



Amended - NEC3 Term Service Contract

Between **ESKOM HOLDINGS SOC LIMITED**
 (Reg No. 2002/015527/30)

and **[Insert at award stage]**
 (Reg No. _____)

for **Provision Of Sewage & Water Treatment Operating &**
 Maintenance Services for The Ingula Pumped Storage Scheme

Enquiry No:

Part C1: Agreements & Contract Data

Contents:

C1.1	Form of Offer and Acceptance
C1.2 – Part 1	Contract Data provided by the <i>Employer</i>
C1.2 – Part 2	Contract Data provided by the <i>Contractor</i>

C1.1 Form of Offer & Acceptance

Offer

The *Employer*, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

Provision of Sewage & Water Treatment Operating & Maintenance Services

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto 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 *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

Options A or C	The offered total of the Prices exclusive of VAT is	R [•]
	Sub total	R [•]
	Value Added Tax @ 15 % is	R [•]
	The offered total of the amount due inclusive of VAT is ¹	R [•]
	(in words) [•]	

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 including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number:

N/A

¹ This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the *Employer* shall pay the *Contractor* the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Service 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 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 of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed and signed original copy of this document, including the Schedule of Deviations (if any).

Signature(s)

Name(s)

Capacity

**for the
Employer**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.

Schedule of Deviations to be completed by the *Employer* prior to contract award

Note:

This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.

The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.

A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1	[•]	[•]
2	[•]	[•]
3	[•]	[•]
4	[•]	[•]
5	[•]	[•]
6	[•]	[•]
7	[•]	[•]

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

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

For the tenderer:

For the *Employer*

Signature

Name

Capacity

On behalf
of

(Insert name and address of organisation)

(Insert name and address of organisation)

Name &
signature
of witness

Date

C1.2 TSC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	
		A: Priced contract with <i>Price List & Activity schedule</i>
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	X 1: Price adjustment for inflation X 2: Changes in the law X 17: Low service damage X18: Limitation of liability X19: Task Order X20: Key Performance Indicators Z: <i>Additional conditions of contract</i>
	of the NEC3 Term Service Contract April 2013 ² (TSC3)	
10.1	The <i>Employer</i> is (name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	Represented by:	Patrick Mhlongo
	Tel No.	036 342 3088
	Fax No.	not applicable.
10.1	The <i>Service Manager</i> is (name):	Len Slabbert
	Address	Ingula PSS, Road D48, Besters Area near Ladysmith.
	Tel	036 342 3023.
	Fax	not applicable
	e-mail	SlabbeLJ@eskom.co.za.

² Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 539 1902 www.ecs.co.za

11.2(2)	The Affected Property is	Ingula Pumped Storage Scheme Site as indicated on the layout of the Service Information.
11.2(13)	The <i>service</i> is	Provision of Sewage & Water Treatment Operating & Maintenance for the Ingula Pumped Storage Scheme.
11.2(14)	The following matters will be included in the Risk Register	<ul style="list-style-type: none"> • Labour strike • Delay in supply of material • Normal construction hazards working with machinery • Working at heights • Confined space • Hazardous gas • Electrocutation • Inadequate ventilation or ventilation failure • Power supply interruptions or failure • Fire and smoke • Flooding from aquifer • Flooding from surface source • Steep, rocky, unstable and slippery ground • Normal construction hazards for concrete works
11.2(15)	The Service Information is in	as defined in clause C3.1.3 of Part C3- Service Information and all documents and drawings to which it makes reference.
P	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> to a communication is	three (3) working days
2	The Contractor's main responsibilities	Data required by this section of the core clauses is also provided by the <i>Contractor</i> in in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.
21.1	The <i>Contractor</i> submits a first plan for acceptance within	[2] weeks of the Contract Date
3	Time	
30.1	The <i>starting date</i> is.	15 September 2022
30.1	The <i>service period</i> is	5 years
5	Payment	
50.1	The <i>assessment interval</i> is	The <i>assessment interval</i> is one (1) month . This will be done on the 30 th of each month or on the Friday before if the 30 th falls on a weekend.
51.1	The <i>currency of this contract</i> is the	South African Rand (ZAR)

51.2	The period within which payments are made is	Monthly on the last working day of the month following the assessment, and it is made by electronic transfer.
51.4	The <i>interest rate</i> is	0%(zero percent) above the publicly quoted prime rate of interest (calculated on a 365 day year) charged by Standard Bank of South Africa Limited, from time to time, as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove.
6	Compensation events	Applicable as per core clause of the NEC3 Term Service Contract April 2013 ³ (TSC3)
7	Use of Equipment Plant and Materials	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	1. None.
84.1	The Employer provides these insurances from the Insurance Table	As stated for in the Employer's Annual Construction All Risk Insurance Policy (Format A) available on request from Eskom Group Insurance.
84.1	The <i>Employer</i> provides these additional insurances	As stated for in the Employer's Asset All Risk Insurance policy available on request from Eskom Group Insurance.
84.2	The minimum amount of cover for loss of or damage including but not be limited to breakage, damage, loss, fire, theft, malicious damage or damages induced by riot & strike (SASRIA) to Equipment is:	for a sum sufficient to provide for their replacement at the Site
84.2	The minimum limit of indemnity for insurance in respect of loss of or damage to property (except the <i>works</i> , Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) caused by activity in connection with this contract for any one event is	Whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i> for any one event with "cross liability" so that the insurance applies to the Parties involved in the contract separately. Notwithstanding anything stated to the contrary this insurance procured by the <i>Contractor</i> will be required to indemnify the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property. Consequently, the cover limit should be for an amount not less than R 500 000.00 (Five hundred thousand Rand) per incident but unlimited during the period of insurance.
84.2	The <i>Contractor</i> provides these additional insurances	
	1. Insurance against Professional Indemnity:	in line with the <i>Contractor's</i> potential liability, the insurance suggested for these risks does not in any way limit the <i>Contractor's</i> liability in terms of this Contract for these risks.
	2. Insurance against whatever the <i>Contractor's</i> deems necessary which is	

³ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 539 1902 www.ecs.co.za

not sufficiently covered by the insurances required to be effected by the *Employer*

9	Termination	Applicable as per core clause 9 of the NEC3 Term Service Contract April 2013 (TSC3).
10	Data for main Option clause	
A	Priced contract with price list	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the <i>service</i> at intervals no longer than	4 Weeks.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i>	the person selected from the Eskom Panel of Adjudicators listed in Annexure B to this Contract Data by the Party intending to refer a dispute to him.
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the President of the South African Institution of Civil Engineering or his nominee
W1.4(2)	The <i>tribunal</i> is:	arbitration
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	Johannesburg, South Africa.
	The person or organisation who will choose an arbitrator	the Chairman of the Association of Arbitrators (Southern Africa) or his nominee.
	- if the Parties cannot agree a choice or	
	- if the arbitration procedure does not state who selects an arbitrator, is	

