRESSURE SENSOR CLEANING AND TESTING**A. Initial Recording**

- Record the river level reading from the onsite gauge plate and compare it with the HMI reading.
- Note any variance in meters and percentage.
- Record the sensor's range (e.g., 0 to 5 m).

B. Removal and Cleaning

- Open the sump cover (using a generator and angle grinder if necessary to remove concrete).
- Mark the sensor's mounting location (on both the cable and inside the sump).
- Remove the sensor and clean its head in a bucket of soapy water.
- Inspect the sensor cable and head for damage.
- Inspect the sump and sump cover; record any damage (e.g., cracks, blockages).
- Use the cleaning water to flush the sump; if no water flows, note this for further investigation.

C. Testing and Reporting

- Fill a test tube with water to the 1,500 m mark and place it vertically on a level surface.
- Simulate a water level change (make provision for water displacement) from 0 m to 1,500 m by gradually lowering the sensor and taking four readings at preset intervals. Record both the water level and the corresponding mA reading.
- Calculate the expected mA readings based on the sensor's range.
- Tabulate the results, comparing simulated readings with calculated values, and note any variances in meters and percentage.
- Advise if the results are within the manufacturer's tolerance. If not, submit a fault-finding report for the sensor.

D. Reinstallation and Verification

- Reinstall the sensor in the sump at the same marked location.
- Record the new river level reading from the gauge plate and compare it with the HMI reading.
- Close the sump cover and seal the grooves with concrete.

B.8.15 ULTRASONIC SENSOR CLEANING AND TESTING

1.8.15.1 The Tenderer will be required on arrival at the RMS to record the following:

- The river level reading from the gauge plate on site in relation to the river level reading on the HMI;
- any variance observed in meters and percentage;
- the range of the pressure sensor (e.g. 0 to 5m).

1.8.15.2 Removal and Cleaning

The Tenderer will then proceed to perform the following tasks when removing and cleaning the sensor:

- Disconnect the sensor from the mounting bracket
- Mark (marker pen) the mounting location of the sensor;
- Clean the sensor head of the instrument with soapy water ensuring not to damage the electronic circuitry;
- Inspect the condition of the sensor cable and head for any damage or imperfection that may affect the operation of the instrument;
- Inspect the condition of the bracket, report on condition (cracked, rusted, etc.);

1.8.15.3 Testing and Reporting

- The tenderer will be required to setup the sensor testing apparatus and place it in a vertical position on a level service. This will be used to test the functionality of the

sensor with a simulated change in water level between 0m and 1,500 meters.

- When performing the change in water level simulation the tenderer will be required to lower the sensor gradually and take 4 readings at pre-set intervals. This exercise will produce 2 readings, the level in meters and the mA reading the sensor produces for the simulation level
- The tenderer will then calculate the correct mA readings for simulation based on the range of the sensor.
- The tenderer will then tabulate the results of the simulated change in water levels showing the mA reading for each change of water level simulated versus the calculations based on the range of the sensor
- The tenderer will then compare and record any variance observed in meters and percentage.
- Based on the variances observed, the tenderer will advise if the results are within the manufacturer's tolerance levels.
- In the event the simulation shows adverse tolerance levels, the tenderer will be required to submit a FAULT FINDING report for the sensor.

1.8.15.4 Reinstalling and Checking

Once the cleaning, testing and reporting is completed, The Tenderer will be required to perform and record the following:

- Re-install the sensor on the bracket, ensuring it is mounted at the same location and position;
- Record the river level reading from the gauge plate in relation to the river level reading on the HMI;
- Check and compare the readings with initial readings taken at the commencement of the service.

B.8.16 RAIN COLLECTOR CLEANING AND TESTING

Record the rainfall count reader on the HMI on the works report

1.8.16.1 Removal and Cleaning

- The tenderer will be required to remove locking ring / bracket (if required / where applicable)
- The tenderer will then remove the rain gauge funnel, ensuring not to disturb the tipping bucket cradle;
- The Tenderer will then secure the tipping bucket to avoid the instrument from recording the services as a rainfall event;
- The tenderer will then place the rain gauge funnel in a bucket of soapy water cleaning the inside and outside of the funnel. Ensure that all insects and nests are removed and cleaned
- The tenderer will also clean the tipping bucket cradle and base of the rain gauge
- The Tenderer shall take extra care when performing this activity and not touch the read switch in order not to cause damages to the read-switch.
- If required, the tender should make use of compressed air to blow out dust and insects within small and confined areas under the rain gauge base.

1.8.16.2 Reinstalling and Checking

- The Tenderer shall inspect the rain gauge bracket or base for damage, corrosion that may affect the secure mounting of the rain gauge;
- The Tenderer shall ensure that the rain gauge is securely mounted on the rain gauge bracket or base;
- The Tenderer shall ensure that the rain gauge is levelled on the mounting bracket and adjust it if required;
- The tenderer will be required to check the cables and connectors for loose

connections. Reconnect the loose connection using proper solder equipment and material to ensure that cable is joint;

- The tenderer shall record the total accumulated before and after the tip test;
- The tenderer shall perform a Tip Test (move the tipping bucket x2) on the rain gauge and record the total accumulated.

1.8.16.3 Reinstalling and Checking

Once the cleaning, testing and reporting is completed, The Tenderer will be required to perform the following:

- Replace rain gauge funnel, ensuring not disturb the tipping bucket cradle
- Replace locking ring / bracket (if required / where applicable)

B.8.17 SOLAR PANEL CLEANING AND TESTING

1.8.17.1 The Tenderer shall perform the cleaning and testing maintenance of the Photovoltaic (PV) Power System located at the Remote Station where there is no 220 volts supply. The maintenance of the PV system shall be done in accordance with SANS 959:2 Test procedures for main components.

1.8.17.2 The tenderer shall Inspect & Test solar regulators. The inspections & testing of the regulator shall be done as per the manufactures guidelines as well as in line with SANS 959-2-4:2017.

1.8.17.3 Maintain, Check and Clean Solar Panels and ensure Panel is Secure

The Tenderer shall clean the Dust, Debris, Bird Droppings, Leaf Litter and SAP from the Panel surface. Dirty panels will reduce their energy output and efficiency.

Cleaning Procedures for the Solar Panel:

- Clean with warm (not hot) soapy water and use a soft brush to remove harder bits of grime (never use an abrasive cleaning brush or sponge)
- Clean your panels in the cooler parts of the day (preferably early morning or late afternoon)

The Tenderer will further check, that your panel is in place with no signs of damage or corrosion

1.8.17.1 Check Your Solar Panels Aren't Corroded

Following on from the last checklist item, ensure that you check your solar panels for weathering, rust and damage at least twice a year (more if live by the coast)

Although highly rust-resistant solar panel may become subject to rust if there is cracks to the vacuumed sealed back sheet

When weathering or rust occurs, your solar system may become less efficient. If left unattended it may also become a safety risk. If you see signs of damage check your solar panel warranty and call your installer for a check-up

1.8.17.2 Checking Wiring Hasn't Been Damaged

It is good to get in the habit of checking the wiring on your solar system. If they are exposed to the elements ensure they are not damaged and have not been impacted by dirt or water

Wiring that is broken or corroded can lead to serious safety concern.

If you find a wire that has been damaged make sure you call you installer.

1.8.17.3 Check Access to Isolator Switches are Clear

Ensure access is always clear to the isolator switch

In the event of an emergency, you need quick access to this switch as it is the only place you can manually disconnect the solar PV system

This switch will also be used when maintenance, repairs or upgrades occur, so be sure not to store anything in front of it.

1.8.17.4 Conduct Regular Electrical Checks and System Faults Checks**Electrical Check**

Using your inverter panel, you can conduct routine checks to see if your solar system is flagging for any electrical faults.

If your solar PV comes back with ground faults, call your solar installer ASAP. Ground faults can be extremely dangerous if left unattended and cause electric shocks.

Solar PV System Faults

If you are experiencing a drop in panel efficiency or your inverter light has switched from green to red, then you may have a system fault. Check in your handbook what the fault code means

For more on why your solar panels might not be working efficiently,

B.8.18 Grid tied Inverter

The Tenderer shall be required to perform a maintenance service on the inverter with aim of increasing the longevity of the unit and minimizing the chance of equipment failure during peak operating time. Close manufactures guidelines should be following coupled with the below recommendet, but not limited activities:

1.8.18.1 Visual Inspections:

- Check for any signs of physical damage, corrosion, or loose connections.
- Ensure proper ventilation around the inverter to prevent overheating.

1.8.18.2 Cleaning:

- Keep the inverter and its surrounding area clean and free from dust and debris.
- Clean the ventilation openings to prevent clogging.

1.8.18.3 Monitoring:

- Utilize monitoring software provided by the inverter manufacturer to keep track of its performance.
- Monitor daily energy production and check for any unusual patterns or drops in energy output.

1.8.18.4 Software Updates:

- Regularly update the inverter firmware or software to ensure it operates with the latest features and optimizations.
- Follow the manufacturer's guidelines for updating the software.

1.8.18.5 Temperature Checks:

- Monitor the inverter's temperature during operation to ensure it stays within the specified range.
- Overheating can lead to reduced efficiency and, in extreme cases, inverter failure.

1.8.18.6 Inspection of Cables and Connections:

- Check DC and AC cables for signs of wear, damage, or loose connections.
- Tighten any loose connections to prevent electrical arcing and ensure optimal performance.

1.8.18.7 Inverter Display:

- Check the inverter's display (if available) for error messages or alerts.
- Consult the user manual to interpret error codes and take appropriate actions if necessary.

1.8.18.8 Testing Ground Fault Detection:

- Grid-tied inverters often have ground fault detection mechanisms. Test to ensure they are functioning correctly.

1.8.18.9 Record Keeping:

- Maintain a log of maintenance activities, including dates of inspections, software updates, and any issues encountered.

B.9 INSTRUMENT CALIBRATION

1.9.1 Pressure Sensor Calibration

The tenderer is responsible for conducting a comprehensive calibration of all field recording instrumentation. They must ensure that the calibration process is carried out exclusively by certified, trained, and qualified personnel in a **SANAS 246/S1 & 346/S1** certified facility for pressure Metrology.

Calibration can be performed either on-site or in a laboratory setting, following the guidelines outlined below:

1.9.1.1 Onsite Calibration:

When conducting onsite calibration at sampling points, the service provider should minimize disruptions to ongoing operations. Onsite calibration must take place within an SANAS accredited facility equipped with the necessary tools for on-site calibration.

After completing the calibration, the service provider will proceed to test and install the instrument back into its operational environment. It is the responsibility of the tenderer to ensure that the instrument functions correctly within its operating environment. All readings should be accurately recorded on the Remote Terminal Unit located on the local data logger and transmitted to the SCADA base stations.

1.9.1.2 Lab Calibration:

In cases where instruments are calibrated within an SANAS accredited laboratory, the service provider must ensure that the laboratory environment is equipped with the necessary tools for conducting the calibration.

Following the calibration process, the service provider will reinstall the instrument on-site and conduct further testing within the existing operational process. Successful testing is essential before ensuring the instrument functions properly within its operating environment. All readings should be accurately recorded on the Remote Terminal Unit located on the local data logger and transmitted to the SCADA base stations.

1.9.1.3 SANAS Accreditation:

Prior to conducting any calibration, the service provider is required to furnish the Project Manager or their representative with the SANAS calibration certificate for the equipment to be used in calibrating each respective instrument. All calibration activities must be performed by a SANAS accredited service provider.

1.9.1.4 Calibration Methodology:

The service provider must also provide the Project Manager or their representative with an electronic copy of the calibration methodology before initiating the calibration process. Calibration procedures must align with the Catchment, Stormwater & River Management Branch ISO9001 process, specifically the "Calibration of Hydrological Monitoring Electronic Measurement Instrumentation (Amended)." This calibration process encompasses pre-calibration checks and recording, calibration setting and recording, and the recording of all variations.

1.9.1.5 SANAS Certification:

Upon the completion of instrument calibration, the service provider must issue the CCT within 7 business day with the relevant instrument-specific SANAS calibration certificate.

SECTION C – INFRASTRUCTURE TECHNICAL SPECIFICATIONS**1. INSTRUMENTATION****1.1 PRESSURE SENSOR****Supply Submersible Pressure Transmitter**

The Tenderer shall supply an IP68 4 – 20mA submersible pressure transmitter for water level measurement along rivers and canals 4 – 20mA to allow for the effective measurement of water levels. Submersible pressure transmitter shall meet the following recommended minimum but not limited to the specification:

Minimum Specification:

Type	Description
Output signal type Signal, Current (2-wire)	4 - 20 mA
Voltage - Power Supply	DC 10 - 30 V
Ingress protection (per IEC 60529)	IP 68
Lightning protection	1.5 J per EN 61000-4-5
Power supply	DC 24 V
Submersion depths	<ul style="list-style-type: none"> Submersible pressure transmitter with FEP cable: up to 100 m Submersible pressure transmitter with PUR cable: up to 300 m
Weight	<ul style="list-style-type: none"> Level probe approx. 200 g Cable: approx. 80 g/m Additional weight (accessories): approx. 500 g
Accuracy at reference conditions	<ul style="list-style-type: none"> Measuring ranges < 0.25 bar: $\leq \pm 0.50$ % of span Measuring ranges ≥ 0.25 bar: $\leq \pm 0.25$ % of span Including non-linearity, hysteresis, zero offset and end value Deviation (corresponds to measured error per IEC 61298-2).
Non-linearity (per IEC 61298-2)	$\leq \pm 0.2$ % of span
Long-term stability at reference conditions	$\leq \pm 0.2$ % of span/year
Dimensions	<ul style="list-style-type: none"> Length: 130 – 147 Breadth: G1/2B

1.2 ULTRASONIC SENSOR**1.2.1 Supply Loop Powered Ultrasonic Non-Contact Level Sensor**

The Tenderer shall Supply a new weather resistant IP68 4 – 20mA calibrated loop powered ultrasonic level sensor (Non-Contact level sensor) flow measurement capable of being mounted of brackets and inside enclosure deemed to be required by the onsite environment that will allow for the effective measurement. The ultrasonic loop powered non-contact level sensor shall meet the following recommended minimum but not limited to the specification:

Minimum Specification:

Type	Description
Measuring principle	Ultrasonic
Characteristic / Application	Separated version with field housing or top hat rail housing for control cabinet instrumentation, 300 m in-between sensor and transmitter
Supply / Communication	4-wire (HART, Profibus DP)
Accuracy	+/- 2mm + 0.17% of measured distance
Blocking distance	0.4 m
Process pressure / max. overpressure limit	0.7 bar ... 4 bar
Communication	Transmitter: 4 ... 20 mA HART Profibus DP
Output	4...20mA

1.3 RAIN COLLECTOR

1.3.1 Supply Rain Collector:

The tender shall supply a tipping spoon rain collector(Davis or similar) with mounting base that is capable of being mounted to a bracket/post/pole or flat surface which ever I deemed to be required by the onsite environment. The Rain collector meet the following recommended minimum specification to ensure that functionality on site.

