TENDER NO. 194C/2020/21	CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD

FRAMEWORK CONTRACT DOCUMENT

FOR THE

TERM TENDER FOR THE PROVISION OF MULTIDISCIPLINARY PROFESSIONAL SERVICES FOR THE WATER AND SANITATION DEPARTMENT OF THE CITY OF CAPE TOWN

CONCLUDED BETWEEN

CITY OF CAPE TOWN

(BULK WATER BRANCH)

AND

ZUTARI (PTY) LTD

"WINNER"

REGISTRATION NUMBER: [redacted]

PREAMBLE

WHEREAS Term Tender 194C/2020/21 was awarded to namely Zutari (Pty) Ltd, in line with resolution SCMB 50/05/21 dated 17 May 2021 for the provision of multidisciplinary professional services for the Water and Sanitation Department of the City of Cape Town, from the Start Date for a period of 60 months.

AND WHEREAS it is recorded that this Contract will be governed by the provisions of Standard Professional Services Contract (July 2009) (Edition 3 of CIDB document 1015), as published by the Construction Industry Development Board ("GCC"), read with the Contract Specific Data ("CSD") annexed hereto marked "PART C1.2: CONTRACT DATA".

NOW THEREFORE THE PARTIES AGREE AS FOLLOWS:

1. **PARTIES**

The Parties to this Contract are:

1.1. 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 Employer"), herein represented by the Director: Bulk Services duly authorised hereto;

1.2. Zutari (Pty) Ltd, a private company registered in terms of the laws of the Republic of South Africa with registration no: [redacted] with its principal place of business situated at [redacted] (the "Service Provider"), herein represented by its duly authorised representative, [redacted] in his capacity as Technical Director;

hereinafter jointly referred to as each a "Parties" and in singular, a "Party".

2. **INTERPRETATION**

2.1. In the event of any conflict between the provisions of this Contract, the GCC and any Part attached hereto, or any other document incorporated by reference to this Contract, save to the extent expressly stated to the contrary, such conflict will be resolved by giving precedence to such different parts of this Contract in the following order of precedence:

2.1.1. first, the terms and conditions of the CSD;

2.1.2. second, the terms and conditions of the GCC;

2.1.3. third, Parts and annexures to this Contract; and

2.1.4. fourth, any other documents incorporated by reference.

2.2. The provisions of this Contract supersede and replace the provisions of any previous agreement entered into between the Parties relating to the same subject matter.

[redacted] [redacted]

3. APPOINTMENT AND DURATION

3.1. The Employer hereby appoints the Service Provider to perform the Scope of Work for the Employer from the Start Date.

3.2. Unless terminated earlier in accordance with the provisions as set out in the GCC or any other provision in terms of this Contract, this Contract shall be for a period of 60-months from the Start Date.

4. MUTUAL GOOD FAITH / CO-OPERATION

4.1. The Parties represent and undertake to do all such things, perform all such acts and take all steps to procure the doing of all such things and the performance of all such acts, as may be necessary or incidental to give effect to the execution of this Contract.

4.2. The Parties shall at all times during the continuance of this Contract observe the principles of good faith towards one another in the performance of their obligations in terms of this Contract.

5. OBLIGATIONS OF THE EMPLOYER

5.1. The Employer undertakes to perform its obligations in accordance with the Contract, including but not limited to the Scope of Work (PART C3: SCOPE OF WORK), subject to the satisfactory fulfilment of the obligations by the Service Provider as set out in this Contract.

5.2. The Employer shall monitor and evaluate the Contractor's performance in respect of the Scope of Work.

6. OBLIGATIONS OF THE SERVICE PROVIDER

6.1. The Service Provider hereby agrees and undertakes to perform the Services to the Employer as set out in Scope of Work (PART C3: SCOPE OF WORK).

6.2. The Service provider will perform the Works as expeditiously as possible and furthermore agrees and undertakes to perform the services in accordance with the operational requirements of the Employer.

6.3. The Service Provider will ensure that the Works will be of a satisfactory quality and fit for purpose, having due regard to the assumptions that the Service Provider can be reasonably expected to make in accordance with sound engineering and/or professional practice and exercising the level of skill, care and attention required of the Service Provider.

6.4. The Service Provider shall, ensure that its employees, agents, representatives, sub-contractors and suppliers comply with this Contract and all applicable Laws in the execution of the Works.

6.5. The Service Provider will not conduct any activity of whatsoever nature which may be detrimental to the Employer's reputation and goodwill.

7. PRICING DATA

7.1. The Contract Price for the Works shall be as set out in the Pricing Data annexed marked "PART C2: PRICING DATA".

7.2. The Service Provider shall not be entitled to any other consideration for the rendering of the Services other than as provided for in this Contract.

[redacted] [redacted] [redacted]

CITY OF CAPE TOWN

WATER AND SANITATION

CONTRACT NO. 194C/2020/21

TERM TENDER FOR THE PROVISION OF MULTIDISCIPLINARY PROFESSIONAL SERVICES FOR THE WATER AND SANITATION DEPARTMENT OF THE CITY OF CAPE TOWN

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[redacted]

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CITY OF CAPE TOWN

WATER AND SANITATION

CONTRACT NO. 194C/2020/21

TERM TENDER FOR THE PROVISION OF MULTIDISCIPLINARY PROFESSIONAL SERVICES FOR THE WATER AND SANITATION DEPARTMENT OF THE CITY OF CAPE TOWN

C1.1 Form of Offer and Acceptance – Bulk Water Branch

Offer

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

CONTRACT 194C/2020/21: TERM TENDER FOR THE PROVISION OF MULTIDISCIPLINARY PROFESSIONAL SERVICES FOR THE WATER AND SANITATION DEPARTMENT OF THE CITY OF CAPE TOWN

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

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

This is a rates based contract.

The rates as contained in Part C2.2: Schedules of Rates for the branches tendered for, shall form the tender offer. These rates shall be multiplied, as applicable, by the quantities required in respect of relevant items to develop individual Works Projects to be allocated in accordance with the procedures described in the Procedure forthe Allocation of Works Projects, Part C1.2: Contract Data in this Framework Contract document.

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

Signature(s) .....

Name(s) .....

Capacity .....

for the tenderer

(Name of organization/tenderer) .....

(Address of organization/tenderer) .....

Name and signature of witness .....

Date .....

For official use.

INITIALS OF CITY OFFICIALS AT TENDER OPENING		
1.	2.	3.

Acceptance – Bulk Water Branch

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

The terms of the contract, are contained in:

Part C1:	Agreements and contract data, (which includes this agreement)
Part C2:	Pricing data
Part C3:	Scope of work
Part C4:	Site information

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

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

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

Notwithstanding anything contained herein, this agreement comes into effect on the date the parties have signed the table below and confirms receipt from the employer of one fully completed original copy of this agreement, including the schedule of deviations (if any). The tenderer (now contractor) shall within five working days of the agreement coming into effect notify the employer in writing of any reason why he cannot accept the contents of this agreement as a complete and accurate memorandum thereof, failing which the agreement presented to the contractor shall constitute the binding contract between the parties.

The Parties	Employer	Service Provider
Business Name	City of Cape Town Metropolitan Municipality	[redacted]
Business Registration	Not applicable	[redacted]
Tax number (VAT)	4500 193 497	[redacted]
Physical Address	Civic Centre 12 Hertzog Boulevard Cape Town 8000	[redacted]
Accepted contract sum including tax	Rates based contract	
Accepted contract duration	60 months from Start Date	
Signed – who by signature hereto warrants authority	[redacted]	[redacted]
Name of signatory	[redacted]	[redacted]
Signed: Date	1 October 2021	01/10/2021
Signed: Location	Cape Town	BELLVILLE
Signed: Witness	[redacted]	[redacted]
Name of Witness	[redacted]	[redacted]

Start Date	[redacted]
Completion Date	[redacted]

C1.2 Contract Data – Bulk Water Branch

Data provided by the Service Provider

The name of the Service Provider is ..

The address of the Service Provider is

Physical Address:

Postal Address:

Telephone:

Fax:

email:

C1.2 Contract Data

Part 1: Contract Data provided by the Employer

GENERAL CONDITIONS OF CONTRACT

The General Conditions of Contract are the **Standard Professional Services Contract (July 2009) (Edition 3 of CIDB document 1015)**, as published by the Construction Industry Development Board.

Copies of these General Conditions of Contract may be obtained from the Construction Industry Development Board's website www.cidb.org.za. Copies of the General Conditions of Contract are also available for inspection and scrutiny at the offices of the Employer.

The pro-formas attached to the Standard Professional Services Contract (July 2009) on pages 17 to 24 shall not apply to this Contract and shall be replaced with the documentation bound into this Contract Document.

The General Conditions of Contract make several references to the Contract Data for specific data, which together with the standard contract collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the General Conditions of Contract.

The General Conditions of Contract shall be read in conjunction with the variations, amendments and additions set out in the Contract Specific Data below. Each item of data given below is cross-referenced to the clause in the General Conditions of Contract to which it mainly applies.

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

i. the Form of Offer and Acceptance,
ii. the Contract Specific Data within the Contract Data,
iii. the General Conditions of Contract
iv. the Drawings
v. the Scope of Work
vi. the Pricing Data, and,
vii. The Conditions of Tender, the Tender Data and Tender Schedules

If an ambiguity or discrepancy is found in the documents, the Employer shall issue any necessary clarification or instruction.

CONTRACT SPECIFIC DATA

The following contract specific data is applicable to this Contract:

Clause 1:
Add the following to the definition of Employer:
The Employer is the CITY OF CAPE TOWN.

Add the following new definitions:
"Framework Contract" means the Contract as defined in Clause 1 of the Standard Professional Services Contract (July 2009) (Edition 3 of CIDB document 1015).

"Framework Contract Period" means the period 60 months from the Start Date.

"Framework Contract Manager" (for each branch)" means the person named as the Framework Contract Manager in the Contract Data or any other person appointed from time to time by the Employer and of whom the is notified, in writing, to act as Framework Contract Manager for the particular branch for the purposes of the Contract as substitute for the Framework Contract Manager so named.

The function of the Framework Contract Manager is to administer the Framework Contract, and such functions as would normally fall to the Employer's Agent/Engineer/Principal Agent in accordance with the provisions of the Framework Contract, shall be undertaken by the Framework Contract Manager in this regard.

The Framework Contract Manager shall be an employee of the Employer, authorised as its representative to administer the Framework Contract, and all references to Employer's Agent/Engineer/Principal Agent in the Contract shall apply to the Framework Contract Manager in respect of his/her administering the Framework Contract.

The Framework Contract Manager is:

Branch:	**Bulk Water**
Name:	[redacted]
Postal address:	Water and Sanitation Department Private Bag X98 Bellville, 7535
Cellphone No.:	
E-mail:	[redacted]

Add the following to the definition of ***Key Persons:***
Key personnel shall have the same meaning as Key Persons.

*Replace the term **Period of Performance:***
Replace the term Period of Performance with the term **Framework Contract Period** (as defined above)

*Add the following to the definition of **Project:***
The project is the **TERM TENDER FOR THE PROVISION OF MULTIDISCIPLINARY PROFESSIONAL SERVICES FOR THE WATER AND SANITATION DEPARTMENT OF THE CITY OF CAPE TOWN**

Add the following new definitions:

"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

"Purchase Order" means the official purchase order created and released on the City of Cape Town's SAP System.

"Schedules of Rates" means, in this Framework Contract document, the document so designated in the Pricing Data, and which will be used to compile a quotation for Professional Services to be rendered for each Works Project.

"Standby Service Provider" means either "Standby Service Provider 1" or "Standby Service Provider 2"

"Standby Service Provider 1" means the highest ranked eligible (subject to Clause C.1.6.1 (b) in the Tender Data) Service Provider for a branch appointed by the Employer under the Framework Contract to be available to execute Works Projects, for the duration of the Framework Contract Period and then only if the "Winner" declines/refuses a Works Project or unless the Employer considers the "Winner" not to be performing on existing Works Projects. (refer to clause 5.1.3 in C 1.2: Contract Data)

"Standby Service Provider 2" means the highest ranked eligible (subject to Clause C.1.6.1 (b) in the Tender Data) Service Provider for a branch appointed by the Employer under the Framework Contract to be available to execute Works Projects, for the duration of the Framework Contract Period and then only if the "Winner" and "Standby Service Provider 1" declines/refuses a Works Project or unless the Employer considers the "Winner" and "Standby Service Provider 1" not to be performing on existing Works Projects. (refer to clause 5.1.3 in C 1.2: Contract Data)

"Winner" means the highest ranked eligible (subject to Clause C.1.6.1 (b) in the Tender Data) Service Provider appointed by the Employer under the Framework Contract who will be allocated work as and when a Works Project arises for the duration of the Framework Contract Period.

"Works Project" means a part of the Works to be performed (task) by a Service Provider under the Contract, the specific terms, conditions and scope of the Works Project contract being specified in a Works Project Contract Brief.

Add the following to the definition of ***Service Provider:***

The contracting party may be a consortium/joint venture contracting as a formally constituted Joint Venture Partnership, in which all parties are jointly and severally liable. In terms of this definition, the words consortium and joint venture shall be regarded as synonymous.

Add the following to the definition of ***Start Date:***
The Start Date is the date when the Service Provider confirms receipt of one fully completed original copy of this document, including the acceptance part of the form of offer and acceptance, and schedule of deviations (if any).

Add the following definition:

Clause 3.1
Delete the heading and replace with ***"Governing law and policies"***

Add the following at the end of clause 3.1

Supply Chain Management Policy

a) The parties agree that this contract shall also be subject to the Employer's Supply Chain Management Policy ('SCM Policy') that was applicable on the date the bid was advertised, **save that if the Employer 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 that contract.** Please refer to this document on the Employer's website.

b) Abuse of the supply chain management system is not permitted and may result in cancellation of the contract, restriction of the supplier, and/or the exercise by the Employer of any other remedies available to it as described in the SCM Policy.

Clause 3.2
Replace the words "time for completion" with "Framework Contract Period".

Clause 3.4 and Clause 4.3.2:
Add the following:
The authorised and designated representatives of the Employer are the Directors of Bulk Services, Retail Services and Technical Services of the Water and Sanitation Department.

The address for receipt of communications is:

Branch:	Bulk Water
Department	Bulk Services
Email	michael.killick@capetown.gov.za
Postal Address:	Private Bag X98 BELLVILLE 7535
Physical Address:	Bellville Water and Sanitation Head Office Corner of Voortrekker Road and Mike Pienaar Boulevard BELLVILLE 7535

Clause 3.4.1:
Add the following to the first sentence:
... , and may be given as set out hereunder and shall be deemed to have been received when:
a) hand delivered - on the working day of delivery
b) sent by registered mail - five (5) working days after mailing
c) sent by email or telefax - one (1) working day after transmission

Clause 3.5:
Add the following:
The location for the performance of the Project will be the **Local Office** of the Service Provider, together with the sites of the proposed projects. The local office must be in the Cape Metropolitan area or within a radius of 60 km from the Water and Sanitation Head Office, Bellville. If the Service Provider does not have a local office, they will be required to establish a local office within 2 (two) months of the Start Date. All communication with the Employer will flow through this local office. This local office may belong to the Service Provider or any of his Joint Venture partners or sub-consultants.

Key personnel will be expected to work out of the local office for the full duration of the Framework Contract as the exigencies of this contract require.

Clause 3.8.1:
Add the following new paragraph:
The Employer reserves the right to reduce, increase or cancel individual Works Projects. This shall be done without adjustment to the agreed rates, sums or fees and without payment of any penalty or surcharge in this regard.

Clause 3.9.1:
Add the following after f):

g) a change in the cost of the construction works applicable to the services

Clause 3.9.2:
Replace the words "6 weeks" with "21 days".

Add the following at the end of the clause:
Should any of the events described in clause 3.9.1 occur, the professional fees and disbursement may be adjusted in a fair and reasonable manner. The Service Provider shall, however, not be entitled to an adjustment to the extent that the variation is due to the negligence or default of the Service Provider. The Service Provider is required to provide all necessary substantiating documents required by the employer to evaluate the request for variation..

Clause 3.9.3:
Delete the clause and replace with the following:
The Employer shall assess the changes to the estimated fee (per Works Project) proposed by the Service Provider on any fair and reasonable basis. The Employer may assess these changes on the effect of the event on the Services based on the time-based fees as stated in the Pricing Data.

Clause 3.12
Delete the heading and replace with "Penalties and fines"

Clause 3.12.1
Add the following:
Failure to establish a Local Office within 2 (two) months of the Contract Start Date (refer to clause 3.5 of the Contract Data above):

Failure to establish a Local Office within 2 (two) months of the Contract Start Date will result in the implementation of penalties.

- The penalty amount for every day for which the Local Office is not established and functional is R5 000 with no limit.
- The minimum 'functional' requirement is for the Key Personnel (required for the Works Projects) to be established together with the necessary physical resources.
- A Breach Notice will be issued if the Local Office is not established by the due date with the requirement that the matter be remedied within 14 days or such time as agreed to by the Employer.
- No further Works Project Briefs will be issued if the Local Office is not established and functional within 2 (two) months of the Contract Start Date.
- Should the Employer consider the local office not to be functional at any stage during the course of the contract, the Employer will notify the Service Provider accordingly and issue a Breach Notice.
- If the matter is not resolved within 14 days (or such time as agreed to by the Employer) of the issuing of the Breach Notice, the Employer may terminate the contract in terms of Clause 8.4.1 (c) of the Contract Data.

Failure to meet deliverable or milestone date (as defined in the agreed Works Project proposal):
Failure to adhere to timeframes without valid agreed upon reasons will result in the implementation of penalties.

- The penalty amount per day for each deliverable/milestone is R2 000 (to a maximum of 42 days - R84 000).
- A deliverable/milestone that is more than 14 days late will result in the issuing of a Breach Notice which will require the matter to be remedied within 14 days or such time as agreed to by the Employer.
- If the matter is not resolved within 14 days (or such time as agreed to by the Employer) of the issuing of the Breach Notice, the Employer may terminate the contract in terms of Clause 8.4.1 (c) of the Contract Data.

Add the following after 3.12.2

Clause 3.12.3
The Employer may impose the following additional penalties or fines:

a) Penalties for breach of conditions of granting preferences in terms of the Preference Schedule.
b) Penalties for failure to meet targeted labour and local enterprises contract participation goals (if applicable)
c) Any other fines or penalties levied in accordance with any of the specifications.

[redacted]

Clause 3.15.1:
Add the following:
The programme shall be submitted within 14 days of the Start Date.

Clause 3.16.2:
Replace the words "in which the start date falls" with "prior to the closing date of the tender".

Add the following:
The indices are those contained in Table A of the P0141 Consumer Price Index for the CPI for services published by Statistics South Africa.

Clause 4.7:
Delete the clause and replace with:
The Employer shall pay the Service Provider in accordance with the provisions of the Contract.

Add the following clause after Clause 4.7:

Clause 4.8 Procedure for the allocation of Works Projects
The Employer will provide the Service Provider with a scope/project brief and any specific terms and conditions (such as time frames/milestones) for a particular Works Project. The Employer reserves the right to plan and effect individual Works Projects at its sole discretion and subject to the availability of funding. The Employer also reserves the right to increase or decrease the scope of work at its sole discretion.

If the "Winner" declines the Works Project due to lack of capacity at that time, the Employer reserves the right to offer the Works Project to the "Standby Service Provider 1".

If the "Standby Service Provider 1" declines the Works Project due to lack of capacity at that time, the Employer reserves the right to offer the Works Project to the "Standby Service Provider 2".

If, in the opinion of the Employer, the "Winner" is:

(a) not performing on an existing Works Projects; or
(b) is lacking capacity or the necessary skills for a particular Works Project; or
(c) if the proposal on a Works Project is unsatisfactory (after consultations), then

the Employer reserves the right to offer the Works Project to the "Standby Service Provider 1".

If, in the opinion of the Employer, the "Standby Service Provider 1" is:

(a) not performing on an existing Works Projects; or
(b) is lacking capacity or the necessary skills for a particular Works Project; or
(c) if the proposal on a Works Project is unsatisfactory (after consultations), then

the Employer reserves the right to offer the Works Project to the "Standby Service Provider 2".

The procedure for the allocation of Works Projects is described in detail at the end of this Part 1: Contract Data provided by the Employer.

Clause 5.1.1
Add the following

The Services to be performed will be defined in terms of the Works Projects.

The procedure for the allocation of Works Projects are described in Clause 4.8 above.

The Service Provider will respond to the Works Project Brief with a Works Project Proposal

The Employer reserves the right to reduce the scope of work of a Works Project or cancel a Works Project based on the Non-performance of the Service Provider.

Add the following after Clause 5.1.2:
Clause 5.1.3 Failure to perform (Non-performance) by the Service Provider on a Works Project would include (but not be limited to) the following:

- Repeated inadequate Works Project Proposals (including methodology, resources availability and appropriate skills, resource-based costing where applicable, programming time frames/milestones, cost proposals);
- Failure to provide adequate and appropriate resources;

- Repeated failure to adhere to the agreed programme or time frames/milestones,
- Repeated failure to submit reports, drawings or other documents by the agreed dates;
- Repeated errors or significant design or construction monitoring errors;
- Other failures or actions on the part of the Service Provider causing additional costs to the Employer or delays to the programme;
- Combinations of the above.

(a) If the "Winner" does not remedy a failure in the performance of their duties under the Works Project within fourteen (14) days of having been notified thereof, or within any further period that the Employer may subsequently approve in writing, the Employer reserves the right to:

- Reduce the scope of work of the Works Project;
- Cancel the Works Project;
- Offer the Works Project in question and/or subsequent Works Projects to the "Standby Service Provider 1".

(b) If the "Standby Service Provider 1" does not remedy a failure in the performance of their duties under the Works Project within fourteen (14) days of having been notified thereof, or within any further period that the Employer may subsequently approve in writing, the Employer reserves the right to:

- Reduce the scope of work of the Works Project;
- Cancel the Works Project;
- Offer the Works Project in question and/or subsequent Works Projects to the "Standby Service Provider 2".

Clause 5.4.1:
Add the following:
The Service Provider is required to take out and maintain, for the full duration of the performance of this contract, the following insurance cover:

a) Professional Indemnity (PI) insurance providing cover in an amount of not less than R20 000 000 in respect of each and every claim during the period of insurance. Where the entity tendering is a joint venture then the value of the PI insurance cover required may be shared between the joint venture partners in proportion to the percentage contribution of each party to the joint venture..
b) Public Liability insurance with a limit of indemnity of not less than R20 000 000 for any single claim, the number of claims to be unlimited during the contract period.
c) Insurance in terms of the provisions of the Compensation for Occupational Injuries and Diseases (COID) Act No. 130 of 1993.

The Service Provider shall ensure that any sub-contractors engaged in construction activities shall, in addition to the Public Liability and COID Insurances as described above, also take out and maintain contractors all risks insurance to the value of the work being undertaken.

Clause 5.4.2
Add the following:
Evidence of insurance or confirmation (warranty) from a reputable Insurance Broker that the required insurances are in place, shall be submitted within 14 days of the Start Date.

Add the following clause after Clause 5.4.2:

5.4.3 The Service Provider shall maintain the insurance policylies for the duration of the liability period in terms of Clause 13.4 and shall upon request by the Employe r provide periodic proof of such insurance.

Clause 5.5:
Add the following:
The Service Provider is required to obtain the Employer's prior approval in writing before taking any of the following actions:

a) Replacing any of the key and additional personnel listed at the time of tender.
b) Occupying any public land or facility for any purpose that will cause disruption and or inconvenience to the users of such land or facility in respect of any construction contract.
c) Making a material change, addition or omission from the approved designs.
d) The exercising of any discretion in terms of any terms and conditions in this contract, that results in the utilisation of the contingency allowance of a construction contract, increasing the contract value for that construction contract or awarding any additional time for that construction contract as detailed in the relevant contract conditions.
e) Permitting advance payment for items not listed in the Advance Payment Schedule.
f) Nominating the Employer's Agent/Engineer/Principal Agent or their respective representatives (as applicable) in terms of the relevant Conditions of Contract.
g) Authority of the Employer's Agent/Engineer/Principal Agent to delegate.
h) Granting permission to work during non-working times in terms of the relevant Conditions of Contract.

i) Suspend the progress of the works in terms of the relevant Conditions of Contract.
j) The issuing of an instruction to accelerate progress in terms of the relevant Conditions of Contract.
k) Approval of any other Additional and Specialist Services and their respective costs/hourly rates.

Clause 6.4:
Add the following clause after Clause 6.3:

6.4 Conflict of interest
The Service Provider shall immediately disclose any potential conflict of interest or involvement in the project other than a professional interest in terms of this Contract.

Clause 7.1.2
Add the following:
Key Persons shall be those individuals listed under "Key personnel" in Part C3.1 Scope of Work.

Clause 7.2.1:
Add the following:
The Service Provider shall provide appropriate Personnel for such time periods as required and shall enter all data pertaining to Personnel (Key personnel and additional personnel) on Schedules 11, 11A and 18, in Part T2.2: Returnable Schedules.

Clause 8.1:
Add the following:
The Service Provider is to commence the performance of the Services within 14 days of the Start Date.