12 Data for secondary Option clauses																										
X1	Price adjustment for inflation	Subject for input at contract award phase																								
X1.1	<p>The <i>base date</i> for indices is</p> <p>The proportions used to calculate the Price Adjustment Factor are:</p>	<table> <tr> <th>proportion</th><th>linked to index for</th><th>Index prepared by</th></tr> <tr> <td>0.</td><td>[•]</td><td>[•]</td></tr> <tr> <td>0.</td><td>[•]</td><td>[•]</td></tr> <tr> <td>0.</td><td>[•]</td><td>[•]</td></tr> <tr> <td>0.</td><td>[•]</td><td>[•]</td></tr> <tr> <td>0.</td><td>[•]</td><td>[•]</td></tr> <tr> <td>[•]</td><td colspan="2">non-adjustable</td></tr> <tr> <td>1.00</td><td colspan="2"></td></tr> </table>	proportion	linked to index for	Index prepared by	0.	[•]	[•]	0.	[•]	[•]	0.	[•]	[•]	0.	[•]	[•]	0.	[•]	[•]	[•]	non-adjustable		1.00		
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X2	Changes in the law	There is no reference to Contract Data in this Option and terms in <i>italics</i> are identified elsewhere in this Contract Data.																								
X17	Low service damages																									
X17.1	Damages penalties	<ul style="list-style-type: none"> Clearing up & related cost of Sewage spills will be for the contractor's account. A penalty of a R1000 per month will be applied for any non conformance reading vs the minimum standards of the WUL and or the applicable SANS standards A penalty of R500 per day will be applied for late approval/acceptance by SHE file from date of inception of contract. 																								
X18	Limitation of liability																									
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to	Nil																								
X18.2	<p>For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:</p> <ul style="list-style-type: none"> the <i>Contractor</i> does not fully comply with the provisions of the contract, or the <i>Contractor</i> is in breach of the <i>Employer's</i> insurance policy conditions, or the <i>Contractor</i> commits any negligence, wilful act or omission or breach of statutory duty. 	<ul style="list-style-type: none"> for the Employer's existing and surrounding property in the care, custody and control of the Contractor: the amount of the deductible (first amount payable) (R 500 000.00) relevant to the event described in the scope of works. for all other existing Employer's property: R25 000 000 (twenty five million Rand) per incident but unlimited during the period of Contract. 																								

X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	The greater of the total of the Prices at the Contract Date and where a claim is made against the Employer's insurance the amounts excluded and unrecoverable from the Employer's insurance plus, a claim is made against the Employer's assets policy R25 000 000 (twenty five million Rand) per incident but unlimited during the period of Contract.
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	<p>the total of the Prices other than for the additional excluded matters. The <i>Contractor's</i> total liability for the additional excluded matters is not limited.</p> <p>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</p> <ul style="list-style-type: none"> • Defects due to his design which arise before the Defects Certificate is issued, • Defects due to manufacture and fabrication outside the Site, • loss of or damage to property (other than the <i>works</i>, Plant and Materials), • death of or injury to a person and infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	06 months after the end of the <i>service period</i> .
X19	Task Order	
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	7 days of receiving the Task Order
X20	Key Performance Indicators (not used when Option X12 applies)	
X20.1	The <i>incentive schedule</i> for Key Performance Indicators is in	No KPI incentives apply this Contract Data
X20.2	A report of performance against each Key Performance Indicator is provided at intervals of	1 month

Z The *additional conditions of contract* are;

Z1 Cession delegation and assignment

- Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry and the Electricity Distribution Industry.

Z2 Joint ventures

- Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.
- Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Service Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.
- Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

Z3 Change of Broad Based Black Economic Empowerment (B-BBEE) status

- Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven (7) days of the change.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Service Manager* within thirty days of the notification or as otherwise instructed by the *Service Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Service.
- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Ethics

- Z4.1 Any offer, payment, consideration, or benefit of any kind made by the *Contractor*, which constitutes or could be construed either directly or indirectly as an illegal or corrupt practice, as an inducement or reward for the award or in execution of this contract constitutes grounds for terminating the *Contractor's* obligation to Provide the Service or taking any other action as appropriate against the *Contractor* (including civil or criminal action).
- Z4.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Service if the *Contractor* (or any member of the *Contractor* where the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations) is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices.

Such practices include making of offers, payments, considerations, or benefits of any kind or otherwise, whether in connection with any procurement process or contract with the *Employer* or other people or organisations and including in circumstances where the *Contractor* or any such member is removed from the an approved vendor data base of the *Employer* as a consequence of such practice.

- Z4.3 Notwithstanding the provisions of core clause 90.2, the procedures on termination in terms of this clause are P1, P2 and P4 as stated in the core clause 92 and the amount due is A1 and A3 as stated in core clause 93.

Z5 Confidentiality

- Z5.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z5.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.
- Z5.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z5.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z5.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z6 Waiver and estoppel: Add to core clause 12.3:

- Z6.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z7 Health, safety and the environment: Add to core clause 27.4

- Z7.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. Without limitation the *Contractor*:
- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Affected Property;
 - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of the *service*; and
 - undertakes, in and about the execution of the *service*, to comply with the Construction

Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

- All other applicable health, safety and environmental laws that have a bearing on the *service*.

Z7.2 The *Contractor*, in and about the execution of the *service*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z7.3 The *Contractor* indemnifies and holds the *Employer* harmless for and against any loss and/or damage that results from the *Contractor's* failure to comply with the applicable safety, health and/or environmental legislation.

Z7.4 Failure by the *Contractor* and his personnel to adhere to the Eskom Life Saving Rules, refer to Part C3.2.5, shall result in the offender/s being immediately removed from site. The *Contractor's* supervisor/s shall also be held accountable for his subordinates not adhering to all the Eskom Life Saving Rules, which at the discretion of the *Service Manager* may request the *supervisor/s* removal from site or disciplinary action. The *Contractor* will further be penalised between R1 000, 00 and R5 000, 00 per transgression of the Life Saving Rules, at the sole discretion of the *Service Manager*. The *Contractor* shall not be allowed to influence the decision of the *Service Manager* and the decision taken by the *Service Manager* shall be final.

Further to the above, the *Contractor* shall also be penalised for the *Contractor* and/or his personnel not adhering to safe working standards and conditions as set out in the relevant acts, regulations, policies and procedures, refer Part C3.2.5. The penalty shall be between R1 000, 00 and R 5 000, 00 and at the sole discretion of the *Service Manager*. Repeat offences shall result in the transgressors being removed from site immediately.

Z8 Provision of a Tax Invoice and interest. Add to core clause 51

Z8.1 Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.

Z8.2 The *Contractor* is required to comply with the requirements of the Value Added Tax Act, 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z8.3 **Invoices must be made out to:**
Eskom Holdings SOC Limited
Group Capital Division
P. O. Box 1091
Johannesburg
2000.
Attention: Accounts payable.

Z8.4 **Invoicing format and Process:**

- Invoice addressed to Eskom Holdings SOC Limited
- Invoice should read 'Tax Invoice'
- Company VAT registration number
- Eskom VAT Number 4740101508
- Invoice Number
- Purchase Order Number
- Supplier Name and Address

- VAT to be indicated separately
- Order numbers to be invoiced separately
- Invoices to be delivered not later than last day of month of assessment
 - Invoices shall be delivered by the *Contractor* to the following email address: Invoiceseskomlocal@eskom.co.za

Invoice date to be same month (not later than the last day of the same month) of assessment. Incorrect claims (invoices) should be cancelled with a credit note referring to the incorrect invoice and issue a new invoice.

- Z8.5 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z9 Notifying compensation events

- Z9.1 Delete the last paragraph of core clause 61.3 and replace with:

If the *Contractor* does not notify a compensation event within eight weeks of becoming aware of the event, he is not entitled to a change in the Prices.

Z10 *Employer's limitation of liability*

- Z10.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z10.2 The *Contractor's* entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the *Employer's* liability under the indemnity is limited to compensation as provided for in core clause 63 and X19.11 if Option X19 Task Order applies to this contract.