Minimum specification:

- Sensor Type: Tipping spoon, 0.2 mm for metric version & 214 cm2 collection area
- Attached Cable Length: 12 m
- Cable Type: 4-conductor, 26 AWG
- Connector: Modular connector (RJ-11)
- Recommended Maximum Cable Length: 270 m
- Housing Material: UV-stabilized ABS plastic
- Dimensions
- Rain Collector: 16.5 cm opening diameter x 24 cm high with bird spikes
- Collection Area: 214 cm2
- Weight: 1 kg - 1.8 kg
- Rainfall Accuracy: For rain rates up to 250 mm/hr: $\pm 3\%$ of total or \pm one tip of the spoon 0.2mm, whichever is greater.
- Rain Rate Accuracy: $\pm 5\%$ for rain rates up to 250 mm/hr
- Rain Rate Resolution: 0.1 mm

1.4 DATA LOGGER

The tender shall supply a new data logger that will be installed in hydrological monitoring outstation for the purpose of recording digital and analog signaling from river level sensors and rain gauge. The data logger shall conform to the below minimum specification.

Minimum Specification:

- Must be a complete unit housed inside an IP 68 rated enclosure.
- Operate with an internal battery for more than 3 years.
- Operating Temperature (-30 to 85 Deg C).
- Bultiband(2G/3G/4G) enabled
- Must operate through the GSM network, also be able to operate using the Wi-Fi technology.
- Standard MODBUS protocol between Sensors and RTU using RS485 interface.
- An IO Module with a minimum of two (2) Digital inputs and two (2) Analogue Inputs.
- 5min sampling time of all parameters.
- Connector cables – logger
- Local Storage space for a 30 days after the transmission.
- Data must be downloadable manually from the remote location with a field device or laptop.
- Must be equipped with LCD display unit to display the various configurable parameters.
- The system shall have a built-in OPC Server to allow the remote stations to communicate direct-ly to the master station OPC server (via GSM network).
- Must provide the data to the Adroit SCADA software.
- Must be able to SMS directly the alarm conditions as set-up in the unit to a mobile phone.
- Must be able save up to 60 000 data values with time stamping.
- Bluetooth enabled for wireless data transfer
- The RTU unit shall be capable to interface with other instrumentation such as, Differential pres-sure level sensors,
 - o Pressure sensors.
 - o Other water quality sensors.
 - o Rainfall meter.
 - o Flow meters.

2. EQUIPMENT

2.1 SOLAR PANELS

The tenderer shall supply new solar panel units including all fittings with manufacturer warranty certificates for the equipment to be presented on delivery. The solar panels shall meet but not limited to the below recommended below minimum specifications:

Minimum Specifications:

Supply Solar Panels

2.1.1 40 WATT Solar Panel

Type Of Module 40W

- Maximum Power: 40W
- Tolerance: $\pm 3\%$
- Open Circuit Voltage: 22V
- Short Circuit Current: 2,37A
- Maximum Power Voltage: 18.2V
- Maximum Power Current: 2,2A
- Module Efficiency: 12.84%
- Solar Cell Efficiency: 17,3%
- Series Fuse Rating: 15A
- Terminal Box: IP65
- Maximum system voltage: 1000V DC
- Operating Temperature: -40°C - 85°C
- Dimensions: 465mm x 670mm x 25mm
- Weight: 4kg

2.1.2 80 WATT Solar Panel

Type Of Module 80W

- Maximum Power: 80W
- Tolerance: $\pm 3\%$
- Open Circuit Voltage: 22V
- Short Circuit Current: 4,85A
- Maximum Power Voltage: 18V
- Maximum Power Current: 4,44A
- Module Efficiency: 13,05%
- Solar Cell Efficiency: 17,2%
- Series Fuse Rating: 15A
- Terminal Box: IP65
- Maximum system voltage: 1000V DC
- Operating Temperature: -40°C - 85°C
- Dimensions: 915mm x 670mm x 30mm
- Weight: 7.3kg

2.1.3 100 WATT Solar Panel

Type Of Module 100W

- Maximum Power: 100W
- Tolerance: $\pm 3\%$
- Open Circuit Voltage: 22V
- Short Circuit Current: 6,06A
- Maximum Power Voltage: 18V
- Maximum Power Current: 5,56A
- Module Efficiency: 14,9%
- Solar Cell Efficiency: 17,2%
- Series Fuse Rating: 15A
- Terminal Box: IP65
- Maximum system voltage: 1000V DC
- Operating Temperature: -40°C - 85°C
- Dimensions: 1005mm x 670mm x 30mm

- Weight: 8kg

2.1.4 150 WATT Solar Panel Type Of Module 150W

- Maximum Power: 150W
- Tolerance: $\pm 3\%$
- Open Circuit Voltage: 22.5 V
- Short Circuit Current: 8.56A
- Maximum Power Voltage: 18.5V
- Maximum Power Current: 8,11A
- Module Efficiency: 15.2%
- Solar Cell Efficiency: 17,1%
- Series Fuse Rating: 15A
- Terminal Box: IP65
- Maximum system voltage: 1000V DC
- Operating Temperature: -40°C - 85°C
- Dimensions: 1480mm x 670mm x 30mm
- Weight: 12kg

2.2 Solar Panel Installation

2.2.1 Install & Test Solar Panels

The tenderer shall Install & Install a new solar panel. The installation of the solar panel shall conform as per the below recommended minimum specification and in line with SANS 959-2-4:2017.

All installation and maintenance work must comply fully with the specifications outlined in the South African National Standard, SANS 10142. This includes system design, wiring, earthing, and safety measures.

System Design and Installation:

Design and install the solar panel system according to SANS 10142 regulations, ensuring proper sizing, wiring, earthing, and safety protocols.

Utilize SANS-compliant components, including panels, inverters, wiring, and mounting structures.

2.3 SOLAR REGULATOR

The tenderer shall supply new 12V – 24V solar regulator. Manufacturers manufacturer warranty certificates for the equipment to be presented on delivery. The solar panels shall meet but not limited to the below recommended minum specifications:

Minimum specification:

- System Voltage: 12V – 24V
- Solar module current(Isc): 30A – 30A
- Max Load Current: 30A – 30A
- End of charge Voltage: 14.5V – 29V
- Reconnection Voltage: 13.8V – 26.1V
- Load Disconnect Voltage: 11.8V – 23.6V
- Load Reconnect Voltage: 13.2V – 26.4V

2.4 BATTERIES

2.4.1 Supply, 12V Rechargeable sealed lead acid deep cycle back-up battery:

The tenderer shall supply, 12V rechargeable sealed lead acid deep cycle back-up battery. All manufacturer warranty certificates for the equipment to be presented to the project manager. The new battery shall conform with the following recommended minimum specifications

2.4.1.1 12V, 7AH BATTERY

Minimum Technical Specification (100Amp/hr Battery):

- Cycle use: 14.5 – 14.9 V
- Standby use: 13.6 – 13.8 V
- Initial Current: 30.0 A
- Capacity: 7Ah
- Voltage: 12V

2.4.1.2 12V, 40H BATTERY

Minimum Technical Specification (100Amp/hr Battery):

- Cycle use: 14.5 – 14.9 V
- Standby use: 13.6 – 13.8 V
- Initial Current: 30.0 A
- Capacity: 40Ah
- Voltage: 12V

2.4.1.3 12V, 100 AH BATTERY

Minimum Technical Specification (100Amp/hr Battery):

- Cycle use: 14.5 – 14.9 V
- Standby use: 13.6 – 13.8 V
- Initial Current: 30.0 A
- Capacity: 100Ah
- Voltage: 12V

2.4.2 Supply, 12V Lithium iron Phosphate

Minimum Technical Specification (100Amp/hr Battery):

- Cycle Life: >2000 cycles
- Energy: 1280Wh
- Months Self Discharge: 3%
- Capacity: 100Ah
- Voltage: 12V
- Discharge Cut-off Voltage: 8V
- Dimensions: 327×172×218mm

2.5 POWER SUPPLY

2.5.1 Supply 12V Power Supply / Battery Charger Unit

The tenderer shall supply new power supply/ battery charger unit as per the below recommended minimum specification:

Minimum Specification:

- AC Voltage: 220
- DC Voltage: +13.8 – 27.6V
- BAT. CHARGE: 13.V
- Efficiency: 71%
- Dimensions: 159 x 97 x 38mm (L × B × H)
- Working Temperature: -10 - +60 C°
- Battery Low: 9.5 – 11V

2.6 COMMUNICATIONS ROUTER

2.6.1 Supply Multi-Band Communications Router

The tenderer shall supply new mulit-band communications router with support for serial to IP data transfer. The router should be capable of meeting our specific communication needs in our remote station environment in an seffective and reliable manner and should meet specification but not limited to the below recommended minimum specification:

Minimum specification

- 4G LTE (Cat 4), 3G, 2G
- DUAL SIM - With auto failover, backup WAN and other switching scenarios
- Ethernet, Serial (RS232, RS485) and multiple Inputs/Outputs
- Global Navigation Satellite System for location services and time synchronization
- **Mobile module:** 4G (LTE) – Cat 4 up to 150 Mbps, 3G – Up to 42 Mbps, 2G – Up to 236.8 kbps
- **SIM switch:** 2 SIM cards, auto-switch cases: weak signal, data limit, SMS limit, roaming, no network, network denied, data connection fail, SIM idle protection
- **Status:** Signal strength (RSSI), SINR, RSRP, RSRQ, EC/IO, RSCP, Bytes sent/received, connected band, IMSI, ICCID
- **SMS:** SMS status, SMS configuration, send/read SMS via HTTP POST/GET, EMAIL to SMS, SMS to EMAIL, SMS to HTTP, SMS to SMS, scheduled SMS, SMS autoreply, SMPP
- **USSD:** Supports sending and reading Unstructured Supplementary Service Data messages
- **Black/White list:** Operator black/white list
- **Multiple PDN:** Possibility to use different PDNs for multiple network access and services
- **Band management:** Band lock, Used band status display
- **APN:** Auto APN
- **Bridge:** Direct connection (bridge) between mobile ISP and device on LAN
- **Passthrough:** Router assigns its mobile WAN IP address to another device on LAN
- **Wireless mode:** IEEE 802.11b/g/n, Access Point (AP), Station (STA)
- **WiFi security:** WPA2-Enterprise - PEAP, WPA2-PSK, WEP, WPA-EAP, WPA-PSK; AES-CCMP, TKIP, Auto Cipher modes, client separation
- SSID/ESSID: SSID stealth mode and access control based on MAC address
- **WiFi users:** Up to 100 simultaneous connections
- **Wireless Hotspot:** Captive portal (Hotspot), internal/external Radius server, SMS authorization, internal/external landing page, walled garden, user scripts, URL parameters, user groups, individual user or group limitations, user management, 9 default customizable themes
- **Wireless Connectivity Features:** Wireless mesh (802.11s), fast roaming (802.11r), Relayd
- **WAN:** 1 x WAN port 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX
- **LAN:** 3 x LAN ports, 10/100 Mbps, compliance IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX
- **Ethernet ports:** 4 x RJ45 ports, 10/100 Mbps
- I/O's: 2 x Inputs and 2 x Outputs on 10-pin industrial socket, 1 x Digital input and 1 x Digital output on 4-pin power connector (available from HW revision 1600)
- **Status LEDs:** 1 x bi-color connection status LED, 5 x connection strength LEDs, 4 x LAN status LEDs, 1 x Power LED
- **SIM:** 2 x SIM slots (Mini SIM - 2FF), 1.8 V/3 V, external SIM holders, eSIM (Optional)
- **Power:** 1 x 4-pin power connector
- **Input/output:** 1x 10 pin industrial socket for inputs/outputs
- **Antennas:** 2 x SMA for LTE, 2 x RP-SMA for WiFi, 1 x SMA for GNSS
- **USB:** 1 x USB A port for external devices
- **RS232:** 1 x DB9 socket
- **RS485:** 1 x 6-pin industrial socket

2.7 ANTENNAS**2.7.1 Supply a New IP68 Class Omnidirectional Cellular 3G/4G/LTE Antenna**

The Tenderer shall supply a new IP68 class Omnidirectional Cellular 3G/4G/LTE antenna on site and ensure best positioning is determined for full and uninterrupted communications between outstation at central base station including the Goodwood disaster risk centre SCADA. The antenna shall conform to the below recommended minimum specification:

Minimum Specification:

RF Protocols	: 2G (GSM/GPRS), 3G (UTMS), 4G (LTE), WiFi
Antenna Physical Form	: Rod
Frequency Range	: 1710 → 2690 MHz, 790 → 960 MHz

Antenna Mounting Type	: Wall/Pole
Gain	: 3dBi
Antenna Directivity	: Omnidirectional

2.8 PIPING & CONDUITS

2.8.1 Steel Conduits & Accessories

The tenderer shall supply SANS 61386-21:2003 standard pre-galvanised steel conduit and conduit accessories and shall bear the SABs mark. Conduits and conduit accessories shall be fixed onto walls, floors, structures and roof spaces as far as possible.