Clause 8.4.1:
Delete "thirty (30)" in the second line of Clause (c) and replace with "fourteen (14)"
Delete "or" at the end of Clause 8.4.1 (d) and add the following five clauses after Clause 8.4.1(e):
f) if the Service Provider has failed to provide the required insurances within the prescribed time;
g) if the Service Provider has committed a corrupt or fraudulent act during the tender process or the execution of the Contract;
h) if the Service Provider has benefitted from an official or other role player committing any corrupt or fraudulent act during the tender process or in the execution of the Contract;
i) 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, provided the Employer follows the processes as described in its SCM Policy; or
j) The implementation of the contract may result in reputational risk or harm to the City as a result of (inter alia):
    (i) reports of poor governance and/or unethical behaviour;
    (ii) association with known family of notorious individuals;
    (iii) poor performance issues, known to the Employer;
    (iv) negative social media reports; or
    (v) adverse assurance (e.g. due diligence) report outcomes.;

Clause 8.4.3(c):
Add the following:
The period of suspension under Clause 8.5 is not to exceed 6 months.

Clause 8.4.4:
Delete the content of this clause and replace with the following:
Upon termination of this Contract pursuant to Clauses 8.4.1 or 8.4.3, the Employer shall remunerate the Service Provider in terms of the Contract for Services satisfactorily performed prior to the effective date of termination and reimburse the Service Provider without adjustment to the agreed rates, sums or fees and without payment of any penalty or surcharge, including any pro-rata payment for partially completed Services, except in the case of termination pursuant to events (c) and (d) of Clause 8.4.1.

Add the following after clause 8.4.5:
Clause 8.4.6
In addition to anything else contained in this contract, the Employer may make either of the following elections to ensure its rights are protected and any negative impact on service delivery is mitigated in instances where the Service Provider has been liquidated:
a) accept a contractor's proposal (via the trustee / liquidator) to render delivery utilising the appropriate contractual mechanisms; or
b) terminate the contract, as the liquidator proposed contractor is deemed unacceptable to the employer, at any time by giving written notice to the contractor (via the trustee / liquidator).

Clause 9:
Delete the clause and replace with the following:

9.1 The Service Provider acknowledges that it shall not acquire any right, title or interest in or to the Intellectual Property of the Employer.

9.2 The Service Provider hereby assigns to the Employer, all Intellectual Property created, developed or otherwise brought into existence by it for the purposes of the contract, unless the Parties expressly agree otherwise in writing.

9.3 The Service Provider shall, and warrants that it shall:

9.3.1 not be entitled to use the Employer's Intellectual Property for any purpose other than as contemplated in this contract;

9.3.2 not modify, add to, change or alter the Employer's Intellectual Property, or any information or data related thereto, nor may the Service Provider 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 Employer;

9.3.3 not apply for or obtain registration of any domain name, trademark or design which is similar to any Intellectual Property of the Employer;

9.3.4 comply with all reasonable directions or instructions given to it by the Employer in relation to the form and manner of use of the Employer's Intellectual Property, including without limitation, any brand guidelines which the Employer may provide to the Service Provider from time to time;

9.3.5 ensure that its employees, directors, members and contractors comply strictly with the provisions of clauses 9.3.1 to 9.3.3 above; unless the Employer expressly agrees thereto in writing after obtaining due internal authority.

9.4 The Service Provider represents and warrants to the Employer that, in providing goods, services or both, as the case may be, for the duration of the contract, it will not infringe or make unauthorised use of the Intellectual Property rights of any third party and hereby indemnifies the Employer from any claims, liability, loss, damages, costs, and expenses arising from the infringement or unauthorised use by the Service Provider of any third party's Intellectual Property rights.

9.5 In the event that the contract is cancelled, terminated, ended or is declared void, any and all of the Employer's Intellectual Property, and any and all information and data related thereto, shall be immediately handed over to the Employer by the Service Provider and no copies thereof shall be retained by the Service Provider unless the Employer expressly and in writing, after obtaining due internal authority, agrees otherwise.

9.6 Copyright of all documents prepared for the project, and the patent rights or ownership in any plant, machine, item, system or process designed or devised, shall be vested with the Employer. Where copyright is vested in the Service Provider, the Employer shall be entitled to use the documents or copy them only for the purposes for which they are intended in regard to the Project and need not obtain the Service Provider's permission to copy for such use. Where copyright is vested in the Employer, the Service Provider shall not be liable in any way for the use of any of the information other than as originally intended for the Project and the Employer hereby indemnifies the Service Provider against any claim which may be made against him by any party arising from the use of such documentation for other purposes.

9.7 The ownership of data and factual information collected by the Service Provider and paid for by the Employer shall, after payment by the Employer, lie with the Employer.

9.8 The Employer shall have no right to use any documents prepared by the Service Provider whilst the payment of any fees and expenses due to the Service Provider in terms of the Contract is overdue.

Clause 11.1:
Add the following:
A Service Provider may not sub-contract any work which he has the skill and competency to perfonn, unless he has the Employer's prior approval in writing.

Clause 12.1.2:
Add the following:
Interim settlement of disputes is to be by mediation.

Clause 12.2.1:
Add the following:
In the event that the parties fail to agree on a mediator, the mediator is nominated by the Association of Arbitrators Southern Africa.

Clause 12.2.4:
Add the following:
Final settlement is by litigation.

Clause 12.3.3:

In the event that the parties fail to agree on an adjudicator, the adjudicator is nominated by the Association of Arbitrators Southern Africa.

Clause 13.1:
Add the following clause after Clause 13.1.3:

13.1.4 The Employer and the Service Provider shall enter into an agreement to complete the Services required for the Project in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993 and the Construction Regulations, 2014 promulgated thereunder.

An agreement is included in the Contract Document (C1.3 of Contract Data) and shall be completed and submitted to the Employer together with a letter of good standing from the Compensation Commissioner (if not insured with a licenced compensation insurer) within fourteen (14) days of the Start Date. The Service Provider shall ensure that any letter of good standing shall be timeously renewed in order that it remains in full force for the duration of the Contract.

Clause 13.4:
Delete the content of this clause and replace with the following:
Notwithstanding the terms of the Prescription Act No. 68 of 1969 (as amended) or any other applicable statute of limitation neither the Employer nor the Service Provider shall be held liable for any loss or damage resulting from any occurrence unless a claim is formally made within a liability period of five years, which period shall commence on the earlier of:
(a) Final completion of the construction contract.
(b) Suspension, postponement, expiry or termination of all construction contracts.
(c) Cancellation or termination of this Framework Contract.

Clause 13.7.3:
Add the following clause after Clause 13.7.2:

13.7.3 The Service Provider hereby indemnifies the Employer against all claims by third parties which arise out of or in connection with the Services rendered under this Contract and where such claims are the consequence of breach by the Service Provider to exercise reasonable professional skill, care and diligence in the exercising of its obligations.

Clause 14.5:
Add the following new clause after Clauses 14.4:

Clause 14.5: Tax Invoices
Section 20(1) of the Value Added Tax Act No. 89 of 1991 requires that a supplier (person supplying goods or services) who is registered as a VAT vendor issue to the recipient a tax invoice within 21 days of the date of a supply whether requested or not.

The Service Provider shall provide a tax invoice (VAT invoice) which shall be included with each account delivered to the Employer in terms of Clause 14. Failure by the Servicer Provider to provide a tax invoice (VAT invoice) timeously may delay payment by the Employer and no interest shall accrue.

Clause 14.6: More frequent payments
The Service Provider may submit a fully motivated application regarding more frequent payments to the Employer's Project Manager to be submitted to the Employer for corisideration. Requests for more frequent payments will be considered at the sole discretion of the Employer and is not a right in terms of this contract.

Clause 15:
Add the following:
The interest rate will be the prime interest rate of the Employer's Bank at the time the amount is due.

Additional Clause:

Clause 16: Periodic review

16.1 This Agreement is valid from the Start Date outlined herein and is valid for the duration of the Framework Contract Period. This Agreement shall be reviewed once every three years; however, in lieu of a review during any period specified, the current Agreement will remain in effect. The Employer reserves the right to reduce or increase the Scope of Work according to the dictates of the budget, to terminate this contract, and/or to review and terminate this contract as is contemplated in Section 116(1)(b)(iii) of the Local Government: Municipal Finance Management Act 56 of 2003, without adjustment to the agreed rates, sums or fees and without payment of any penalty or surcharge in this regard. The Service Provider shall however be entitled to pro-rata payment for all services carried out in terms of any adjustment to the Scope of Work or, in the case of termination, payment for services delivered.

[redacted]

PROCEDURES FOR THE ALLOCATION OF WORKS PROJECTS

The procedures for the allocation of Works Projects, given below, are to be read in conjunction with Clause 4.8 in the Contract Data and the Process Diagram for Allocation of Works Projects below. These procedures include the development of a Works Project Brief, applying the tendered rates in order to arrive at a quote and compiling a preliminary programme and scope of works from the Service Provider.

The procedures are summarised under the steps below:

Step 1 The Employer's Framework Contract Manager together with the Employer's Project Manager for the project compiles a Works Project Brief and any terms and conditions associated for a particular works project. This Works Project Brief outlines the broad details of the project and includes, but is not limited to:

- Reference drawings, plans and other information.
- Time frames/milestones and a required completion date.

Step 2 The Employer issues the Works Project Brief to the designated representative of the "Winner". If, at this stage the "Winner" declines the work, the Employer reserves the right to consider the "Standby Service Provider 1" for this particular works project.

Step 3 If the "Winner" accepts the work, a project briefing session/site meeting is organised.

Step 4 After the project briefing session/site meeting, the Service Provider will provide the Employer with an estimated cost for the preparation of a Works Project proposal. Once accepted/acknowledged, the "Winner"/"Standby Service Provider" prepares and submits a Works Project Proposal (within the specified time) for approval by the Employer which includes the following documents:

i) The Scope of the works;
ii) A methodology - extent of methodology required will be dependent on scope of work (as advised by Employer);
iii) A programme of the work;
iv) Agreed time frames/milestones;
v) Proposed resources (project team);
vi) A list of CVs for each of the project team members, their company's name and the company's BBBEE status level;
vii) Resource-based costing; (ie. tasks, staff allocation, hours and rates)
viii) A cost proposal which includes the cost of any associated fees and services and an estimated cost of construction (where applicable).

Step 5 Following submission of these documents, the Employer will review the Works Project proposal.

Step 6 If the Works Project proposal is satisfactory, the Employer will notify the "Winner" in writing to commence with the work. The Employer will confirm the start and end date for the Works Project and the associated cost. All work undertaken on the Works Project, prior to this approval, will be at the Service Provider's cost.

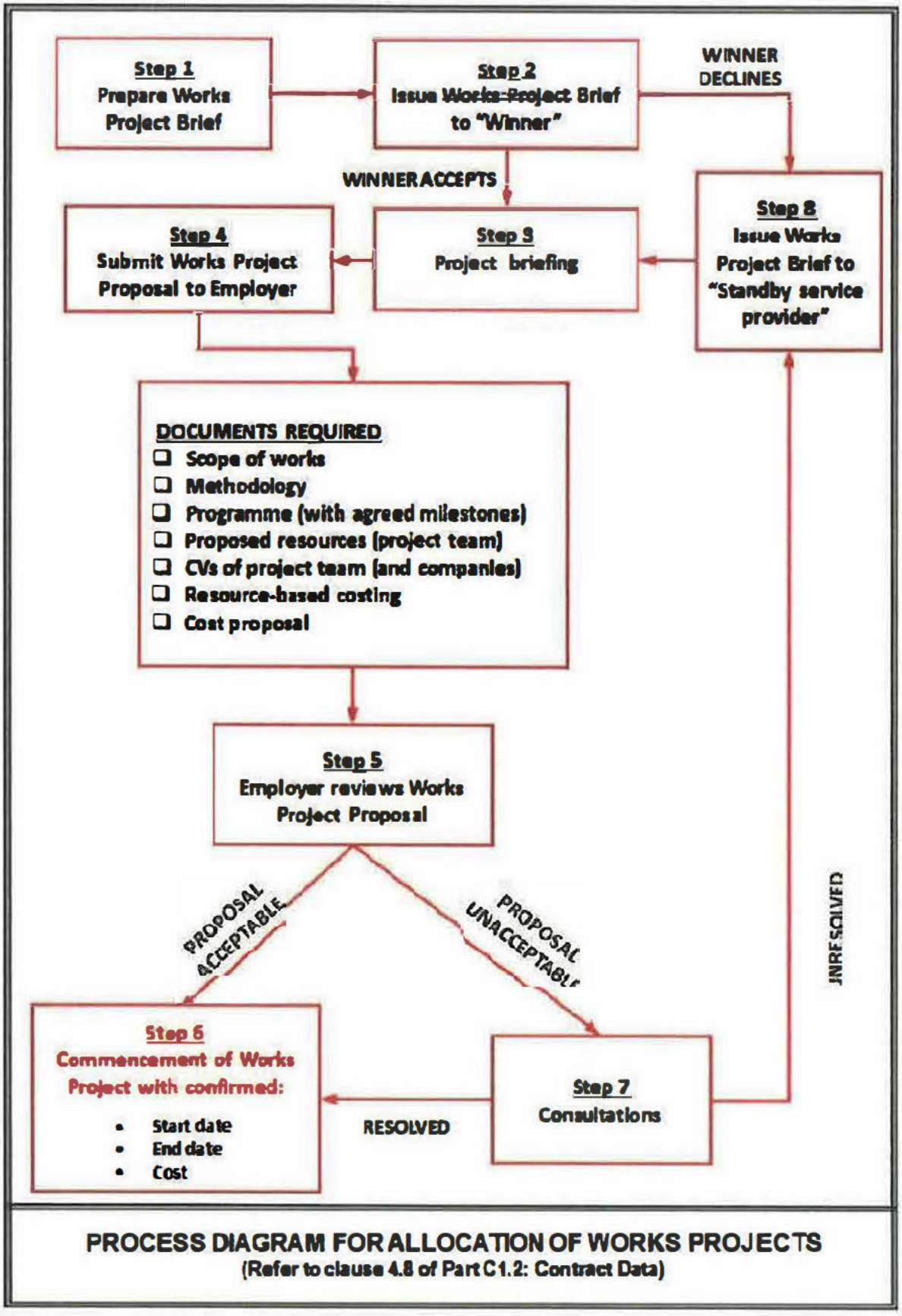
Step 7 If the Employer is not satisfied with the Works Project proposal, consultations will proceed between both parties (Employer and "Winner").

- If consultations are resolved, the Works Project proposal must be revised by the "Winner" and submitted to the Employer for final approval. On approval, the Employer will then inform the "Winner" in writing to commence with the work as for Step 6 above.
- If consultations are unresolved, the Employer reserves the right to consider appointing "Standby Service Provider 1". The Employer will inform the "Winner" in writing, giving reasons for the decision.

PROCEDURES FOR THE ALLOCATION OF WORKS PROJECTS (CONTINUED)

Step 8	The Employer will issue the Works Project Brief to the "Standby Service Provider 1". • If, at this stage the "Standby Service Provider 1" declines the work, the Employer reserves the right to consider appointing "Standby Service Provider 2" or an alternative procurement method for this particular works project. • If the "Standby Service Provider 1" accepts the work, a Works Project Proposal will be submitted as per Step 4 above then Step 9 below.
Step 9	Following submission of the documents, the Employer will review the Works Project Proposal from "Standby Service Provider 1".
Step 10	If the Works Project proposal is satisfactory, the Employer will notify the "Standby Service Provider 1" in writing to commence with the work. The Employer will confirm the start and end date for the Works Project and the associated cost. All work undertaken prior to this approval will be at the Service Provider's cost.
Step 11	If the Employer is not satisfied with the Works Project proposal, consultations will proceed between both parties (Employer and "Standby Service Provider 1"). • If consultations are resolved, the Works Project proposal must be revised by the "Standby Service Provider 1" and submitted to the Employer for final approval. The Employer will then inform the "Standby Service Provider 1" in writing to commence with the work as for Step 10 above. • If consultations are unresolved, the Employer reserves the right to consider appointing "Standby Service Provider 2" or an alternative procurement method for this particular works project. The Employer will then inform the "Standby Service Provider 1" in writing, giving reasons for the decision.
Step 12	Proceed to Step 8 and repeat Steps 8, 9,10 and 11 with "Standby Service Provider 2".

[redacted]



PROCESS DIAGRAM FOR ALLOCATION OF WORKS PROJECTS
(Refer to clause 4.8 of Part C1.2: Contract Data)

[redacted]

C1.3 Occupational Health and Safety Agreement

AGREEMENT MADE AND ENTERED INTO BETWEEN THE CITY OF CAPE TOWN (HEREINAFTER CALLED THE "EMPLOYER") AND

[redacted] ,
(Service Provider/Mandatary/Company/CC Name)

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

I, [redacted] , representing
[redacted] , as an employer
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 (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: [redacted]

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 appended Occupational Health and Safety Conditions and undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan.

Signed at BELLVILLE on the 1ST day of OCTOBER 20 21

[redacted]

[redacted]
Mandatary

Signed at Cape Town on the 1 day of October 20 21

[redacted]

[redacted]
for and on behalf of
City of Cape Town

Empower Results®

Date : 30 September 2021

CITY OF CAPE TOWN
City Manager
Civic Centre
12 Hertzog Boulevard
Cape Town
8000

Dear Sir/Madam

Contract Number: **194C/2020/21**

Contract title: **Term Tender for the Provision of Multidisciplinary Professional Services for the Water and Sanitation Department of the City of Cape Town**

NAME OF CONTRACTOR: [redacted]PTY) LTD

Professional Indemnity Insurance

I, the undersigned, do hereby confirm and warrant that all the professional liability/indemnity 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 CITY OF CAPE TOWN with regard to the abovementioned contract, and that all the insurances and endorsements, etc. are all in accordance with the requirements of the contract.

We confirm that the premium has been paid and that the policy is currently in full force and effect.

Yours faithfully

[redacted]

[redacted]
Business Unit Manager - Specialty
Professional Risks

fia

[redacted]

[redacted]

Part C2: Pricing Data

Pages

C2.1 Pricing Assumptions ..... 25 – 26

C2.2 Schedules of Rates ..... 27 – 42

C2.1 Pricing Assumptions

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

1. The short descriptions given in the Schedules of Rates below are brief descriptions used to identify the activities for which prices are required. Typical Works Projects, f orwhich rates are required, are contained in the Part C3.1: Scope of Work.

2. While it is entirely at the tenderer's discretion as regards pricing the Schedules of Rates below, tariffs of fees or indicative time based fee rates are gazetted from time to time by the built environment professional bodies. These are useful documents that will give tenderers some idea of industry norms against which they may compare their rates, sums and/or prices as applicable. Where applicable, tenderers must take into account the possible project types when pricing the Schedules of Rates.

   The tenderer's attention is drawn to the Municipal Cost Containment Regulations, 2019 (published in Government Gazette on 7 June 2019). Rates tendered must not exceed rat es:
   (a) set out in the "Guide on Hourly Fee Rates for Con sultants"issued by the Department of Public Service and Administration (DPSA rates); and
   (b) as prescribed by the body regulating the profession of the consultant.

3. For the purpose of the Schedules of Rates, the following words shall have the meanings hereby assigned to them:

   Unit: The unit of measurement for each item of work.
   Tende redRate: The agreed payment per unit of measurement.
   Tendered Percentage: Service Provider's percentage mark-up.

4. The rates (excluding VAT) in the Schedules of Rates are to be fully inclusive rates f orthe work described under the several items. Such rates are to cover all costs and expens esthat may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work. and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. The rates shall also include for all payments to administrative, clerical and secretarial staff used to support professional and technical staff.

5. Where a local office is required to be establish edby the Service Provider (in terms of clause 3.5 in C1.2: Contract Data), these establishment and operational costs must be included in the tendered time-based rates. These tendered rates shall also include any travel, accommodation, subsistence allowances, etc. paid by the Service Provid erto his employees or sub-consultants for the duration of the local office establishment (see item 19 below) in fulfillment of the Contract.

6. A rate or percentage is to be entered against each item in the Schedules of Rates for the branches tender edfor. If a nil rate (i.e. "nil" or "0.00") is entered against an item, it will be considered that there is no charge for that particular item. **An item against which no rate (or rates, in the case of rate cat egoriesif provided) is/are entered, or if anything other than a rate or a nil rate (for example, a zero, a dash or t heword "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 Employer may also perform a risk analysis with regard to the reasonableness of such rates.

7. The tend erermay not group a number of items together and tender one lump sum for such group of items.

8. **Tenderers are only to price their Branches of Preference as they have indicated on Returnable Schedule 26, in accordance with clauses C.1.6.1 and C.2.10.5 in Part T1.2 Tender Data.**

[redacted]

9. There are no quantities applicable to the tender during the tender submission stage. The rates provided in the Schedules of Rates shall be used in representative Works Projects for tender evaluation purposes in accordance with clause C.3.11.1 in Part T1.2: Tender Data.

10. Tenderers shall provide rates and mark-up percentages (excluding VAT) for each required rate for each item specified in every schedule in the Schedules of Rates applicable to the branch(es) tendered for (refer to clause C.2.10.5 in Part T1.2: Tender Data).

11. The procedures for the allocation of Works Projects are specified in Part C1.2: Contract Data (refer to clause 4.8).

12. All rates (except for travel expenses – see item 18 below) shall be adjusted in terms of clause 3.16 of the Standard Professional Services Contract.

13. A higher category person undertaking lower category work will be reimbursed, in respect of time-based fees, at the lower category rate.

14. Tenderers are to note that only those recoverable expenses listed in the Schedules of Rates will be reimbursed to the Service Provider. No reimbursement of costs for subsistence, typing, printing/copying (other than reports and/or tender documents), communications or computer hardware and/or software will be made and these costs will be deemed to be included in tendered rates.

15. Payment will only be made for copies of reports and drawings when requested by the Employer, and all drafts shall be for the Service Provider's account.

16. Full time construction monitoring staff shall be reimbursed for travelling expenses, for either the return office to site or return home to site journeys, whichever is the lesser. Part time construction monitoring staff shall be reimbursed for either the return office to site or return alternate site to site journeys, whichever is the lesser. Construction monitoring staff engaged in work outside of normal working hours shall be reimbursed for the return home to site journey. Staff other than construction monitoring staff shall be reimbursed for all travelling expenses at the appropriate rate.

17. Unless otherwise agreed with the Employer, any air travel will be for the Service Provider's account.

18. The per kilometre rate for the reimbursement of travel expenses shall be limited to the ad-hoc duty transportation allowance for the Employer's own staff as adjusted from time to time. This rate is currently R 3.98/km (excluding VAT). The Service Provider must obtain the Employer's prior approval before using a 4 x 4 vehicle for any site journeys. The rate for using a 4 x 4 vehicle is currently R 5.94/km (excluding VAT), and will be adjusted pro rata to the ad-hoc duty transport allowance for the Employer' own staff.

19. Travel time and all associated travel costs from the local office, as required in fulfillment of a works project, will be reimbursable. Travel time and all associated travel costs from outside the local office area to the local office (eg. air travel) will not be reimbursable.

20. Where fractions of a cent occur in calculations of prices and amounts, they shall be rounded up/down to the nearest whole cent.

21. Clause C.2.13.11(c) in Part T1.2: Tender Data shall be applicable to the submission of Schedules of Rates which have been priced electronically, and which the tenderer wishes to submit as a printed version with his/her tender in the place of a handwritten priced Schedules of Rates.

    If there is found to be any variance between the printed version and the original issued document, the original shall stand. However, where Addenda have been issued which amend the Schedules of Rates, then the printed Schedules of Rates shall take these into account.

    The pages of the issued Schedules of Rates should not be removed from the tender document.

22. Timesheets, drawn from the Service Providers' financial system, are to be submitted with each invoice to confirm the actual hours worked for each task.

23. The Service Provider will be reimbursed for the cost of preparing a Works Project proposal.

24. The payment for Construction Monitoring levels 1 and 2 will be paid at the appropriate Category rate for the particular discipline as tendered for, Stages 5 and 6 and Additional Services.

[redacted]

C2.2 Schedules of Rates

Page:

Schedule No. 1: Bulk Water Branch ..... 28 - 42

SCHEDULE NO. 1: BULK WATER BRANCH

The following Notes (B1 to B35) are applicable to the Bulk Water Branch only:

Note B1: **Project Managers:** Category A: The required personnel must be a professionally registered (PrCPM or PMP or other proven equivalent registration) with over 20 (twenty) years of experience in project management. The Project Manager's expertise and experience must be nationally recognised and must provide advice at a level of specialisation where such advice is recognized as that of an expert in the area of project management.

Category B: The required personnel must be a professionally registered (PrCPM or PMP or other proven equivalent registration) with at least 10 (ten) years verifiable postgraduate experience in the project management of all works related to all types of construction works. The Project Manager is a person who bears the risk of the business or who takes responsibility for the projects and related liabilities of the practice and where his level of expertise and proven experience is commensurate with the position and provides strategic guidance in planning and executing a project.

Category C: The required personnel must be a professionally registered (PrCPM or PMP or other proven equivalent registration) with at least 5 (five) years verifiable postgraduate experience in the project management of various types of similar works.

Category D: Need not be professionally registered and can be an Engineer, Technologist or Technician involved in project management of various types of works.

Note B2: **Construction Health and Safety Services:** The required personnel must be registered with the South African Council for the Project and Construction Management Professions (SACPCMP).

Professional Construction Health and Safety Agent: must be a professionally registered Construction Health and Safety Agent (PrCHSA).

Construction Health and Safety Manager: must be a registered Construction Health and Safety Manager (CHSM).

Construction Health and Safety Officer: must be a registered Construction Health and Safety Officer (CHSO).