Z11 **Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":**

- Z11.1 or had a business rescue order granted against it.

Z12 *Employer's step-in rights*

- Z12.1 If the *Contractor* defaults by substantially failing to comply with his obligations and within four weeks of the notification of the default by the *Service Manager* has not rectified the default, the *Employer*, without prejudice to his other rights, powers and remedies under the contract, is entitled to remedy the default either himself or appoint others to do so on his behalf, and the reasonable costs of doing so is for the account of the *Contractor*.
- Z12.2 The *Contractor* co-operates with the *Employer* and facilitates and permits the use of all required information, materials and other matter [including documents and all other drawings, CAD materials, technical data, software, models, plans, designs, programs, diagrams, evaluations, details, specifications, schedules, reports, calculations, manuals or other documents or recorded information (electronic or otherwise) which have been or are at any time prepared by or on behalf of the *Contractor* under the contract or otherwise for and/or in connection with the service] and generally does all things required by the *Service Manager* to achieve this end.

Z13 **Change of legal status**

- Z13.1 The *Contractor* immediately notifies the *Employer* in writing of any change to its legal status. Failure on the part of the *Contractor* to notify the *Employer* of a change in legal status will

constitute a reason for termination. The *Employer* assesses the impact of the change on the contract and reserves the right to terminate the contract.

Z13.2 The *Employer* may also terminate if the *Contractor* fails to notify the *Employer* and the *Service Manager* of a change in his legal status.

Z13.3 If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z14 Supplier Development & Localisation [SD&L].

Z14.1 Refer to T1.1 Tender Data and invitation letter for SD&L requirements. 2, 5 % SD&L retention will be withheld. The retention money will be released once the SD&L commitments have been achieved at the end of the contract period. However, in the event that the *Contractor* fails to fulfil its SD&L obligations, the portion not met would be quantified and withheld from the final payment. The *Contractor* provides the *Service Manager*, on a monthly basis with a statement, using the *Employer's* template, indicating the supplier and the amount paid to Small and Medium Enterprises (SME) and Black Women Owned (BWO) organisations or suppliers. A Progress report as part of the reporting system will be required. The *Contractor* will be required to provide an explanation and action plan should he deviate from his obligations.

Skill Type	Target (Local to Site)	Proposed (Local to Site)
Total		

Z15 Compensation Events

Z15.1 **Add the following clause under 63 Assessing compensation events**

Compensation shall be reduced by costs against which this Contract required the *Contractor* to insure and costs insured by the *Contractor* and costs paid to the *Contractor* by insurers.

Z16 Risks and insurance

Z16.1 Delete 83.2 and replace with

83.2 The insurances are in the joint names of the Parties for their respective rights and interests and provide cover for events arising out of the Contract from the starting date until the end of the service period or a termination certificate has been issued.

Z16.2 Delete 84.4 and replace with the following

84.4 Nothing in this Clause limits the obligations, liabilities or responsibilities of the *Contractor* under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from insurers shall be borne by the *Contractor* in accordance with these obligations, liabilities or responsibilities.

Z16.3 Add Clause 84.5

84.5 The *Contractor* shall ensure that, where applicable, its sub-contractor(s) shall take out and maintain in effect adequate Insurances for their employees and property and for work executed by them under the Contract, unless such subcontractor(s) are covered by the insurance policies taken out by the *Contractor*.

Z16.4 Add Clause 84.6

84.6 The insurances must be arranged with reputable insurers

Z17 Delay to the defects date

- Z17.1 If after Completion of the whole of the *service* and before the *defects date* a Defect is notified due to the whole of the *service* not performing as stated in the Service Information, the *Service Manager* may notify the *Contractor* of a delay to the *defects date* equal to the period during which the whole of the *service* do not perform as stated in the *Service Information*.
- Z17.2 If after Completion and before the *defects date* a part of the *service* is replaced or repaired as a result of a Defect notified by the *Service Manager*, the *Service Manager* may notify the *Contractor* of a delay to the *defects date* which applies only to the replaced or repaired part of the *service*.
- Z17.3 The *Service Manager* notifies the *Contractor* of delays to the *defects date* for the whole or a part of the *service* within four weeks of notification of the Defect. The *Service Manager* does not extend the period between Completion of the *service* and a delayed *defects date* by more than twice the period between Completion and the *defects date* stated in the Contract Data.

Annexure A: Insurance provided by the Employer

These notes are provided as guidance to tendering contractors and the Contractor about the insurance provided by the Employer. The Contractor must obtain its own advice regarding insurance matters. Details of the insurances provided by the Employer are contained in Annexure C Insurance Schedule

1. Tendering contractors should note that cover provided by the *Employer* is only per the insurance policies in Annexure C Insurance Schedule and may not be the cover required by the tendering contractor or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 83. In terms of clause 83.1 “the *Contractor* provides the insurances stated in the Insurance Table except any insurance which the *Employer* is to provide”. Hence the *Contractor* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.
2. If Marine Insurance is required the *Contractor* needs to obtain a copy of the latest edition of Eskom’s Shipment Policies and Procedures.
3. **Further guideline information and full details of all Eskom arranged insurance policies and procedures are contained in Annexure C Insurance Schedule**
4. The *Contractor* should generally give further consideration to providing for these additional insurance concepts: [for Amounts and Periods of Insurance the Contractor deems fit and necessary]
 - a) Professional Indemnity: The Insurance provided shall indemnify the *Contractor* (and/or his professional Consultant) for those sums which the *Contractor* or his Consultant shall become legally liable to pay as Damages arising from any claim first made against the *Contractor/Consultant* and reported to their Insurers during the Period of Insurance, directly arising out of any negligent act, error or omission committed or alleged to have been committed by the *Contractor/Consultant* in the conduct of professional services (example: design) in connection with the Contract.
 - b) Products Liability: A special General Liability extension for liability arising out of the Manufacturer’s/Supplier’s/Original Equipment Manufacturer’s defective:
 - i. production and manufacturing process (workmanship or material), or
 - ii. product design, or
 - iii. warnings, instructions, usage and maintenance manuals and specifications.
 - c) Products Guarantee: For the cost of replacing, reworking or recovering products that have failed to perform their intended function due to faulty design, manufacture, installation, after handover to the *Employer*.
 - d) Goods in Trust and under Manufacture or Storage at Manufacturer’s Premises: Where the Contract involves manufacture, and/or fabrication of Plant and Materials, components or other goods to be incorporated into the works, at premises other than the site, the *Contractor* shall satisfy the *Employer* that such Plant and Materials, components or other goods for incorporation in the works are adequately insured during manufacture and/or fabrication. Should the *Employer* have an insurable interest in such items during manufacture or fabrication, such interest shall be noted by endorsement to the *Contractor’s* relevant policies of insurance as well as those of any subcontractor.
5. Contract Works SASRIA insurance is subject to the terms exceptions and conditions of the SASRIA coupon policy. Cover and Indemnity is therefore within the scope and to the extent provided by the SASRIA coupon policy.

The *Employer's* Panel of Adjudicators

The following persons listed in alphabetical order of their surname have indicated their willingness to be included in the Eskom Panel of Adjudicators. Their CV's may be obtained by using the contact details provided.