- 2.8.1.1 20mm Steel Conduit
- 2.8.1.2 25mm Steel Conduit
- 2.8.1.3 32mm Steel Conduit
- 2.8.1.4 50mm Steel Conduit
- 2.8.1.5 75mm Steel Conduit
- 2.8.1.6 20 mm 2 Way Through Conduit Box
- 2.8.1.7 25 mm 2 Way Through Conduit Box
- 2.8.1.8 20 mm 2 Angle Conduit Box
- 2.8.1.9 25 mm 2 Angle Conduit Box
- 2.8.1.10 20 mm 3 Way Side Entry Conduit Box
- 2.8.1.11 25 mm 3 Way Side Entry Conduit Box
- 2.8.1.12 20 mm 4 Way Side Entry Conduit Box
- 2.8.1.13 25 mm 4 Way Side Entry Conduit Box

2.8.2 PVC PIPING

The tenderer shall supply & fit PVC conduit and conduit accessories and shall bear the SABs mark. Conduits and conduit accessories shall be fixed onto walls, floors, structures and roof spaces as far as possible.

- 2.8.2.1 20mm PVC Conduit
- 2.8.2.2 25mm PVC Conduit
- 2.8.2.3 32mm PVC Conduit
- 2.8.2.4 50mm PVC Conduit
- 2.8.2.5 75mm PVC Conduit

3. CABLING

3.1 INSTRUMENTATION CABLING

The tenderer shall supply, install & connect 2.5 mm², 4 core signal cable. The instrumentation cable shall be in conform to the below recommended minimum specification:

Minimum specification for signal cable:

- 4 core cable
- Sheeted PVC insulation
- Core size 1mm
- Fixed: -30°C to + 70°C

SECTION D – HEALTH & SAFETY**H: HEALTH AND SAFETY SPECIFICATION****CONTENTS**

H1	DEFINITIONS
H2	SCOPE
H3	INTERPRETATION
H4	GENERAL REQUIREMENTS
H5	ADMINISTRATION
H5.1	Application for construction work permit
H5.2	Notification of intention to commence construction work
H5.3	Occupational Health and Safety Agreement
H5.4	Good standing with the Compensation Fund or a licensed compensation insurer
H5.5	Emergency procedures
H5.6	Health and safety file
H5.7	Health and safety committee
H5.8	Inspections, formal enquires and incidents
H5.9	Personal protective equipment and clothing
H6	APPOINTMENTS
H6.1	Other competent persons
H6.2	Health and safety representative(s)
H7	EMPLOYER'S HEALTH AND SAFETY AGENT
H8	CREATING AND MAINTAINING A SAFE AND HEALTHY WORK ENVIRONMENT
H8.1	General
H8.2	Risk assessment
H8.3	Health and safety plans
H8.4	Responsibilities towards employees and visitors
H8.5	Subcontractors
H8.6	Work permits and wayleaves
H8.7	Access to the Site
H8.8	First aid and emergency procedures
H8.9	Housekeeping
H8.10	Fire precautions
H8.11	Facilities for workers
H9	GENERAL HAZARDS AND RISKS APPLICABLE TO WORK REQUIRED IN TERMS OF THIS TERM TENDER
H9.1	Existing Site conditions
H9.2	Information provided by the designer (CR 6(1))
H9.3	Environmental hazards
H9.4	Traffic hazards
H9.5	Fall protection (working at heights) (CR 10)
H9.6	Structures (CR 11)
H9.7	Temporary works (CR 12)
H9.8	Excavation work (CR 13)
H9.9	Scaffolding (CR 16)
H9.10	Suspended platforms (CR 17)
H9.11	Rope access work (CR 18)
H9.12	Material hoists (CR 19)
H9.13	Construction vehicles and mobile plant (equipment) (CR 23)
H9.14	Electrical installations and machinery (CR 24)
H9.15	Water environments (CR 26)
H9.16	Overhead work (CR 27(g))
H9.17	Confined spaces
H9.18	Other hazards...

H: HEALTH AND SAFETY SPECIFICATION

For use with the General Conditions of Contract for Construction Works, Third Edition, 2015.

H1 DEFINITIONS

For the purposes of this Specification, the definitions given in the Occupational Health and Safety Act, 85 of 1993 and the Construction Regulations, 2014, and the following definitions, shall apply:

- a) "Construction Regulations, 2014" means the Construction Regulations (GNR. 84 of 7 February 2014) published in terms of the OHS Act.
- b) "Contractor" means the Principal Contractor as defined in the Construction Regulations, 2014.
- c) "Employer" means the Client or his agent as defined in the Construction Regulations, 2014.
- d) "Employer's Agent" means the person/firm so named in the Contract Data whose function is to administer the Contract as agent of the Employer, acting through, if appointed, a Health and Safety Agent.
- e) "OHS Act" means the Occupational Health and Safety Act, 85 of 1993.
- f) "subcontractor" means any contractor employed by the Contractor to perform construction work.

H2 SCOPE

In terms of the OHS Act and the Construction Regulations, 2014 the Employer must provide the Contractor with a Health and Safety Specification, to which the Contractor must respond with a Health and Safety Plan for approval by the Employer.

The purpose of this Specification is to ensure that a contractor entering into a contract with the Employer maintains an acceptable level of compliance with regard to health and safety issues during the performance of the Contract. In this regard the Health and Safety Specification forms an integral part of the Contract and the Contractor shall ensure that his subcontractors and/or suppliers comply with the requirements of this Specification.

H3 INTERPRETATION

The OHS Act and its associated regulations shall have precedence in the interpretation of any ambiguity or inconsistency between it and this Specification.

Responsibility for health and safety relating to the Works lies with the Contractor as described in this Specification. Nothing stated in or omitted from this Specification shall in any way limit the Contractor's obligations and liabilities in terms of the OHS Act.

H4 GENERAL REQUIREMENTS

The Contractor shall:

- a) create and maintain a safe and healthy work environment;
- b) execute the Works in a manner that complies with all the requirements of the OHS Act and all its associated regulations, and in so doing, minimize the risk of incidents occurring; and
- c) respond to the instructions issued by the Employer's Agent through the Employer's Agent's Representative, except in the case of a health and safety issue which requires the Contractor's immediate attention, in which case the Employer's Health and Safety Agent can issue an instruction directly to the Contractor.

H5 ADMINISTRATION

H5.1 Application for construction work permit

In terms of Regulation 3 of the Construction Regulations, 2014, read together with the exemptions published by the Department of Labour in Government Notice dated 7 July 2015, a client who intends to have construction work carried out, must at least thirty days before that work is to be carried out apply to the Provincial Director in writing for a construction work permit to perform construction work if the works contract is of a value exceeding one hundred and thirty million Rand (R130 000 000) or Construction Industry

Development Board (CIDB) grading level 9. In such cases, the Employer's Agent will not issue an instruction to commence executing the Works, and the Contractor will not be permitted to commence with Works execution, until such time as the required construction work permit has been issued by the Provincial Director.

The employer will apply for the construction work permit as soon as possible after its Bid Adjudication Committee has awarded the contract based on the draft Health and Safety Plan submitted. Should the issuing of a construction work permit be delayed by the submission of a draft Health and Safety Plan which, in the opinion of either the Employer's Health and Safety Agent, or the Provincial Director of the Department of Labour, is unacceptable, no claim for an extension of time will be entertained.

The issuing of a construction work permit by the Department of Labour shall in no way nullify the requirement to submit a Health and Safety Plan to the Employer's Health and Safety Agent for discussion and approval (in terms of Clause H8.3 of this specification) before commencement with Works execution.

H5.2 Notification of intention to commence construction work

The Contractor shall notify the Provincial Director of the Department of Labour in writing using the pro forma contained in Annexure 2 of the Construction Regulations, 2014 before construction work commences, and retain a copy of such notification in the health and safety file, if such work will:

- a) include excavation work;
- b) include working at a height where there is a risk of falling;
- c) include the demolition of a structure; or
- d) include the use of explosives to perform construction work.

The Contractor shall ensure that no work commences on an electrical installation which requires a new supply or an increase in electricity supply before the person who supplies or contracts or agrees to supply electricity to that electrical installation has been notified of such work.

The Contractor shall ensure that no asbestos work is carried out before the Provincial Director of the Department of Labour has been notified in writing.

H5.3 Occupational Health and Safety Agreement

The Contractor shall enter into an Agreement with the Employer before the commencement of the Works on Site.

H5.4 Good standing with the Compensation Fund or a licensed compensation insurer

The Contractor shall provide the Employer's Agent with a letter of good standing from the Compensation Commissioner or a licensed compensation insurer before the commencement of the Works on Site.

H5.5 Emergency procedures

The Contractor shall submit for acceptance to the Employer's Agent a health and safety emergency procedure, which includes but is not limited to fire, spills, accidents and exposure to hazardous substances, which:

- a) identifies the key personnel who are to be notified of any emergency;
- b) sets out details of available emergency services, including contact particulars; and
- c) the actions or steps which are to be taken during an emergency.

The Contractor shall within 24 hours of an emergency taking place notify the Employer's Agent in writing of the emergency and briefly outline what happened and how it was dealt with.

H5.6 Health and safety file

The Contractor shall ensure that a Health and Safety file, which shall include all documentation required in terms of the provisions of the OHS Act, the Construction Regulations, 2014 and this Health and Safety Specification, is open and kept on Site at all times.

The Health and Safety file shall be made available for inspection by any inspector, subcontractor, the

Employer, the Employer's Agent, the Employer's Health and Safety Agent, or employee of the Contractor, upon the request of such persons.

The Contractor shall hand over the Health and Safety file to the Employer's Agent upon Works completion of the Contract and, if applicable, a certificate of compliance accompanied by a test report for the electrical installation in accordance with the provisions of the Electrical Installation Regulations, 1992.

H5.7 Health and safety committee

Where applicable, the Contractor shall establish a health and safety committee, and shall convene health and safety meetings as provided for in the OHS Act.

The Employer's Agent or the Employer's Health and Safety Agent shall be invited to attend such meetings as an observer.

The Contractor shall ensure that minutes of the health and safety committee meetings are kept.

H5.8 Inspections, formal enquires and incidents

The Contractor shall inform the Employer's Agent:

- a) beforehand of inspections, investigations or formal inquiries of which he has been notified by an inspector; and
- b) as soon as reasonably practicable of the occurrence of an incident (as defined in the OHS Act) on the Site.

The Contractor shall record all incidents and notify the Employer's Agent of any incident, except in the case of a traffic accident on a public road, as soon as possible after it has occurred and report such incident to an inspector as designated in terms of the OHS Act.

The Contractor shall investigate all incidents and issue the Employer's Agent with copies of such investigations.

H5 Personal protective equipment and clothing

The Contractor shall ensure that all workers are issued with the necessary personal protective clothing.

H6 APPOINTMENTS

H6.1 Other competent persons

The Contractor shall appoint in writing competent persons to supervise or inspect, as relevant, any of the following:

- a) temporary works operations;
- b) excavation work;
- c) demolition work;
- d) scaffolding work operations;
- e) suspended platform work operations;
- f) rope access work;
- g) material hoists;
- h) operation of bulk mixing plant;
- i) explosive activated fastening device;
- j) cranes;
- k) construction vehicles and mobile plant (equipment);
- l) the stacking and storage of articles on the Site; and
- m) fire equipment.

The Contractor shall appoint in writing competent persons to:

- l) induct employees in health and safety; and
- m) prepare a fall protection plan.

H6.2 Health and safety representative(s)

The Contractor shall appoint in writing, if necessary in terms of the OHS Act, a health and safety employee representative(s), whose duties shall be as described in the OHS Act.

H7 EMPLOYER'S HEALTH AND SAFETY AGENT

The Employer's Health and Safety Agent shall:

- a) audit the Contractor's compliance with the requirements of this Specification prior to the commencement of any physical construction activities on the Site;
- b) accept or reject all safety plans, giving reasons for rejecting such plans;
- c) monitor the effective implementation of all safety plans;
- d) conduct periodic and random audits on the health and safety file to establish compliance with the requirements of this Specification and the Contractor's health and safety plan; and
- e) visit the site at regular intervals to conduct site inspections, and based upon such visits issue, wherever necessary, any notices and/or instructions to the Contractor or any of the Contractor's subcontractors with a copy to the Employer's Agent and, where relevant, to the Contractor.

The Contractor shall invite the Employer's Health and Safety Agent to audit compliance with the requirements of this Specification before commencing with any new construction activity on the Site.

The Contractor shall permit the Employer's Health and Safety Agent to audit the Contractor's compliance with the approved Health and Safety Plan, and shall provide any assistance and/or documentation as may be required in this regard.

H8 CREATING AND MAINTAINING A SAFE AND HEALTHY WORK ENVIRONMENT**H8.1 General**

The Contractor shall with respect to the Site and the construction works that are contemplated:

- a) cause a preliminary hazard identification to be performed by a competent person before commencing any physical construction activity;
- b) evaluate the risks associated with such work constituting a hazard to the health and safety of such employees and the steps that need to be taken to comply with the OHS Act; and
- c) as far as is reasonably practicable, prevent the exposure of such employees to the hazards concerned or, where prevention is not reasonably practicable, minimize such exposure.

The Contractor shall ensure that:

- d) all reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work;
- e) no structure or part of a structure is loaded in a manner which would render it unsafe;
- f) relevant information, if any, provided by the designer of the structure is taken into account in the risk assessment; and
- g) the designer of any temporary works complies with the requirements of regulation 6(2) of Construction Regulations, 2014.