Note B3: **Environmental Assessment Practitioner:** The required personnel must be registered with the Environmental Assessment Practitioner's Association of South Africa (EAPASA) or must meet the criteria for registration (and has applied for registration) with the Environmental Assessment Practitioner's Association of South Africa (EAPASA). The EAP must have at least 8 (eight) years verifiable experience in the undertaking of all environmental works related to all types of construction work similar to those listed in the Typical Works Projects lists. The EAP must have acted in a lead role in at least (2) two Full Scoping/Environmental Impact Assessment (EIA) reports and at least (5) five Basic Assessments of a project or type relevant to the Typical Works Projects list.

Note B4: **Environmental Control Officer:** The required personnel must have a relevant tertiary qualification and at least 3 (three) years verifiable experience of all works related to all types of construction works similar to those listed in Typical Works Projects lists.

Note B5: **Public Participation Practitioner (Lead):** The required personnel will be required to assist with Environmental Impact Assessments and must have at least 3 (three) years' experience in similar activities.

Note B6: **Environmental Auditor:** The required personnel must have an environmental auditing qualification and at least 3 (three) years' experience as a lead environmental auditor.

Note B7: **Heritage Assessment Practitioner:** The required personnel must have a postgraduate qualification in a heritage related field and at least 4 (four) years verifiable appropriate experience in heritage management issues likely to be encountered in all works similar to those listed in Typical Works Projects lists.

Note B8: **Freshwater ecologist:** The required personnel must be a registered professional with the South African Council for Natural Scientific Professions (SACNASP or other proven equivalent registration), with at least 8 (eight) years verifiable postgraduate experience in this specialised field and specifically providing aquatic ecological advisory services and undertaking all work necessary to acquire the authorisations (including General Authorisations or Water Use Licences) or permits required in terms of the National Water Act No. 36 of 1998.

[redacted]

Note B9: **Environmental Specialist (e.g. botanist, horticulturist, marine biologist, etc.):** The required personnel must be appropriately qualified and have a minimum of 8 (eight) years verifiable experience in the specialised field, 5 (five) of which must be proven and appropriate experience of local conditions relating to projects as stated in the Scope of Work.

Note B10: **Coastal Engineer**

Coastal Engineer - Category A: The required personnel must be a professional Engineer (PrEng) or professional Engineering Technologist (PrTechEng) or other proven equivalent registration, with at least 15 (fifteen) years verifiable postgraduate experience in marine and coastal engineering, five years of which needs to be verifiable international experience in marine and coastal engineering.

Coastal Engineer - Category B: The required personnel must be a professional Engineer (PrEng) or professional Engineering Technologist (PrTechEng) or other proven equivalent registration, with a minimum of 10 (ten) years verifiable postgraduate experience in marine and coastal engineering.

Coastal Engineer - Category C: The required personnel must be a professional Engineer (PrEng) or professional Engineering Technologist (PrTechEng) or other proven equivalent registration, with a minimum of 5 (five) years verifiable postgraduate experience, 3 (three) years of which must be in marine and coastal engineering.

Coastal Engineer - Category D: The required personnel does not have to be registered and can be an Engineer, Technologist or Technician involved in marine and coastal engineering.

Note B11: **Coastal Modelling expert:** The required personnel must be a registered professional with a recognized body and be specialized in wave modelling, near and far field dispersion modelling and hydrodynamic modelling with a minimum of 5 (five) years relevant experience in this modelling field.

Note B12: **Geohydrologist**

Geohydrologist - Category A: The required personnel must be professionally registered (PrSciNat or other proven equivalent registration), with over 20 (twenty) years of experience in groundwater management. The required personnel must have at least a Master's degree in a geohydrology or similar earth/water science field of expertise. The Geohydrologist's expertise and experience must be nationally recognised and must provide advice at a level of specialisation where such advice is recognized as that of an expert in the area of geohydrological investigations, wellfield development and operations, and monitoring (including water quality).

Geohydrologist - Category B: The required personnel must be professionally registered (PrSciNat or other proven equivalent registration) with at least 10 (ten) years verifiable postgraduate experience in groundwater management. The required personnel must have at least a NQF level 8 (including an Honours degree) in geohydrology or similar earth/water science field of expertise. The Geohydrologist must have extensive knowledge in geohydrological investigations, wellfield development and operations, and monitoring (including water quality).

Geohydrologist - Category C: The required personnel does not have to be professionally registered but must have at least 5 (five) years verifiable postgraduate experience in groundwater management. The required personnel must have at least a NQF level 8 in geohydrology or similar earth/water science field of expertise. The Geohydrologist must have significant knowledge in geohydrological investigations and/or wellfield development and operations and/or monitoring (including water quality).

Geohydrologist - Category D: The required personnel does not have to be registered and can be a Scientist, Technologist or Technician involved in groundwater investigations.

Note B13: **Groundwater Quality specialist (Geochemist):** The required personnel must be professionally registered (PrSciNat or other proven equivalent registration) and have a BSc degree in chemistry, water sciences or equivalent with at least 8 (eight) years verifiable postgraduate experience in the field of groundwater studies.

Note B14: **Geophysicist:** The required personnel must be professionally registered (PrSciNat or other proven equivalent registration) and have a BSc Degree in geophysics or geology with at least 8 (eight) years verifiable postgraduate experience in the field of geophysics.

Note B15: **Groundwater Modeller:** The required personnel must be professionally registered (PrSciNat or other proven equivalent registration) and must have at least a Masters degree in Geohydrology or similar earth/water science or equivalent with at least 8 (eight) years verifiable postgraduate experience in the field of groundwater modelling.

Note B16: **Geologist**

Geologist - Category B: The required personnel must be professionally registered (PrSciNat or other proven equivalent registration) with at least 10 (ten) years verifiable postgraduate experience in the field of geology. The required personnel must have at least a NQF level 8 (including an Honours degree) in geology or similar earth science field of expertise.

Geologist - Category C: The required personnel must be professionally registered (PrSciNat or other proven equivalent registration) with at least 5 (five) years verifiable postgraduate experience in the field of geology. The required personnel must have at least a NQF level 8 in geology or similar earth science field of expertise.

Note B17: **Seismologist / Seismotectonics Expert / Structural Geologist**: The required personnel must be a registered (PrSciNat) with the South African Council for Natural Scientific Professions (SACNASP) or a verified university academic, and have a minimum Masters Degree in Geology (or similar earth science related if in the field of seismotectonics) with at least 8 (eight) years verifiable postgraduate experience in the field of seismology/seismotectonics and the interpretation of seismic data.

Note B18: **Asset Management specialist**: The required personnel must be professionally registered with a recognized body and have at least 10 years' verifiable postgraduate experience in infrastructure asset management and maintenance planning and optimization.

Note B19: **Cathodic Protection specialist**: The required personnel must be a certified NACE CP3 specialist or Metallurgy Engineering (PrEng or other proven equivalent registration) who has at least 10 (ten) years verifiable postgraduate experience in the analysis and design of cathodic protection systems for steel pipelines.

Note B20: **Dam Safety specialist**: The required personnel must be a professionally registered Civil Engineer or Civil Engineering Technologist (PrEng or PrTechEng or other proven equivalent registration) with at least 8 (eight) years verifiable postgraduate experience and must be registered as an Approved Professional Person with the Department of Water and Sanitation.

Note B21: **Energy Optimisation specialist**: The required personnel must be professionally registered with a recognized body and have at least 10 years' verifiable postgraduate experience in the design of energy optimization systems incorporating new technologies.

Note B22: **Fire Services specialist**: The required personnel must be registered with the Engineering Council of South Africa (ECSA) and have at least 8 (eight) years verifiable postgraduate experience, 3 (three) of which must be experience in the design, installation, testing and inspections of fire protection, detection, smoke extraction and suppression systems and who will be responsible for all fire services work required for each Works Project.

Note B23: **Geotechnical specialist**: The required personnel must be a professionally registered Civil Engineer or Civil Engineering Technologist (PrEng or PrTechEng or other proven equivalent registration) with at least 8 (eight) years verifiable postgraduate experience and must have a postgraduate qualification in the specialised field.

Note B24: **Hazardous Substance Management specialist (Major Hazardous Installations, working with hazardous materials)**: The required personnel must be a qualified Chemical or Process Engineer with at least 8 (eight) years proven experience in this specialised field and must be: (i) accredited by the South African National Accreditation System (SANAS) in accordance with ISO/IEC 17020:2012; and (ii) approved by, or registered with, the Department of Labour as an Approved Inspection Authority (Type A) to conduct Major Hazardous Installations audits/inspections.

Note B25: **Hydraulic Engineer "A"**: The required personnel must be a registered professional Civil Engineer or professional Civil Engineering Technologist (PrEng or PrTechEng or other proven equivalent registration), with at least 8 (eight) years postgraduate experience in the design of large diameter pipelines and in surge analyses and must have undertaken, and taken responsibility for, the design of a minimum of 5 (five) pipeline projects with a diameter larger than 500mm.

Note B26: **Hydrologist**: The required personnel must be a professionally registered hydrologist or professionally registered Civil Engineer or Civil Engineering Technologist (PrSciNat or PrEng or PrTechEng or other proven equivalent registration) with at least 8 (eight) years verifiable postgraduate experience in the water resource field, specifically focussed on large catchment hydrological modelling, system modelling and stream flow assessments.

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Note B27: **Process Design Engineer "A":** The required personnel must be a registered professional Civil or Chemical Engineer (PrEng) or professional Civil or Chemical Engineering Technologist (PrTechEng) or other proven equivalent registration, who has experience in the analyses and design of Water Treatment Plants (10Ml/day or larger), and have either:
(i) a Postgraduate qualification in Water Treatment with a minimum of 8 (eight) years verifiable experience in the analyses and design of Water Treatment Plants, 5 (five) of which must be post Postgraduate experience, or
(ii) 20 (twenty) years verifiable experience in the analyses and design of Water Treatment Plants.

Note B28: **Process Design Engineer "B":** In addition to the requirements for Process Design Engineer "A", the required personnel must have a minimum of three years of verifiable experience in advanced water treatment processes (eg. Desalination/Sea Water Reverse Osmosis, Ultrafiltration, Ultraviolet light/Advanced Oxidation). This experience can run concurrently with the verifiable years of experience as required in terms of the requirements (i) and (ii) for Process Design Engineer "A".

Note B29: **Pump and pipeline specialist:** The required personnel must be a professionally registered Civil or Mechanical Engineer or Civil or Mechanical Engineering Technologist (PrEng or PrTechEng or other proven equivalent registration), who has at least 10 (ten) years verifiable postgraduate experience in the analyses, optimisation and design of large diameter pipelines (diameter > 1 m) and pump stations (individual pump power requirement >1 MW and pumping head >50 m).

Note B30: **Traffic Impact specialist:** The required personnel must be a registered professional Civil Engineer or Civil Engineering Technologist (PrEng or PrTechEng or other proven equivalent registration), with at least 8 (eight) years verifiable postgraduate experience in Traffic Engineering. The specialist must have a postgraduate qualification in Transportation Engineering

Note B31: **Water Quality specialist:** The required personnel must be a registered hydrologist (PrSciNat) registered with the South African Council for Natural Scientific Professions) or professional Civil Engineer (PrEng) with at least 8 (eight) years verifiable postgraduate experience in water quality modelling and assessments and water quality management.

Note B32: **Water Resource modelling specialist:** The required personnel must be a professionally registered hydrologist or professionally registered Civil Engineer or Civil Engineering Technologist (PrSciNat or PrEng or PrTechEng or other proven equivalent registration), with at least 8 (eight) years verifiable postgraduate experience in the water resource field, specifically focussed on large catchment hydrological modelling, system modelling (DWS's WRPM, WRYM and MIKE) and stream flow assessments

Note B33: **Water Resource Planning Engineer:** The required personnel must be a professionally registered Civil Engineer or Civil Engineering Technologist (PrEng or PrTechEng or other proven equivalent registration), who has at least 8 (eight) years verifiable postgraduate experience in preparing integrated water resources management and development plans, strategies and action plans. Experience in undertaking and managing water resource feasibility studies is also a requirement.

Note B34: **Water Use Authorisation specialist:** The required personnel must be appropriately qualified and professionally registered in the applicable field and have at least 8 (eight) years proven experience in the specialist field.

Note B35: **Training Supervisor:** Refer to sub-clause 5.2.1.3, Training of Personnel in C3.1: Scope of Work.

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1.1: PLANNING, STUDIES, INVESTIGATIONS, ASSESSMENTS AND ADDITIONAL SERVICES

Time-based fees for Planning, Studies, Investigations, Assessments and Additional Services as described in the Scope of Work for the following disciplines:

Item No.	Activity Description	Unit	Tendered Rate
	CIVIL ENGINEERING SERVICES		
1.1.1.	Category A	Hour	1 320.00
1.1.2.	Category B	Hour	1 030.00
1.1.3.	Category C	Hour	620.00
1.1.4.	Category D	Hour	340.00
	STRUCTURAL ENGINEERING SERVICES		
1.1.5.	Category A	Hour	1 030.00
1.1.6.	Category B	Hour	880.00
1.1.7.	Category C	Hour	600.00
1.1.8.	Category D	Hour	330.00
	MECHANICAL ENGINEERING SERVICES		
1.1.9.	Category A	Hour	1020.00
1.1.10.	Category B	Hour	980.00
1.1.11.	Category C	Hour	610.00
1.1.12.	Category D	Hour	350.00
	ELECTRICAL ENGINEERING SERVICES		
1.1.13.	Category A	Hour	1 020.00
1.1.14.	Category B	Hour	970.00
1.1.15.	Category C	Hour	610.00
1.1.16.	Category D	Hour	400.00
	ELECTRONIC ENGINEERING SERVICES		
1.1.17.	Category A	Hour	1 020.00
1.1.18.	Category B	Hour	970.00
1.1.19.	Category C	Hour	610.00
1.1.20.	Category D	Hour	400.00

Item No.	Activity Description	Unit	Tendered Rate
	QUANTITY SURVEYING SERVICES		
1.1.21.	Registered Professional Principals (Specialist)	Hour	730.00
1.1.22.	Registered Professional Principals (> 10 years experience)	Hour	670.00
1.1.23.	Registered Professional Principals (5 – 10 years experience)	Hour	450.00
1.1.24.	Registered Professional Principals (<5 years experience)	Hour	390.00
1.1.25.	Salaried Personnel	Hour	250.00
	ARCHITECTURAL SERVICES		
1.1.26.	Principal (Specialist)	Hour	970.00
1.1.27.	Principal (>10 years experience)	Hour	790.00
1.1.28.	Principal (<10 years experience)	Hour	750.00
1.1.29.	Salaried staff (Associates and Managers)	Hour	480.00
1.1.30.	Salaried Staff (Registered architectural professionals performing work of an architectural nature and carrying direct responsibility for activities related to a project)	Hour	490.00
1.1.31.	Salaried Staff (Registered architectural professionals performing work of an architectural nature under direction and control)	Hour	480.00
1.1.32.	Salaried Staff (Staff performing work of an architectural nature and/or to support architectural work outputs under direction and control)	Hour	480.00
	PROJECT MANAGEMENT SERVICES		
1.1.33.	Category A (Note B1)	Hour	1 400.00
1.1.34.	Category B (Note B1)	Hour	1 000.00
1.1.35.	Category C (Note B1)	Hour	620.00
1.1.36.	Category D (Note B1)	Hour	200.00
	CONSTRUCTION HEALTH AND SAFETY SERVICES		
1.1.37.	Professional Construction Health and Safety Agent (Note B2)	Hour	870.00
1.1.38.	Construction Health and Safety Manager (Note B2)	Hour	560.00
1.1.39.	Construction Health and Safety Officer (Note B2)	Hour	460.00

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Negotiated Rate

Item No.	Activity Description	Unit	Tendered Rate
	ENVIRONMENTAL AND HERITAGE SERVICES		
1.1.40.	Environmental Assessment Practitioner (Note B3)	Hour	600.00
1.1.41.	Environmental Assessment Practitioner Assistant	Hour	360.00
1.1.42.	Environmental Control Officer (Note B4)	Hour	450.00
1.1.43.	Public Participation Practitioner (Lead) (Note B5)	Hour	600.00
1.1.44.	Public Participation Practitioner (Administrative assistant)	Hour	360.00
1.1.45.	Environmental Auditor (Note B6)	Hour	600.00
1.1.46	Heritage Assessment Practitioner (Note B7)	Hour	970.00
1.1.47.	Heritage Assessment Practitioner Assistant	Hour	560.00
1.1.48.	Freshwater Ecologist (Note B8)	Hour	970.00
1.1.49.	Environmental Specialist (e.g. botanist, horticulturist, marine biologist, etc.) (Note B9)	Hour	970.00
	LANDSCAPE ARCHITECTURAL SERVICES		
1.1.50.	Registered Professional Principal Landscape Architect (minimum 8 years' experience)	Hour	920.00
1.1.51.	Staff performing work of a landscape architectural nature and carrying direct responsibility for one or more specific activities related to a project	Hour	710.00
	COASTAL ENGINEERING SERVICES		
1.1.52.	Coastal Engineer - Category A (Note B10)	Hour	1 200.00
1.1.53.	Coastal Engineer - Category B (Note B10)	Hour	1 000.00
1.1.54.	Coastal Engineer - Category C (Note B10)	Hour	620.00
1.1.55.	Coastal Engineer - Category D (Note B10)	Hour	350.00
1.1.56.	Coastal Modelling expert (Note B11)	Hour	820.00
	GROUNDWATER ENGINEERING SERVICES		
1.1.57.	Geohydrologist - Category A (Note B12)	Hour	1 280.00
1.1.58.	Geohydrologist - Category B (Note B12)	Hour	1 030.00
1.1.59.	Geohydrologist - Category C (Note B12)	Hour	820.00
1.1.60.	Geohydrologist - Category D (Note B12)	Hour	480.00
1.1.61.	Groundwater Quality specialist (Geochemist) (Note B13)	Hour	820.00
1.1.62.	Geophysicist (Note B14)	Hour	820.00
1.1.63.	Groundwater Modeller (Note B15)	Hour	820.00

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Item No.	Activity Description	Unit	Tendered Rate
1.1.64.	Geologist - Category B (Note B16)	Hour	1 030.00
1.1.65.	Geologist - Category C (Note B16)	Hour	820.00
1.1.66.	Seismologist / Seismotectonics Expert / Structural Geologist (Note B17)	Hour	1 030.00

1.2: NORMAL SERVICES AND ADDITIONAL SERVICES (STAGES 1 TO 4)

Time-based fees for Normal Services Stages 1 to 4 and Additional Services as described in the Scope of Work for the following disciplines:

Item No.	Activity Description	Unit	Tendered Rate
	CIVIL ENGINEERING SERVICES		
1.2.1.	Category A	Hour	1 320.00
1.2.2.	Category B	Hour	1 030.00
1.2.3.	Category C	Hour	620.00
1.2.4.	Category D	Hour	340.00
	STRUCTURAL ENGINEERING SERVICES		
1.2.5.	Category A	Hour	1 030.00
1.2.6.	Category B	Hour	880.00
1.2.7.	Category C	Hour	600.00
1.2.8.	Category D	Hour	330.00
	MECHANICAL ENGINEERING SERVICES		
1.2.9.	Category A	Hour	1 020.00
1.2.10.	Category B	Hour	980.00
1.2.11.	Category C	Hour	610.00
1.2.12.	Category D	Hour	350.00
	ELECTRICAL ENGINEERING SERVICES		
1.2.13.	Category A	Hour	1 020.00
1.2.14.	Category B	Hour	970.00
1.2.15.	Category C	Hour	610.00
1.2.16.	Category D	Hour	400.00
	ELECTRONIC ENGINEERING SERVICES		
1.2.17.	Category A	Hour	1 020.00
1.2.18.	Category B	Hour	970.00
1.2.19.	Category C	Hour	610.00
1.2.20.	Category D	Hour	400.00

Item No.	Activity Description	Unit	Tendered Rate
	QUANTITY SURVEYING SERVICES		
1.2.21.	Registered Professional Principals (Specialist)	Hour	730.00
1.2.22.	Registered Professional Principals (> 10 years experience)	Hour	670.00
1.2.23.	Registered Professional Principals (5 – 10 years experience)	Hour	450.00
1.2.24.	Registered Professional Principals (< 5 years experience)	Hour	390.00
1.2.25.	Salaried Personnel	Hour	250.00
	ARCHITECTURAL SERVICES		
1.2.26.	Principal (Specialist)	Hour	970.00
1.2.27.	Principal (>10 years experience)	Hour	790.00
1.2.28.	Principal (<10 years experience)	Hour	750.00
1.2.29.	Salaried staff (Associates and Managers)	Hour	480.00
1.2.30.	Salaried Staff (Registered architectural professionals performing work of an architectural nature and carrying direct responsibility for activities related to a project)	Hour	490.00
1.2.31.	Salaried Staff (Registered architectural professionals performing work of an architectural nature under direction and control)	Hour	480.00
1.2.32.	Salaried Staff (Staff performing work of an architectural nature and/or to support architectural work outputs under direction and control)	Hour	480.00
	PROJECT MANAGEMENT SERVICES		
1.2.33.	Category A (Note B1)	Hour	1 400.00
1.2.34.	Category B (Note B1)	Hour	1 000.00
1.2.35.	Category C (Note B1)	Hour	620.00
1.2.36.	Category D (Note B1)	Hour	200.00
	CONSTRUCTION HEALTH AND SAFETY SERVICES		
1.2.37.	Professional Construction Health and Safety Agent (Note B2)	Hour	870.00
1.2.38.	Construction Health and Safety Manager (Note B2)	Hour	560.00
1.2.39.	Construction Health and Safety Officer (Note B2)	Hour	460.00

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			Negotiated Rate
Item No.	Activity Description	Unit	Tendered Rate
	ENVIRONMENTAL AND HERITAGE SERVICES		
1.2.40.	Environmental Assessment Practitioner (Note B3)	Hour	600.00
1.2.41.	Environmental Assessment Practitioner Assistant	Hour	360.00
1.2.42.	Environmental Control Officer (Note B4)	Hour	450.00
1.2.43.	Heritage Assessment Practitioner (Note B7)	Hour	970.00
1.2.44.	Heritage Assessment Practitioner Assistant	Hour	560.00
1.2.45.	Freshwater Ecologist (Note B8)	Hour	970.00
1.2.46.	Environmental Specialist (e.g. botanist, horticulturist, marine biologist, etc.) (Note B9)	Hour	970.00
	LANDSCAPE ARCHITECTURAL SERVICES		
1.2.47.	Registered Professional Principal Landscape Architect (minimum 8 years' experience)	Hour	920.00
1.2.48.	Staff performing work of a landscape architectural nature and carrying direct responsibility for one or more specific activities related to a project	Hour	710.00
	COASTAL ENGINEERING SERVICES		
1.2.49.	Coastal Engineer - Category A (Note B10)	Hour	1 200.00
1.2.50.	Coastal Engineer - Category B (Note B10)	Hour	1 000.00
1.2.51.	Coastal Engineer - Category C (Note B10)	Hour	620.00
1.2.52.	Coastal Engineer - Category D (Note B10)	Hour	350.00
1.2.53.	Coastal Modelling expert (Note B11)	Hour	820.00
	GROUNDWATER ENGINEERING SERVICES		
1.2.54.	Geohydrologist - Category A (Note B12)	Hour	1 280.00
1.2.55.	Geohydrologist - Category B (Note B12)	Hour	1 030.00
1.2.56.	Geohydrologist - Category C (Note B12)	Hour	820.00
1.2.57.	Geohydrologist - Category D (Note B12)	Hour	480.00
1.2.58.	Groundwater Quality specialist (Geochemist) (Note B13)	Hour	820.00
1.2.59.	Geophysicist (Note B14)	Hour	820.00
1.2.60.	Groundwater Modeller (Note B15)	Hour	820.00
1.2.61.	Geologist - Category B (Note B16)	Hour	1 030.00
1.2.62.	Geologist - Category C (Note B16)	Hour	820.00
1.2.63.	Seismologist / Seismotectonics Expert / Structural Geologist (Note B17)	Hour	1 030.00

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1.3: NORMAL SERVICES AND ADDITIONAL SERVICES (STAGES 5 TO 6)

Negotiated Rate

Time-based fees for Normal Services Stages 5 to 6 and Additional Services as described in the Scope of Work for the following disciplines:

Item No.	Activity Description	Unit	Tendered Rate
	CIVIL ENGINEERING SERVICES		
1.3.1.	Category A	Hour	1 320.00
1.3.2.	Category B	Hour	1 030.00
1.3.3.	Category C	Hour	620.00
1.3.4.	Category D	Hour	340.00
1.3.5.	Construction Monitoring: Level 3 - Category C person	Month	85 680.00
1.3.6.	Construction Monitoring: Level 3 - Category D person	Month	43 680.00
	STRUCTURAL ENGINEERING SERVICES		
1.3.7.	Category A	Hour	1 030.00
1.3.8.	Category B	Hour	880.00
1.3.9.	Category C	Hour	600.00
1.3.10.	Category D	Hour	330.00
1.3.11.	Construction Monitoring: Level 3 - Category C person	Month	85 200.00
1.3.12.	Construction Monitoring: Level 3 - Category D person	Month	43 680.00
	MECHANICAL ENGINEERING SERVICES		
1.3.13.	Category A	Hour	1 020.00
1.3.14.	Category B	Hour	980.00
1.3.15.	Category C	Hour	610.00
1.3.16.	Category D	Hour	350.00
1.3.17.	Construction Monitoring: Level 3 - Category C person	Month	81 600.00
1.3.18.	Construction Monitoring: Level 3 - Category D person	Month	33 600.00
	ELECTRICAL ENGINEERING SERVICES		
1.3.19.	Category A	Hour	1 020.00
1.3.20.	Category B	Hour	970.00
1.3.21.	Category C	Hour	610.00
1.3.22.	Category D	Hour	400.00
1.3.23.	Construction Monitoring: Level 3 - Category C person	Month	81 600.00
1.3.24.	Construction Monitoring: Level 3 - Category D person	Month	33 600.00