Name	Location	Contact details (phone & e mail)
Nigel ANDREWS	Gauteng	+27 11 836-6760 nigela@quoin.net
Andrew BAIRD	Gauteng	+27 11 803 3008 andrewbaird@ecsconsult.co.za
Christopher BINNINGTON	Gauteng	+27 11 888-6141 cdb@bca.co.za
Peter HIGGINS	UK	+44 1293 873 868 peterhiggins@pdconsult.co.uk
Bruce LEECH	Gauteng	+27 11 290 4000 leech@counsel.co.za
Nigel NILEN	Gauteng	+27 11 465 3601; nilences@global.co.za
Peter THURLOW	Gauteng	+27 11 787 6226 info@thurlowassoc.com

Information about the Panel and appointment of the selected *Adjudicator* is available from Eskom Supply Chain Operations management, by contacting Leighton Itholeng (Tel.: +27 (0)11 800 4031) (Fax :+27 (0)86 668 0419) E-mail: Leighton.Itholeng@eskom.co.za

C1.2 Contract Data

Part two - Data provided by the *Contractor*

Notes to a tendering contractor:

1. Please read both the both the NEC3 Term Service Contract April 2013 and the relevant parts of its Guidance Notes (TSC3-GN)⁴ in order to understand the implications of this Data which the tenderer is required to complete.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	% %
11.2(14)	The following matters will be included in the Risk Register	
11.2(15)	The Service Information for the <i>Contractor's</i> plan is in:	
21.1	The plan identified in the Contract Data is contained in:	
24.1	The key people are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job Responsibilities:	

⁴ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 5391902 or www.ecs.co.za

Qualifications:

Experience:

CV's (and further key person's data including CVs) are in .

A	Priced contract with price list	
11.2(12)	The <i>price list</i> is in	
11.2(19)	The tendered total of the Prices is	R

PART 2: PRICING DATA
TSC3 Option A

Document reference	Title
C2.1	Pricing assumptions: Option A with Activity schedules
C2.2	The <i>price list</i> guidelines and attached BoQ

PART 2: PRICING DATA
TSC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A with Activity Schedules	2
C2.2	The <i>price list</i>	3

C2.1 Pricing assumptions: Option A

1. The *conditions of contract*

2. How work is priced and assessed for payment

Clause 11 in NEC3 Term Service Contract, June 2005 (TSC3) core clauses and Option A states:

Identified and defined terms	11	
	11.2	(12) The Price List is the <i>price list</i> unless later changed in accordance with this contract.
		(17) The Price for Services Provided to Date is the total of <ul style="list-style-type: none">the Price for each lump sum item in the Price List which the <i>Contractor</i> has completed andwhere a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the <i>Contractor</i> has completed by the rate.
		(19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

This confirms that Option A is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both.

3. Function of the Price List

Clause 54.1 in Option A states: "Information in the Price List is not Service Information". This confirms that instructions to do work or how it is to be done are not included in the Price List but in the Service Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Service in accordance with the Service Information". Hence the *Contractor* does **not** Provide the Service in accordance with the Price List. The Price List is only a pricing document.

4. Link to the *Contractor's* plan

Clause 21.4 states "The *Contractor* provides information which shows how each item description on the Price List relates to the operations on each plan which he submits for acceptance". Hence when compiling the *price list*, the tendering contractor needs to develop his first clause 21.2 plan in such a way that operations shown on it can be priced in the *price list* and result in a satisfactory cash flow in terms of clause 11.2(17).

5. Preparing the *price list*

It will be assumed that the tendering contractor has read Pages 14, 15 and 73 of the TSC3 Guidance Notes before preparing the *price list*. Items in the *price list* may have been inserted by the *Employer* and the tendering contractor should insert any additional items which he considers necessary. Whichever party provides the items in the *price list* the total of the Prices is assumed to be fully inclusive of everything necessary to Provide the Service as described at the time of entering into this contract.

1 As the *Contractor* has an obligation to correct Defects (core clause 42.1) and there is no compensation event for this unless the Defect was due to an *Employer's* risk, the lump sum Prices and rates must also include for the correction of Defects.

2 If the *Contractor* has decided not to identify a particular item in the *price list* at the time of tender the cost to the *Contractor* of doing the work must be included in, or spread across, the other Prices and rates in the *price list* in order to fulfil the obligation to complete the *service* for the tendered total of the Prices.

3 There is no adjustment to lump sum prices in the *price list* if the amount, or quantity, of work within that

lump sum item of service later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event. See Clause 60.1.

4 Hence the Prices and rates tendered by the *Contractor* in the *price list* are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk.

5 The Contractor does not have to allow in his Prices and rates for matters that may arise as a result of a compensation event. It should be noted that the list of compensation events includes those arising as a result of an *Employer's* risk event listed in core clause 80.1.

6. Format of the *price list*

(From page 73 of the TSC3 Guidance Notes)

Entries in the first four columns in the *price list* in section C2.2 are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for an item of work which is the rate for the work multiplied by the quantity completed, the tendering contractor enters the rate which is then multiplied by the Expected Quantity to produce the Price, which is also entered.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected Quantity column.

C2.2 the *price list*

Clarification and guidance notes:

Pricing structure to be in the following format:

The Price List to be split between

A) ROUTINE OPERATING & MAINTENANCE SERVICES &

B) NON ROUTINE (CALL OUTS, BREAKDOWNS REQUIRING EXTERNAL RESOURCES AND PLANT IMPROVEMENT SERVICES

Under the following headings:

- 1) PRICING OF SHE-, SITE ESTABLISHMENT & MANAGEMENT EXPENSES
 - a. SHE Cost
 - i. Routine &
 - ii. Non Routine
 - b. Site establishment
 - i. Routine &
 - ii. Non Routine
 - c. Project Management & Admin Cost
 - i. Routine &
 - ii. Non Routine
- 2) LABOUR:
 - a. ROUTINE &
 - b. NON ROUTINE WORK
- 3) TRANSPORT
 - a. Lower Site Home Work Home
 - i. Routine &
 - ii. Non Routine Travelling
 - b. Upper Site
 - i. Routine &
 - ii. Non Routine Travelling
 - c. From outside local base
 - i. Routine &
 - ii. Non Routine
- 4) ACCOMMODATION & LIVING OUT
 - a. Non Routine only
- 5) MATERIALS/SPARES
 - a. Routine &
 - b. Non Routine
- 6) SPECIAL TOOLS & EQUIPMENT: Small (Fit On A 1 Ton LDV)
 - a. Routine &
 - b. Non Routine
- 7) SPECIAL TOOLS AND EQUIPMENT: LARGE (> 1 ton)
 - a. Routine &
 - b. Non Routine

See detailed pricing guidance notes following the *price list*

For the Price List, please see attached “Excel’ Bill of Quantity (BoQ) & Activities for use and pricing inputs. (Note colour green = input required by Tenderer, colour amber = input by Employer)

The *price list*

Provision of SEWAGE - & WATER Operating & Maintenance Services for the Ingula Pumped Storage Scheme

SUMMARY: Part A+B

		TOTAL
Part no.	ITEM DESCRIPTION	
A	ROUTINE O&M	
B	NONE ROUTINE O&M	
A+B	GRAND TOTAL	

Table A: Routine Services

The following are calculated on Table A:

- P&G, Labour, Transport

The following are calculated on separate tables and transferred to Table A:

- Table A4: Material & Spares
- Table A5: Equipment & Tools

Table A

A ROUTINE O & M

ITEM NO	ITEM DESCRIPTION	UOM	UNIT	QUANTITY	RATE	AMOUNT
1	PRELIMINARY & GENERAL PRICING FOR SHE -, MANAGEMENT - & SITE ESTABLISHMENT EXPENSES	SUB TOTAL		1.1+1.2+1.3+1.4+1.5+1.6+1.7+1.8		R -
1.1	Submission & sign off of Health and Safety File vs SHE requirements & general updating with SHE training & appointments	Lump Sum/ annum	EA	5	-	R -
				Mandays allowed for over 5 years	Rand / manday	