The Contractor shall carry out regular inspections and audits to ensure that the Works are being performed in accordance with the requirements of this Specification and the Contractor's health and safety plan.

H8.2 Risk assessment

The Contractor shall before the commencement of any construction work on Site and during such construction work, cause risk assessment(s) to be performed by a competent person appointed in writing. Such assessment(s) shall as a minimum:

- a) identify the risks and hazards to which persons may be exposed to;
- b) analyse and evaluate the identified risks and hazards based on a documented method;

- c) document a plan of safe work procedures, including the use of any personal protective equipment or clothing and the undertaking of periodic “toolbox talks” or inductions before undertaking hazardous work, in order to mitigate, reduce or control the risks and hazards that have been identified;
- d) provide a monitoring plan; and
- e) provide a review plan.

The Contractor shall ensure that as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment.

The Contractor must review the relevant risk assessment -

- f) where changes are effected to the design and or construction that result in a change to the risk profile; or
- g) when an incident has occurred.

H8.3 Health and safety plans

The Contractor shall prior to commencing the Works to which this Specification applies, submit to the Employer's Health and Safety Agent for approval a suitable and sufficiently documented health and safety plan, based on this Specification and the risk assessment that is conducted.

The health and safety plan shall include, but not be limited to, the following:

- a) The safety management structure, including the names of all designated persons such as the construction supervisor and any other competent persons;
- b) Safety method statements and procedures to be adopted to ensure compliance with the OHS Act; Construction Regulations, 2014 and this Health and Safety Specification;
- c) The provision and use of temporary services;
- d) Personal protective equipment, devices and clothing required;
- e) Emergency procedures;
- f) Provision of workers' welfare facilities;
- g)
- h) Induction and training;
- i) Arrangements for monitoring and control to ensure compliance with the safety plan; and
- j) Provision and maintenance of the health and safety file and all other relevant documentation.

The Contractor shall provide each subcontractor with the sections of this Health and Safety Specification pertaining to the construction work to be performed by that subcontractor. The subcontractor shall provide the Contractor with a health and safety plan pertaining to his work, for incorporation into the Contractor's health and safety plan.

The Contractor shall discuss the submitted health and safety plan with the Employer's Health and Safety Agent, modify such plan in the light of the discussions and resubmit the modified plan for approval.

The Contractor shall apply the approved health and safety plan from the date of its approval and for the duration of the Works to which this Specification applies.

The Contractor shall conduct periodic audits for compliance with the approved health and safety plan at intervals agreed upon with the Employer's Health and Safety Agent, but at least once every month.

The Contractor shall update the health and safety plan whenever changes to the Works are brought about.

H8.4 Responsibilities towards employees and visitors

The Contractor shall, as far as is reasonably practicable, cause every employee to be made conversant with the hazards to his health and safety attached to any work which he has to perform, any article or substance which he has to produce, process, use, handle, store or transport and any plant or machinery which he is required or permitted to use, as well as with the precautionary measures which should be taken and observed with respect to those hazards or safe work procedures.

The Contractor shall ensure that all employees under his control are informed, instructed and trained by a

competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment.

The Contractor shall cause a record of all induction training to be kept, which indicates the names, identity numbers and job description of all those who attended such training.

The Contractor shall not allow or permit any employee to enter the Site, unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the Site at the time of entry.

The Contractor shall ensure that all of his employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner on the prescribed form.

The Contractor shall ensure that each visitor to the Site, save where such visitor only visits the site office and is not in direct contact with the construction work activities:

- a) undergoes health and safety instruction pertaining to the hazards prevalent on the Site; and
- b) is in possession of and using the necessary personal protective equipment.

The Contractor shall cause a record of all induction training to be kept in the Health and Safety file.

The Contractor shall provide suitable on-site signage to alert workers and visitors to health and safety hazards and requirements. Such signage shall include but not be limited to:

- c) prohibited unauthorized entrance;
- d) signage to indicate what personal protective equipment is to be worn; and
- e) activity related signs.

The Contractor shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace.

H8.5 Subcontractors

The Contractor may only subcontract work in terms of a written subcontract and shall only appoint a subcontractor should he be reasonably satisfied that such a subcontractor has the necessary competencies and resources to safely perform the work falling within the scope of the subcontract.

The Contractor shall ensure that all of his obligations in respect of subcontractors in terms of the Construction Regulations, 2014 are adhered to.

H8.6 Work permits and wayleaves

The Contractor shall be responsible for obtaining all the wayleaves, permissions or permits applicable to working near any existing services or other infrastructure on Site, and shall abide by the safety conditions imposed by such wayleaves, permissions or permits.

H8.7 Access to the Site

The Contractor shall ensure that access to the Site is strictly controlled and that, where possible, only authorised persons are permitted onto the Site.

The Contractor shall control the access to Site of his own personnel and equipment, and that of his subcontractors and suppliers, in such a way so as to ensure that the safety of all public pedestrian and vehicular traffic is not compromised.

H8.8 First aid and emergency procedures

The Contractor shall, where more than five employees are employed at a workplace, provide a first aid box or boxes at or near the workplace, which shall be available and accessible for the treatment of injured persons at that workplace. Such first aid boxes shall contain suitable first aid equipment.

The Contractor shall ensure, where there are more than 10 employees employed on the Site, that for every group of up to 50 employees at that workplace at least one person is readily available during normal

working hours who is in possession of a valid certificate of competency in first aid.

The following information shall be conspicuously posted in the offices of the Contractor for the duration of the Contract:

Telephone numbers of emergency services;
The names of all safety representatives and safety officers; and
The name(s) of the competent first aider(s).

The Contractor shall post, in prominent places, notices indicating where the first aid box(es) is/are kept, as well as the name of the person in charge of the first aid box.

H8.9 Housekeeping

The Contractor shall ensure, *inter alia*, that suitable housekeeping is continuously implemented on the Site, including provision for the:

removal of scrap, waste and debris, and materials which are no longer required for use, at appropriate intervals (in accordance with Construction Regulation 27); and
proper stacking and storage of materials and equipment (in accordance with Construction Regulations 27 and 28).

H8.10 Fire precautions

The Contractor shall ensure that all appropriate measures are taken to minimize the risk of fire and that appropriate procedures and equipment are in place to deal with the event of a fire, all in accordance with Construction Regulation 29 and the Environmental Management Specification in Part C3.5 of the Scope of Work.

H8.11 Facilities for workers

The Contractor shall provide ablution facilities and eating areas all as specified in the Environmental Management Specification in Part C3.5 of the Scope of Work.

H9 GENERAL HAZARDS AND RISKS APPLICABLE TO WORK REQUIRED IN TERMS OF THIS TENDER

- H9.1 Existing Site conditions**
- H9.2 Information provided by the designer (CR 6(1))**
- H9.3 Environmental hazards**
- H9.4 Traffic hazards**
- H9.5 Fall protection (working at heights) (CR 10)**
- H9.6 Structures (CR 11)**
- H9.7 Temporary works (CR 12)**
- H9.8 Excavation work (CR 13)**
- H9.9 Scaffolding (CR 16)**
- H9.10 Suspended platforms (CR 17)**
- H9.11 Rope access work (CR 18)**
- H9.12 Material hoists (CR 19)**
- H9.13 Construction vehicle and mobile plant (equipment) (CR 23)**

H9.14	Electrical installations and machinery (CR 24)
H9.15	Water environments (CR 26)
H9.16	Overhead Work (CR 27(g))
H9.17	Confined spaces
H9.18	Other hazards...

SECTION E – TIMEBASED SPECIALISED FUNCTIONS

Ensuring the seamless operation of our hydrological monitoring section and the delivery of accurate, reliable data is paramount to our success. To meet this objective, it is imperative that we are prepared to overcome any challenges that may impede the delivery of valid information. At certain points during the duration of the project specialized functions which are integral to addressing these challenges and fulfilling our mandate effectively. Consequently, the tenderer at times will be required to provide the following specialized functions to support the hydrological monitoring section:

Title	Functional Requirement	Educational Requirements
Project Manager	<ul style="list-style-type: none"> Plan, execute, and monitor project timelines and budgets Coordinate teams and resources. Risk management 	<ul style="list-style-type: none"> Bachelor's degree in Electrical, Computer Science, Information System & Technology, Mechanical/Electrical Engineering
Electrical Light Current Engineer	<ul style="list-style-type: none"> Design, develop, and maintain electrical systems and components. Troubleshoot and repair electrical issues. Stay updated with industry codes and regulations 	<ul style="list-style-type: none"> Bachelor's degree in Electrical Engineering or related field.
Electronic Engineer	<ul style="list-style-type: none"> Design and develop electronic systems and components. Circuit analysis and PCB design. Debugging and testing 	<ul style="list-style-type: none"> Bachelor's degree in Electronic Engineering or related field
Instrumentation Technician	<ul style="list-style-type: none"> Install, calibrate, and maintain instrumentation equipment. Troubleshoot and repair instrumentation issues 	<ul style="list-style-type: none"> Associate degree or certification in Instrumentation, Electronics, or a related field
Database Administrator	<ul style="list-style-type: none"> Manage and optimize databases. Ensure data security and availability. Performance tuning 	<ul style="list-style-type: none"> Bachelor's degree in Computer Science, Information Technology, or related field SQL Database Certification or other proven equivalent registration
Engineering Artisan	<ul style="list-style-type: none"> Skilled in hands-on engineering tasks. Maintenance, repair, and fabrication of equipment 	<ul style="list-style-type: none"> Relevant technical certification or apprenticeship in Engineering-related disciplines
Maintenance Assistant	<ul style="list-style-type: none"> Assists technical staff by e.g. cleaning, lubricating, basic tool maintenance, lifting, fetching and carrying equipment. Follows short term instructions. Closely supervised. Performs easily observable actions 	<ul style="list-style-type: none"> Qualifications: Basic literacy. Experience: 1 Years' experience required.

SECTION F – OUTSOURCED WORK**4. PROVISIONAL SUM****4.1 OUTSOURCED REPAIRS AND GENERAK ITEMS**

The Supplier will be reimbursed for the cost of outsourced repairs and general items from the Provisional Sum allowance contained within this item.

In accordance with the Purchaser's Supply Chain Management policy, When monetary allowances of less than R300 000 have been included in the bid documents, and where the work or items to which the sums relate are to be executed/supplied by sub-contractors/suppliers, the supplier must be required to request a minimum of three written quotations for approval by the Responsible Agent.

4.1 SPECIALIZED FUNCTIONS FOR HYDROLOGICAL MONITORING SECTION**4.1.1 Software Development**

Title	Functional Requirement	Educational Requirements
Software Developer	<ul style="list-style-type: none"> Develop, test, and deploy software applications. Collaborate with cross-functional teams. Debugging 	<ul style="list-style-type: none"> Bachelor's degree in Computer Science, Software Engineering, or related field Professional Certification or other proven equivalent registration
System Architect	Requirements Analysis, Integration, Technology Selection, Security, Performance Optimization, Documentation, Risk Management, Collaboration, Quality Assurance, Maintenance and Upgrades, Capacity Planning, Compliance	<ul style="list-style-type: none"> Bachelor's degree in Computer Science, Information Technology, or related field. Professional Certification or other proven equivalent registration

4.1.2 Security Services

Title	Functional Requirement	Statutory Body Requirements
Armed Security Services	Private vehicular armed security services	Registered with Private Security Industry Regulatory Authority (PSIRA). PSIRA Number & Certification
Unarmed Armed Security Services	Private vehicular unarmed armed security services	Registered with Private Security Industry Regulatory Authority (PSIRA). PSIRA Number & Certification

SECTION G – TRENCHING & EXCAVATIONS

7. Trenching

Trenching must be professionally and neatly carried out and shall be 700 mm or 900 mm deep and from 300 mm wide as indicated by the Principal Agent.

The surface cut of bitumen tar and paving shall be neatly made and shall be wide enough to allow trenching without undermining or subsiding of the tar edge to facilitate adequate joining of reinstated surfaces.

Where grass sods or plants are removed, they shall be neatly packed adjacent to the trench. The Contractor shall keep the grass sods or plants damp after removal by watering or otherwise to ensure that they remain alive. The Contractor must ensure that all vegetation is replanted after the trench is properly backfilled and compacted. The Contractor will have to make good at his own cost, any vegetation damaged during the excavation and not restored to its original condition.

Brick paving shall be neatly removed and stacked adjacent to the area excavated at a location that is acceptable to the user of such brick paved surface. Any breakage of bricks will be the responsibility of the Contractor. The Contractor will be responsible for reinstallation of the removed bricks to the satisfaction of the user. The same method of operation shall apply for paving slabs.

When trenching through kerbs, channels, edgings or any other edge unit, these shall be carefully removed up to the nearest whole unit and replaced. If these units are damaged, they shall be replaced with similar approved new units for the cost of the Contractor.

All excavated trenches shall be in a straight line, where possible, and marked out by using a line. Where cable trenches change direction the excavated trench may not result in the installed cable having a bending radius of less than 500 mm. Under NO circumstances shall this minimum bending radius be reduced.

While excavating, the Contractor shall remove tar pieces, stones and sharp objects from the unearthed soil and arrange for removal of such material from site. No stones, tar pieces or sharp objects may be put back in the trench.

The bottom of the cable trench shall be even and free of stones and sharp objects. Should the base of the trench consist of rocks or sharp objects, a bedding layer of approximately 100 mm of soft stone-free sand shall be installed prior to cable installation.

No excavated trenches or holes shall be left open for longer than 3 days or over a weekend.

The Contractor may not dump or store excavated material against boundary walls or on landscaped gardens. Restoration of defaced property will be the responsibility of the Contractor. Where excavated material is placed on road surfaces care should be taken not to block storm water drains or open channels.