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Item No.	Activity Description	Unit	Tendered Rate
	ELECTRONIC ENGINEERING SERVICES		
1.3.25.	Category A	Hour	1 020.00
1.3.26.	Category B	Hour	970.00
1.3.27.	Category C	Hour	610.00
1.3.28.	Category D	Hour	400.00
	QUANTITY SURVEYING SERVICES		
1.3.29.	Registered Professional Principals (Specialist)	Hour	730.00
1.3.30.	Registered Professional Principals (> 10 years experience)	Hour	670.00
1.3.31.	Registered Professional Principals (5 – 10 years experience)	Hour	450.00
1.3.32.	Registered Professional Principals (< 5 years experience)	Hour	390.00
1.3.33.	Salaried Personnel	Hour	250.00
	ARCHITECTURAL SERVICES		
1.3.34.	Principal (Specialist)	Hour	970.00
1.3.35.	Principal (>10 years experience)	Hour	790.00
1.3.36.	Principal (<10 years experience)	Hour	750.00
1.3.27.	Salaried staff (Associates and Managers)	Hour	480.00
1.3.38.	Salaried Staff (Registered architectural professionals performing work of an architectural nature and carrying direct responsibility for activities related to a project)	Hour	490.00
1.3.39.	Salaried Staff (Registered architectural professionals performing work of an architectural nature under direction and control)	Hour	480.00
1.3.40.	Salaried Staff (Staff performing work of an architectural nature and/or to support architectural work outputs under direction and control)	Hour	480.00
	PROJECT MANAGEMENT SERVICES		
1.3.41.	Category A (Note B1)	Hour	1 400.00
1.3.42.	Category B (Note B1)	Hour	1 000.00
1.3.43.	Category C (Note B1)	Hour	620.00
1.3.44.	Category D (Note B1)	Hour	200.00
	CONSTRUCTION HEALTH AND SAFETY SERVICES		
1.3.45.	Professional Construction Health and Safety Agent (Note B2)	Hour	870.00
1.3.46.	Construction Health and Safety Manager (Note B2)	Hour	560.00
1.3.47.	Construction Health and Safety Officer (Note B2)	Hour	460.00

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Negotiated Rate

Item No.	Activity Description	Unit	Tendered Rate
	ENVIRONMENTAL AND HERITAGE SERVICES		
1.3.48.	Environmental Assessment Practitioner (Note B3)	Hour	600.00
1.3.49.	Environmental Assessment Practitioner Assistant	Hour	360.00
1.3.50.	Environmental Control Officer (Note B4)	Hour	450.00
1.3.51.	Heritage Assessment Practitioner (Note B7)	Hour	950.00
1.3.52.	Heritage Assessment Practitioner Assistant	Hour	560.00
1.3.53.	Freshwater Ecologist (Note B8)	Hour	970.00
1.3.54.	Environmental Specialist (e.g. botanist, horticulturist, marine biologist, etc.) (Note B9)	Hour	970.00
	LANDSCAPE ARCHITECTURAL SERVICES		
1.3.55.	Registered Professional Principal Landscape Architect (minimum 8 years' experience)	Hour	920.00
1.3.56.	Staff performing work of a landscape architectural nature and carrying direct responsibility for one or more specific activities related to a project	Hour	720.00
	COASTAL ENGINEERING SERVICES		
1.3.57.	Coastal Engineer - Category A (Note B10)	Hour	1 200.00
1.3.58.	Coastal Engineer - Category B (Note B10)	Hour	1 000.00
1.3.59.	Coastal Engineer - Category C (Note B10)	Hour	620.00
1.3.60.	Coastal Engineer - Category D (Note B10)	Hour	350.00
1.3.61.	Coastal Modelling expert (Note B11)	Hour	820.00
	GROUNDWATER ENGINEERING SERVICES		
1.3.62.	Geohydrologist - Category A (Note B12)	Hour	1 260.00
1.3.63.	Geohydrologist - Category B (Note B12)	Hour	1 030.00
1.3.64.	Geohydrologist - Category C (Note B12)	Hour	820.00
1.3.65.	Geohydrologist - Category D (Note B12)	Hour	480.00
1.3.66.	Groundwater Quality specialist (Geochemist) (Note B13)	Hour	820.00
1.3.67.	Geophysicist (Note B14)	Hour	820.00
1.3.68.	Groundwater Modeller (Note B15)	Hour	820.00
1.3.69.	Geologist - Category B (Note B16)	Hour	1 030.00
1.3.70.	Geologist - Category C (Note B16)	Hour	820.00
1.3.71.	Seismologist / Seismotectonics Expert / Structural Geologist (Note B17)	Hour	1 030.00

[redacted]

1.4: ADDITIONAL AND SPECIALIST SERVICES - GENERAL

Time-based fees for Normal Services Stages 1 to 6 and Additional Services for the following disciplines:

Item No.	Activity Description	Unit	Tendered Rate
1.4.1.	Conveyancer	Hour	1 020.00
1.4.2.	Land Survey Team – Field Work (civil topographical surveys or survey/measure existing structures)	Hour	620.00
1.4.3.	Land Survey Team – Office Work (reduce field work, prepare CAD/GIS drawing/s, maps and reports)	Hour	510.00
1.4.4.	CAD Draughting Operator	Hour	330.00
1.4.5.	GIS technician	Hour	380.00
1.4.6.	Registered Land Surveyor (cadastral surveys, property registration of sub-divisions)	Hour	770.00
1.4.7.	Town Planner (Zoning/Land Use report/reports or certificates/ re-zoning applications)	Hour	430.00
1.4.8.	Asset Management specialist (Note B18)	Hour	850.00
1.4.9.	Cathodic Protection specialist (Note B19)	Hour	950.00
1.4.10.	Dam Safety specialist (Note B20)	Hour	750.00
1.4.11.	Energy Optimisation specialist (Note B21)	Hour	920.00
1.4.12.	Fire Services specialist (Note B22)	Hour	620.00
1.4.13.	Geotechnical specialist (Note B23)	Hour	850.00
1.4.14.	Hazardous Substances Management specialist (Major Hazardous Installations, working with hazardous materials) (Note B24)	Hour	950.00
1.4.15.	Hydraulic Engineer "A" (Note B25)	Hour	960.00
1.4.16.	Hydrologist (Note B26)	Hour	680.00
1.4.17.	Process Design Engineer "A" (Note B27)	Hour	1 150.00
1.4.18.	Process Design Engineer "B" (Note B28)	Hour	1 250.00
1.4.19.	Pump and pipeline specialist (Note B29)	Hour	1 010.00
1.4.20.	Traffic Impact specialist (Note B30)	Hour	830.00
1.4.21.	Water Quality specialist (Note B31)	Hour	850.00
1.4.22.	Water Resource modelling specialist (Note B32)	Hour	920.00
1.4.23.	Water Resource Planning Engineer (Note B33)	Hour	1 000.00
1.4.24.	Water Use Authorisation specialist (Note B34)	Hour	600.00
1.4.25.	Training Supervisor (Note B35)	Hour	670.00

[redacted]

1.5: RECOVERABLE EXPENSES

Recoverable Expenses

Item No.	Activity Description	Unit	Sum
1.5.1.	Service Provider's cost for materials, equipment, testing and/or any other recoverable expenses not covered in the tender document will be claimed under this item for each individual works project during the Framework Contract Period.	Sum	

Provision for Service Provider's Mark-up on Recoverable Expenses claimed under item 1.5.1.

Item No.	Activity Description	Unit	Tendered Percentage
1.5.2.	Service Provider's percentage mark-up on item 1.5.1 above	%	2.50

1.6: DISBURSEMENTS/RECOVERABLE EXPENSES

Negotiated Rate

Item No.	Description	Unit	Tendered Rate
	Recoverable expenses in respect of printing/plotting/copying, traveling expenses, etc. as specified below:		
1.6.1.	Size A0 (Monochrome)	No.	43.00
1.6.2.	Size A1 (Monochrome)	No.	33.00
1.6.3.	Size A2 (Monochrome)	No.	22.00
1.6.4.	Size A3 (Monochrome)	No.	0.95
1.6.5.	Size A4 (Monochrome)	No.	0.35
1.6.6.	Size A4 (Monochrome on colour paper)	No.	0.85
1.6.7.	Size A0 (Colour)	No.	72.00
1.6.8.	Size A1 (Colour)	No.	54.00
1.6.9.	Size A2 (Colour)	No.	38.00
1.6.10.	Size A3 (Colour)	No.	6.00
1.6.11.	Size A4 (Colour)	No.	1.30
1.6.12.	Laminated posters: Size A0 (Colour)	No.	32.00
1.6.13.	Laminated posters: Size A1 (Colour)	No.	18.00
1.6.14.	Laminated posters: Size A2 (Colour)	No.	15.00
1.6.15.	Laminated posters: Size A3 (Colour)	No.	9.00
1.6.16.	Compilation and binding of reports/tender documents, books of drawings, etc.	No.	11.00
1.6.17.	Electronic Data provided on a flash drive (4 GB).	No.	45.00
1.6.18.	Provision of Personal Computer	Month	615.00
1.6.19.	Travel expenses	km	R3.98
1.6.20.	Travel expenses (4 X 4)	km	R5.94

[redacted]

Part C3: Scope of Work

Pages

C3.1 Scope of Work ..... 44 – 6[illegible]

C3.2 Annexes ..... 62 – 70

[redacted]

CITY OF CAPE TOWN

WATER AND SANITATION

CONTRACT NO. 194C/2020/21

TERM TENDER FOR THE PROVISION OF MULTIDISCIPLINARY PROFESSIONAL SERVICES FOR THE WATER AND SANITATION DEPARTMENT OF THE CITY OF CAPE TOWN

C3.1 Scope of Work

CONTENTS

1. INTRODUCTION AND EMPLOYER'S OBJECTIVE
2. DESCRIPTION OF THE SERVICES REQUIRED
3. EXTENT OF THE SERVICES
4. USE OF REASONABLE SKILL AND CARE
5. PROJECT BRIEF
6. APPLICABLE NATIONAL AND INTERNATIONAL STANDARDS
7. APPROVALS
8. PROCUREMENT
9. FORMAT OF COMMUNICATION
10. KEY PERSONNEL
11. MANAGEMENT MEETINGS
12. CLAIMS FOR PAYMENT
13. EMPLOYER'S RIGHT TO RECOVER COSTS
14. INTELLECTUAL PROPERTY RIGHTS AND CONFIDENTIALITY

1. INTRODUCTION AND EMPLOYER'S OBJECTIVE

The Employer's objectives are to execute new developments and services and repairs, maintenance, alterations, additions and refurbishments to existing properties and services within the Water and Sanitation Department, for which it requires teams of Professional Services Providers. The department is divided into five (5) branches for this tender and the Employer intends to appoint a "Winner", a "Standby Service Provider 1" and a "Standby Service Provider 2" to provide multidisciplinary professional services for each branch.

Branch No.	Branch Name	Estimated professional fees to be spent per branch for the Framework Contract Period
A	Bulk Water	R100 000 000
B	Catchment Stormwater and River Management	R56 000 000
C	Engineering and Asset Management	R54 000 000
D	Reticulation Branch	R84 000 000
E	Wastewater Treatment	R100 000 000

Note 1: It is the intention of the Employer to use the successful Service Providers if and when required and the successful appointment under this contract does not guarantee any amount of work to be executed hereunder. The Employer reserves the right to plan and effect individual Works Projects at its sole discretion and to reduce or increase the estimated professional fees to be spent per branch according to the dictates of the budget.

Teams of Professional Service Providers are required to provide the professional services necessary to implement these projects, which, in terms of the Municipal Finance Management Act, 2003 and the Municipal Supply Chain Management Regulations, 2005, must be procured through a competitive bidding process.

[redacted]

The list of Typical Works Projects contained in Clauses 2.1, 2.2, 2.3, 2.4 and 2.5 (Description of the Services Required) is merely an outline of the scope of the Contract Works for each branch and shall not limit the work to be carried out by the Service Provider under this Framework Contract. The anticipated services to be provided in accordance with the Framework Contract Document for the Typical Works Projects are included in the Schedules of Rates.

It will be expected that a Project Leader (Project Manager or similar professional person) will lead the teams of Professional Service Providers and who will draw the required competencies from resources available to him (e.g. in his own company or sub-consultant) or from external approved Service Providers. The key personnel in the Service Provider teams shall comply with the competencies required irrespective of the nature of the teams and will be evaluated as a single entity

As this framework contract period will exceed the current budget cycle, it is subject to Section 33 of the Municipal Finance Management Act. 56 of 2003, and consequently the Employer must follow the required processes in terms of Section 33. These will run concurrently with the procurement process for this tender/contract. The Start Date of the Framework Contract is expected to be within 10 (ten) months of the tender closing date.

The Employer reserves the right to utilise, under exceptional circumstances, the Service Providers appointed for this framework contract to provide professional services to other Directorates/Departments within the City of Cape Town. These Works Projects will be issued subject to agreement between the Framework Contract Manager and the Service Provider and will be without prejudice.

2. DESCRIPTION OF THE SERVICES REQUIRED

2.1 BULK WATER BRANCH

The Service Provider is required to provide the professional services listed in Clauses 2.1.1 to 2.1.8 below to address the following Typical Works Projects which are anticipated to be executed during the duration of the contract. (Note: Projects requiring design will mostly include the construction phase).

- Additions, alterations, refurbishments and new building works.
- Upgrades and additions to road works, paving, sewer, stormwater, reticulation/minor water supply and ducts (electrical, instrumentation, telecommunication, etc.) at reservoir sites and depots.
- Refurbish, upgrade or new pump stations.
- Design of water retaining structures (reservoirs, settling tanks, balancing tanks) and other concrete structures.
- Bulk pipeline design including route planning, pipeline optimization, vertical alignment, hydraulic analysis and cathodic protection.
- Water treatment process improvement and investigations.
- Design of Water Treatment Works and associated infrastructure
- Design, upgrades and refurbishment to existing water treatment works and reservoirs (including electrolytic chlorination installations)
- Relays and modifications to existing bulk water pipelines (including installation of flow control valves)
- Design and oversee implementation of SCADA, telemetry and control systems
- Geotechnical investigations
- Topographical and land surveys
- Environmental investigations and studies
- Water Resource Planning Feasibility studies
- Design and contract documentation for future water augmentation schemes (e.g. surface water schemes, desalination and water re-use)
- System Modelling (including Water resource yield modelling) and data management
- Geo-hydrological investigations, monitoring and well-field development (e.g. further phases of TMG, Cape Flats or Atlantis)
- Dam safety inspections and investigations.

Personnel requirements

The requirements of the various professional/technical personnel are contained in the Notes provided as a preamble to Schedule No.1: Bulk Water Branch in Part C2.2: Schedules of Rates.

Verifiable experience referred to in the Notes is interpreted as experience in that particular service. Postgraduate years of experience is defined as working experience gained from the time of obtaining a baccalaureus/diploma qualification, as applicable.

[redacted]

2.1.1 **Engineering Services (Civil, Structural, Mechanical, Electrical and Electronic)**

2.1.1.1 **Planning, Studies, Investigations and Assessments**

The provision of all services described in Clause 3.1 of Board Notice 138 of 2015: Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No 46 of 2000), as amended or amplified upon in the Project Brief (Clause 5) below.

2.1.1.2 **Normal Services**

The provision of all services described in Clauses 3.2.1 to 3.2.6 (inclusive) of Board Notice 138 of 2015: Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No 46 of 2000), as amended or amplified upon in the Project Brief (Clause 5) below.

The Service Provider's attention is also drawn to the responsibilities of the designer of a structure in terms of the Construction Regulations, and shall comply with all requirements in this regard.

The Service Provider shall, apart from conducting his own activities in compliance with the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and Construction Regulations 2014, ensure that any sub-consultants/contractors employed by the Service Provider also comply with the requirements of the Act and Regulations. The Service Provider shall enter into an agreement with the Employer in this regard before the commencement of any work related to this contract (Form C1.3, Occupational Health and Safety Agreement Part C1, refers).

2.1.1.3 **Additional Services**

(1) The provision of additional services pertaining to all stages of the project as anticipated in Clause 3.3.1 of Board Notice 138 of 2015: Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No 46 of 2000), as amended or amplified upon in the Project Brief (Clause 5) below, will be conducted based on the hourly rates tendered and upon the acceptance of a quotation for such services received from the Service Provider by the Employer.

(2) The provision of construction monitoring service as described in Clause 3.3.2 of Board Notice 138 of 2015: Guideline for Services and Processes for Estimating Fees for Persons Registered in terms of the Engineering Profession Act, 2000 (Act No 46 of 2000), as amended or amplified upon in the Project Brief (Clause 5) below, will be based on the rates tendered and upon the acceptance of a quotation for such services received from the Service Provider by the Employer.

2.1.2 **Quantity Surveying Services**

2.1.2.1 **Building and Engineering Works Services**

The provision of all applicable services described in Board Notice 170 of 2015: Guideline Tariff of Professional Fees in respect of Services rendered by Persons Registered in terms of the Quantity Surveying Profession Act, 2000 (Act No 49 of 2000), as amended or amplified upon in the Project Brief (Clause 5) below.

2.1.3 **Architectural Services**

2.1.3.1 **Standard Services**

The provision of all applicable services described in Board Notice 121 and 122 of 2015: Framework for the Professional Fees Guideline in respect of services provided by persons registered in terms of the Architectural Profession Act, 2000 (Act No 44 of 2000), as amended or amplified upon in the Project Brief (Clause 5) below.

The Service Provider's attention is also drawn to the responsibilities of the designer of a structure in terms of the Construction Regulations, and shall comply with all requirements in this regard.

[redacted]

The Service Provider shall, apart from conducting his own activities in compliance with the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and Construction Regulations 2014, ensure that any sub-consultants/contractors employed by the Service Provider also comply with the requirements of the Act and Regulations. The Service Provider shall enter into an agreement with the Employer in this regard before the commencement of any work related to this contract (Form C1.3, Part C1, refers).

2.1.3.2 Additional Services

(1) The provision of additional services pertaining to all stages of the project as anticipated in Clauses 1.2.1 of the 2015: Framework for the Professional Fees Guideline in respect of services provided by persons registered in terms of the Architectural Profession Act, 2000 (Act No 44 of 2000), as amended or amplified upon in the Project Brief (Clause 5) below, will be conducted based on the hourly rates tendered and upon the acceptance of a quotation for such services received from the Service Provider by the Employer.

(2) The provision of special inspections (more intensive inspections and assessments of the works) as described in Clause 1.2.1.2(c) of the 2015 Professional Fees Guidelines as published by the South African Council for the Architectural Profession in terms of the Architectural Profession Act, 2000 (Act No 44 of 2000), as amended or amplified upon in the Project Brief (Clause 5) below, which will be conducted based on the rates tendered and upon the acceptance of a quotation for such services received from the Service Provider by the Employer.

(3) Rezoning or change of use or amendments of town planning schemes.

2.1.4 Project Management Services

The provision of all services described in Clause 3.0 (Standard Services) and Clause 4.0 (Additional/Supplementary Services) of Board Notice 202 of 2011: Guideline Scope of Services and Recommended Guideline Tariff of Fees for Persons Registered in terms of the Project and Construction Management Professions; (Act 48 of 2000), as amended or amplified upon in the Project Brief (Clause 5) below.

2.1.5 Environmental Assessment Practitioner, Environmental Control Officer, Environmental Auditor and Heritage Assessment Practitioner

2.1.5.1 An independent Environmental Assessment Practitioner (EAP) is required to assess the project objectively, provide advice on the implementation of relevant environmental legislation and the requirements for any Environmental Assessments, undertake such assessments (where required), obtain the required Environmental Authorisation from the Environmental Authorities (where required) and develop an Environmental Management Programme (EMPr) for the project.

The EAP will be responsible for the planning, management, coordination of environmental impact assessments, strategic environmental assessments, environmental management programmes or any other appropriate environmental instruments introduced through regulations

An EAP may be required to act as a Review EAP on any project as instructed by the Employer. A Review EAP must fulfil the requirements of an EAP and must be registered with EAPASA.

When required, a Public Participation Practitioner will assist with any Environmental Impact Assessments or similar. The practitioner will be required to have at least 3-years' experience in similar activities.

2.1.5.2 An independent Environmental Control Officer (ECO) is required to monitor objectively the implementation of relevant environmental legislation, conditions of Environmental Authorisations (EAs or other environmental licences, permits) and the Environmental Management Plan for the project. The ECO must be on site prior to any site establishment and must form an integral part of the project team.

2.1.5.3 An Independent Environmental Auditor is required to undertake environmental compliance audits at prescribed timeframes (prescribed by the competent authority) for the duration of construction related activities (and thereafter as required). These audits must comply with the requirements as prescribed in Regulation 34 of the EIA Regulations, 2014, as amended.

[redacted]

2.1.5.4. An independent Heritage Assessment Practitioner (HAP) may be required to assess a project objectively and provide advice on the implementation of the National Heritage Resources Act and Heritage Protection Overlay zoning where this is in place. The Heritage practitioner will be required to complete any Notifications of Intent to Develop, carry out any heritage impact assessments or develop heritage statements for the project, and assist with any required applications under heritage legislation as well as with the implementation of any heritage requirements put in place by the relevant authorities. It must be noted that the heritage practitioner should be appropriately experienced/qualified in the applicable fields of heritage such as built environment, archaeology or palaeontology as required.

2.1.6 Health and Safety Services

The provision of all services described in Clause 3 (Standard Services) and Clause 4 (Additional Related Services) as described in the Guideline Scope of Services and Recommended Guideline Tariff of Fees for Construction Health and Safety Professionals Registered in terms of the Project and Construction Management Professions Act, 2000 (Act 48 of 2000), Board Notice 167 of 2019 as gazetted in government Gazette No. 42697, 13 September 2019, as amended or amplified upon in the Project Brief (Clause 5) below.

2.1.7 Landscape Architectural Services

All standard services as described in Stages 1 to 6 in the Amended Landscape Architectural Work Stages January 2011 published by the South African Council for the Landscape Architectural Profession (available on their website www.saclap.org.za), as amended or amplified upon in the Project Brief (Clause 5) below.

2.1.8 Specialist Services

Where the Employer requires specialist services from the Service Provider to comply with the Scope of Works, such services shall be provided by the Service Provider and shall be conducted on a Time and Cost basis. No additional services shall be undertaken without the approval of the Employer. Such specialist services shall include but are not limited to those listed in item 1.4 in C2.2: Schedules of Rates.

Where the Employer requires materials, equipment, testing and/or any other recoverable expenses not covered in the Scope of Work, such items will be provided by the Service Provider on a cost basis plus administration fee (refer to items 1.5.1 and 1.5.2 in C2.2: Schedules of Rates). Prior approval needs to be obtained from the Employer before these items may be procured.

2.2 NOT APPLICABLE

2.3 NOT APPLICABLE

2.4 NOT APPLICABLE

2.5 NOT APPLICABLE

3. EXTENT OF THE SERVICES

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

Purchase Orders will be raised for each approved Works Project by the Employer. Such Works Project will be based on the Schedules of Rates or time based cost proposal submitted by the Service Provider and accepted by the Employer

The services to be provided in terms of this contract are inextricably linked to the Employer's budget, and it should be noted that while the Employer has every intention of completing the full Scope of Work making full use of the budget allocation, the Employer's budget is subject to periodic review. Should it become necessary to vary the scope of work or even suspend or terminate this contract, such variation, suspension or termination shall be dealt with in accordance with the provisions of the Standard Professional Services Contract as amended by the Contract Data.

4. USE OF REASONABLE SKILL AND CARE

The Service Providers' attention is drawn to the fact that the safety of persons and property is of paramount importance, closely followed by the minimisation of disruption and inconvenience to the local authority and public.

[redacted]

The Service Provider is therefore required to provide all aspects of the Service with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards, and ensure that all legal requirements are met, and that all legal processes are adhered to.

5. PROJECT BRIEF

5.1 Terms of Reference

The Employer's objective is to:

(i) perform repairs, renovations, alterations and additions from time to time on some of the properties and services under its custodianship. These properties are located in all areas of the City of Cape Town.
(ii) execute new capital projects or services.

In order to design, procure and manage these projects the Employer requires various professional services to be provided. All services would be performed in complete compliance with the respective guidelines or tariffs of fees.

In general, it is the Employer's intention for the Service Provider to provide all stages of services (Stages 1-6) for a particular Works Project.

The Service Provider will furthermore be required to procure, on instruction from the Employer, any other specialist services as may be required for the successful implementation of this project, in terms of a sub-consultancy or sub-contract agreement.

5.2 Specific Requirements

5.2.1 Professional Consulting Services

5.2.1.1 Planning, Studies, Investigations and Assessments

The Service Provider shall carry out all of the studies and investigations necessary to determine a scope of work for each facility. A Preliminary report on the technical and financial feasibility of the project together with preliminary proposals in this regard shall be submitted.