1.2	SHE training per person to meet SHE requirements: Submit SHE training plan per person	R/manday	EA	120	-	R	-
1.3	PPE per person annual for ROUTINE jobs	R/Person	EA	30	-	R	-
1.4	Medicals, Inductions & Security clearances for ROUTINE employees annual and for new jobs	R/Person	EA	30	-	R	-
	Paid on actual medicals done for the month. Only paid once per year per position						
1.5	DWS Class IV operator SITE MANAGER, Project Management, SHE Officer & Specialist support expenses, scheduled meetings, prep of quotes, procurement, measurements & billing. Travelling will be priced under Transport for Routine site visits, Non Routine -& Call out travelling. Call outs to do SOW & Resource planning covered under Call outs	R/Month	MONTH	60	-	R	-
1.6	On site Communication, Radios, PC, Laptop & Printer, Laboratory services and related consumables	R/Month	MONTH	60	-	R	-
1.7	SITE ESTABLISHMENT, INCL getting Staff trained, -inducted, -moved to site, getting Vehicles, Tools, Equipment, Materials to site to get ROUTINE SERVICES up and running. Paid annually	R/Year	EA	5	-	R	-
1.8							
2	LABOUR: FULL TIME O & M SERVICES	SUB TOTAL	2.1+2.2+2.3+2.4+2.5+2.6+2.7			R	-
	Normal work-week (Monday to Friday between 7:00am to 4:00pm)			Mandays allowed over 5 year	Rand / manday		
2.1	Site Technical Supervisor: DWS Class 4 operator	R/day NT	DAY	1 320	-	R	-
	PAY FEE:RATE: OVERTIME: emergent work	R/HOUR	H	60	-	R	-

2.2	Artisan Pipe Fitter /Plumber	R/day	DAY	1 320	-	R -
	PAY FEE:RATE: OVERTIME: emergent work	R/HOUR	H	60	-	R -
	Dayshift work-week (Monday to Sunday between 7:00am to 4:00pm)			Mandays allowed over 5 year	Rand / manday	
2.3	DWS Operators Class 3	R/day	DAY	5 475	-	R -
2.4	DWS Class 2 Operators	R/day	DAY	5 475	-	R -
2.5	Semi skilled Workers	R/day	DAY	5 475	-	R -
2.6	General Workers	R/day	DAY	5 475	-	R -
2.7						
3	TRANSPORT ROUTINE TOTAL		Total	3.1+3.2+3.3+3.4+3.5+3.6		R -
3.1	Supervisor & Plumber					R -
3.1	Normal daily Routine,Local Collection of goods travelling to and from Ingula Pumped Storage Scheme Site (On site travelling and underground included. Lower site only)	km /round trip		110	Max allowed 100 km radius	
				Trips allowed over 5 years	Rand/ Trip	
3.1.1	Single cab	R/trip	EA	1 320	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.1.2	Double cab: 4 x 4	R/trip	EA	1 320	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.2	Shift (7 DAYS A WEEK) Normal daily Routine, travelling to and from Ingula Pumped Storage Scheme Site (On site travelling and underground included. Lower site only)					R -
3.2	SHIFT (7 DAYS A WEEK) Normal daily Routine,	km /round trip		60	Max allowed 100 km radius	
				Trips allowed over 5 years	Rand/ Trip	
3.2.1	Single cab	R/trip	EA	1 825	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	

3.2.2	Double cab: 4 x 4	R/trip	EA	1 825	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.3	UPPER SITE, Routine to & from Ingula Pumped Storage Scheme lower Site	km /round trip		80	FIXED	R -
				Trips allowed over 5 years	Rand/ Trip	
3.3.1	Single cab Truck	R/trip	EA	60	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.3.2	Double cab: 4 x 4	R/trip	EA	60	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.4	Management & Specialists: Routine- travelling to and from Ingula Pumped Storage Scheme Site (Report to lower site first)	km /round trip		500	Max allowed 250 km radius	R -
				Trips allowed over 5 years	Rand/ Trip	
3.4.1	Single cab	R/trip	EA	60	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km		-	-	
3.4.2	Double cab	R/trip	EA	60	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km		-	-	
3.5	Supervisor, Plumber, Management & Specialists: Routine- travelling to and from Ingula Pumped Storage Scheme Site (from lower to upper site if and when required)	km /round trip		260	FIXED	R -
				Trips allowed over 5 years	Rand/ Trip	
3.5.1	Single cab/SEDAN	R/trip	EA	5	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km		-	-	
3.5.2	Double cab	R/trip	EA	5	-	R -

	DIESEL DRIVEN COST FIXED & VARIABLE	R/km		-	-	
3.6	OTHER ROUTINE TRANSPORT					R -
4	MATERIALS ROUTINE TOTAL	R/ UNIT	SUB TOTAL			R -
5	EQUIPMENT & TOOLS ROUTINE TOTAL	R/ UNIT	SUB TOTAL		from Table A4	R -
					from TableA5	
	GRAND TOTAL					R -

Table A4: Material & Spares

Total A4 to be added into Table A

A4	ROUTINE MATERIALS & SPARES:					Total 4.1 transferred to Table A, ROUTINE, 4
Service no.	ITEM DESCRIPTION	UNIT OF MEASURE	UNIT	TOTAL QUANTITY	RATE	AMOUNT
4.1	TOTAL MATERIALS APPLICATION SERVICES	R/ UNIT	EACH	1 725	34.78	R 60 000.00
	Description	Unit				
10	CEANING MATERIALS	R/MONTH	EA	60	-	0
20	FILTER SAND	R/KG	EA	1 000	-	0
30	Sodium hypochlorite FOR DOSING	R/L	EA	300	-	0
40	REAGENTS FOR ANALYSES OF SAMPLES IN OPERATIONAL LAB	R/MONTH	EA	60	-	0
50	BROMOCHLOR TABLETS	R/KG	EA	80	-	0
60	SUPERFLOC FLOCCULANT	R/KG	EA	80	-	0
70	HYDRO CARBON SPILL KIT REPLENISHMENT: OILSEP 4m Booms • Absorbent booms for wet or dry surfaces • 4m x 19cm	R/UNIT	EA	30	-	0
80	SEWAGE SPILL KIT & REPLENISHMENT	R/KIT	EA	5	-	0
90	Gearbox Aerator: OIL	R/L	EA	50	-	0

100	BUDGET: PLUMBING MATERIALS, FITTINGS,SPARES	R/ UNIT	EACH	60	1 000.00	R 60 000.00
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Table A5: Equipment & Tools