Any water accumulating in excavated trenches or holes, either as a result of rain or due to the level of the water table, shall be pumped out by the Contractor to make work inside the trench or hole possible.

Particular care must be taken to ensure that effective barriers are erected around all trenches and excavations to ensure the safety personnel and the general public. In this regard the contractor is required to install an orange meshed barrier screen (or other type of barrier if deemed by the contractor to be more effective) up to at least a metre in height along the entire length of the trench or excavation. The barrier is to be secured in such a way that it will not be disturbed by adverse weather conditions. Where the general access across the excavation is required, suitable, safe crossings must be provided. The contractor must detail these measures in his safety plan.

Any liability arising out of the activities of the Contractor shall be his responsibility. This includes the safety of personnel and the public while the trenches are open.

Soil conditions vary from Area to Area and within each Area. To account for soil conditions that may vary along an excavated trench, rates for 3 different types of soil will be used- "Normal", "Difficult" and "Hard" excavation, as defined below.

The Tenderer will need to determine the incurred costs for each type of excavation in accordance with the following categories:

- **Normal Excavation**

Material that can be loosened and removed using pick and shovel (such as grass covered sand, soft clay, dry earth, small stones in sand which can be removed by hand, or thin layers of “koffieklip”).

- **Difficult Excavation**

Material that is difficult to loosen and remove using pick and shovel such as large layers of “koffieklip”, hard dry clay, ground containing boulders and layers of tar or where progress is slow and other services are affected. The cost of any mechanical plant used to assist in loosening the material is to be included in the given rate.

- **Hard Excavation**

A solid mass of material, 1 m or longer, which can only be broken using a paving breaker or jackhammer and where progress is very slow.

Backfilling of trenches shall take place immediately following cable installation and inspection by the Principal Agent. The trench shall be backfilled and mechanically compacted to a depth of approximately 250 mm after which a layer of danger tape must be installed. The remaining backfilling shall be mechanically compacted in 150 mm layers and completed no later than one day after the cable installation. Backfilling and compaction shall be carried out to the specification of the local. Municipal Services Authority and be tested for compliance using a Dynamic Cone Penetrometer. A measurement of more than 20 mm difference between successive penetrating blows will be regarded as insufficient compaction. The backfilled trench shall be level with the surrounding terrain and all excess backfilling material shall be removed.

The Contractor shall be responsible for the proper reinstatement of the trench for a period of 1 year after completion of the work.

Where excavated material is unsuitable (i.e. contains stones and sharp objects which cannot be easily removed) for use as a bedding layer for the installation of electrical services the Contractor shall supply and deliver to site stone free sand for such purposes at the tendered rate. Backfill material delivered to site should be stored at an appropriate location to prevent damage and obstruction of existing services and property. An accurate record of delivered material shall be kept for verification by the Principal Agent

Reinstatement of all bitumen, brick paving or cement paving as well as cement surfaces shall be carried out by the Tenderer and shall match the original finish.

Council reserves the right to arrange the reinstatement of bitumen, brick paving or cement paving as well as cement surfaces via other tenders.

All waste material (i.e. broken tar, stones or unsuitable soils such as clay) must be removed from the worksite and dumped at the nearest recognised authorised dumping site. Transport to and any fee payable at the dumpsite will be to the Contractor's account and must be included in the rate quoted. Claims for export of material loads should be supported by receipts or other documentation from the dump site.

7.1 Site Clearance

Clearing shall consist of the removal of all trees, brush other vegetation, rubbish and all other objectionable material, including the disposal of all material resulting from the clearing and grubbing.

Site clearance shall be carried out prior to earthworks and shall be measured once. Site clearing shall also mean bush clearing. The tenderer shall pay attention to the method of moving vegetation to ensure the roots are removed without removing excessive sand material.

The tenderer shall include in his rate, cost of removal, storing protection and replanting in a protected and fenced-off area of selected vegetation.

7.2 Excavation

Tenderer to excavate by between the remote terminal unit & measuring point for the installation of a PVC conduit that will house signal cable.

Soft excavation shall be all material not falling into the category of hard rock excavation.

Excavation shall be done by hand in order to protect underground services. The amount by which the excavation is to exceed the proposed level of 0.5 x 0.5 m deep shall be sufficient to allow the proper laying, bedding, backfilling and compacting of a 110mm diameter uPVC sleeve.

All excavation areas shall be made safe from pedestrian and vehicle traffic at all times while the works is ongoing. The tenderer to have all the relevant materials on site to ensure all works is cordoned off while the trench work is ongoing (safety netting).

7.3 Install uPVC Cable Sleeve:

The tenderer is to supply and lay a 110 mm uPVC cable sleeves suitable for the housing of an signal cable, for the full length of the proposed trench.

Draw wires are to be inserted in the sleeves between each of the proposed inspection manholes, with enough slack left on each end.

7.4 Concrete Encasement of PVC conduit

The tenderer shall encase the 110 uPVC cable sleeve in 100mm concrete (15 MPa) all round.

7.5 Backfill, Compaction & Reinstatement

The tenderer shall backfill and compact the excavated area around the uPVC conduit with the excavated material.

The tenderer shall not commence with the backfilling of trenches without prior notification to the Department so that the cable installation may be inspected. Should the tenderer fail to give a timely notification, the trenches shall be re-opened at the tenderer's cost. Such an inspection will not be unreasonably delayed. Backfilling shall be undertaken with soil suitable to ensure settling without voids.

The trench shall be backfilled and mechanically compacted to a depth of approximately 250 mm after which a layer of danger tape must be installed. The remaining backfilling shall be mechanically compacted. The tenderer shall reinstate the trenched area with the grass sods that was stockpiled.

SECTION H – GENERAL SPECIFICATIONS

1. EXTENT OF THE WORKS

The work that is to be carried out under the contract is as provided for in the Project Specification. However, if during the course of maintenance conditions are found to differ from those anticipated, the Employer reserves the right to modify the scope of the work to suit the prevailing conditions and circumstances.

2. LIMITED CONTRACT FUNDS

Limited funding is available for the works detailed in the Project Specification and certain items may be omitted depending on tendered rates and tender amounts received. **The Employer reserves the right to omit certain works to suit the available funding for the contract without invalidating the contract.**

The works set out in this contract is of an if and when required bases, and falls solely at the discretion of the Director: Bulk Services or his representative

3. STANDARD OF WORKMANSHIP

- 3.1 The attention of Tenderers is particularly drawn to the high standard of workmanship applicable to this Contract.
- 3.2 The onus to produce work which conforms in quality and accuracy of detail to the requirements of the specifications is on the Tenderer. The Tenderer shall, at his own expense, institute a quality-control system and provide experienced, Technician / Artisans, together with all transport and equipment, to ensure adequate supervision and positive control of the works at all times.
- 3.3 The costs of all supervision and process control, including testing thus carried out by the Tenderer shall be deemed to be included in the rates tendered for the related items of work.
- 3.4 On completion of every part of the work submission thereof to the Director: Bulk Services or his representative for examination, the Tenderer shall furnish the Director: Bulk Services or his representative with photographs of all relevant completed works.

4. TENDERER'S SUPERINTENDENCE

- 4.1 The Tenderer shall give or provide all necessary site supervision due to the execution of the Works and must be on site at all times during the duration of the works.
- 4.2 The tenderer on successful appointment of the tender shall be required to have a local office setup and operational within **60 calender days** of signing of the contract to ensure there is no delay in service delivery.
- 4.3 The Tenderer or a competent and authorised agent or representative approved of in writing by the Director: Bulk Services or his Representative (which approval may at any time be withdrawn), is to be constantly on the Works and shall give his whole time to the superintendence the works. Such authorised agent or representative shall receive and execute on behalf of the Tenderer directions and instructions from the Director: Bulk Services or his Representative.
- 4.4 The superintendence must be familiar with the contents of the tender document.
- 4.5 In the event that a company is based outside the municipal area of the City of Cape Town a local office must be established within two weeks after award of a contract.

5. PERFORMANCE MONITORING

- 5.1 The Tenderer shall execute the Works in strict accordance with the contract to the satisfaction of the Director: Bulk Services or his Representative and shall comply with and adhere strictly to the Director: Bulk Services or his Representatives instructions and directions on any matter (whether mentioned in the contract or not). The Tenderer shall take instructions and directions only from the Director: Bulk Services or his Representative.
- 5.2 Works can only commence once the tenderer received a written instruction with an explanatory drawing from the Director: Bulk Services or his representative. No payment will be made unless the written instruction with the drawing is submitted with the tenderers payment invoice.
- 5.3 The Tenderer shall allow the Director: Bulk Services or his representative, to have access at all times to inspect the work being conducted, to inspect all records and documents maintained by the Tenderer regarding work performed, and to inspect the equipment, including spare parts inventories, stores, and workshop repair facilities.
- 5.4 A complete log of all communications via the Project Manager is to be maintained, including a record of actions to follow-up on any instructions or comments. The Tenderer shall make the record available for inspection whenever requested by the Director: Bulk Services or his representative.

- 5.5 The Tenderer shall inform the Director: Bulk Services or his Representative timeously of any problems on site

6. AVAILABLE SERVICES

The tenderer shall note that not all sites have listed in locations as per the Attached Annexure 19 have a standard 220V electricity supply. Therefore the tenderer shall make the necessary provisions for all electricity generating equipment where deemed that an electricity supply is required for the completion of works. Furthermore, the tender shall also make provision for a continuous electricity supply at their premises when remote monitoring of the Hydrological Monitoring System is performed in an event of disruption in electrical supply.

7. SITE LOCATION SPECIAL ATTENTION

The tenderer shall note the following:

- Certain hydrological monitoring sites fall outside the boundaries of the City of Cape Town metropolitan area.
- Certain sites are only accessible by the use of the 4x4 vehicle
- Certain sites are located on private property and in the neighbouring Stellenbosch Municipality

The tenderer is obligated to ensure that their personnel, when operating vehicles on private, public, and informal road surfaces, adhere strictly to the designated routes and refrain from causing any damage to the immediate surroundings. This precaution is necessary to preserve existing access roads, as well as the local flora and fauna. Should any of these areas incur damage that hampers access, it is the responsibility of the tenderer to promptly inform the employer of the situation.

Protection of natural features

The Contractor shall not deface, paint, damage or mark any natural features (e.g. rock formations) situated in or around the Site for survey or other purposes, unless agreed beforehand with the Employer's Agent. Any features affected by the Contractor in contravention of this clause shall be restored/ rehabilitated to the satisfaction of the Employer's Agent. The cost of restoration/rehabilitation shall be borne by the Contractor.

The Contractor shall not permit his employees to make use of any natural water sources (e.g. springs, streams, open water bodies) for the purposes of swimming, personal washing and the washing of machinery or clothes.

Protection of flora and fauna

Except to the extent necessary for the carrying out of the Works, as specified by the Employer's Agent, no vegetation shall be removed, damaged or disturbed.

The presence of any wild animals found on Site shall be reported to the Employer's Agent, who shall issue an instruction with regard to their removal or relocation. If a wild animal needs removal from the Site the Cape Nature (Metro Region) Conservation Services Manager may be contacted for assistance (tel 021 955 9132/9121/3122/9130). Trapping poisoning, injuring or shooting animals is strictly forbidden. No domestic pets or livestock are permitted on Site, with the exception of controlled watchdogs approved by the Employer's Agent.

Where the use of herbicides, pesticides and other poisonous substances has been specified, the Contractor shall submit a Method Statement to the Employer's Agent for approval.

8. PROTECTION OF SERVICES

8.1 WAYLEAVES

The Tenderer shall be responsible for obtaining all of the necessary wayleaves, permissions or permits applicable to working near any existing services or other infrastructure on Site, and shall ensure that any wayleaves, permissions or permits obtained by the Employer's Agent prior to the award of the contract are transferred into the Tenderer's name.

The Tenderer shall abide by any conditions imposed by such wayleaves, permissions or permits.

The Tenderer shall ensure that all wayleaves, permissions and permits are kept on site and are available for inspection by the relevant service authorities on demand.

The Tenderer shall also ensure that any wayleaves in respect of electricity services are renewed timeously every three months.

Existing Services

“Existing Service” shall include any service which has been temporarily taken out of service to allow for the execution of the works or which has been taken out of service as a result of an event which necessitated the execution of the works.

8.2 Condition of Existing Services

The Tenderer acknowledges that he has inspected and examined all known existing services and all existing services subsequently discovered and is satisfied that all such services were in an acceptable and serviceable state at the commencement of the works.

In the event of a dispute as to the acceptability and/or serviceability of an existing service at the commencement of the works or upon the discovery of such service, the Tenderer shall bear the onus of proving that the service in question was not in an acceptable and/or serviceable state at the commencement of the works.

8.3 Maintenance and Protection of Existing Services

During the course of the works, all existing services including watermains, sewers and stormwater reticulation, electricity transmission and telephone lines, cables, poles and conduits whether in service or not shall be protected, supported and maintained to the satisfaction of the service authority or department concerned and the Employer. The Tenderer shall bear all costs in this regard.

Where on account of location or level, existing services have to be permanently altered to accommodate the proposed service, the Council will pay all charges in connection therewith.

Hydrants under pressure, watermain valve covers and manholes shall be kept unobstructed and accessible at all times.

8.4 Work in Close Proximity to Existing Services

The Tenderer shall note that no mechanical excavators or vibratory type compactors may be used within three (3) metres of any telecommunications or electrical services. No pegs or stakes shall be driven into the ground in the vicinity of underground services unless their exact positions have been determined.