The payment for Planning, Studies, Investigations and Assessments shall be at the tendered Time-Based fees for the professional services required.

5.2.1.2 Normal, Standard and Building & Engineering Works Services

Where a Quantity Surveyor is not part of the team for a particular Works Project, the cost estimates shall be completed by the other relevant disciplines for each Stage (as applicable) and the cost thereof shall be deemed to be included in the tendered rates for that discipline.

Stage 1: Inception

The Works Project Brief will generally have been agreed before the Works Project commences.

The Service Provider shall provide a Works Project Proposal, as detailed in clause 4.8 of Part C1.2: Contract Data, to the Employer for approval.

Stage 2: Concept and Viability

The Service Provider shall provide a preliminary design.

Stage 3: Design Development

The Service Provider shall provide those services necessary to finalise the detailed scope of work, design, specifications, detailed estimate and updated programme for the project and shall co-ordinate the input from all members of the professional team in this regard. The Project Leader shall be responsible for ensuring that the time, cost and quality parameters are adhered to. The Project Leader's name for the particular Works Project must be clearly stated in the Works Project Proposal.

The Service Provider shall be responsible for all service enquiries, wayleave applications and obtaining the necessary authority or permission from the relevant service authorities to carry out all work in terms of this project. All applications in this respect must be carried out timeously.

[redacted]

The design development shall take cognisance of all design requirements as may be imposed by the local authority or any other authority whose services are impacted upon by the proposed work.

The design development shall consider and minimise disruption to the working environment of staff adjacent to renovated areas. A form of screening at public entrances, corridors and private working areas must be considered to minimise loss of privacy and entry into the properties and those immediately adjacent.

A set of documents, consisting of a scope of work, draft plans/drawings and specifications shall be submitted to the Employer for comment and approval prior to going out to tender. All plans must be thoroughly checked by the Service Provider's Project Leader prior to submission. On approval of the detail design drawings and council approved drawings, two sets of paper prints of each must be submitted to the Employer for signature. One set will be kept by the Employer and the other returned to the Service Provider. All other prints issued thereafter shall carry the words "Initial version signed on *(date)*" at the signature location in the title block.

A revised cost estimate shall be submitted to the Employer.

Stage 4: Documentation and Procurement

The Service Provider shall provide those services necessary for the preparation of procurement documentation, advertising of tenders, and the evaluation of tenders received. The Service Provider shall confirm the Employer's procurement (Supply Chain Management) policies and procedures prior to the preparation of any procurement documentation.

The construction contract document shall be prepared in the Construction Industry Development Board's (CIDB) or non-CIDB format (as applicable). The Service Provider shall confirm with the Employer which Conditions of Contract (GCC, FIDIC, JBCC, National Treasury, etc.) will be applicable to each Works Project. The Service Provider shall liaise with the Employer during the preparation of the contract document to determine any other specific requirements that the Employer may have in this regard.

Specifications shall include, inter alia, Health and Safety Specifications, and an Environmental Management Plan.

The Service Provider should note that it is the Employer's preference that all payment items must be measured out in the Bills of Quantities, as opposed to the use of provisional sums or prime cost items. Should provisional sums or prime cost items of greater value than R300 000 (incl. VAT) be included in the Bills of Quantities, the Service Provider will be expected to follow an open competitive process in respect of these items, on behalf of the contractor. This will include the preparation of a tender document, advertising and receiving tenders, and evaluating same on behalf of the contractor.
A draft contract document shall be submitted to the Employer for scrutiny at least four weeks prior to the Bid Specification Committee meeting taking place. The Service Provider shall attend Bid Specification Committee meetings (as required) prior to the finalisation of the contract document and the advertising of tenders. All comments of the committee shall be incorporated into the final contract documents.

Once the contract document has been finalised, the Service Provider shall supply the Employer with an electronic copy of the documents and drawings..

The Service Provider shall be responsible for providing the Employer with the required number of copies of plans and tender documents for tender purposes (both hard copy and on a flash drive).

The Service Provider shall, during the tender period, attend and preside over a tender clarification meeting, and respond to all queries received during this period. This will include the preparation of any Notice to Tenderers

Once tenders close, the Service Provider shall prepare a technical evaluation report for consideration by the Employer's Bid Evaluation Committee (BEC). The Service Provider may be required to attend the BEC Meeting and may be asked to respond to any queries the committee may raise and follow up on any issues requiring attention/action.

Once approved by the Employer, the Service Provider shall facilitate the signing up of the construction contract, in consultation with the Employer.

Working drawings, including reinforcement drawings and Bending Schedules, shall be finalised as part of Stage 4 unless otherwise agreed with the Employer.

[redacted]

Stage 5: Contract Administration and Inspection

The Service Provider shall provide those services as required to manage, administer and monitor the construction contract, including co-ordination of the inspection of the works by the other members of the professional team, as and when necessary.

The service to be provided shall include, where necessary detailed drawings prepared by the contractor for manufacture and installation.

The Service Provider shall prepare any further plans, designs and drawings (over and above the tender drawings), which may be necessary for the execution of the works. The preparation of any shop drawings required for manufacture and installation, or the detailed checking of such, where prepared and submitted by the construction contractor, shall form part of the normal services to be provided by the Service Provider.

The Service Provider shall also, in particular, ensure that all payment certificates, preferential procurement and labour returns, and contract participation expenditure reports are timeously submitted.

Stage 6: Close-Out

The Service Provider shall complete the project close-out as described in the guideline scope of services.

As-built plans/drawings shall be submitted to the Employer in electronic format (preferably .dwg, otherwise .dxf) as well as one complete set of paper prints.

The Service Provider shall also compile a project close-out report for submission to the Employer, which includes, *inter alia*, technical details of the project, the project team, project cost, completion dates, construction details and design changes, delays and the reasons thereof, problems encountered and the solution thereof, conclusions and recommendations.

5.2.1.3 Additional Services

Payment for the following services will be deemed to be included in the tendered percentage rates unless specifically itemised or excluded:

Service Enquiries/Wayleave Applications

The Service Provider shall be responsible for all initial service enquiries/wayleave applications from the various service authorities, the requirements of whom shall be carried through into the designs and tender documentation as necessary. Payment for this service will be time-based.

Preferential Procurement and Targeted Participation

The Service Provider shall provide all services related to preferential procurement and targeted participation in respect of the construction contract (as set out in the Employer's example CIDB documents for Civil (or other) construction contracts including but not limited to:

(a) the incorporation into the contract documentation of:

  i) preferential procurement requirements in respect of B-BBEE and, if applicable, local production and content, and
  ii) targeted participation goals in respect of targeted labour and/or resources.

(b) the monitoring and verification of compliance with (i) and (ii) in (a) above during the construction contract (including the receiving and collation of documentary evidence submitted by the contractor in this regard).

Construction Monitoring

Construction monitoring will be required for many projects, requiring the full time input of experienced individuals on site. The level of construction monitoring required will be stated in the Works Project Brief.

The Service Provider shall, when called upon to do so by the Employer, submit a fully motivated proposal for such construction monitoring to the Employer for approval.

[redacted]

The proposal shall name the individual(s) proposed, provide details of their experience in relation to the particular Works Project, the anticipated duration of their involvement and the monthly cost in respect thereof. The cost shall include all benefits, overhead charges and profit as well as any overtime costs, if applicable. Construction monitoring staff will be paid over the year end break, if applicable.

The Service Provider's proposal may be accepted or rejected at the sole discretion of the Employer.

Act as the Employer's agent in terms of the Occupational Health and Safety Act

The Service Provider, in submitting a tender for this professional services contract, shall be deemed to have acknowledged acceptance of the appointment as the Employer's Construction Health and Safety Agent in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and the Construction Regulations, 2014, should the Employer accept the tender. The Service Provider shall, as such, execute all of the duties of the client as contemplated in the Construction Regulations.

The Service Provider's attention is also drawn to the responsibilities of the designer of a structure in terms of the Construction Regulations, and shall comply with all requirements in this regard.

The Service Provider shall, apart from conducting his own activities in compliance with the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and Construction Regulations, 2014, ensure that any sub-consultants/contractors employed by the Service Provider also comply with the requirements of the Act and Regulations. The Service Provider shall enter into an agreement with the Employer in this regard before the commencement of any work related to this contract (Form C1.3, Part C1, refers).

Environmental Control Officer

Where required for a specific Works Project, the Service Provider shall provide from within its own organisation or, if necessary, appoint as a sub-consultant, a suitably experienced Environmental Control Officer (ECO) whose responsibilities shall be as follows:

(a) to prepare a project specific Construction Environmental Management Programme (specification) (EMPr) for inclusion into the construction tender/contract documents.
(b) to assist the Employer's Agent/Engineer/Principal Agent in ensuring that any necessary permits are obtained.
(c) to convey the contents of the EMPr to the contractor's site team, and discuss the contents in detail with the contractor, as well as to conduct induction and environmental awareness training sessions to the contractor's and sub-contractor's workforces, as and when necessary.
(d) to monitor and verify that the EMPr is adhered to at all times, and to inform the Employer's Agent/Engineer/Principal Agent if the specifications are not followed.
(e) to review construction method statements for approval by the Employer's Agent/Engineer/Principal Agent.
(f) to assist the Employer's Agent/Engineer/Principal Agent and contractor in finding environmentally responsible solutions to problems.
(g) to provide a report on environmental compliance issues (with photographic evidence, if applicable) at the monthly site meetings or any other meetings that may be called regarding environmental matters.
(h) to ensure that all activities/incidents concerning the environment are recorded in the site records, to monitor and review such records and advise the Employer's Agent/Engineer/Principal Agent of any action necessary.
(i) to inspect the site and surrounding areas with regard to compliance with the EMPr.
(j) to advise the Employer's Agent/Engineer/Principal Agent on the imposition of penalties or fines specified in the EMPr, or the removal of person(s) and/or equipment not complying with the specifications.

The frequency of site visits/inspections shall be as and when necessary, but not less than at monthly intervals.

Training of Personnel

The Employer may require that the Service Provider provide training and transfer knowledge to one or more of the Employer's staff, described as a Trainee for the purposes of this Contract.

The preferred situation will be that the Trainee is incorporated into the Service Provider's team for a particular Works Project. The Trainee should be given specific design tasks to complete under the supervision of an experienced and relevant engineer, referred to as the Supervisor.

[redacted]

The Supervisor will be required to:

- Guide and instruct the Trainee in the execution of the tasks
- Monitor the Trainee's progress
- Provide monthly feedback on the Trainee's progress

Payment will be made for the effective time spent by the engineer in the supervision and training of the Trainee. Payment will also be made for the provision of a Personal Computer (PC) for the sole use by the Trainee for the execution of the task(s) allocated to the Trainee. The PC shall be appropriate for the task(s) and have the necessary software required for the execution of the task(s). Appropriate payment items have been allowed in the Schedules of Rates.

5.3 Time Frames/Milestones

Milestones set by the Employer typically revolve around budget cycles and the need to spend the budget in any given financial year. The important milestones are therefore the financial year ends (30 June each year) and the Service Provider will be expected to establish a project programme, in consultation with the Employer that takes cognisance of the budgets available and the budget cycles. Once agreed, the Service Provider is expected to ensure that the programme is adhered to, and to intervene timeously if necessary.

The Service Provider shall submit a revised programme as and when required by the Employer.

5.4 Places for the Performance of Specific Tasks

It is anticipated that the majority of the work involved in the reporting, preliminary design and detail design and tender stages will be undertaken at the Service Provider's local office. The construction monitoring service will take place at the site of the project.

The Service Providers personnel will however be required to attend meetings in the Cape Metropolitan area or at the location of the Works Projects as and when required, and it may be necessary to carry out inspections at the contractor's (or sub-contractor's) yard(s) wherever they may be.

5.5 Reporting Requirements

Aside from the three particular reports required in terms of the brief above (the Preliminary Technical & Feasibility Report, Tender Evaluation Report and Project Close-Out Report), the Service Provider may be required to prepare, or contribute to, ad hoc reports on specific aspects of the project.

Furthermore, the Service Provider shall submit monthly cost reports to the Employer showing expenditure in respect of both the Service Provider's appointment and the construction contractor's contract; together with the anticipated spend to the end of the financial year in question.

The Conceptual Planning Report shall be submitted within the time frames agreed to by the Employer.

The Tender Evaluation Report shall be submitted to the Employer within two weeks of tenders for the construction works having been received.

A preliminary Project Close-Out Report shall be submitted to the Employer within three months of the Certificate of Completion having been issued, which shall be updated as necessary and re-submitted within three months of the issue of the Final Approval Certificate.

6. APPLICABLE NATIONAL AND INTERNATIONAL STANDARDS

The Service Provider shall ensure that cognisance of all applicable national and international standards are taken in the execution of his/her own work and that of his/her sub-consultants in the design and compilation of specifications for this project. International standards should only be used where no national standards exist, or where it is the norm to use or refer to international standards.

[redacted]

7. APPROVALS

The Service Provider shall be responsible for obtaining the following approvals:

(a) Approval of the implementation programme from the Employer,
(b) Approval of the conceptual and preliminary designs from the Employer,
(c) Approval of the project from Heritage Western Cape *(if required)*,
(d) Approval (authorisation) of the project from the Department of Environmental Affairs and Development Planning *(if required)*,
(e) Approval of the detail design, drawings and contract document from the Employer,
(f) Wayleave approval from all service authorities,
(g) Approval of the Engineers Representative from the Employer,
(h) In respect of time based services, approval of the allocation of staff from the Employer,
(i) Approval for the employment of specialist sub-consultants from the Employer,
(j) Approval of plans from Department of Planning and Building Development within City of Cape Town in accordance with the National Building Regulations and Building Standards Act (Act 103 of 1977) and all necessary certifications,
(k) Approval for the employment of specialist sub-consultants and their applicable costs/hourly rates from the Employer,
(l) Approval of the accommodation of traffic plans from the Traffic Manager.

Notwithstanding any approval received from the Employer, the Service Provider shall remain responsible for all work carried out by the Service Provider and its sub-consultants in terms of this contract.

8. PROCUREMENT

8.1 Preferential Procurement

The Works shall be executed in accordance with the conditions associated with the granting of preferences detailed in the **Preference Schedule** where preferences are granted in respect of B-BBEE contribution.

Financial penalties, as described in the **Preference Schedule**, shall be applied in the event that the Service Provider is found to have breached the conditions contained in the **Preference Schedule** (unless proven to be beyond the control of the Service Provider).

Notwithstanding the application of penalties, the Service Provider's attention is drawn to other sanctions that may be applied by the Employer (listed in the **Preference Schedule**) with due consideration to the circumstances.

8.2 Monitoring the use of sub-contractors/sub-consultants and joint ventures

Notwithstanding the restriction on sub-contracting as described on the **Preference Schedule**, it is recognised that sub-contracting is an integral part of the built environment, which the conditions of contract make provision for.

In order, however, to comply with the requirements of the **Preference Schedule**, the Service Provider shall submit to the Employer's Agent, on a monthly basis, a **B-BBEE Sub-contract Expenditure Report**. The format of this report is provided in Annex 2 attached.

The Service Provider shall submit to the Employer's Agent documentary evidence in accordance with the applicable codes of good practise of the B-BBEE status level of every sub-contractor employed by the Service Provider. Until such time as documentary evidence as described above has been submitted to the Employer's Agent, a sub-contractor shall be deemed to be a non-compliant contributor.

The Service Provider shall furthermore, on the written request of the Employer's Agent, provide documentary evidence showing the value of work sub-contracted to any or all of the sub-contractors employed by the Service Provider.

8.3 Forms for contract administration

The Service Provider shall complete, sign and submit with each monthly statement for payment, the following updated returns (the format of which are attached in C3.2 Annexes as amended from time to time):

- B-BBEE Sub-contract Expenditure Report (Annex 1)
- Joint Venture Expenditure Report (Annex 2)

[redacted]

The **B-BBEE Sub-contract Expenditure Report** is required for monitoring the prime contactor's compliance with the sub-contracting conditions of the **Preference Schedule.**

The Joint Venture Expenditure Report is required for monitoring the joint venture's compliance with the percentage contributions of the JV partners as tendered, where the joint venture has been awarded preference points in respect of its consolidated B-BBEE scorecard.

In respect of Annexes 1 and 2, the Employer shall, in addition to any other sanctions available to it, apply the financial penalties applicable to breach of preferencing conditions in the **Preference Schedule** Preference Schedule in Part T2.2 Returnable Schedules. In the case of joint ventures (Annex 2), the contractor shall prove his compliance with item 6) in Section 2 of the Preference Schedule by providing a consolidated scorecard at his own cost on instruction from the Employer's Agent.

9. FORMAT OF COMMUNICATION

All requests for formal approval from the Employer, or any other body, shall be submitted in writing in hardcopy format. Interim payment claims shall be submitted in the same format, accompanied by an original tex invoice. Ad-hoc communication between the Employer and the Service Provider may be conducted per facsimile or in electronic format (e-mail). Electronic copies shall also be submitted for the record.

All plans and contract documents submitted for approval shall be in hardcopy and electronic format.

10. KEY PERSONNEL

More than the minimum number of key personnel stated below may be required in order to fulfil the Service Provider's obligations.

[redacted]

KEY PERSONNEL						
NOTE: Refer to Clauses 2.1, 2.2, 2.3, 2.4 and 2.5 in Part C3.1: Scope of Work for Typical Works Projects lists.						
Service	Profession	Branch				
		Bulk Water	Catchment Stormwater and River Management	Engineering and Asset Management	Reticulation	Wastewater Treatment
Civil Engineering	A minimum of 2 (two) registered **professional Civil Engineers (PrEng) or professional Civil Engineering Technologists (PrTechEng) or other proven equivalent registration**, each with at least 8 (eight) years verifiable postgraduate experience in the analysis, design, control and monitoring of civil and infrastructural works similar to those listed in Typical Works Projects lists.	✓	✓	✓	✓	✓
Structural Engineering	A minimum of 2 (two) registered **professional Structural Engineers (PrEng) or professional Structural Engineering Technologists (PrTechEng) or other proven equivalent registration**, each with at least 8 (eight) years verifiable postgraduate experience in the analysis, design, control and monitoring of structural works pertaining to all types of construction work similar to those listed in Typical Works Projects lists.	✓	✓	✓	✓	✓
Mechanical Engineering	A minimum of 2 (two) registered **professional Mechanical Engineers (PrEng) or professional Mechanical Engineering Technologists (PrTechEng) or other proven equivalent registration**, each with at least 8 (eight) years verifiable postgraduate experience in the analysis, design, control and monitoring of all works related to all types of construction work similar to those listed in Typical Works Projects lists.	✓	✓	✓	✓	✓
Electrical Engineering	A minimum of 2 (two) registered **professional Electrical Engineers (PrEng) or professional Electrical Engineering Technologists (PrTechEng) or other proven equivalent registration**, each with at least 8 (eight) years verifiable postgraduate experience in the analysis, design, control and monitoring of all works related to all types of construction work similar to those listed in Typical Works Projects lists.	✓	✓	✓	✓	✓
Electronic Engineering	A minimum of 1 (one) registered **professional Electronic Engineer (PrEng) or professional Electronic Engineering Technologist (PrTechEng) or other proven equivalent registration**, with at least 8 (eight) years verifiable postgraduate experience in PLC and SCADA programming and in the analysis, design, control and monitoring of all works related to all types of construction work similar to those listed in Typical Works Projects lists.	✓	✓	✓	✓	✓

[redacted]

KEY PERSONNEL						
NOTE: Refer to Clauses 2.1, 2.2, 2.3, 2.4 and 2.5 in Part C3.1: Scope of Work for Typical Works Projects lists.						
Service	Profession	Branch				
		Bulk Water	Catchment Stormwater and River Management	Engineering and Asset Management	Reticulation	Wastewater Treatment
Process Design Engineer "A"	A minimum of 1 (one) **Process Design Engineer** who is a registered **professional Civil or Chemical Engineer (PrEng) or professional Civil or Chemical Engineering Technologist (PrTechEng) or other proven equivalent registration**, who has experience in the analyses and design of Water Treatment Plants (10Mℓ/day or larger), **and** has either: (i) a Postgraduate qualification in Water Treatment with a minimum of 8 (eight) years verifiable experience in the analyses and design of Water Treatment Plants, 5 (five) of which must be post Postgraduate experience, or (ii) 20 (twenty) years verifiable experience in the analyses and design of Water Treatment Plants.	✓	*	*	*	*
Process Design Engineer "D"	A minimum of 1 (one) **Process Design Engineer** who is a registered **professional Civil or Chemical Engineer (PrEng) or professional Civil or Chemical Engineering Technologist (PrTechEng) or other proven equivalent registration**, who has experience in the analyses and design of Wastewater Treatment Plants (10Mℓ/day or larger), **and** has either: (i) a Postgraduate qualification in Wastewater Treatment with a minimum of 8 (eight) years verifiable experience in the analyses and design of Wastewater Treatment Plants, 5 (five) of which must be post Postgraduate experience, or (ii) 20 (twenty) years verifiable experience in the analyses and design of Wastewater Treatment Plants.	*	*	*	*	✓
Hydraulic Engineer "A"	A minimum of 1 (one) registered **professional Civil Engineer (PrEng) or professional Civil Engineering Technologist (PrTechEng) or other proven equivalent registration**, with at least 8 (eight) years postgraduate experience in the design of large diameter pipelines and in surge analyses and must have undertaken, and taken responsibility for, the design of a minimum of 5 (five) pipeline projects (including surge analyses) with a diameter larger than 500mm.	✓	*	*	*	*
Hydraulic Engineer "B"	A minimum of 1 (one) registered **professional Civil Engineer (PrEng) or professional Civil Engineering Technologist (PrTechEng) or other proven equivalent registration**, with at least 8 (eight) years postgraduate experience in the design of pipelines and in surge analyses and must have undertaken, and taken responsibility for, the design of a minimum of 5 (five) pipeline projects (including surge analyses) with a diameter larger than 300mm.	*	*	*	✓	✓

[redacted]

KEY PERSONNEL						
NOTE: Refer to Clauses 2.1, 2.2, 2.3, 2.4 and 2.5 in Part C3.1: Scope of Work for Typical Works Projects lists.						
Service	**Profession**	**Branch**				
		Bulk Water	Catchment Stormwater and River Management	Engineering and Asset Management	Reticulation	Wastewater Treatment
Hydraulic Engineer "C" (Hydrology and open channel hydraulics and engineering)	A minimum of 1 (one) registered **professional Civil Engineer (PrEng) or professional Civil Engineering Technologist (PrTechEng) or other proven equivalent registration**, with at least 8 (eight) years verifiable postgraduate experience in this specialised field and specifically rainfall-runoff-water quality modelling, river (and floodplain) and open channel flow modelling, stormwater network modelling, analysis of river and rainfall data for flood management and stormwater harvesting, hydraulic engineering structures, and Sustainable Urban Drainage Systems (SUDS).	*	✓	*	*	*
Geohydrologist	A minimum of 1 (one) Geohydrologist **(PrSciNat) or other proven equivalent registration**, with at least 10 (ten) years verifiable postgraduate experience in Groundwater management. The Geohydrologist must have at least a NQF level 8 (including an Honours degree) in geohydrology or similar earth/water science field of expertise and must have extensive knowledge in geohydrological investigations, wellfield development and operations, and monitoring (including water quality).	✓	*	*	*	*
Quantity Surveying	A minimum of 1 (one) registered **professional Quantity Surveyor (PrQS) or other proven equivalent registration**, with at least 8 (eight) years verifiable postgraduate experience in providing a quantity surveying service for all types of construction work similar to those listed in Typical Works Projects lists.	✓	*	✓	✓	✓
Architectural	A minimum of 1 (one) registered **professional Architect (PrArch) or professional Senior Architectural Technologist (Pr SArch T) or other proven equivalent registration**, with at least 8 (eight) years verifiable postgraduate experience in providing an architectural service for all types of construction work similar to those listed in Typical Works Projects lists.	✓	*	✓	✓	✓
Project Management	A minimum of 1 (one) registered **professional Construction Project Manager (PrCPM) or Project Management Professional (PMP) or other proven equivalent registration**, with at least 8 (eight) years verifiable postgraduate experience in the management of all works related to all types of construction works similar to those listed in Typical Works Projects lists.	✓	✓	✓	✓	✓

[redacted]

KEY PERSONNEL						
NOTE: Refer to Clauses 2.1, 2.2, 2.3, 2.4 and 2.5 in Part C3.1: Scope of Work for Typical Works Projects lists.						
Service	**Profession**	**Branch**				
		Bulk Water	Catchment Stormwater and River Management	Engineering and Asset Management	Reticulation	Wastewater Treatment
Occupational Health and Safety	A minimum of 1 (one) **professional Construction Health and Safety Agent (PrCHSA)** registered with the **South African Council for Project and Construction Management Professions (SACPCMP)** with the necessary competencies and resources to act as the Employer's Agent in terms of the Occupational Health and Safety Act.	✓	✓	✓	✓	✓
Environmental	A minimum of 1 (one) **Environmental Assessment Practitioner (EAP)** registered with the **Environmental Assessment Practitioner's Association of South Africa (EAPASA)** or who meets the criteria for registration (and has applied for registration) with the **Environmental Assessment Practitioner's Association of South Africa (EAPASA)**. The EAP must have at least 8 (eight) years verifiable experience in the undertaking of all environmental works related to all types of construction work similar to those listed in the Typical Works Projects lists. The EAP must have acted in a lead role in at least (2) two Full Scoping/Environmental Impact Assessment (EIA) reports and at least (5) five Basic Assessments of a project or type proven to the Typical Works Projects list.	✓	✓	✓	✓	✓
Freshwater Ecologist	A minimum of 1 (one) **Freshwater Ecologist** registered with the **South African Council for Natural Scientific Professions (SACNASP) or other proven equivalent registration** with at least 8 (eight) years verifiable postgraduate experience in this specialised field and specifically providing aquatic ecological advisory services and undertaking all work necessary to acquire the authorisations (including General Authorisations or Water Use Licences) or permits required in terms of the National Water Act No. 36 of 1998.	✓	✓		✓	✓

Key personnel will be expected to operate out of the local office, as the exigencies of this project require.