Total A5 to be added into Table A

**A5 ROUTINE TOOLS
& EQUIPMENT**

ITEM NO	ITEM DESCRIPTION	UOM	UNIT	TOTAL QUANTITY	RATE	AMOUNT
	TOTAL EQUIPMENT	Transfer total to Table A (item5)				R -
	SPECIAL TOOLS & EQUIPMENT : SMALL-MEDIUM NOT LISTED/PART OF MATERIAL APPLICATION SERVICES	SUB TOTAL	EA	163	-	-
10	PLUMBERS TOOLBOX	R/ UNIT	EA	60	-	-
20	PLUMBERS EQUIPMENT i.e RODDING	R/M	M	100	-	-
30	SUMP PUMP MOBILE:GRUNDFOS SL pump: Product No.: 96106566	R/ UNIT	EA	1	-	-
40	HIGH PRESSURE WATER JET	R/ UNIT	EA	2	-	-
50	ELECTRICAL EXTENTION CORD(s): 3 PHASE 380 V	R/ M	EA	30	-	-
70	ELECTRICAL EXTENTION CORD(s): 220 V	R/ M	EA	30	-	-
80	POWER TOOLS	R/ UNIT	EA	5	-	-
90	HYDRO CARBON SPILL KIT INCL TROLLEY BIN	R/ UNIT	EA	1	-	-
100	SEWAGE SPILL KIT INCL TROLLEY BIN	R/KIT	EA	2	-	-
110		R/ UNIT	EA	1	-	-
120		R/ UNIT	EA	1	-	-
130		R/ UNIT	EA	1	-	-
	Any SHE equipment not covered under SHE cost to be detailed here & priced					

	SPECIAL TOOLS & EQUIPMENT : LARGE					
	TRANSPORT, MOVEMENT, HIRING, OPERATE & MAINTAIN OF LARGE/ HEAVY ITEMS & MATERIALS		UNIT	TOTAL QUANTITY	RATE	AMOUNT
		SUB TOTAL				R -
10	SEWAGE SUCTION TANKER: WEEKLY					
	WEEKLY SUCKING/TANKERING all movements to and from site, labour, operating, servicing & maintenance included	R/trip	EA	260	-	R -
					-	R -
	OTHER					

Table B: NON Routine Services

The following are calculated on Table B:

- P&G, Labour, Transport, Accommodation

The following are calculated on separate tables and transferred to Table B:

- Table B5: Material & Spares
- Table B6: Equipment & Tools

Table B

B CALL OUTS, BREAKDOWNS & IMPROVEMENTS

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	UNIT	QUANTITY	RATE	AMOUNT
1	P&G's NON ROUTINE: SHE-, MANAGEMENT-& SITE ESTABLISHMENT COSTS for CALL OUTS	SUB TOTAL		1.1+1.2+1.3+1.4+1.5		R -
1.1	Submission of a Health and Safety File per specific NON ROUTINE call out, projects & pandemics	R/Project	EA	50	-	R -
	Paid per Non routine job that requires additional Labour,- Equipment, - Tools and /or a Sub Contractor					
				Mandays allowed for over 5 years	Rand / manday	
1.2	SHE training per person to meet SHE requirements: Submit SHE training plan per person	R/manday	EA	225	-	R -

	Paid on actual mandays training done for the month					
1.3	PPE per person annual for NON ROUTINE jobs	R/Person	EA	75	-	R -
1.4	Medicals, Inductions & Security clearances for NON ROUTINE employees annual and for new jobs	R/Person	EA	75	-	R -
	Paid on actual induction attended for the month. Only paid once per year per person					
	SITE ESTABLISHMENT: All SHE related cost to be included above. Transport, accommodation and living out for persons on breakwons & improvement projects from outside Ladysmith for NON ROUTINE WORK to be covered lower down. DIRECT & SUB CONTRACTOR's FEE % to COVER OVERHEADS (CALC at end of PRICE LIST)					
1.5						
2	LABOUR: NON ROUTINE O & M SERVICES	SUB TOTAL		SUM (2.1 to 2.16)		R -
	Normal work-week (Monday to Friday between 7:00am to 16:00pm)			Mandays allowed over 5 year	Rand / manday	
2.1	TECHNICAL EXPERT on CALL OUT ASSESSMENTS i.e. to do SOW & Resource planning for operational and or electro-mechanical and or control & instrumentation or civil/plumbing.	R/Hour	H	90	-	R -
2.2	Site Technical Supervisor	R/day NT	H	440	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.3	Artisan Pipe Fitter /Plumber	R/day	H	80	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.4	Operator Class 3	R/day	H		-	R -

				80		
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.5	DWS Class 2 Operators	R/day	H	80	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.6	Semi skilled Workers	R/day	H	560	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.7	General Workers	R/day	H	440	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.8	Artisan ELECTRICIAN	R/day	H	160	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.9	DRIVER SEWAGE SUCTION TANKER (AFTER HOURS)	R/HOUR	H	80	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.10	Technician (OEM) C&I & OTHER	R/Person/hour	H	160	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.11	ARTISAN Fitter/ Rigger	R/Person/hour	Hrs	480	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -

	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.12	TLB DRIVER NT	R/HOUR	H	120	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.13	CRANE OPERATOR NT	R/HOUR	H	240	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.14	CHERRY PICKER DRIVER/OPERATOR NT	R/HOUR	H	120	-	R -
	PAY FEE:RATE: OVERTIME: call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: SUNDAY:call out	R/HOUR	H	60	-	R -
	PAY FEE:RATE: PUBLIC HOLIDAYS: call out	R/HOUR	H	60	-	R -
2.15						
2.16						
3	TRANSPORT	SUB TOTAL		sum(3.1 to 3.5)		R -
3.1	LOCAL BASED NON ROUTINE, Collection of goods and Call out travelling to and from Ingula Pumped Storage Scheme Site (On site travelling and underground included. Lower site only)	km /round trip		110	Max allowed 100 km radius	
				Trips allowed over 5 years	Rand/ Trip	
3.1.1	Single cab	R/trip	EA	25	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.1.2	Double cab: 4 x 4	R/trip	EA	25	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.3	LOCAL BASED UPPER SITE, Non Routine & Call out to & from Ingula Pumped Storage Scheme lower Site	km /round trip		80	FIXED	

				Trips allowed over 5 years	Rand/ Trip	
3.3.1	Single cab Truck	R/trip	EA	5	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.3.2	Double cab: 4 x 4	R/trip	EA	5	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.4	SPECIALISTS FROM OUT OF TOWN TRAVELLING: Non Routine- & Call out travelling to and from Ingula Pumped Storage Scheme Site (Report to lower site first)	km /round trip		500	Max allowed 250 km radius	
				Trips allowed over 5 years	Rand/ Trip	
3.4.1	Single cab	R/trip	EA	25	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.4.2	Double cab	R/trip	EA	25	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.4.2	8T FLATBED with JIB CRANE	R/trip	EA	10	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.1	SPECIALIST LOCAL TRAVEL Non Routine, Collection of goods and Call out travelling to and from Ingula Pumped Storage Scheme Site (On site travelling and underground included. Lower site only)	km /round trip		110	Max allowed 100 km radius	
				Trips allowed over 5 years	Rand/ Trip	
3.1.1	Single cab	R/trip	EA	25	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.1.2	Double cab: 4 x 4	R/trip	EA	25	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.5	SPECIALIST UPPER SITE TRAVELLING: Non Routine- & Call out travelling to and from Ingula Pumped Storage Scheme Site (from lower to upper site if and when required)	km /round trip		80	FIXED	