The Tenderers attention is drawn to the following with regard to work done in proximity of ESKOM and other electrical services:

MACHINERY AND OCCUPATIONAL SAFETY ACT(Act No 6 of 1983) WITH REGULATIONS

D16(7) excavations

“The builder or excavator shall ascertain as far as practicable the location and nature of underground services likely to be affected by the excavation and take such steps as may be necessary to prevent danger to persons”

THE ELECTRICITY ACT (ACT No 40 of 1958)

Section 51(3) : Offences and penalties

“ Any person without legal right (the proof of which shall be upon him) cuts or damages or interferes with any apparatus for generating, transmitting or generating electricity, shall be guilty of an offence and liable on conviction to a fine not exceeding R 1 000.00 or to imprisonment for a period not exceeding twelve months.”

The Tenderer shall allow all reasonable access to the representatives of any Authority or department for the purpose of maintaining, laying and/or relaying any services, cables or mains during the period of the Contract.

Permanent alterations to existing services ordered in writing by the Employer, and for which no separate provision has been provided has been made in the Price Schedule, will be paid for under dayworks or extra works if required

9. ACCOMMODATION OF TRAFFIC

9.1 Safety

The Contractor shall be responsible for the safe and easy passage of pedestrian and vehicular traffic past and/or over sections of roads of which he has occupation. The Contractor shall at all times in his entire operations take the necessary care to protect the public and to facilitate the traffic flow.

The Contractor may not commence with any part of the works before he has made adequate provision for the

accommodation of traffic. The safety and convenience of the travelling public is to be considered of utmost importance and every effort must be made to ensure that no work may proceed on any public road until such time as the relevant road signs, flagmen, speed controls, barricades, delineators, cones etc are in place and maintained, and that courtesy is extended to the public at all times.

The Contractor shall ensure that his employees wear high visibility safety clothing when working alongside public traffic. The safety jackets shall be of an approved Level 2 type, bright/fluorescent orange, red-orange or yellow in colour with retro-reflective strips as indicated in Chapter 13 of Volume 2 of the South African Traffic Signs Manual (SARTSM). When work is carried out between the hours of sunset and sunrise, the Level 2 safety jackets shall be replaced by Level 3 jackets.

The travelling public shall have the right of way on public roads, and the Contractor shall apply suitable methods for controlling the movement of his vehicles, plant and equipment that they will not constitute a hazard on the road.

Access to properties must be maintained at all times.

The Contractor shall nominate a knowledgeable employee on site who shall be the Traffic Safety Officer responsible for the arrangements and maintenance of all accommodation of traffic measures required for the duration of the work. He shall exercise control in terms of traffic safety over the safe movement of personnel, visitors and plant on site including the wearing of high visibility clothing, the operation of amber flashing lights and for keeping all roads signs and traffic cones clean and visible. He shall attend to the training and performance of flagmen and other personnel involved in the control of traffic.

The Contractor shall liaise with and co-operate with the relevant traffic authorities wherever the work affects existing roads.

9.2 Temporary Traffic-Control Facilities

The Contractor shall provide, erect and maintain the necessary traffic-control devices, road signs, channelisation devices, barricades, warning devices and road markings (hereinafter referred to as traffic-control facilities), as shown in the South African Road Traffic Signs Manual (SARTSM), and shall remove them when no longer required. It shall be incumbent upon the Contractor to see to it that the above-mentioned traffic-control facilities are present at all times and are functioning properly.

Work, including the erection and removal of traffic control facilities, shall be executed between sunrise and sunset on Monday to Saturday, inclusive. Occupation of existing traffic lanes will only be allowed during daylight hours on normal working days, which are defined as Monday to Saturday, inclusive. The existing number of lanes for each traffic movement affected by infrastructure maintenance shall not be reduced without the written authorization of the Engineer.

The Contractor shall determine the particular accommodation of traffic layout(s) on the drawings suitable to the cleaning exercise(s) planned. The Contractor shall submit the layout proposals for signage and accommodation of traffic to the Engineer for approval.

The Contractor shall indemnify the employer against all proceedings, claims, actions, damages and costs which may arise from or be related to the absence or improper functioning or placement of traffic-control facilities.

No claims will be considered for delays or inconvenience caused by the accommodation of traffic requirements.

The type of infrastructure maintenance, spacing and placement of traffic-control facilities shall be in accordance with the prescriptions and recommendation of the latest edition of SARTSM.

The Traffic shall be accommodated on the existing surfaced carriageway and shoulders. No bypasses or temporary deviations shall be constructed. Accommodation of traffic will generally be carried out by closing off one lane of traffic at a time and accommodating the traffic on the other lane(s).

9.3 Traffic-Control Devices

Traffic-control devices include the use of flagmen and portable STOP and GO-RY signs, and traffic signals, whichever may be the most suitable method under the prevailing circumstances. Traffic signals shall only be erected if approved by the Engineer.

If a road is partially closed and one-way traffic only is allowed over a section of road of which the length exceeds 250 m, the traffic shall be regulated by flagmen and STOP and GO-RY signs at both ends of such section. If it is necessary for effective communication between the flagmen, an approved two-way communication system shall be in operation at the control points.

Flagmen shall have a working knowledge of the road regulations.

Temporary traffic-control facilities shall be provided with portable stands adequately ballasted with sandbags

to prevent the signs from being blown over by wind or wind turbulence from moving traffic.

9.4 Road Signs and Barricades

Road signs shall include all the statutorily required road signs in the permanent or temporary series, which shall also include delineators and moveable barriers (the barrier/sign combination type), or an appropriate combination thereof.

9.5 Channelization Devices and Barricades

Channelization devices shall include delineators, cones, barricades, guardrails, barriers, road studs or road markings or any appropriate combination of these devices.

Appended to this General Section is an extract from the South African Road Traffic Signs Manual Volume 2 Chapter 13 – Roadworks Signing. This is provided to illustrate the Accommodation of Traffic Layout Categories. The Contractor shall comply with the complete manual when implementing accommodation of traffic measures.

10. LIAISON WITH LOCAL AUTHORITIES

The Tenderer will have to liaise with local authorities regarding the following matters:

- (a) Dealing with traffic.
- (b) Locating of existing underground services.
- (c) Protection of existing services during construction.

All the relevant authorities were notified of above operations. It is then the Tenderer's onus to immediately contact all these authorities and to accommodate their involvement in his programme of work. The Tenderer should also warn the authorities at least 48 hours before the actual work commence. Compensation for delays, losses or accidents will not be considered should the Tenderer at any time have failed to keep the local authorities informed.

The Director: Bulk Services or his representative must immediately be notified, should the Tenderer experience any problem regarding work which involves a local authority.

11. Quality Conformance

11.1 Quality Control

Only new materials of first class quality shall be used and be approved by the Principal Agent prior to installation.

Wherever applicable the material is to comply with the relevant South African Bureau of Standards, specifications, or to British Standard Specifications, where no SABS Specifications exist.

Materials wherever possible, must be of South African manufacture and shall bear the SABS mark of approval.

The work shall be done by, or at all times be under the personal supervision of an installation Technician appointed in writing by the Tenderer.

The tenderer shall have a complete Safety file as specified by the Construction Regulations of the OHS Act on site.

Failure to produce such an Element will result in stopping of the work until such file can be produced.

The work stoppage shall be for the account of the Tenderer and no extension of time will be allowed.

The Project Manager may, if he deems fit, require that the Tenderer removes or causes to be removed an employee of his from the construction site by virtue of that person's incapability, appearance or any such reason which in the opinion of the Project Manager is valid.

Without detracting from the safety clothing and equipment as specified in the Safety File all members of the Contract's staff shall wear clothing adequately marked with the Contractor's name or acceptable identification.

11.2 Quality and Industry Standards

During the tender period, strict adherence to industry-standard protocols and guidelines is imperative to ensure the reliability, efficiency, and security of our hydrological monitoring system. The tenderer is expected to comply with a comprehensive set of quality standards encompassing industrial automation, control, and data acquisition, as well as security, systems, application, and data architecture domains.

In the realm of industrial automation, the tenderer must uphold standards such as EC 61131, focusing on programmable controllers and their vital programming languages and guidelines essential for PLC maintenance and programming. Additionally, compliance with IEC 60870 is mandatory, specifying the standards for SCADA systems pivotal in the monitoring and control of industrial processes. Further

guidelines are outlined in IEC 60947, which pertains to the performance and testing of controlgear, including those utilized in PLC systems.

Ensuring information security is paramount, and the tenderer must align with ISO 27001, a fundamental standard governing Information Security Management Systems (ISMS) requirements. This standard is crucial in maintaining information security within data loggers, SCADA systems, and other electronic devices. Moreover, the tenderer is required to follow ISO/IEC 27002, detailing the code of practice for information security controls, and ISO/IEC 27005, focusing on information security risk management. Specific to the energy utility industry, IEC 27019 provides essential guidelines for information security management in process control systems.

In the context of communication protocols, the tenderer must adhere to IEC 61784, relevant for industrial communication networks, including SCADA and PLC systems. Additionally, IEEE 1451, defining a standard interface for various sensors like pressure level sensors, rain gauges, and ultrasonic sensors, is crucial. This standard ensures a common interface for different sensor types, promoting seamless integration and efficient data acquisition.

Furthermore, our expectations extend to architecture domains. In the realm of security architecture, compliance with ISO/IEC 27001, ISO/IEC 27002, ISO/IEC 27005, and ISO/IEC 27019 is necessary. For systems architecture, adherence to ISO/IEC 42010, focusing on architecture description, and ISO/IEC 15288, which defines system life cycle processes, is mandatory. Application architecture demands compliance with ISO/IEC 25010, emphasizing system and software quality models, and ISO/IEC 25030, detailing quality requirements. Lastly, data architecture requirements include adherence to ISO/IEC 11179, governing metadata registries, and ISO/IEC 25012, focusing on data quality models.

By meeting these stringent standards, the tenderer ensures not only the success of the hydrological monitoring system but also the safeguarding of sensitive information and seamless integration of diverse sensors, fostering a robust, secure, and efficient data management environment.

Applicable standards listed below.

EC 61131: Industrial automation, control, and data acquisition - Programmable controllers

Specifically related to PLC programming languages and guidelines, essential for PLC maintenance and programming.

IEC 60870: Telecontrol equipment and systems

Standard for SCADA (Supervisory Control and Data Acquisition) systems used in the monitoring and control of industrial processes.

IEC 60947: Low-voltage switchgear and controlgear

Provides guidelines for the performance and testing of controlgear including those used in PLC systems.

ISO 27001: Information technology - Security techniques - Information security management systems - Requirements

Important for ensuring information security in data loggers, SCADA systems, and other electronic devices.

IEC 61784: Industrial communication networks - Profiles

Relevant for communication protocols used in industrial automation systems, including SCADA and PLCs.

IEEE 1451: Standard for a Smart Transducer Interface for Sensors and Actuators

Applicable for various sensors, including pressure level sensors, rain gauges, and ultrasonic sensors, providing a common interface for different types of sensors.

Security Architecture:

ISO/IEC 27001: Information Security Management System (ISMS) - Requirements

ISO/IEC 27002: Code of Practice for Information Security Controls

ISO/IEC 27005: Information Security Risk Management

ISO/IEC 27019: Information security management guidelines for process control systems specific to the energy utility industry

Systems Architecture:

ISO/IEC 42010: Systems and software engineering - Architecture description

ISO/IEC 15288: Systems and software engineering - System life cycle processes

Application Architecture:

ISO/IEC 25010: Systems and software engineering - Systems and software Quality Requirements and Evaluation (SQuaRE) - System and software quality models

ISO/IEC 25030: Systems and software engineering - Systems and software Quality Requirements and Evaluation (SQuaRE) - Quality requirements

Data Architecture:

ISO/IEC 11179: Information technology - Metadata registries (MDR)

ISO/IEC 25012: Systems and software engineering - Systems and software Quality Requirements and Evaluation (SQuaRE) - Data quality model

12. 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".

13. EMPLOYMENT OF SECURITY PERSONNEL

All security staff employed by the Supplier on behalf of the CCT or at any CCT property must be registered with Private Security Industry Regulatory Authority (PSiRA). Proof of such registration must be made available to the CCT or its agent, upon request.

14. FORMS FOR CONTRACT ADMINISTRATION

The Supplier shall complete, sign and submit with each invoice, the following:

- a) Monthly Project Labour Report (described below)

The Monthly Project Labour Report must include details of all labour (including that of sub-contractors) that are South African citizens earning less than **R28.79 p/h**, as adjusted from time to time (excluding any benefits), who are employed on a temporary or contract basis on this contract in the month in question.

In addition to the Monthly Project Labour Report the Supplier shall simultaneously furnish the CCT's Agent with copies of the employment contracts entered into with such labour, together with certified copies of identification documents, proof of attendance in the form of attendance register or timesheets as well as evidence of payments to such labour in the form of copies of payslips or payroll runs. If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it and proof of such acknowledgement shall be furnished to the CCT's Agent.

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 Purchser;
- 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

Not Applicable.

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).
- [11.2.4 In the case of Contracts for delivery of professional services, Professional indemnity insurance providing

cover in an amount of not less than **[R5 million]** in respect of each and every claim during the contract period.]

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:

16.1.1 Within 30 (thirty) days of receiving the relevant invoice or statement from the Supplier, unless otherwise prescribed for certain categories of expenditure or specific contractual requirements in accordance with any other applicable policies of the Purchaser.

16.1.2 Notwithstanding anything contained above, the Purchaser shall not be liable for payment of any invoice that pre-dates the date of delivery of any Goods and/or Services.

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.