Should it become necessary to replace any of the key personnel listed at the time of tender during the course of this contract, they may only be replaced by individuals with similar or better qualifications and experience, who satisfy the minimum requirements and then only with the written approval of the Employer. (Note that 'verifiable experience' is interpreted as experience in that particular service. This must be clearly demonstrated in the CVs provided. Postgraduate years of experience is defined as experience gained from the time of obtaining a baccalaureus qualification).

[redacted]

11. MANAGEMENT MEETINGS

11.1 Management Meetings

During the initial stages of projects (Planning, Studies, Investigations and Assessments; Inception; Concept and Viability and Design Development) the Service Provider will be expected to attend monthly management meetings with the Employer's project management team (PMT), convened for the purpose of managing these projects. The Project Leader will present the Service Provider's proposals at these meetings, and take direction from the PMT in this regard.

11.2 Community/Stakeholder Meetings

The Service Provider will also be expected to contribute to and attend community/stakeholder meetings, presenting proposals at these forums, and taking cognisance of input from the various interested and affected parties in the conceptual and detail design development, where possible. It is anticipated that it will be necessary to continue with community/stakeholder participation through the construction period, including to respond to any individual queries/concerns that may be raised.

11.3 Supply Chain Management (SCM) Committee Meetings

During the course of the Documentation and Procurement stage, the Service Provider shall attend and participate in the SCM Bid Specification and Bid Evaluation Committee meetings in order to present the contract document and tender evaluation report to the Employer.

The Service Provider shall plan to attend two BSC meetings and two BEC meetings. The number of meetings can vary depending on the complexity and extent of interest shown in the tender.

11.4 Site/Technical Meetings

During the Contract Administration and Inspection stage of these projects, the Service Provider shall convene and run monthly site meetings at which the Employer and contractor will be present, as well as any technical meetings with the contractor as may be required to ensure the successful implementation of these projects.

11.5 Ad-hoc Meetings

The Service Provider will be expected to attend ad-hoc meetings from time to time, with the Employer, stakeholder groups, or service or other authorities, in order to address specific issues as and when the need arises.

11.6 General

The Service Provider shall be represented at all meetings by at least one of the key personnel, preferably the Project Leader. The Service Provider shall provide secretarial services (for record keeping purposes) at all management, community/stakeholder, site/technical, and ad-hoc meetings.

All charges in respect of the provision of secretarial services shall be deemed to be included in the tendered Time-based fees.

12. CLAIMS FOR PAYMENT

The Service Provider may submit interim claims for payment (invoices) as the work in terms of this contract progresses, but not more frequently than at monthly intervals. All interim claims must be accompanied by an original tax invoice. Payment will be effected within 30 days of the date on the tax invoice.

13. EMPLOYER'S RIGHT TO RECOVER COSTS

The Employer reserves the right to recover, by way of a deduction from any amount due to the Service Provider, any additional cost which the Employer incurs arising out of non-performance/negligence of the Service Provider.

[redacted]

14. INTELLECTUAL PROPERTY RIGHTS AND CONFIDENTIALITY

Any intellectual property (including but not limited to source documents, designs, maps, drawings, reports, statistics, recordings, photography, computer software, electronic documents, etc.) that may result from the project will be the sole property of the City of Cape Town.

In alignment with the above, any information arising from or within a project will be treated as confidential and no information is to be divulged, provided to or mentioned to persons or parties not involved in the project except where permission is granted in writing for that specific purpose.

[redacted]

C3.2 Annexes

ANNEX 1: SCHEDULE OF DEVIATIONS

ANNEX 2: SCHEDULE 11: KEY PERSONNEL [Extracted from tender submission]

ANNEX 3: SCHEDULE 11(A): SPECIFIC EXPERIENCE OF KEY PERSONNEL [Extracted from tender submission]

ANNEX 4: SCHEDULE 12: SUPPORT RESOURCES [Extracted from submission]

ANNEX 5: SCHEDULE 18: ADDITIONAL PERSONNEL SCHEDULE [Extracted from tender submission]

ANNEX 6: SCHEDULE 19: ORGANISATIONAL STRUCTURE [Extracted from tender submission]

ANNEX 7: SCHEDULE 23: PREFERENCE SCHEDULE TO BE USED IN TERMS OF THE AMENDED CODES FOR MEASURING BROAD-BASED BLACK ECONOMIC EMPOWERMENT IN THE CONSTRUCTION SECTOR (2017) [Extracted from tender submission]

ANNEX 8: B-BBEE SUB-CONTRACT EXPENDITURE REPORT

ANNEX 1

SCHEDULE OF DEVIATIONS



Schedule of Deviations

Notes:

1. The extent of deviations from the tender documents issued by the Employer 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 becomes an obligation of the contract shall also be recorded here.
4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the contract.

NONE

By the duly authorised representatives signing the Contract Agreement, the Employer and the Service Provider agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents, as well as any confirmation, clarification or changes to the terms of the offer agreed to by the Employer and the Service Provider during this process of offer and acceptance.

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

[redacted]

ANNEX 2

SCHEDULE 11: KEY PERSONNEL

SCHEDULE 11: KEY PERSONNEL (BULK WATER BRANCH)

SERVICE	NAME	EMPLOYER (COMPANY
Civil Engineering Services (Minimum 2 professionals)	[redacted]	[redacted]
Structural Engineering Services (Minimum 2 professionals)		
Mechanical Engineering Services (Minimum 2 professionals)		
Electrical Engineering Services (Minimum 2 professionals)		
Electronic Engineering Services (Minimum 1 professional)		
Process Design Engineer "A" (Minimum 1 professional) **(Bulk Water Branch only)**		
Process Design Engineer "D" (Minimum 1 professional) **(Wastewater Treatment Branch only)**	N/A	N/A
Hydraulic Engineer "A" (Minimum 1 professional) **(Bulk Water)**	[redacted]	[redacted]
Hydraulic Engineer "B" (Minimum 1 professional) **(Wastewater Branch)**	N/A	N/A
Hydraulic Engineer "C" (Minimum 1 professional) **(Catchment and Stormwater Management Branch only)**	N/A	N/A
Geohydrologist (Minimum 1 professional) **(Bulk Water Branch only)**	[redacted]	[redacted]
Quantity Surveying Services (Minimum 1 professional)		
Architectural Services (Minimum 1 professional)		
Project Management Services (Minimum 1 professional)		
Occupational Health and Safety Services (Minimum 1 professional)		
Environmental Assessment Practitioner (Minimum 1 professional)		
Freshwater Ecologist (Minimum 1 professional)		

[redacted]

[redacted]

ANNEX 3

SCHEDULE 11(A): SPECIFIC EXPERIENCE OF KEY PERSONNEL

[redacted]

SCHEDULE 11A: SPECIFIC EXPERIENCE OF KEY PERSONNEL (BULK WATER BRANCH)

CIVIL ENGINEERING SERVICES (MINIMUM 2 PROFESSIONALS)

1. CIVIL ENGINEER/TECHNOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Technical Director	[redacted] BEng (Civil) ([redacted]	ECSA Pr Eng [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Civil engineer with more than two decades of experience in designing bulk water and sewerage infrastructure, associated tender documentation, contract management and site supervision. Responsible for the design and project management of various systems involving pump stations, pipelines, valve chambers and associated infrastructure. Specialised knowledge of bulk infrastructure (pump stations and pipelines), waterhammer (surge analysis), project management, water engineering and water resource planning.

Project director and engineer for the Table Mountain Group (TMG) Aquifer New Water project for the City of Cape Town. Boreholes in the TMG Aquifer will be developed in three geographic areas to augment the water supply to Cape Town as part of their water resilience strategy. The project includes the drilling of boreholes, the mechanical and electrical equipping thereof, as well as the pipelines required to connect to existing dams. Responsible for overall project management and design of the civil works.

Refer to CV for other comparable projects: Ntuzuma Bulk Water Supply; Ndulinde Bulk Water Supply and Reticulation Ccheme; Butterworth Bulk Water Supply Scheme; Sidwadweni Regional Water Supply Scheme; Detailed Design of the Lower Thukela Bulk Water Supply Scheme.

[redacted]

[redacted]

CIVIL ENGINEERING SERVICES (MINIMUM 2 PROFESSIONALS) (Continued)

2. CIVIL ENGINEER/TECHNOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Associate	[redacted] (Civil) [redacted] (Civil)	ECSA Pr Eng [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional civil engineer with experience in and bulk water infrastructure engineering, responsible for detailed design with associated tender documentation, project and construction management and contract administration. His main areas of expertise relate to **water treatment systems, bulk water and sewage conveyance (pipelines and pump stations), water and sanitation network reticulation, waterhammer (surge) analysis**, biological corrosion systems for concrete, civil works for Infrastructure development and engineering project management. He has also been involved in designing and coordinating supporting infrastructure for wastewater treatment plants.

Lead Design Engineer for **Sidwadweni Regional Water Supply Scheme: Phase 5** for OR Tambo District Municipality. This project has seen the involvement of Aurecon since the early 2000s and has since been implemented up to the remainder of Contract Phase 5A. The scope of works includes designing up to commissioning the new water treatment plant (WTP) at Tsitsa River, primary bulk pipelines from the new water treatment works (WTW), reservoirs and command reservoirs; and the village reticulation of Phase 5B and 5C. Specifically, the project involved Tsitsa River abstraction works, proposed WTW and high lift pump; a rising main to Nduku balancing tank and a pipeline from the balancing tank to Nduku Reservoir; a pipeline to link Nduku Reservoir and the existing Emdibanisweni Reservoir; and a bulk pipeline connecting the Tsolo Town Reservoir and and another reservoir therein.

Refer to CV for other comparable projects: New water scheme for Faure WTW (70 Mℓ/d); Coffee Bay Water Supply Phases 4 and 5); Sidwadweni Regional Water Supply Scheme; Extensions to Zandvliet wastewater treatment works (WWTW) reclamation Phase 1; Upgrading of Zandvliet wastewater treatment works (WWTW); Ngqamakwe Regional Water Supply (RWSS); Kei Road water treatment and conveyance project

[redacted]

[redacted]

STRUCTURAL ENGINEERING SERVICES (MINIMUM 2 PROFESSIONALS)

1. STRUCTURAL ENGINEER/TECHNOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Associate	[redacted] (Civil) [redacted]	[redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional structural engineer with experience in construction, contract documentation and structural analysis and design, and specialises in structural engineering, water retaining structures, concrete repair and rehabilitation. Widespread experience in civil engineering structures, specifically in the water retaining environment, which include water treatment works (WTW), wastewater treatment works (WWTW), reservoirs, pipe-thrust-resisting structures, pump stations, river abstraction works, canals, retaining walls and aquariums.

Structural Engineer on the **Lower Thukela Bulk Water Supply Scheme** in KwaZulu-Natal. The project involved the design of a new weir, abstraction works, a 55 Ml/d WTW, low and high lift PS, 30 Ml reservoir, 30 km of pipeline and 12 Ml rectangular reservoir in the WTW site. Responsible for the conceptual structural analysis, design and contract specification.

Refer to CV for other applicable projects: Construction of Pringle Bay reservoir infrastructure; Langerug 20 Ml Reservoir and Transhex water supply pipeline; Augmentation of the Stettynskloof bulk water supply system; Ndlambe Bulk Water Supply Scheme; Upgrading of Welvanpas WTW.

2. STRUCTURAL ENGINEER/TECHNOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Director / Technical Specialist	[redacted] (Civil) [redacted] (Civil) [redacted]	[redacted] Pr Eng [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional structural engineer with over three decades of experience and a specialist in water retaining structures

Structural engineer on the Detailed design of the Lower Thukela Bulk Water Supply Scheme for Umgeni Water. Zutari was appointed to undertake the detailed design and preparation of contract documentation of all the infrastructure associated with the Lower Thukela Bulk Water Supply Scheme (LTBWSS). The project involved the design of a new weir, abstraction works, a 55 Mℓ/d water treatment works (WTW), a low and high lift pump station, 30 Mℓ post-tensioned reservoir and 30 km of 900 mm diameter pipeline. Responsible for the conceptual structural analysis, detailed design and contract specification.

Refer to CV for other comparable projects: Upgrading of Zandvliet wastewater treatment works (WWTW) and associated infrastructure; Muswellbrook Recycle Water Treatment Works (WTW); Engineering services for the Two Oceans Aquarium; Upgrade and Extension of the Stellenbosch Wastewater Treatment Works (WWTW); Water reservoirs and water retaining structures.

[redacted]

[redacted]

MECHANICAL ENGINEERING SERVICES (MINIMUM 2 PROFESSIONALS)

1. MECHANICAL ENGINEER/TECHNOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Associate	[redacted] (Mechanical) [redacted]	[redacted] Eng [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional mechanical engineer who has worked in the consulting engineering field since 2009 in **water, wastewater and pumping fields**, as well as the manufacturing industry. She forms part of a multidisciplinary team and has been involved in conceptual design; the preparation of tender documents, including contractual conditions, technical documentation and conceptual design drawings; the administration of contracts (acting as the engineer as defined by the International Federation of Consulting Engineers (FIDIC)); with a more recent focus on technical coordination and project management. She has also been involved in the supervision of the contractor's detailed design; and equipment inspections and plant commissioning for mechanical engineering projects.

Mechanical Engineer on **Coega Kop Water Treatment Works**. The project includes equipping boreholes, construction of pipelines and a permanent 20 Ml/d water treatment works (WTW).

Refer to CV for other comparable projects: Coffee Bay Water Supply; Ndlambe bulk water supply scheme; Dissolved air flotation (DAF) upgrade at Meulwater WTW; Refurbishment and upgrading of Preekstoel WTW; Upgrade to Churchill Raw Water Pump Station.

2. MECHANICAL ENGINEER/TECHNOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Associate	[redacted] Mechanical) [redacted] (Mechanical) [redacted]	[redacted] Pr Eng [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional mechanical engineer who works on mechanical engineering projects in all aspects of the water field and provides technical specifications for engineering contracts as well as assistance on contractual documentation. He is involved in the design and construction of **wastewater treatment works (WWTW), and pipework and pump stations for bulk water supply**.

Mechanical Engineer on **Feasibility study and detailed design of the Lower Thukela Bulk Water Supply Scheme (LTBWSS)**. The project involved the design of a new weir, abstraction works, a 55 Ml/d water treatment works (WTW), low and high lift pump stations, 30 Ml reservoir and 30 km of pipeline. The scheme supplies an additional 55 Ml/d of treated water to the areas. Responsible for the mechanical pipeline design and modelling of the offtake, flowmeter, scour valve, air valve and isolating valve chambers, and a high-lift pump station as well as computational fluid dynamics (CFD) analysis on various parts of pipework and civil structures. Also responsible for checking that the contractor's workshop drawings were performed and commenting on the drawings as well as the inspection of fabricated equipment and conducting load testing witnessing.

Refer to CV for other comparable projects: Upgrading of Sandile WTW; Extension of Wellington WWTW; Sidwadweni Regional Water Supply Scheme; Ndlambe bulk water supply; Eshowe regional bulk water support services agent 1; Preekstoel water treatment works.

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ELECTRICAL ENGINEERING SERVICES (MINIMUM 2 PROFESSIONALS)

1. ELECTRICAL ENGINEER/TECHNOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Associate	[redacted] (Electrical)	[redacted] Pr Eng [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Principal/registered electrical engineer, specialising in electrical reticulation and the control of industrial plants such as **WTW, WWTW and pump stations**. Experience working on projects covering medium-voltage (MV) switchgear, transformers, diesel generators, motor control centres (MCCs), electric motors, programmable logic controllers (PLCs), supervisory control and data acquisitioning (SCADA), industrial networks and instrumentation. Proficient in detailed design, tender documentation, process optimisation, on-site problem solving and contact management.

Electrical engineer on the **Faure new water scheme** project for the City of Cape Town. The capacity of the reuse plant is 70 Mℓ/d upgradeable to 100 Mℓ/d. The process includes tertiary filtration, ozonation, biological activated carbon filtration, granular activated carbon filtration, ultra-filtration and ultra-violet (UV) advanced oxidation processes (AOP). A transfer pump station with six 630 kW pumps/motors. Responsible for the entire electrical, control and instrumentation (EC&I) scope design, drawings, technical specifications. Also responsible for liaising with the supply authority (Eskom) and setting a cogeneration application.

Refer to CV for other comparable projects: Nelson Mandela Bay Municipality (NMBM) emergency water master plan; Voelvlei high lift pump station electrical upgrade; Upgrading of Churchill WTW; Upgrading of Elandsjagt WTW; Transnet Drydock pump stations refurbishment; Design and supervision for the new Welvanpas WTW.

2. ELECTRICAL ENGINEER/TECHNOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Electrical Engineer	[redacted] (Industrial) [redacted] (Electrical)	[redacted] Pr Eng [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional electrical, control and instrumentation (EC&I) engineer involved in several projects, for which he was responsible for the design and construction monitoring of **EC&I installations in industrial plants (pump stations and process plants)**, including **medium- and low-voltage (MV and LV) switchgear** design, reticulation, programmable logic control (PLC) and human-machine interface/supervisory control and data acquisition (HMI/SCADA) control system design.

EC&I engineer on the **Construction of Meulwater Water Treatment Works (WTW)** project, which entailed the construction of an 8 Mℓ/d water treatment works (WWTW). Responsible for the full design and construction supervision of the electrical instrumentation and control (EIC) portion of the water treatment works (WTW). The plant is fully automated with programmable logic control (PLC) and plant-wide supervisory control and data acquisition (SCADA) systems. It also included interfacing with a Festo pneumatic system and a full back-up generator.

Refer to CV for other comparable projects: Design of Voelvlei Pump Station Upgrade, Lower Thukela Bulk Water Supply Scheme, Ndlambe Bulk Water Supply Scheme; Aussenkehr bulk water supply scheme, and Stellenbosch Municipality sewage pump stations.

[redacted]

[redacted]

ELECTRONIC ENGINEERING SERVICES (MINIMUM 1 PROFESSIONAL)

1. ELECTRONIC ENGINEER/TECHNOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Electrical Engineer	[redacted] (Electronic) [redacted]	[redacted] Pr Eng [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional electrical and electronic engineer specialising on low voltage (LV), supervisory control and data acquisitioning (SCADA) and programmable logic controllers (PLC) systems, industrial communication networks and instrumentation design as well as specifications for the renewables, mining, power utilities and water industries. He is proficient in detail design engineering, tender document creation and project execution from conception to completion.

Electrical, Control and Instrumentation (EC&I) Engineer for the **Upgrading of the Voëlvlei high lift pump station**. Zutari was appointed to replace the 5 x 1 210 kW and 1 x 550 kW pumps by adding medium-voltage (MV) variable frequency converters (VFCs), more modern non-return valves (NRVs) and an adjusted control method to limit surge on the pipeline. Responsible for the complete supervisory control and data acquisition (SCADA), control, industrial network and instrumentation design and tender specifications.

Refer to CV for other comparable projects: TMG aquifer groundwater resilience project; Kei Road Water Treatment Works; Second Mogalakwena wastewater treatment works; Engineering services for Droogfontein 2 photovoltaic (PV) plant; Upgrading and extension of Wellington wastewater treatment works.

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PROCESS DESIGN ENGINEER "A" (MINIMUM 1 PROFESSIONAL)
(BULK WATER BRANCH ONLY)

1. PROCESS DESIGN ENGINEER (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Technical Director	[redacted] Civil Eng), specialising in water and wastewater process design [redacted] Civil) [redacted]	[redacted] Pr Eng [redacted]	[redacted] (post MSc)

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional civil engineer with more than a decade of process engineering experience, specialising in water treatment applications with extensive experience in the complete lifecycle of water treatment works.

Significant projects which he has been involved in included the ground-breaking Cape Town Reuse Plant, the innovative Meulwater water treatment works (WTW), the complex Lower Thukela WTW and the novel Preekstoel Biofilter project. All three projects challenged the conventional approach to WTW design to make the infrastructure more operator-centric, while utilising latest research on water treatment technologies to provide efficient solutions to clients. He has significant and valuable experience in the integration of multiple disciplines on complex projects.

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PARTICULAR EXPERIENCE: PROCESS DESIGN ENGINEER "A"

PROJECT / TASK DESCRIPTION	1. Upgrading of the Welvanpas water treatment works (WTW)			**Start month/year**	**End month/year**	**Duration (Months**
			DURATION OF PROJECT/TASK	[redacted]	[redacted]	[redacted]
CAPACITY OF PLANT	10	**Ml/d**	**DURATION OF PERSONAL INVOLVEMENT IN DESIGN WORK / TASK / PROJECT**	12 person-months		
IF AN UPGRADE / EXPANSION, STATE ADDITIONAL CAPACITY OF PROJECT/TASK	10	**Ml/d**	**CLIENT REFERENCE & CONTACT DETAILS**	[redacted] Local Municipality Contact: [redacted]		
DETAILS OF INVOLVEMENT & RESPONSIBILITY	**Role:** Process Designer / **Project Manager / Project Leader** Responsible for process design, civil design, documentation, tender adjudication and reporting, and contract management. As project leader, responsible for all project management, concept and viability through to detailed design and contract documentation. Also responsible for overseeing site supervision and contract administration.					

PROJECT / TASK DESCRIPTION	2. Border Post water treatment works (WTW)			**Start month/year**	**End month/year**	**Duration (Months**
			DURATION OF PROJECT/TASK	[redacted]	[redacted]	[redacted]
CAPACITY OF PLANT	48	**Ml/d**	**DURATION OF PERSONAL INVOLVEMENT IN DESIGN WORK / TASK / PROJECT**	1.75 person months		
IF AN UPGRADE / EXPANSION, STATE ADDITIONAL CAPACITY OF PROJECT/TASK	48	**Ml/d**	**CLIENT REFERENCE & CONTACT DETAILS**	[redacted]		
DETAILS OF INVOLVEMENT & RESPONSIBILITY	**Role:** Process Engineer / Design Lead for the Water Treatment Works (WTW) Responsible for process design, as well as coordinating and leading a diverse design team to provide an innovative and cost effective WTW facility that would blend into the local landscape, while providing a robust, appropriate and secure works.					

[redacted]

PROJECT / TASK DESCRIPTION	3. Feasibility study, detailed design and documentation for Mogalakwena Bulk Water Supply Scheme			Start month/year	End month/year	Duration (Months)
			DURATION OF PROJECT/TASK	[redacted]	[redacted]	[redacted]
CAPACITY OF PLANT	[redacted]	Ml/d	DURATION OF PERSONAL INVOLVEMENT IN DESIGN WORK / TASK / PROJECT	6 person months		
IF AN UPGRADE / EXPANSION, STATE ADDITIONAL CAPACITY OF PROJECT/TASK	[redacted]	Ml/d	CLIENT REFERENCE & CONTACT DETAILS	[redacted] Local Municipality Contact: [redacted]		
DETAILS OF INVOLVEMENT & RESPONSIBILITY	Role: Process Design Engineer / Design Lead for the Water Treatment Works (WTW). Responsible for coordinating the water treatment works (WTW) design team and related components.					

PROJECT / TASK DESCRIPTION	4. Refurbishment and upgrading of Preekstoel water treatment works (WTW)			Start month/year	End month/year	Duration (Months)
			DURATION OF PROJECT/TASK	[redacted]	[redacted]	[redacted]
CAPACITY OF PLANT	[redacted]	Ml/d	DURATION OF PERSONAL INVOLVEMENT IN DESIGN WORK / TASK / PROJECT	[redacted] person-months		
IF AN UPGRADE / EXPANSION, STATE ADDITIONAL CAPACITY OF PROJECT/TASK	[redacted]	Ml/d	CLIENT REFERENCE & CONTACT DETAILS	[redacted] Local Municipality Contact: [redacted] Te[redacted]		
DETAILS OF INVOLVEMENT & RESPONSIBILITY	Role: Project Manager / Contract Manager / Process Engineer Responsible for project administration, project management, process and biofilter design, tender documentation, adjudication, contract management of both civil and mechanical contracts and commissioning of the works.					

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PROJECT / TASK DESCRIPTION	5. Detailed design of the Lower Thukela Bulk Water Supply Scheme (LTBWSS)			Start month/year	End month/year	Duration (Months)
			DURATION OF PROJECT/TASK	[redacted]	[redacted]	[redacted]
CAPACITY OF PLANT	55	Ml/d	DURATION OF PERSONAL INVOLVEMENT IN DESIGN WORK / TASK / PROJECT	[redacted]person-months		
IF AN UPGRADE / EXPANSION, STATE ADDITIONAL CAPACITY OF PROJECT/TASK	55	Ml/d	CLIENT REFERENCE & CONTACT DETAILS	[redacted] Contact: [redacted] Tel: [redacted]		
DETAILS OF INVOLVEMENT & RESPONSIBILITY	**Role: Assistant Project Manager** / Process Engineer Responsible for project management, coordinating design teams and assisting the project engineer					

PROJECT / TASK DESCRIPTION	6. Upgrading of Elandsjagt water treatment works (WTW)			Start month/year	End month/year	Duration (Months)
			DURATION OF PROJECT/TASK	[redacted]	[redacted]	[redacted]
CAPACITY OF PLANT	70	Ml/d	DURATION OF PERSONAL INVOLVEMENT IN DESIGN WORK / TASK / PROJECT	1 person-month		
IF AN UPGRADE / EXPANSION, STATE ADDITIONAL CAPACITY OF PROJECT/TASK	35	Ml/d	CLIENT REFERENCE & CONTACT DETAILS	[redacted]Bay Metropolitan Municipality Contact [redacted] Tel [redacted]		
DETAILS OF INVOLVEMENT & RESPONSIBILITY	**Role: Project Manager** / Process Engineer Responsible for the detailed process design and tender documentation.					