				Trips allowed over 5 years	Rand/ Trip	
3.5.1	Single cab/SEDAN	R/trip	EA	5	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km			-	
3.5.2	Double cab	R/trip	EA	5	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km		-	-	
3.5	OTHER TRAVELLING: Non Routine- & Call out travelling to and from Ingula Pumped Storage Scheme Site (from lower to upper site if and when required)	km /round trip		-	FIXED	
					Rand/ Trip	
3.5.1	Single cab/SEDAN	R/trip	EA	-	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km		-	-	
3.5.2	Double cab	R/trip	EA	-	-	R -
	DIESEL DRIVEN COST FIXED & VARIABLE	R/km		-	-	
3.6				-	-	R -
4	ACCOMMODATION for SPECIALIST (s) CALL OUTS: Extra over normal Labour -& Project Management Rates	SUB TOTAL		Person nights allowed over 5 years	R/night/person	R -
4.1	Accommodation & Living out of specialist & specialist additional labour from outside town	R/Person	No	215	-	R -
	NOTES					
c	Standby response time allowed < 24 hours					
a	Compensation allowed for Accommodation of Non Routine Work Specialist Labour and Standby on call from > 100 km radius as and when required					
b	Compensation allowed for Transport of Non Routine Work Specialist Labour and Standby on call from > 100 km radius as and when required using rates as per TRANSPORT section					
5	MATERIALS TOTAL	SUB TOTAL			From Table B5	R
6	EQUIPMENT & TOOLS TOTAL	SUB TOTAL			From Table B6	R -

	TOTAL			1+2+3+4+5		R -
B	OVERHEADS /MANAGEMENT(DIRECT -& CONTRACTOR'S FEE%)	%		% OF TOTAL (SUM 1-5)	%	R -
	GRAND TOTAL					R

Table B5: Material & Spares

**B5 NON ROUTINE O & M: CALL OUTS,
BREAKDOWNS & IMPROVEMENTS**

Ser vice no.	ITEM DESCRIPTION		UNIT OF MEASU RE	UNIT	TOTAL QUANTI TY	RATE	AMOUNT
5.1	MATERIALS & SPARES SUPPLY	TOTAL	R/ UNIT	EACH			R -
	Description		Unit				Transfer to Table B (5)
10	HDPE 75 MM Pipe	PLUMBING SPARES	R/M	M	400	-	R -
20	75 MM HDPE Couplings		R/UNIT	EACH	8	-	R -
30	(75 MM X 80 MM) Compression Male Adaptor		R/UNIT	EACH	2	-	R -
40	VJ Flange adaptor 160 MM		R/UNIT	EACH	2	-	R -
50	160 MM Metal flange		R/UNIT	EACH	2	-	R -
60	160 MM Flange Gasket		R/UNIT	EACH	2	-	R -
70	(150 MM X 100 MM) Bush reducer		R/UNIT	EACH	2	-	R -
80	(100 MM x 80MM) Bush reducer		R/UNIT	EACH	2	-	R -
90	75 MM HDPE 90 Degree Bends		R/UNIT	EACH	16	-	R -
100	Flowmeter 5W4C1H-10KC1/0 (5W4C1H-AAELHP4AUD5K0 A+AA) Promag W 400 DN100 4"	FLOW METER COMPLETE WITH CALIBRATION CERTIFICATE	R/UNIT	EA	10	-	R -

110	HMI: MODEL: PWS6500S-S, VERSION:V11-12- 10, DATE: 0749, S/N: 6500005879, 24VDC/12W	OEM PRENTEC	R/UNIT	EA	4	-	R	-
120	PLC	OEM PRENTEC	R/UNIT	EA	2	-	R	-
130	SOFTWARE UPGRADE (OEM PRENTEC TECHNICAL SERVICES	OEM PRENTEC	R/UNIT	EA	2	-	R	-
140	GRUNDFOS SL pump: Product No.: 96106566		R/UNIT	EA	4	-	R	-
150	FlenderZR108-K2- S132M4W	New gearbox complete	R/UNIT	EA	1	-	R	-
160		Gearbox Oil,	R/L	EA	5	-	R	-
170		Seals,	R/SET	EA	2	-	R	-
180		Gaskets	R/SET	EA	2	-	R	-
190	Kalbskopf Prentel	New Surface Aerator	R/UNIT	EA	1	-	R	-
200		Bearings	R/UNIT	EA	4	-	R	-
210		Blades	R/UNIT	EA	4	-	R	-
220	Ebara DWO 4007	Impellar	R/UNIT	EA	1	-	R	-
230		Mechanical Seal	R/UNIT	EA	1	-	R	-
240	DP Type DP3057	Impellar/Mechanic al Seal	R/UNIT	EA	1	-	R	-
250	GC Barrs	Actuator 80mm	R/UNIT	EA	4	-	R	-
260	GC Barrs	Valve 80mm	R/UNIT	EA	4	-	R	-
270	GC Barrs	Actuator 150mm	R/UNIT	EA	4	-	R	-
280	GC Barrs	Valve 150mm	R/UNIT	EA	4	-	R	-
290	ITT Flygtt ENM6	Pear type float, 230V	R/UNIT	EA	2	-	R	-
300	Burkett 4/2 way 230V	Valve	R/UNIT	EA	2	-	R	-
310		230V Coils	R/UNIT	EA	2	-	R	-
320	Fini SKM10-2M	Complete new Compressor	R/UNIT	EA	1	-	R	-
330		V Belts	R/UNIT	EA	3	-	R	-

340		Compressor Oil	R/L	EA	10	-	R	-
350		Drain Cock	R/UNIT	EA	5	-	R	-
360	Grundfos 208.18.10013	Complete new DOSING Pump	R/UNIT	EA	1	-	R	-
370		4 MM Polypropylene Tubing	R/M	EA	4	-	R	-
380		6 MM Polypropylene Tubing	R/M	EA	4	-	R	-
390	Grundfos DM 1208	Complete new DOSING Pump	R/UNIT	EA	1	-	R	-
400		4 MM Polypropylene Tubing	R/M	EA	4	-	R	-
410		6 MM Polypropylene Tubing	R/M	EA	4	-	R	-
420	PIPE:Hot Dipped Galvanised	PIPE 1/2 INCH	R/M	EA	20	-	R	-
430		PIPE 4 INCH	R/M	EA	20	-	R	-
440	MEMBRANE FOR DRYING BEDS	BUDGET ALLOWED	SUM	EA	1	30 000.00	R30 000.00	
450	ADDATIVES FOR PROCESS RESULTS ENHANCEMENT	BUDGET ALLOWED	sum	EA	1	30 000.00	R30 000.00	

Table B6: Equipment & Tools

B6	NON ROUTINE O & M: CALL OUTS, BREAKDOWNS & IMPROVEMENTS						
ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	UNIT	TOTAL QUANTITY	RATE	AMOUNT	
B6	TOTAL EQUIPMENT	B6.1+B6.2			Transfer to Table B (6)	R	-
B6.1	SPECIAL TOOLS & EQUIPMENT : SMALL & MEDIUM	SUB TOTAL	EA	60	-		-
	Items that fit into a 1 t LDV						
10	Mobile Sump pump:GRUNDFOS SL pump: Product No.: 96106566	R/ UNIT	EA	1	-		-
20	LIFTING EQUIPMENT TO RAISE BOREHOLE PUMP (80M) & SUMP PUMPS (3M)	R/ UNIT	EA	1	-		-
30	GAS TESTING (for METHANE, calibrated)	R/ UNIT	EA	2	-		-
30		R/ UNIT	EA	1	-		-
40		R/ UNIT	EA	1	-		-
50		R/ UNIT	EA	1	-		-