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 not 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:

Item	Activity	Infringement	Penalty
1	Poor workmanship leading in equipment failure	1.1 Failure to resolve the problem within 24 hours from time of notice	R1500
		1.2 Repetitive incidents concerning failure to address fault notifications as outlined in 1.1 above.	R2000
2	Works Reports	1.1 Failure to Complete a Works Report (electronic/paper) on site when work was conducted under contract conditions.	R2000
		1.2 Late Submission of Electronic/Paper Works Report when work was conducted under contract conditions(must be submitted within 5 business days after performing works related activity)	R1000
3	Instrument Calibration Report	3.1 Failure to issue a Instrument Calibration Report after calibration of and reinstallation of instrument as outlined under the contract conditions.	R2000
		3.2 Late Submission of Instrument Calibration Report(to be submitted within 7 business days after performing instrument calibration)	R1000
4	SCADA & Telemetry Systems Operations	4.1 Not responding to fault investigation during (autumn - winter) May – September within a 24 hour period of written notification thereof.	R2000
		4.2 Not responding to fault investigation during (spring – summer) October – April within a 48 hour period of written notification thereof.	R1000
5	Access to Private Properties	5.1 Not informing the CCT Project Manager of site inspection/work being performed on private property (permission to be granted by CCT Project Manager or representative)	R500
6	Loss of data due to service provider negligence	6.1 Not insuring that All equipment is in their original positions and operational after work has been successfully completed and back in full operation	R2000

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))

TABLE OF CLAUSES

1. Definitions
2. Application
3. General
4. Standards
5. Use of contract documents and information; inspection
6. Patent rights
7. Performance security
8. Inspections, tests and analysis
9. Packing
10. Delivery and documents
11. Insurance
12. Transportation
13. Incidental services
14. Spare parts
15. Warranty
16. Payment
17. Prices
18. Contract amendments
19. Assignment
20. Subcontracts
21. Delays in the supplier's performance
22. Penalties
23. Termination for default
24. Dumping and countervailing duties
25. Force majeure
26. Termination for insolvency
27. Settlement of disputes
28. Limitation of liability
29. Governing language
30. Applicable law
31. Notices
32. Taxes and duties
33. National Industrial Participation Programme (NIPP)
34. Prohibition of restrictive practices

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



Letterhead of supplier’s Insurance Broker

Date _____

CCT
City Manager
Civic Centre
12 Hertzog Boulevard
Cape Town
8000

Dear Sir

TENDER NO.: 296S/2024/25

TENDER DESCRIPTION: MAINTENANCE AND ADMINISTRATION (SCADA, DATABASE MANAGEMENT SYSTEM INCLUDING SERVICING (INSTRUMENTATION & TELEMETRY EQUIPMENT) OF THE CATCHMENT, STORMWATER & RIVER MANAGEMENT HYDROLOGICAL MONITORING INFORMATION SYSTEM]

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



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

CONTRACT OR WORKS PROJECT NAME: (6)		EPWP SUPPLIED PROJECT NUMBER: (6)														
DIRECTORATE:		DEPARTMENT:														
CONTRACTOR OR VENDOR NAME:		CONTRACTOR OR VENDOR E-MAIL ADDRESS:														
CONTRACTOR OR VENDOR CONTACT PERSON:		CONTRACTOR OR VENDOR TEL. NUMBER:	CELL WORK													
PROJECT LABOUR REPORT CURRENT MONTH (mark with "X")																
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR				

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				

	(8)	(8)	(8)	(9)			(10)		(11)	(12)	(13)	(14)
No.	First name	Surname	ID number	New Beneficiary (Y/N)	Gender (M/F)	Disabled (Y/N)	Job seeker database (Y/N)	Contract start date (DDMMYY)	Contract end date (DDMMYY)	No. days worked this month (excl. training)	Training days	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

NOT APPLICABLE

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)

TENDER NO: [296S/2024/25]

Approved Financial Institution as at []:

NOT APPLICABLE

Annexure D - Pro Forma Advance Payment Guarantee

NOT APPLICABLE

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

1. TENDER CONDITIONS

- 1.1 The Contract Price Adjustment (CPA) mechanism and/or provisions relating to Rate of Exchange (RoE) Variation, contained in this schedule is compulsory and binding on all Tenderers/Suppliers and this schedule (the parts relevant to the particular tender) must be completed by all Tenderers / Suppliers.
- 1.2 Tenderers/Suppliers are not permitted to amend, vary, alter or delete this schedule or any part thereof unless otherwise stated in this schedule.
- 1.3 Tenderers are not permitted to offer fixed and firm prices except as provided for in the Price Schedule.

2. CPA PROVISIONS SELECTION

- 2.1 The prices stipulated on the Price Schedule are subject to adjustment as set out below.
- 2.2 Tenderer to indicate the specific CPA and/or RoE provisions applicable to their bid by marking the relevant checkboxes below. Tenderers to note that the CPA and/or RoE provisions are not exclusive and multiple CPA Types can exist if the bid contains both local and foreign exchange based pricing. In such cases the CPA and/or ROE provision applies only to that particular portion of the tendered price.
- 2.3 The CPA and/or RoE provisions applicable to this tender and resulting contract are to be indicated below by checking the relevant boxes (with multiple selections only where indicated permissible):

	<u>Indicate option</u>	<u>CPA Type</u>	<u>Period</u>	<u>Refer to Section</u>
A	<input type="checkbox"/>	FIRM PRICES as per Pricing Schedule	Annual	<i>Pricing Schedule C.4 and Schedule F.1 (A)</i>
<u>LOCAL (RSA) TENDER CONTENT:</u>				
EITHER				
B	<input type="checkbox"/>	SEIFSA Index based CPA	Monthly / Quarterly	<i>Schedule F.1 (B)</i>
OR				
C	<input type="checkbox"/>	Pricelist / Quotation Based CPA	Ad-Hoc	<i>Schedule F.1 (C)</i>
OR				
D	<input checked="" type="checkbox"/>	STATS SA CPI Index Based CPA	Annually	<i>Schedule F.1 (D)</i>
OR/AND				
E	<input type="checkbox"/>	Sectorial Determination 1:Contract Cleaning Sector	Annually	<i>Schedule F.1 (E)</i>
OR				
E	<input type="checkbox"/>	Sectorial Determination 6: Private Security Sector	Annually	<i>Schedule F.1 (E)</i>
<u>IMPORTED GOODS AND / OR COMPONENTS (IF APPLICABLE)</u>				
F	<input type="checkbox"/>	ROE based CPA	Ad-Hoc	<i>Schedule F.1 (F)</i>
AND (IF REQUIRED), EITHER				
G	<input type="checkbox"/>	Pricelist / Quotation based CPA	Ad-Hoc / Periodic	<i>Schedule F.1 (G)</i>

OR

H

Overseas CPI / PPI index based CPA

Ad-Hoc /
Periodic

Schedule F.1 (H)

- 2.4 CPA and/or RoE provisions marked as **not applicable** is not relevant and will not apply to this tender and resulting contract.

3. CONTRACT CPA APPLICATIONS AND ADMINISTRATION

- 3.1 Any claim for variation in the contract price (either CPA or RoE adjustments) must be submitted in writing:

- i. By letter to: Director - Bulk Services, City of Cape Town,
P O Box 655, Cape Town, 8000 or
- ii. By email to: Jamaine.ruiters@capetown.gov.za

at least 14 days prior to the month upon which the adjustment would become effective in the case of prices being set in advance, and as soon as relevant indices are available and no later than 60 days after the date of delivery of goods or the completion of the project (i.e. date of issue of the Taking-Over Certificate, if applicable) in the case of adjustments being claimed retrospectively for Goods or Services. The latter case is only applicable where specifically provided for in the CPA provisions.

- 3.2 When submitting a request for CPA and/or RoE adjustment the Supplier shall indicate the Rand Value claimed for each item listed on C.4 - Price Schedule, clearly indicating the item number as per C.4 - Price Schedule. Percentage increases will not be considered. A mere notification of a request for CPA without stating the new price claimed for each item shall, for the purpose of this clause, not be regarded as a valid request.
- 3.3 The CCT reserves the right to request the Supplier to submit auditor's certificates or such other documentary proof as it may require in order to verify a claim for CPA or RoE adjustments. Price adjustments will not be processed until such time as the Supplier submits such auditor's certificates or other documentary proof to the CCT. Should the Supplier fail to submit the auditor's certificates or other documentary proof to the CCT within 30 days from the written request, it shall be presumed that the Supplier has abandoned his request.
- 3.4 The CCT reserves the right to withhold payment of any claim for adjustment while only provisional figures are available and until such time as the final (revised) figures are issued by the relevant authority.
- 3.5 The CCT will confirm in writing once processing of the CPA or RoE adjustments have been completed including the effective date of the adjustments.
- 3.6 Where pricelist-based and other non-index based CPA requests are investigated and found to be not reasonable and market related, the CCT reserves the right to reject such requests. Where disputes arise with respect to such rejected requests the CCT reserves the right to procure the Goods from other available Suppliers until such time as the dispute is resolved.
- 3.7 Unless indicated otherwise in the relevant schedule below, all Purchase Orders issued on or after the effective date of the adjustment shall be issued at, and the Goods or Services supplied, invoiced and paid for at the adjusted prices. The relevant adjustment will not be applied to Purchase Orders issued prior to the effective date.

F.1 (C) LOCAL SOUTH AFRICAN CONTENT - SUPPLIER/ MANUFACTURER PRICE LIST/QUOTATIONS

1. Tenderers /Suppliers that are not the manufacturer or original supplier of the tendered goods and whose tender prices are based on the price list/quotation of another company (manufacturer or other supplier) may apply Supplier / Manufacturer Pricelist / Quotation based CPA.
2. In such cases the Tenderer is required to submit with his tender a copy of the original Supplier / Manufacturer Pricelist / Quotation upon which his tender prices are based. Such pricelist / Quotation is required to be on the Letterhead of the Supplier / Manufacture, is to be dated, referenced and signed, and is to provide clear reference to the tender number and is required to clearly reference each item quoted to the respective Tender Item Number indicated in C.4 Price Schedule.
3. The tenderer shall further confirm the Manufacturer / supplier, Quotation date and reference number and applicable tender Items by completing Table F.1(C).1 below.

Table F.1(C).1: Price Schedule information for Manufacturers/Suppliers Price List(s)/Quotation

Manufacturer/ Supplier Name	Price List Information		
	Price List/Quotation Date.	Price List/Quotation Reference Number	Pricelist applicable to Items as per C.4 Price Schedule

4. During the contract period, the Tenderer (now Supplier) must submit the request for price adjustment based on increases in pricelists of manufacturers/suppliers prior to the effective date of the increase in the pricelist.
5. The effective date of any price adjustment granted will be the first day of the month following the month during which the fully substantiated application for contract price adjustment is submitted or, by agreement between the Tenderer/Supplier and the CCT, a subsequent date on which the price adjustment will become effective.
6. In instances where the Supplier's price adjustment claimed is less than entitled, the lesser price will be accepted.
7. Purchase orders placed prior to the effective date of any price increase shall be placed at the previously agreed price, not the claimed adjusted price.
8. Only the difference in source supplier / manufacturer pricelist (actual cost, not percentage) may be adjusted and under no circumstances may the Tenderer/Supplier increase their profit margin.
9. The Tenderer/Supplier shall, when submitting claims for contract price adjustment, submit all of the documentation indicated below a minimum of two weeks prior to the effective date of the contract price adjustment:
 - a) Copies of price lists upon which original tender prices were based (refer to clause 2, Table F.1(C).1 above) clearly indicating the item(s) according to C.4 Price Schedule.
 - b) The new price list (*from the same Supplier / Manufacturer as originally tendered*) on the relevant manufacturer/suppliers letterhead (with pamphlets, brochures and e-mail communication) clearly indicating the item(s) according to C.4 Price Schedule.

- c) Detailed calculations indicating how the “adjusted” price was calculated. The calculations must be submitted in Excel, together with a signed, “PDF” version of the Excel spreadsheet. The example below – Table F.1(C).2, is what is required.
- d) A covering letter on the Supplier’s letterhead requesting the CPA with the effective date of the claim.
10. The CCT will consider the request and either refer the request back for correction or additional information or approve the request.
11. The CCT will assess such pricelist based CPA claims against market pricing and indices and other input pricing indicators and will only approve such claims that are confirmed to be reasonable and market related with reference to the source pricing information provided with the tender and with the CPA application
12. Approval of the CPA request including confirmation of the effective date, will be communicated to the Supplier in writing together with a list of the approved adjusted rates. The effective date will be as per clause 3 above.
13. The successful Tenderer/Supplier shall immediately upon notification of the commencement date of contract submit written application for approval of any adjusted unit prices for the Goods that may have been notified by the Supplier / Manufacturer of the Goods, together with the required supporting documentation. This application will be assessed in accordance with the process laid out above in order to determine approved contract prices at the commencement of the contract.
14. Failure to submit such application within two working weeks of commencement of contract shall result in the tendered unit prices being applied for initial orders placed following commencement of the contract.
15. In the event of a Supplier changing their Supplier / Manufacturer during the tenure of the contract, no request for price variations will be considered unless the Supplier has obtained prior approval from the City for the change of Supplier / Manufacturer. Such approval shall include technical approval by the Engineer of the goods supplied by the replacement Supplier / Manufacturer. Technical approval by the Engineer shall be a prerequisite for any change of Supplier / Manufacturer.