[redacted]

PROJECT / TASK DESCRIPTION	**7. Meulwater WTW**			**Start month/year**	**End month/year**	**Duration (Months**
			DURATION OF PROJECT/TASK	[redacted]	[redacted]	[redacted]
CAPACITY OF PLANT	**8**	**Ml/d**	**DURATION OF PERSONAL INVOLVEMENT IN DESIGN WORK / TASK / PROJECT**	1 person-month		
IF AN UPGRADE / EXPANSION, STATE ADDITIONAL CAPACITY OF PROJECT/TASK	**8**	**Ml/d**	**CLIENT REFERENCE & CONTACT DETAILS**	[redacted] Local Municipality Contact: [redacted] Tel: [redacted]		
DETAILS OF INVOLVEMENT & RESPONSIBILITY	**Role: Project Manager / Process Engineer** Responsible for process design, civil design, documentation, tender adjudication and reporting as well as contract management.					

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HYDRAULIC ENGINEER "A" (MINIMUM 1 PROFESSIONAL)
(BULK WATER, RETICULATION BRANCH ONLY)

1. HYDRAULIC ENGINEER (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Associate	[redacted] Eng (Civil) [redacted] Civil) [redacted]	[redacted] Pr Eng [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional civil engineer specialising in the design, including master planning, system optimisation, **hydraulic design and surge analysis** of new bulk water and wastewater conveyance systems, or the rehabilitation of existing systems, by means of trenchless technologies. Also involved in the development and implementation of mini-hydropower installations. Responsible for project coordination and planning, design review, report writing, contract documentation and administration of the construction contracts as the Employer's Agent.

Design leader for the rising main and command reservoir design engineering team for the **Detailed design of the Lower Thukela Bulk Water Supply Scheme** for Umgeni Water. Responsible for the design of the **2.5 km DN900 welded steel rising main** from the high lift pump station towards the new 30 Mℓ command reservoir. The design work included a **waterhammer/surge analysis** and reservoir pipework.

In addition to the projects listed in the table of "Particular Experience" below, please refer to CV for other comparable projects:

Construction of Langerug 20 Mℓ reservoir and water supply pipeline (**7.1 km DN500 ductile iron pipeline**);

Kleinberg Dam, Phase 1 (**7.8 km of new pipelines ranging from DN200 to DN800**);

Durbanville North bulk water supply scheme (**7 km of DN800 rising and gravity mains**).

[redacted]

PARTICULAR EXPERIENCE: HYDRAULIC ENGINEER "A"

PROJECT / TASK DESCRIPTION	DURATION OF INVOLVEMENT IN PIPELINE DESIGN PROJECT (Start Month/Year) (End Month/Year)	DURATION (Months)	PIPE DIAMETER, TYPE & LENGTH	DETAILS OF INVOLVEMENT & RESPONSIBILITY	DETAILS OF SURGE ANALYSIS CARRIED OUT	CLIENT REFERENCE & CONTACT DETAILS
Upgrading of [redacted] Bulk Pipeline between [redacted] and Con [redacted] ervoirs	[redacted]	31	7.2 km DN700 GRP; 3.1 km DN600 GRP	Responsible for the optimisation of the conveyance pipelines, material selection and hydraulic design, including surge analysis	Surge analysis conducted on 700mm and 600m pipelines	[redacted] Municipality Contact: [redacted] Tel: [redacted]
Upgrading of the [redacted] WTW: construction of new [redacted] rising main	[redacted]	37	6.8 km long 600mm diameter pipeline (welded steel or ductile iron)	Responsible for the design, including surge analysis, and tender documentation.	Surge analysis conducted on 600mm diameter rising main	[redacted] Water Contact: [redacted] Tel: [redacted]
[redacted] Pipeline	[redacted]	14	183 km long 250 mm to 900 mm diameter pipelines (ductile iron and welded steel)	Responsible for the pipeline routing, material selection preliminary design, including surge analysis	Surge analysis conducted on 250mm to 900mm diameter pipelines	[redacted] Water Contact: [redacted] Tel: [redacted]

[redacted]

[redacted]

[redacted] Bulk Water Supply Scheme	[redacted]	[redacted]	110mm to 700mm diameter pipelines; varying lengths from 8.8 km to 38 km; various materials (incl. steel, uPVC, GRP)	Responsible for managing the pipeline design team responsible for the design of bulk water supply systems, which included surge analysis of all systems, design of a borehole field system and two bulk pump stations, with installed power of 230 and 390 kW, respectively. Also responsible for the project design coordination with other design teams for the design of two 2 Ml reinforced concrete (RC) reservoirs, a 16 Ml RC reservoir and a 9 Ml/d water treatment works (WTW), including reverse osmosis and the appurtenant infrastructure for these infrastructure elements (a brine discharge pipeline and sea outfall). Further responsible for the compilation of tender documentation for the civil infrastructure contracts and undertaking the tender evaluation of some of these tenders	Surge analysis conducted on all pipeline systems ranging between 110 mm to 700 mm diameter	[redacted] Water **Contact:** [redacted] **Tel:** [redacted]

[redacted]

Detailed design of the Lower [redacted] Water Supply Scheme	[redacted]	[redacted]	30 km of 900 mm diameter steel pipeline	Responsible for design of the 2.5 km DN900 welded steel rising main from the high lift pump station towards the new 30 Ml command reservoir. The design work included a surge analysis and reservoir pipework.	Surge analysis conducted for the 900mm diameter pipeline	[redacted] Water Contact: [redacted] Tel: [redacted]
[redacted] Water Augmentation Project	[redacted]	[redacted]	**Phase 1:** 46 km of pipeline, with diameters up to 1100mm **Phase 2:** 128 km of pipeline, with diameters up to 2500mm	Responsible for system optimisation as well as surge analysis of the rising and gravity mains during Phase 1. During Phase 2, responsible for generating hydraulic models, estimating the capital and operational costs and unit reference values (URV) to compare the alternative routes.	Surge analysis conducted for the rising and gravity mains in both phases	[redacted] Authority Contact: [redacted] Tel: [redacted]
[redacted] bulk water supply project	[redacted]	[redacted]	500mm dia 12 km ductile iron/steel bi-directional pipeline.	Responsible for the concept design of the bi-directional pipeline and bulk pump station as well as the preliminary and detailed design (including surge analysis of the bi-directional pipeline), tender documentation and procurement of the mechanical equipment for the boreholes and bulk pump station	Surge analysis conducted for 500mm diameter pipeline	[redacted] Municipality Contact: [redacted] Tel: [redacted]

[redacted]

[redacted]

Design of the [redacted] Street Sewage Pump Station	[redacted]	[redacted]	Dual 600mm dia GRP rising mains	Responsible for the concept civil design of the pump station building and the detailed mechanical design of the pump system, including tender documentation and tender adjudication. Also undertook the surge analysis on the dual DN600 GRP rising mains	Surge analysis conducted for dual 600mm diameter rising mains	[redacted]onsulting Engineers **Contact:** [redacted] **Tel:** 021 [redacted] **Email** [redacted]
[redacted] River abstraction scheme	[redacted]	[redacted]	5.5 km of 500 mm dia rising main	Responsible for the pipeline design, including pipe optimisation, air valve sizing and positioning, and surge analysis. Also responsible for compiling contract documents for tender.	Surge analysis conducted for 500mm diameter pipeline	[redacted]Local Municipality **Contact:** [redacted] **Tel:** [redacted] **Email:** [redacted]
[redacted] Lellefontein booster pump/turbine station	[redacted]	[redacted]	600mm to 1500 mm pipelines	Responsible for concept and preliminary design of the civil works, including surge analysis to determine the impact of the new station on existing pipeline (600mm to 1500mm), and detailed design of the mechanical works as well as assisting in the tender documentation for the civil works and managing the tender documentation portion of the mechanical and electrical works. Also responsible for acting as the contracts engineer on the mechanical and electrical works.	Surge analysis conducted for existing 600mm to 1500mm pipelines	[redacted]Local Municipality **Contact:** [redacted] **Tel:** [redacted]

[redacted]

[redacted]

Replacement of existing pipelines on [redacted] Mountain	[redacted]	[redacted]	940m DN355 HDPE; 230m DN600 GRP; 2km DN315 HDPE and DN200 HDPE	Responsible for managing the design and tender documentation and evaluation of the project. Also acted as engineer during the execution of the construction contract	Surge analysis conducted for DN355 HDPE pipeline	**Drakenstein Municipality** **Contact:** [redacted] **Tel:** [redacted]

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GEOHYDROLOGIST (MINIMUM 1 PROFESSIONAL)
(BULK WATER BRANCH ONLY)

1. GEOHYDROLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Director / Hydrogeologist	[redacted] (Geohydrology) [redacted] (Applied Geology) [redacted] Geology) [redacted]	[redacted] Pr Sci Nat [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional Natural Scientist who is proficient in pollution and remediation studies, risk assessment methodology and quality assurance systems. He has extensive experience in quantifying the hydraulic behaviour of primary aquifers and rock-water-pollutant interactions, as well as the planning and supervision of soil and groundwater remediation.

Geohydrologist for the City of Cape Town's **Table Mountain Group Aquifer Feasibility Study and Pilot Project**, which involves the geological, structural and hydrogeological mapping of the Table Mountain Group aquifer systems. Involved in aquifer surface and storage modelling, using GIS software, focussing on stratigraphic analysis, structural modelling and fractured rock reservoir estimates. Undertook preparation of Excel-based balanced cross-sections to update the Peninsula and Skurweberg Formation aquifer yield estimates. Logging of TMG core from Wemmershoek (1050 m), Steenbras (750 m) and Nuweberg (1600 m). Assistance with development of ecological monitoring protocol, and on-site management of exploratory core borehole drilling.

Refer to CV for other comparable projects: City of Cape Town New Water Programme: Development of the Cape Flats Aquifer Management Scheme; Department of Water and Sanitation: Feasibility Plan for Groundwater Resource Development of the Malmani Dolomites within the Olifants River Water Supply System; Overstrand Municipality: Water Source Development and Management Plan for the Greater Hermanus Area.

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QUANTITY SURVEYING SERVICES (MINIMUM 1 PROFESSIONAL)

1. QUANTITY SURVEYOR (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Associate / Quantity Surveyor	[redacted] QS) QS)	[redacted] QS	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional quantity surveyor who performs a range of **quantity surveying tasks**, such as preparing estimates and feasibility studies, compiling bills of quantities and tender documentation, contract administration and cost control, including contract advice and management, processing variation orders and final accounts. Vast experience in **various civil contracts (FIDIC and NEC)**, with projects ranging from power generation and transmission, substations, **civil structures (pump stations, oxidation ponds, sewerage and water purification plants**, golf estate infrastructure, **major pipeline construction projects, water and sewer pipelines)**, to mine infrastructure. Also worked on many commercial projects including utilisation of the JBCC form of contract. Used various measurement methods including Standard Systems, SANS 1200 system, RICS New Rules of Measurement, SMM7 and project/client specific systems.

Quantity surveyor for TCTA's **Olifants River Water Resource Development Project, Phase 2**, which was an extensive water resource development project to supply water for domestic and industrial (mining) use in Limpopo. Responsible for measuring quantities and compiling bills of quantities (BoQs), compiling tender documentation according to client's project-specific specification. Also responsible for compiling rough estimates for design optimisation, compiling estimates for budget purposes and tender adjudication on a new water supply pipeline. Other responsibilities included variation orders, claims, interim payment certificates and estimates for scope changes as well as estimated final construction and cost calculations.

Refer to CV for other comparable projects: Matsapha Industrial Site wastewater treatment works (WWTW); Sunderland Ridge WWTW; Refurbishment of the Sable River to Nyongani pipeline; Augmentation of the Moreleta Spruit outfall sewer; Civil engineering services for the Serengeti Gold and Wildlife Estate; Infrastructure development for the Moatize Coal Mine project;

[redacted]

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ARCHITECTURAL SERVICES (MINIMUM 1 PROFESSIONAL)

1. ARCHITECT/SENIOR ARCHITECTURAL TECHNOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Partner / Principal Architect	[redacted] Dipl. Arch [redacted]	[redacted] Pr Arch [redacted] [redacted] CIA ARB	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional architect with 20 years' experience in commercial, infrastructural and residential architecture. As a principal architect, he leads the design and coordination of projects which range from residential projects to complex prototype installations to **infrastructural projects** such as the Lower Thukela Water Treatment Works Administration and ancillary buildings with Zutari.

Principle architect for the **Lower Thukela Water Treatment Works**: **Control and Administration Building, Gatehouse and Plant Buildings** for Umgeni Water – A new control and administration building with laboratory, office and storage facilities for the operation and management of the new Lower Thukela Water Treatment Works in Northern KwaZulu-Natal.

Refer to CV for other comparable projects: Churchill Water Treatment Plant; Zandvliet Wastewater Treatment Works Administration Building; Border Post Water Treatment Works; Stellenbosch Municipality Wastewater Treatment Works Administration Building; and Paarl Wastewater Treatment Works Administration Building.

[redacted]

[redacted]

PROJECT MANAGEMENT SERVICES (MINIMUM 1 PROFESSIONAL)

1. PROJECT MANAGER (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Technical Director	[redacted] (Civil) [redacted] Civil)	[redacted] Project Management [redacted] ECSA Pr Eng [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional construction project manager and professional engineer, specialising in water resources. Expertise in **leading design and implementation teams, and in managing multi-disciplinary projects** from feasibility stage through to commissioning. Expertise in contract preparation and administration, both for traditional employer-designed contracts, and for design-build contracts.

Project Manager for the **Development of water conservation and demand management plan for Ngaka Modiri Molema District Municipality**, which involved reduction of the amount of unaccounted for water present in the existing water supply system, which includes real losses (from source to point of supply) as well as apparent losses (unmetered consumption). Responsible for project management, client liaison, data analyses and compilation of reports.

Refer to CV for other comparable projects where Mr van Zyl was the Project Manager: Reconciliation strategy for the Algoa Water Supply System (WSS); Extensions to Sebokeng wastewater treatment works (WWTW): Modules 6 and 7; Sustainable water supply scheme for the town of Ezulwini; Design and construction of a new wastewater treatment works (WWTW) at the Matsapha industrial site; Refurbishment and upgrading of Kinross wastewater treatment works (WWTW).

[redacted]

[redacted]

OCCUPATIONAL HEALTH AND SAFETY SERVICES (MINIMUM 1 PROFESSIONAL)

1. CONSTRUCTION HEALTH AND SAFETY AGENT (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Town (Pty) Ltd Director / Safety Consultant	[redacted] Nat. Cert. (Construction Safety & Health) (NEBOSH, UK) [redacted] (Environmental Health) [redacted] (Env Health) [redacted] Public Health)	[redacted] Pr CHSA	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

[redacted] a registered Professional Construction Health and Safety Agent (PRCHSA) with SACPCMP and has 30 years of experience in the health and safety field. He also has experience in developing health and safety documentation and safety management systems, conducting site safety evaluations, presenting safety training courses, preparation of baseline risk assessments and site-specific safety specifications, strategies and advising clients on construction health and safety issues.

With reference to his CV Mark has been involved in various projects as OHS Agent. His specific project related experience includes:

- Replacement of existing Power Transformers for Steenbras Power Station Generators
- City of Cape Town Refurbishment & Upgrade of the Black-Mac Screening & Macassar Raw Sewage Pump Station
- Upgrading of the Inlet Works at the Mitchell's Plain Wastewater Treatment Works
- Inlet Works Borcherds Quarry and Hout Bay Incl Cape Flats
- Odour Control at Cape Flats Contract
- Upgrade and Extension of the Wellington Wastewater Treatment Works
- Main Upgrade to Membrane Bio-reactor at Zandvliet
- Digestors, Cape Flats
- Athlone Stadium - Upgrade of Fire Water Installation
- Upgrading of Roads and Stormwater in Saron
- Replacement of Water Main and Fire Main Pipelines - Tygerberg Hospital
- Construction of Sewer and Water Connections for Waldorf School – Kommetjie
- Construction of Bulk Water - Stellenbosch Arterial
- Construction of F4A water pipeline between Moorreesburg and Riebeek Kasteel
- Project 2 - Bishop Lavis, Area D2, Water meters

His responsibilities on all of the above projects were:

- Acting as construction health and safety agent for the project
- Compilation of baseline risk assessments and site-specific health and safety specification
- Evaluation of health and safety plans
- Monitoring and supervision of health and safety standards on site
- Meeting attendance as required

[redacted]

[redacted]

ENVIRONMENTAL SERVICES (MINIMUM 1 ENVIRONMENTAL ASSESSMENT PRACTITIONER)

NAME	[redacted]		**NO. OF YEARS POSTGRADUATE EXPERIENCE**	[redacted]
EMPLOYER & CURRENT JOB TITLE	[redacted] Senior Environmental Scientist		**Qualification**	**Date obtained**
Registered with EAPASA?	**Yes, Registration No.**	Yes, [redacted]	[redacted] Geography	[redacted]
	No, but application submitted (date)		[redacted] and [redacted]	

PARTICULAR EXPERIENCE: ENVIRONMENTAL ASSESSMENT PRACTIONER

LIST OF RELEVANT PROJECTS	DURATION OF PROJECT		EAPs role in the listed EIA/Assessment	CLIENT REFERENCE & CONTACT DETAILS
	Start (Month/Year)	End (Month/ Year)		
Upgrading of the [redacted] wastewater treatment works (WWTW) (Basic Assessment)	[redacted]	[redacted]	Project Leader	[redacted] Local Municipality Contact: [redacted] Tel: [redacted]
[redacted] water treatment works (WTW) upgrade (Basic Assessment)			Project Leader	[redacted] Associatio Contact: [redacted] Tel: [redacted]
[redacted] - Conmarine bulk potable water pipeline (Basic Assessment)			Project Leader	[redacted] Local Municipalit Contact: [redacted] Tel: 0. [redacted]
S[redacted] water pipeline (Basic Assessment)			Project Leader	[redacted] Local Municipality Contact [redacted] Tel [redacted]
[redacted] *Reconstruction* (Maintenance Management Plan: equivalent of a Basic Assessment)			Environment and Planning Senior Consultant	[redacted] (Pty) Lt Contact: [redacted]

[redacted]

[redacted] *(river crossings)* (Maintenance Management Plan: equivalent of a Basic Assessment)	[redacted]	[redacted]	Environment and Planning Senior Consultant	**Western Cape Department of Public Transport** **Contact:** [redacted] **Tel:** [redacted]
[redacted] **augmentation study** (Basic Assessment)			Environmental Advisor/Auditor/Project Leader	**Overstrand Municipality** **Tel** [redacted]
Planning and design of the [redacted] **Bulk Water Supply System** (Full Environmental Impact Assessment / Section 30A Directive process)			Project Leader	**Drakenstein Local Municipality** **Contac** [redacted] **Tel:** [redacted]
[redacted] **resilience project** (Full Environmental Impact Assessment / Section 30A Directive process)			Project Leader	**City of Cape Town** **Contact:** [redacted] **Tel** [redacted]
Consolidation of the stormwater management function for Transport for the City of Cape Town (Maintenance Management Plans)			Project Leader	**City of Cape Town** **Contact:** [redacted] **Tel:** [redacted]
Bridging study for [redacted] (environmental advisory, stakeholder engagement, specialist studies and screening)			Project Leader	**Department of Water and Sanitation (DWS)).** **Contact:** [redacted] **Tel:** [redacted]

[redacted]

[redacted]

FRESHWATER ECOLOGIST (MINIMUM 1 PROFESSIONAL)

1. FRESHWATER ECOLOGIST (NAME): [redacted]			
EMPLOYER AND CURRENT JOB TITLE	QUALIFICATIONS AND DATES	ASSOCIATION AND PROFESSIONAL REGISTRATION NO.	NO. OF YEARS POSTGRADUATE EXPERIENCE
[redacted] Aquatic Scientist	[redacted] (Environmental Management) [redacted] [redacted] (Hons) Oceanography, [redacted] [redacted] Mathematics [redacted]	[redacted] Pr Sci Nat [redacted]	[redacted]

RELEVANT FIELDS OF SPECIALIZATION, EXPERIENCE AND COMPARABLE PROJECTS

Professional environmental scientist, specialising in water resources management and freshwater ecology. Experience includes More than 500 freshwater impact assessments studies as input into EIA decision making processes. Toni has conducted more than 150 water use authorisation applications.

Completed more than 35 aquatic ecosystem assessments for infrastructure developments such as roads, power line and substation and alternative/renewable energy projects in and around the City of Cape Town.

Completed more than 20 aquatic ecosystem assessments for human settlement projects within the City such as at Darwin Road and Penhill.

Water quality impact assessments of wastewater treatment facilities and water quality management reports for the upgrade of more than 15 wastewater treatment works in the Western Cape, including **the Macassar, Zandvliet, Cape Flats, Scottsdene, Kliphuewel and Philadelphia WWTW** within the City.

[redacted]

[redacted]

ANNEX 4

SCHEDULE 12: SUPPORT RESOURCES

[redacted]

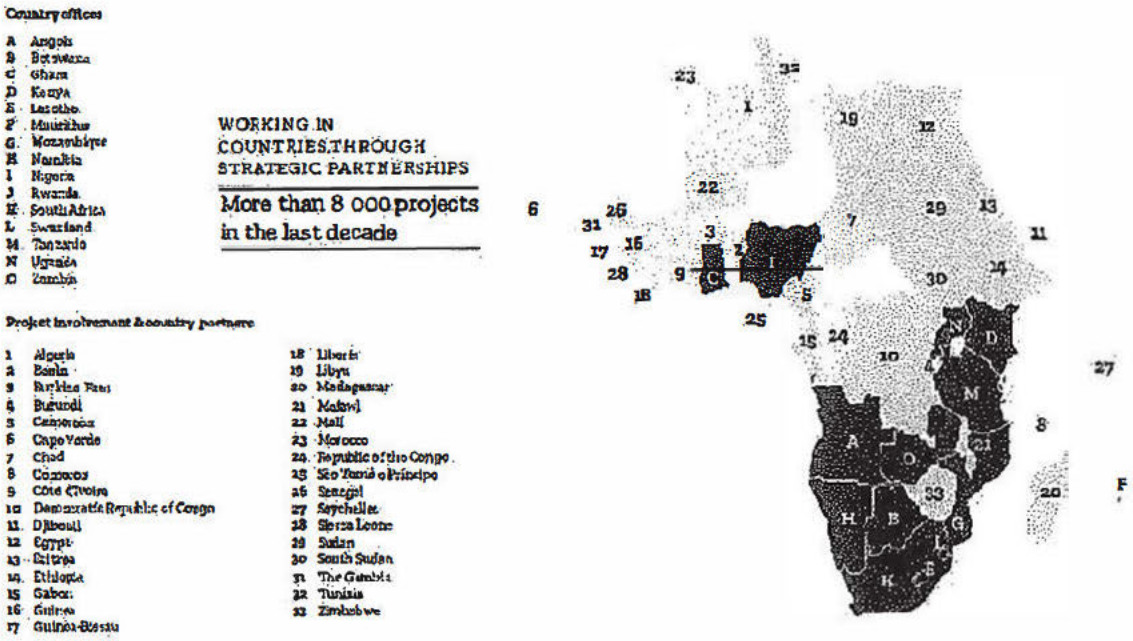
SCHEDULE 12: SUPPORT RESOURCES

DRAWING AND STRUCTURAL ANALYSIS SOFTWARE PACKAGES AVAILABLE FOR USE		
NAME OF PACKAGE	DESCRIPTION	CURRENTLY OWNED/ LICENCED OR OTHER
Autodesk AutoCAD 2016 to 2020	Drawing software packages	Currently Licenced
Autodesk Civil 3D 2016 to 2020		Currently Licenced
PROKON	Structural analysis software packages	Currently Licenced
SAFE		Currently Licenced
ETABS		Currently Licenced
GLS WADISO	Analysis and optimal design of water distribution systems	Currently Licenced
EPANET		Currently Licenced
Bentley WaterGEMS		Currently Licenced
GLS SEWSAN	Simulation, analysis and optimal design of sewer reticulation systems	Currently Licenced
Autodesk Storm and Sanitary Analysis 2018		Currently Licenced
PCSWMM (1D and 2D)	Modelling software for stormwater, wastewater and watershed systems	Currently Licenced
HECRAS (1D and 2D)	Modelling software for hydraulics of water flow through natural rivers and other channels	Currently Licenced
Bentley HAMMER	Surge analysis software	Currently Licenced
KYPIPE SURGE		Currently Licenced
Autodesk REVIT 2014 to 2020	3D modelling of structural, mechanical and electrical components, etc.	Currently Licenced
Autodesk Inventor 2015 to 2020	Computer-aided design application for 3D mechanical design, simulation, visualization, and documentation	Currently Licenced
Autodesk Navisworks 2015 to 2020	3D design review package for Microsoft Windows	Currently Licenced
Autodesk Infraworks	Infrastructure planning and design software	Currently Licenced
Star-CCM+	Computational fluid dynamics modelling software	Currently Licenced
BioWin	Commercial simulation tool for biological wastewater treatment plant design, analysis and training. Can simulate both steady state and dynamic-state models	Currently Licensed
Plant Wide Steady State Design (University of Cape Town, 2014)	Plant wide steady state computerised process design software for treatment plant design and analysis	No License required

[redacted] [redacted]

Plant and equipment

[redacted] has offices in 15 countries across Africa and has been involved in projects in over 30.