Table F.1(C).2 – Pro Forma Table for Adjustments in price where the Supplier is not the Manufacturer)

C.4 Price Schedule Item No.	Original Tender Price	Previous and New Price List Information					New Contract Price (Excl. VAT)
		Manufacturer/ Supplier	Material no.	Price as per previous Manufacturer/ Supplier Price List (Excl. Vat) Price List Date: _____	Price as per new Supplier/ Manufacturer Price List (Excl. Vat) Price List Date: _____	Difference between the previous and new manufacturer Price list (C)-(B)	
	(A)			(B)	(C)	(D)	(A)+(D)

**When submitting the first request for price adjustment, use the tender price as per C.4 Price Schedule.*

F.1 (D) LOCAL SOUTH AFRICAN CONTENT - STATS SA CONSUMER PRICE INDEX

1. Applicable where the Tenderer/Suppliers has indicated their tendered prices are subject to adjustment based on changes in the Statistics South Africa (STATS SA) Consumer Price Indices.
2. A minimum of 10% of the tender price as per C.4 Pricing Schedule shall be fixed and free of variation for the duration of the contract.
3. A total of 90% of the tender price as per C.4 Pricing Schedule shall be adjusted annually in accordance with clause 5 below.
4. The Contract Price(s) shall remain FIRM for the first 12 calendar months from date of Commencement Date of Contract and Suppliers are not permitted to requests CPA during this period.
5. The Contract Price(s) will thereafter be subject to adjustment annually based on the average percentage of change over 12 months as published by STATS SA: Consumer Price Index (P0141–Table B2 – CPI headline year-on-year rates) as follows:
 - 5.1 CPA applicable from the start of the 13th month to the end of the 24th month calculated as follows:
 - a) The base month for the price adjustment being three (3) calendar months prior to Commencement Date of Contract; and
 - b) The end month shall be three (3) calendar months prior to the 12th month.
 - 5.2 CPA applicable from the start of the 25th month to end of the 36th month calculated as follows:
 - a) The base month for the price adjustment shall be three (3) calendar months prior to the 13th month; and
 - b) The end month shall be three (3) calendar months prior to 24th month.
 - 5.3 The average CPI percentage will be calculated using the base month to the end month (both included) divided by the number of months. (12 months totalled/12 to achieve the average CPI)
6. 6 Subject to prior approval by the CCT delegated authority, in the event of any extension of the contract period, the CPA applicable beyond month 36th of the contract will follow the same principle in determining the base month (i.e. 3 calendar months prior to 25th month) and end date (3 calendar months prior to 36th month) as outlined above.

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
- 1.2 **To be completed by the organ of state**
[Delete whichever is not applicable for this tender]
 The applicable preference point system for this tender is the 80/20 preference point system.
- 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**POINTS AWARDED FOR PRICE**

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

80/20

Or

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 (80/20 system)	Number of points claimed (80/20 system)
Gender	5	
Race	5	
Disability	3	
Promotion of Micro and Small Enterprises	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.

<i>Signature of Tenderer</i>	<i>Date</i>	<i>Name and Surname</i>	<i>Address</i>

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:
 - 1.3 persons in the service of the state¹, or
 - 1.4 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
 - 1.5 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
 - 1.6 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:
 - 1.6.1 the CCT employee left the CCT's employment voluntarily, during the previous twelve (12) months;
 - 1.7 a person who was a CCT employee, or an entity that employs a CCT employee, if
 - 1.7.1 the CCT employee left the CCT's employment whilst under investigation for alleged misconduct, or
 - 1.7.2 was facing disciplinary action or potential disciplinary action by the CCT, or
 - 1.7.3 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:

Date

On behalf of the tenderer (duly authorised)

'MSCM 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	<p>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?</p> <p>(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).</p> <p>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.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2.1.1	If so, furnish particulars:		
2.2	<p>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?</p> <p>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.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2.2.1	If so, furnish particulars:		
2.3	<p>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?</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
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 <input type="checkbox"/>	No <input type="checkbox"/>
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 <input type="checkbox"/>	No <input type="checkbox"/>
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 **296S/2024/25** and tender description: **Maintenance and Administration (SCADA, Database Management System) and Service (Instrumentation & Telemetry Equipment) of the Catchment, Stormwater & River Management** 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 including third party quotations for all items under Section C – INFRASTRUCTURE TECHNICAL SPECIFICATIONS items of the pricing schedule

 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:

Title	Required Experience	Educational Requirements
Project Manager	between 5-8 years relevant and related experience.	Minimum NQF 7 Qualification in Electrical Engineering or Computer Science or Mechatronics Engineering or Information Systems & Technology
Electrical Light Current Engineer/ Electronic Engineer	between 5-8 years relevant and related experience.	Minimum NQF 7 Qualification in Electrical Engineering or Computer Science or Mechatronics Engineering or Information Systems & Technology
Database Administrator	Experience in database administration with 3- 5 years or more.	Minimum NQF 6 Qualification in Information Systems.
Instrumentation Technician	3-5 years or more relevant and related experience	Minimum NQF 6 Qualification in Light Current Electrical Engineering & Instrumentation or Information Systems & Technology
Engineering Artisan	3-5 years relevant and related experience.	Minimum Qualification of an intrustry trade certificate in Light Current Electrical Engineering with 5 years or more relevant and related experience
Project Administrator	3-5 years relevant and related experience.	Minimum Qualification NQF 5 Qualification

Schedule F.13.A: Track Record of Service Provider/Tenderer

The tenderer **shall insert** in the spaces below list of successful completed projects awarded to him and those currently being undertaken **(The tenderer can add additional files as evidence if so required)**

Item	Project Description	Client Details	Start Date	End Date	Project Value
A.	Maintenance & Administration of SCADA Systems				
1.					
2.					
3.					
4.					
5.					
6.					
B.	Maintenance & Administration of Database Management Systems & Telemetry Systems				
1.					
2.					
3.					
4.					
5.					
6.					
C.	The Repairs, Maintenance & Installation of Measuring Instrumentation & Telemetry Systems				
1.					
2.					
3.					
4.					
5.					
6.					

Attach additional pages if more space is required and ensure supporting evidence match the respective sections detailed in the above schedule

Schedule F.13.B: Track Record of Service Provider/Tenderer(continued)

The tenderer **shall insert** in the spaces below list of successful completed projects awarded to him and those currently being undertaken

Item	Description		Date of Issue	Validity Period	Certificate Number
A.	Proof of Systems & Database Certification				
1.					
2.					
3.					
4.					
5.					
6.					
B.	Project Management & Administration (sample project/works plans, schedules, and documentation outlining the company's project management methodologies, demonstrating their approach to planning, organizing, and executing projects)				
		Document	Type	Description	
1.	<i>Example</i>	<i>Project/Works plans</i>	<i>Gantt Chart, Maintenance Plan, etc...</i>	<i>In a maintenance work setting, project/works plans encompass tools like Gantt Charts or other software tools, aiding in visualizing tasks and timelines. Additionally, the Maintenance Plan outlines strategies for upkeep, including preventive schedules and response protocols, ensuring smooth operations. These tools and documents help maintenance teams effectively plan, schedule, and execute their work, ensuring that equipment and facilities remain operational and in good condition. Please provide examples of these currently used in the execution of the companies work duties for clients.</i>	
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11					
12					

Schedule F.13.C: Key Personnel - Qualifications & Experience

The Tenderers are required to complete the below schedule in full with the qualifications and experience of key personnel who have conducted work in a similar nature to this tender. **Please include copies of qualifications (Certificate & Transcript detailing the relevant module completed) and attached Curriculum Vitae in the document.**

Position.	Name & Surname	Qualification <i>Example: B-Tech or BSc</i>	Qualification Type <i>Example: Engineering or Information Technology</i>	Years' of Relevant Experience
<u>Project Manager:</u>				
<u>Engineer:</u>				
<u>Technician:</u>				
<u>Artisan:</u>				
<u>Project Administrator:</u>				

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	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:

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PROFIT CENTRE:

1	3	0	5	0	0	0	0	1
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NAME/COMPANY NAME:

AMOUNT:

						R	3	0	0	-	0	0
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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

CIVIC CENTRE IZIKO LOLUNGU BURGERSENTRUM
12 HERTZOG BOULEVARD CAPE TOWN 8001 P.O. BOX 298 CAPE TOWN 8000
www.capetown.gov.za


 Making progress possible. Together.

ANNEXURE G: MONITORING STATION LIST AS AMENDED

SCADA ST ID	CODE NAME	SITE NAME - LOCATION / ADDRESS
	Base03	CSRM - PRIMARY, 3rd Floor, Water & Sanitation Head Office, Bellville
	Base02	CSRM : STAND-BY, Goodwood Disaster Center
1.0	Diep01aR	Rietvlei, Milnerton Dr, Milnerton, Blaauwberg
2.0	Diep05cR	Wynberg Reservoir, Wynberg Park, Trovato Road, Wynberg
3.0	Disa09bR/S	Longkloof Weir, Hout Bay
4.0	Eers02cR/S	Jonkershoek Dam, Jonkershoek Road, Klienplasie, Stellenbosch
5.0	Elsi03cR	Tygerberg Reservoir, Java Oos Straat, Avondale
6.0	Elsi03xS	Cora Avenue, Howard Center, Pinelands
7.0	Kuil02aR/S	Macassar Bridge, Macassar Road, Macassar
8.0	Lies03gS	Paradise Road, c/o Rhodes Drive & Paradise Road, Newlands
9.0	Lour06bR/S	Vergelegen Farm, Vergelegen Road, Somerset West - Entrance
10.0	Lour06cR	Lourensford Farm, Lourensford Road, Somerset West - Waterval
11.0	Lour06dR	Vergelegen Farm, Vergelegen Road, Somerset West - Langklippie
12.0	Lour06eR	Lourensford Farm, Lourensford Road, Somerset West - Blikberg
13.0	Vyge03gR	Athlone Treatment Works, Jan Smuts Ave, Athlone - Control Room
14.0	Vyge03jS	Athlone Treatment Works, Jan Smuts Ave, Athlone
15.0	Zvou05fS	Zandvlei Outlet, Thessen Bridge, Axminister Road, Muizenberg
16.0	Blac03xS	Sybrand Park, Next to Canal, downstream of Klipfontein Rd, Sybrand Park
17.0	Diep05bR	Southfield Depot, Alduwa Road, Southfield
18.0	Diep05cS	Doordrift Road, Constantia
19.0	Disa09aR/S	Princess Road, Hout Bay
20.0	Elsi03bR	Dagbreek Reservoir, Paardeberg Road, Durbanville Hills
21.0	Elsi03dR	Goodwood Bowling Greens, c/o Milton & Alice Rds Goodwood
22.0	Elsi03eR	Pinelands Roads Depot, Pinelands Maintenance Yard, Princess Path, Pinelands
23.0	Lies03hS	Durban Road, Next to Liesbeeck Parkway, Mowbray
24.0	Lotu04cS	Sixth Ave, Lotus River
25.0	Lour06aS	Historic Bridge, Main Road, Kalamuda, Somerset West
26.0	Norh08bR	Noordhoek Forestry Station, Avondrust road, Forestry Station, Noordhoek
27.0	SPen13aR	Brooklyn Water Treatment Plant, Red Hill, Simons Town
28.0	Wild08aR	Wildevolevlei WWTW, Kommetjie Main Road, Kommetjie
29.0	Khay01R	Khayelitsha Roads Depot, Goven Mbeki Roads, Khayelitsha

ANNEXURE G: MONITORING STATION LIST AS AMENDED(Cont..)

SCADA ST ID	CODE NAME	SITE NAME - LOCATION / ADDRESS
30.0	Kraa01R	Kraaifontein Roads Depot, First Ave, Kraaifontein
31.0	City11bR	Molteno Dam , Molteno Road, Oranjezicht
32.0	Lour06aS	Historic Bridge, Main Road, Kalamuda, Somerset West (No #2)
33.0	Diep01aR	Potsdam WWTW, Koeberg Road, Milnerton
34.0	Diep05dR	Cecilia Forest, Rhodes Ave, Klassenbosch
35.0	Diep05eR	Table Mountain, At Constantia Nek Circle take the gravel road to the top
36.0	Eers02aR/S	Klein Welmoed Farm, Off Baden Powell Road (R310), Stellenbosch
37.0	Eers02bS	Libertas Farm, Van Rheede Road, Stellenbosch, Stellenbosch
38.0	Els03aR	Maastricht Farm, Durbanville Road, Durbanville
39.0	Jakk03mS	Jakkelsvlei N2, Next to Settlers Way, few kms past the old Athlone Power Station
40.0	Keys05fR	Tokia Forest, At the SAFCOL office at Tokai Forest
41.0	Kuil02bR/S	Waldermar Road, Oakdene, Kuils River
42.0	Lies03fR	Newlands Reservoir, Rhodes Drive, Newlands
43.0	Lotu04aR	Hanover Park Cleansing Depot, Downberg Road, Hanover Park
44.0	Lpv05aS	Princessvlei, Consort Road, Retreat
45.0	Atla17aR	Atlantis WWTW, Wesfleur Atlantis
46.0	Blom03mS	College Road Pumpstation, College Road, Belgravia
47.0	Diep05aR	Kendal Water Works Depot (SPM), Kendal Road, Meadowridge
48.0	Keys05dR/S	M3 Freeway, Next to the Simon Van Der Stel Freeway
49.0	Klei02eS	Kleinvlei Canal, Faure Kleinvlei Canal downstream of Old Faure road
50.0	Kuil02eR	Stellenbosch Fire Station, c/o Cluver & Helshoogte, Stellenbosch
51.0	Lotu04aS	Springfield Road, Ottery
52.0	MPla12aR	Mitchells Plain Roads Depot
53.0	MPla12aS	Mitchells Plain SW Outlet, Sewage Pump Station, Alps Circle, Tafelsig, MP
54.0	MPla12bR	Cape Flats Treatment Plant, off Strandfontein Road
55.0	Wynb05bS	Maynardville Park, c/o Wolfe & Church Street, Wynberg
56.0	Els03eS	Durbanville Quarry, Carl Cronje Drive, Durbanville
57.0	Salt03iS	Glamis Close Pump Station, Next to M5 Black River Parkway, Maitland
58.0	Zeek04dS	Zeekoevlei Yacht Club, Peninsula Road, Zeekoevlei
59.0	Zvin05eS	Zandvlei inlet, Under the railway bridge at the inlet to the vlei
60.0	Stra01R	Strand Roads Depot, Power Ave, Strand
61.0	Diep01aS	Rietvlei, Upstream of R27 bridge over Diepriver, Milnerton, Blaauwberg
	City11cR	Devil's Peak, High Cape