Our physical facilities include:

- Office space
- Conference facilities
- 24-hour office security
- Pool cars
- PC's and laptops, high volume copiers/printers and WAN & LAN computer support.
- Full corporate support departments like CAD Plotting, filing and archiving, postal and delivery services as well as reproduction and printing

In terms of information technology:

We partnered with Orange Business Services to provide and manage our network across Africa.

[redacted]has one physical data centre located in Tshwane, South Africa, with partial cloud-based disaster recovery services. This data centre is equipped with Compute-Dell Storage-EMC/Dell that hosts our virtual environment based on WM ware. All our offices also have the same brand infrastructure scaled to office sizes.

Data backups and archiving are done with Commvault with onsite retention and cloud offload.

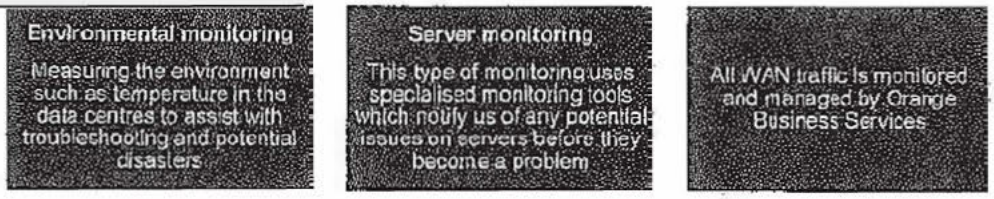
Our office LAN runs on a Cisco backbone.

Our IT connectivity services also includes virtual private networks (VPNs) and secure internet connectivity. Because the network is protected by firewalls, access is limited to authorised personnel only. The extranet services are made available through our DMZ (Demilitarized Zone) depending on business requirements managed by Orange.

[redacted]

[redacted] uses the best available technology to support our business. This includes Cisco as the network switching layer, Dell desktops, Dell laptops and Dell servers, Dell/EMC storage and Microsoft Enterprise Voice (Teams). All LANs are Ethernet networks based on CAT5/CAT6 UTP cabling. Furthermore, all core services in buildings are backed up by Uninterrupted Power Supply (UPS) and generators (where deployed).

[redacted] IT team continually monitors many services in its environment,



We use Microsoft software almost exclusively and have an Enterprise Licensing Agreement with them. [redacted] is an Office 365 user for mail management and use Microsoft Advanced Threat Protection for email security hygiene.

Our design software suite is made-up of Autodesk, Bentley and various third-party design products.

All the equipment is owned by our firm and is managed by a central IT team within [redacted] All large purchases are financed by a local investment house.

Licensed software used for projects:

Autodesk	Other	
AutoCAD	Aasidra	Proclarity
AutoCAD MEP	Adobe	Acc Pac
Architectural Desktop	Alchemy	Quark Express RoadWorks
Building Systems (MEP)	AquaChem	Symantec backup exec
Electrical	AutoTurn	TechnoCAD
Revit Inventor Pro	AtroTurn	Trendnet
Revit Structures	Bill	Various Geographic Information Systems (GIS) software
Revit MEP	Biowin	Blackberry Enterprise Server
MAP 3D	Civil Designer	Aurion
Bentley	Fax FX	BST
Microstation	FireACad	Domino
Powerdraft	Manifold	Infra
Inroads	Mindmanager	Licensing - Test outside LAB
AutoPlan	Model Maker	Content Server
	Prokon	SupportPoint
	Projectwise	Storage Management (ECC, RecoverPoint, Avamar and ESRS)
	VMWare Management	
	LMS/SABA	
	Timeline	

[redacted]

ANNEX 5

SCHEDULE 18: ADDITIONAL PERSONNEL SCHEDULE

[redacted]

SCHEDULE 18: ADDITIONAL PERSONNEL SCHEDULE (BULK WATER BRANCH)

SERVICE	NAME	QUALIFICATION AND DATE	AREA(S) OF EXPERTISE (with years of experience, where applicable)	YEARS OF EXPERIENCE	EMPLOYER/ COMPANY
Civil Engineering Services	[redacted]	[redacted]	Bulk water supply infrastructure	20	Zutari
			Dams & Bulk water supply infrastructure	17	Zutari
Structural Engineering Services			Water retaining structures	8	Zutari
			Water retaining structures	8	Zutari
Mechanical Engineering Services			Water and wastewater treatment and reticulation	14	Zutari
			Mechanical engineering in pump stations and treatment plants; BIM management	5	Zutari
Electrical Engineering Services			Electrical, industrial and control engineering in water and wastewater treatment	9	Zutari
			Electrical, control and instrumentation	6	Zutari

[redacted]

[redacted]

Quantity Surveying Services	Mercy Mafu	BSc (QS) (2006) Pr QS (4356)	Quantity surveying	14	Zutari
	[redacted]		Quantity surveying	12	Zutari
Architectural Services			Architecture	11	Alex Stewart & Partners
			Architecture & interior design	20	Alex Stewart & Partners
Geohydrologist			Geohydrology	8	Umvoto
			Geohydrology	14	Umvoto
			Geohydrology	8	Umvoto
CAD Operator/ Draughting Personnel			Structural design & detailing	30	Zutari
			Engineering draughtsperson in water/civil projects	42	Zutari
GIS Technician			Geographic information systems	24	Zutari

[redacted]

[redacted]

Other Additional Personnel:

[redacted] Cape Town office has approximately 450 technical personnel in the Water, Building and Structural, Electrical, Land Development, Roads and Transport, Geotechnical and Advisory fields. There are over 100 technical professionals in the Cape Town water team which include civil, hydraulic, process, structural, mechanical engineers, electrical and electronic who specialise in the bulk water field. These technical personnel will be able to meet the City of Cape Town's requirements for project expertise.

[redacted]

[redacted]

ANNEX 6

SCHEDULE 19: ORGANISATIONAL STRUCTURE



ANNEX 7

SCHEDULE 23: PREFERENCE SCHEDULE TO BE USED IN TERMS OF THE AMENDED CODES FOR MEASURING BROAD-BASED BLACK ECONOMIC EMPOWERMENT IN THE CONSTRUCTION SECTOR (2017)

CITY OF CAPE TOWN

WATER AND SANITATION

CONTRACT NO. 194C/2020/21

TERM TENDER FOR THE PROVISION OF MULTIDISCIPLINARY PROFESSIONAL SERVICES FOR THE WATER AND SANITATION DEPARTMENT OF THE CITY OF CAPE TOWN

SCHEDULE 23: PREFERENCE SCHEDULE TO BE USED IN TERMS OF THE AMENDED CODES FOR MEASURING BROAD-BASED BLACK ECONOMIC EMPOWERMENT IN THE CONSTRUCTION SECTOR (2017)

Preference Schedule where preferences are granted in respect of B-BBEE contribution

1 Definitions

The following definitions shall apply to this schedule:

All applicable taxes: Includes value-added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

Applicable Code: Shall be either the Amended Codes of Good Practise (published on 11 October 2013) or Sector Specific Codes as indicated in the tender conditions

B-BBEE: Broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act.

B-BBEE status level of contributor: The B-BBEE status of an entity in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act.

Bid (Tender): A written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or proposals.

Black Designated Groups: The meaning assigned to it in the codes of good practice issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003, (Act 53 of 2003).

Black People: The meaning assigned to it in section 1 of the Broad-Based Black Economic Empowerment Act.

Broad-Based Black Economic Empowerment Act: The Broad-Based Black Economic Empowerment Act, Act 53 of 2003.

Consortium or Joint Venture: 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.

Contract The agreement that results from the acceptance of a bid by an organ of state.

Co-operative: A co-operative registered in terms of section 7 of the Co-operatives Act, 2005 (Act no. 14 of 2005).

Designated Group: Black designated groups, black people, women, people with disabilities or small enterprises as defined in section 1 of the National Small Enterprises Act, 1996 (act no. 102 of 1996)

Designated Sector: A sector, sub-sector or industry or product that has been designated in terms of any relevant regulation of the Preferential Procurement Regulations, 2017.

Exempted Micro Enterprise (EME): An exempted micro enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act.

Firm Price: The price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract.

Functionality: The ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.

Military Veteran: The meaning assigned to it in section 1 of the Military Veterans Act, 2011 (Act No. 18 of 2011).

National Treasury: The meaning assigned to it in section 1 of the Public Finance Management Act, 1999 (Act No. 18 of 1999).

Non-firm prices: All prices other than "firm" prices.

Person: Includes a juristic person.

People with disabilities: The meaning assigned to it in section 1 of the Employment Equity Act, 1998 (Act No. 55 of 1998).

Price: Includes all applicable taxes less unconditional discounts.

Proof of B-BBEE status level of contributor: The B-BBEE status level certificate issued by an authorised body or person, a sworn affidavit as prescribed by the B-BBEE Codes of good Practice or any other requirement prescribed in terms of the Broad-Based Black Economic Empowerment Act.

[redacted]

Qualifying Small Enterprise (QSE): A qualifying smal enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act.

Rand Value: means the total estimated value of a contract in Rand, calculatec at the time of bid invitations.

Rural Area: A sparsely populated area in which people farm or depend on natural resources, including villages and small towns that are dispersed through the area or an area including a large settlement which depends on migratory labour and remittances and government social grants for survival, and may have a traditional land tenure system.

Stipulated Minimum Threshold: The minimum threshold stipulated in terms of any relevant regulation of the Preferential Procurement Regulations, 2017.

Sub-contract: The primary contractor's assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract.

The Act: The Preferential Procurement Policy Framework Act, 2000 (Act No 5 of 2000).

Total Revenue: Bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the *Government Gazette* on 9 February 2007.

Township: An urban living area that at any time from the late 19th century until 27 April 1994, was reserved for black people, including areas developed for historically disadvantaged individuals post 27 April 1994.

Treasury: The meaning assigned to it in section 1 of the Public Finance Management Act, 1999 (Act No. 18 of 1999).

Trust: The arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person.

Trustee: Any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

Youth: The meaning assigned to it in section 1 of the National Youth Development Agency Act, 2008 (Act No. 54 of 2008).

2 Conditions associated with the granting of preferences

A supplier that is granted a preference undertakes to:

1) accept that the number of preference points allocated will be based on the B-BBEE status level of contributor of the supplier as at the closing date for submission of quotation offers;
2) not sub-contract more than 25% of the value of the contract to sub-contractors that do not have an equal or higher B-BBEE status level of contributor than the supplier, unless the intended sub-contractors are exempted micro enterprises that have the capability and ability to execute the sub-contract works or unless otherwise declared in terms of Section 5 below;
3) accept that a contract may not be awarded if the price offered is not market related;
4) accept the sanctions set out in Section 3 below should Condition 2(2) be breached, or should the tenderer have submitted any false information regarding its B-BBEE status level of contributor, local production and content, or any other matter required in terms of this bid that will affect, or has affected the bid evaluation;
5) accept that, in order to qualify for preference points, it is the responsibility of the supplier to submit documentary proof of its BBBEE level of contribution in accordance with the Codes of Good Practise, 2013, to the CCT at the Supplier Management Unit located within the Tender Distribution Office, 2nd Floor (Concourse Level), Civic Centre, 12 Hertzog Boulevard, Cape Town (Tel 021 400 9242/3/4/5);
6) accept that, further to 5) above, Consortiums/Joint Ventures will qualify for preference points, provided that the entity submits the relevant certificate/scorecard in terms of the Preferential Procurement Regulations, 2017. Note that, in the case of unincorporated entities, a verified scorecard in the name of the consortium/Joint Venture must be submitted with the quotation (attached to this schedule);
7) accept that if it is found that, in the performance of the contract, the participation of the various partners in a Consortium/ Joint Venture differs substantially from that upon which the consolidated scorecard submitted in terms of 5) above was based, and the impact of which is that the Joint Venture would not have been awarded the contract in terms of the actual B-BBEE level of contribution achieved by the Joint Venture, then a financial penalty shall be applied (in addition to any other remedies that the CCT may have) in accordance with Section 3 below;
8) accept that the CCT will verify the B-BBEE level of contributor of the supplier as at the closing date for submission of tender offers, to determine the number of preference points to be awarded to the supplier. In the case of Consortiums/Joint Ventures which tender as unincorporated entities, a verified scorecard submitted with the tender and valid as at the closing date will be used to determine the number of preference points to be awarded to the supplier;

[redacted]

9) accept that, notwithstanding 8) above, a supplier will not be awarded points for B-BBEE status level of contributor if he indicates in his tender that he intends sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the points that the supplier qualifies for unless the intended sub-contractors are exempted micro enterprises that have the capability and ability to execute the sub-contract works;

10) accept that any subcontracting arrangements after the award of the tender may only be entered into upon the prior approval of the City of Cape Town; and

11) immediately inform the City of Cape Town of any change that may affect the tenderer's B-BBEE level of contribution upon which preference points will be or have been allocated.

3 Sanctions relating to breaches of preference conditions

The sanctions for breaching the conditions associated with the granting of preferences are:

1) disqualify the supplier from the quotation process;
2) recover costs, losses or damages the CCT has incurred or suffered as a result of the supplier's or contractor's conduct;
3) cancel the contract in whole or in part and claim any damages which the CCT has suffered as a result of having to make less favourable arrangements due to such cancellation;
4) restrict the supplier, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from the CCT for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied and inform the National Treasury accordingly;
5) forward the matter for criminal prosecution; and/or
6) financial penalties payable to the CCT, as set out below.

Financial penalty for breach of Condition 2 in Section 2 above:

The penalty to be applied for sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the preference points that the supplier qualified for (unless so declared or proven to be beyond the control of the supplier, or the sub-contractors are EMEs that have the capability and ability to execute the sub-contract works) shall be as provided for in the following formula:

Penalty = 0.5 x E(%) x P*

where:

E = The value of work (excluding VAT) executed by sub-contractors that do not qualify for at least the preference points that the supplier qualified for, expressed as a percentage of P*, less 25%

P* = Value of the contract

Financial penalty for breach in terms of condition 6 in Section 2 above:

The penalty to be applied where, in the performance of the contract, the participation of the various partners in a Consortium/ Joint Venture differs substantially from that upon which the consolidated scorecard submitted in terms of 5) in Section 2 above was based, and the impact of which is that the Joint Venture would not have been awarded that contract in terms of the actual B-BBEE level of contribution achieved by the Joint Venture, shall be as provided for in the following formula:

Penalty = 5/100 x (B-BBEE^{a} – B-BBEE^{t}) x P*

where:

B-BBEE^{a} = The B-BBEE level of contribution that is achieved, determined in accordance with the actual participation of the Joint Venture partners in the performance of the contract

B-BBEE^{t} = The B-BBEE level of contribution that was used to determine the number of preference points granted to the Joint Venture at the time of quotation evaluation

P* = Value of the contract

Financial penalty for breach in terms of condition 10 in Section 2 above:

The penalty to be applied where the supplier fails to disclose subcontracting arrangement after the award of the tender is up to a maximum of 10% of the value of the contract.

4 Level of Contribution in respect of enterprise status or structure of the tendering entity (the supplier)

In the interest of transparency, suppliers are required to complete Table 1: Level of Contribution below applicable to the Code they wish to be evaluated against.

[redacted]

Table 1: Tender Preference claim (B-BBEE contribution)

Level of Contribution: Amended Codes for Measuring Broad-Based Black Economic Empowerment in the Construction Sector.

Type of B-BBEE Contributor	Status (tick box(es) below as applicable)
Exempted Micro Enterprise (EME), 100% black-owned	☐
Exempted Micro Enterprise (EME), at least 51% but less than 100% black-owned	☐
Exempted Micro Enterprise (EME), at least 30% but less than 51% black-owned	☐
Exempted Micro Enterprise (EME), less than 30% black-owned	☐
Exempted Micro Enterprise B-BBEE Status Level of Contributor[1] ☐	☐
Qualifying Small Enterprise B-BBEE Status Level of Contributor[1] ☐	☐
Qualifying Small Enterprise (QSE), 100% black-owned	☐
Qualifying Small Enterprise (QSE), at least 51% but less than 100% black-owned	☐
Qualifying Small Enterprise (QSE), less than 51% black-owned	☐
Verified B-BBEE contributor B-BBEE Status Level of Contributor[1] 1	✓
Non-compliant contributor	☐

[1] If it is indicated that the company/firm/entity is a verified B-BBEE contributor, then the verified status level of contributor must be inserted in the box provided (insert a number from 1 to 8 as applicable)

5 Declarations

1) With reference to Condition 8 in Section 2 above, the supplier declares that:

I/we hereby forfeit my preference points because I /we DO intend sub-contracting more than 25% of the value of the contract to sub-contractors that do not qualify for at least the points that I/we as supplier qualify for or are not exempted micro enterprises that have the capability and ability to execute the sub-contract works

n/a

Note:

Tenderers who do not tick this box will be allocated preference points but the sanctions relating breaches of preference conditions in Section 3 will be applicable if the tenderer contravenes t conditions in Section 2.

2) The undersigned, who warrants that he/she is duly authorized to do so on behalf of the supplier, hereby certifies that the preference claimed based on the B-BBEE status level of contribution indicated in Table 1, qualifies the supplier, subject to condition 8 in Section 2 above, for such preference claimed, and acknowledges that:

(i) the information furnished is true and correct;

(ii) the preference claimed is in accordance with the conditions of this schedule;

(iii) the supplier may be required to furnish documentary proof to the satisfaction of the CCT that the BBBEE level of contributor as at the closing date is correct; and

iv) he/she understands the conditions under which preferences are granted, and confirms that the supplier will satisfy the conditions pertaining to the granting of preferences.

[redacted]

Signature

[redacted]

Date

[redacted]

Name (PRINT)

(For and on behalf of the Supplier (duly authorised))

For official use. [redacted]		
SIGNATURE OF C ITY OFFICIALS AT [redacted] ENDER OPENING		
1 [redacted]	2. [redacted]	3. [redacted]

ANNEX 8

CITY OF CAPE TOWN

CONTRACT NO. AND NAME: _____

CONTRACTOR (SERVICE PROVIDER): _____

B-BBEE SUB-CONTRACT EXPENDITURE REPORT BASED ON PAYMENT NO. .....

Value of the contract (as defined in the Preference Schedule (P*)	R	B-BBEE Status Level of Service Provider	

Name of Sub-consultant (list all Sub-consultants)	B-BBEE Status Level of Sub-consultant [1]	Total Value of Sub-consultant's contract (excl VAT)[1]	Value of Sub-consultant's work to date (excl VAT)[1]	Value of Sub-consultant's work to Sub-consultants with a lower B-BBEE Status Level than Service Provider
Sub-consultant A		R	R	R
Sub-consultant B		R	R	R
Sub- consultant C		R	R	R
			Total:	R
			Expressed as a percentage of P*	%

[1]Documentary evidence to be provided

Signatures

Declared by Contractor (Service Provider) to be true and correct: _____ Date: _____

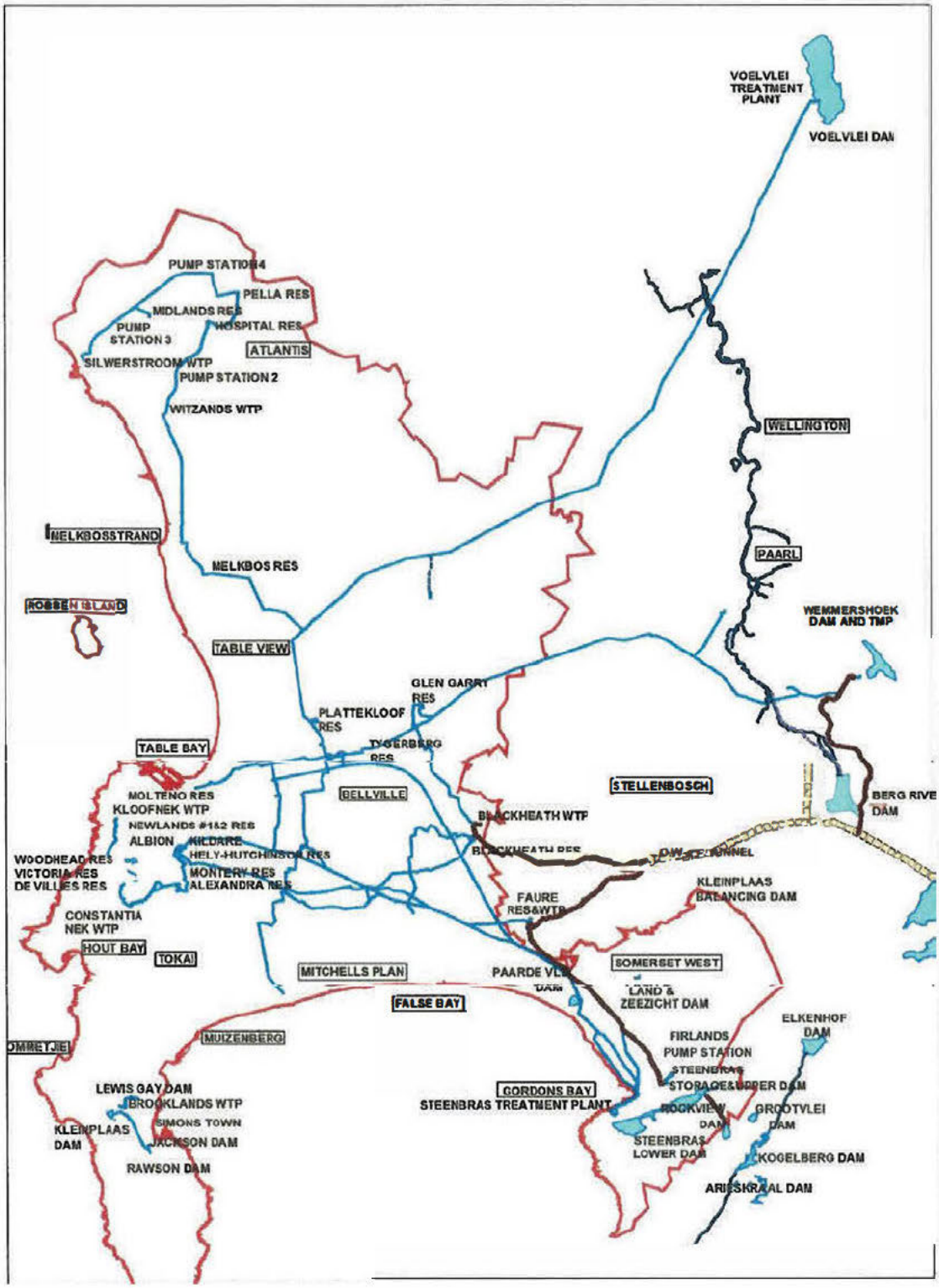
Verified by Framework Contract Manager / Employer's Project Manager: _____ Date: _____

Part C4: Site Information

Pages

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[redacted]



POSSIBLE LOCATIONS OF WORKS PROJECTS
BULK WATER BRANCH

[redacted]

[redacted]

IMPACT. ENGINEERED.

[redacted]

30 September 2021

TO WHOM IT MAY CONCERN

AUTHORITY FOR SIGNATORY

It is hereby certified that [redacted] in his capacity as Technical Director, is duly authorised, in accordance with [redacted] internal processes and delegated authorities, to sign all documents submitted on behalf of [redacted] (Pty) Ltd in respect of the following contract:

Term Tender for the Provision of Multidisciplinary Professional Services for the Water and Sanitation Department of the City of Cape Town (Contract Number: 194C/2020/21),

for the City of Cape Town.

Yours sincerely

[redacted]

COMPANY SECRETARY

[redacted]

CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

OFFICE OF THE CITY MANAGER

Lungelo Mbandazayo
City Manager

T: 021 400 1330 F: 086 201 8928
E: City.Manager@capetown.gov.za
CM62048

MEMORANDUM

DATE: 30th September 2021

TO: The Executive Director: Water and Waste, Mr Mike Webster

SUBJECT: **AWARDING OF CONTRACTS WHICH WILL INCUR FINANCIAL OBLIGATIONS BEYOND THE BUDGET CYCLE: TENDER 194C/2020/21: TERM TENDER FOR THE PROVISION OF MULTIDISCIPLINARY PROFESSIONAL SERVICES FOR THE WATER AND SANITATION DEPARTMENT OF THE CITY OF CAPE TOWN**

The abovementioned matter refers.

Kindly note that in terms of Council Resolution SPC 11/09/21, I hereby nominate the Executive Director: Water and Waste, Mr. Mike Webster to sign the abovementioned contract on behalf of the City.

Kindly ensure that all relevant pages are signed and completed and the necessary diligence is taken prior to signature thereof.

Thank you for your assistance.

Digitally signed by
Ernest Sass
Date: 2021.09.30
17:33:44 +02'00'

ERNEST SASS
ACTING CITY MANAGER