	Any SHE equipment not covered under SHE cost to be detailed here & priced					
	Operating of SMALL TOOLS & EQUIPMENT will be covered under rates as per Labour rates. Labour supplied full time and/ or additional to be able to Operate small tools safely. No mark up on Labour.					
B6.2	SPECIAL TOOLS & EQUIPMENT : LARGE	SUB TOTAL		285	-	R -
	TRANSPORT, MOVEMENT, HIRING, OPERATE & MAINTAIN OF LARGE/ HEAVY ITEMS & MATERIALS					
20	TLB WITH BACKHOE: 3 M TRENCHING					
10	Supply, deliver& operate TLB all labour, operating & maintenance included	R/trip	EA	5	-	R -
20	Collect TLB	R/trip	EA	5	-	R -
30	TLB hiring	R/day	DAY	25	-	R -
40	TLB: operate, maintain and render service.	R/HOUR	H	250	-	R -
30	SEWAGE SUCTION TANKER: NON ROUTINE					
10	SEWAGE BLOCKAGE REMOVAL, SUCKING/TANKERING all labour, operating & maintenance included	R/day	EA	5	-	R -
20	SUPPLY OF TANKER SERVICES TO SITE AND MOVEMENT OF RAW SEWAGE FROM POINT OF BLOCKAGE TO ON SITE SEWAGE WORKS	R/trip	EA	5	-	R -
30	SEWAGE OFF SITE REMOVAL, SUCKING/TANKERING all labour, operating & maintenance included	R/day	EA	5	-	R -
40	TRANSPORT AND DELIVER SEWAGE TO LADYSMITH MUNIC SEWAGE WORKS 60 KM FROM INGULLA (120 KM ROUND TRIP)	R/trip	EA	5	-	R -
40	MOBILE CHEMICAL TOILETS: NON ROUTINE					
10	Supply, deliver& batch of chemical mobile toilets	R/trip	EA	5	-	R -
20	Collect batch of toilets	R/trip	EA	5	-	R -
30	Hiring & servicing (twice per week)	R/week	TOILET WEEKS	50	-	R -
50	POTABLE WATER TANKER: NON ROUTINE					
10	COLLECTION, TRANSPORT AND DELIVERY all labour, operating & maintenance included	R/day	EA	5	-	R -
20	TRANSPORT AND DELIVER FROM BEDFORD DAM WATER WORKS 80 KM (RETURN TRIP) FROM INGULLA LOWER SITE	R/trip	EA	5	-	R -

60	CRANE FOR GEARBOX REMOVAL/ PLACEMENT					
10	Supply, deliver& operate CRANE & slings all permits to move crane, labour, operating & maintenance included	R/trip	EA	5	-	R -
20	Collect CRANE & RIGGING EQUIPMENT, all transport permits and resources incl	R/trip	EA	5	-	R -
30	CRANE & RIGGING EQUIPMENT hiring	R/day	DAY	25	-	R -
40	CRANE: operate, maintain and render service.	R/HOUR	H	250	-	R -
70	MEWP (CHERRY PICKER) FOR PIPE & VALVE REPLACEMENT & REPAIRS UNDERGROUND					
10	Supply, deliver& operate MEWP & slings all permits to move CHERRY PICKER, labour, operating & maintenance included	R/trip	EA	5	-	R -
20	Collect MEWP EQUIPMENT, all transport permits and resources incl	R/trip	EA	5	-	R -
30	MEWP EQUIPMENT hiring	R/day	DAY	25	-	R -
40	MEWP: operate, maintain and render service.	R/HOUR	H	250	-	R -
80	MOBILE (diesel driven)COMPRESSOR / HIGH PRESSURE (2500 PSI) WATER JET FOR PIPE FLUSHING					
10	Supply, deliver& operate COMPRESSOR / HIGH PRESSURE WATERJET CLEANER including Piping to reach 30 m, labour, operating & maintenance included	R/trip	EA	5	-	R -
20	Collect COMPRESSOR & EQUIPMENT, all transport permits and resources incl	R/trip	EA	5	-	R -
30	COMPRESSOR & EQUIPMENT hiring	R/day	DAY	25	-	R -
40	COMPRESSOR: operate, maintain and render service.	R/HOUR	H	250	-	R -
80	HIGH PRESSURE (2500 PSI) WATER JET FOR PIPE FLUSHING					
10	Supply, deliver& operate COMPRESSOR / HIGH PRESSURE WATERJET CLEANER including Piping to reach 30 m, labour, operating & maintenance included	R/trip	EA	5	-	R -
20	Collect COMPRESSOR & EQUIPMENT, all transport permits and resources incl	R/trip	EA	5	-	R -
30	COMPRESSOR & EQUIPMENT hiring	R/day	DAY	25	-	R -

40	COMPRESSOR: operate, maintain and render service.	R/HOUR	H	250	-	R	-
						R	-
						R	-
						R	-
						R	-
						R	-
						R	-

Guidelines and Assumptions when completing the above price lists:

A. PRICE LIST FOR ROUTINES O&M SERVICES

• SEE PRICE LIST A FOR ROUTINE COST BREAKDOWN

1. P&G's ROUTINE: SHE-, MANAGEMENT-& SITE ESTABLISHMENT COSTS for CALL OUTS (In TOTAL A sheet)
2. LABOUR ROUTINE(In TOTAL A sheet)
3. TRANSPORT(In TOTAL A sheet)
4. MATERIALS & SPARES REQUIREMENTS (separate sheet feeding into TOTAL A)
5. EQUIPMENT REQUIREMENTS (separate sheet feeding into TOTAL A)

NOTES FOR PLANNING OF PRICING OF SITE ESTABLISHMENT, LABOUR & TRANSPORT for ROUTINE O&M

- a) Offices, ablutions, parking & workshop space will be made available
- b) No canteen , accommodation and public transport available at Ingula
- c) The price must be all inclusive but exclude VAT
- d) Normal hours deemed to be shift hours 07h00 to 16h00 daily Sat-Sunday including Public Holidays
- e) Overtime/Shift allowances to be calculated as per the Basic Conditions of Employment Act
- f) All Full time staff to have drivers licenses for general type of vehicles & equipment required. Drivers will not be compensated separately only the TLB Operator & Tanker (Honey Sucker) will be separate. One Contract employee to be trained to operate Eskom Telehandler 5t x 25m boom with forks, mancage and hoist and be part of the site team.
- g) All SHE appointments to come from within full time staff to meet SHE requirements. Participation in First Aid-, Fire Fighting & Rescue- and Rescue from heights and confined space exercises as well as attending to situations that gives rise to participation in this regard will be deemed as part of routine duties. Staff will not be compensated separately
- h) The full time staff compliment to be 100% and if a person is off for longer than 3 days an able replacement to be supplied for routine jobs.
- i) Overtime and standby will be allowed for under Call outs & Non Routine
- j) Shift allowance to be included in rates
- k) Only diesel driven vehicles allowed underground
- l) Contractor to optimize and add/reduce & describe vehicles above & input @ AN OTHER VEHICLE (s) if required and could adjust trips in column F if justified and align with contractor transport plan
- m) Trips allowed in column F by Employer for Planning purposes but will pay actual
- n) Contractor to input source info into green blocks to calculate cost per trip depending on base town & area office
- o) Max allowed round trip for full time staff: 200 km (home base to be within 100km radius from Ingula)
- p) Max allowed round trip for management, specialist staff and additional staff: 500 km (Area office base to be within 250 km radius from Ingula)
- q) Employer done input in amber: km to top site allowed from lower site offices

- r) No accommodation and living out to be compensated for routine work & local call outs, only transport, labour & additional materials & equipment
- s) Semi - & Unskilled workers to be recruited from local community, no accommodation payment allowed
- t) Study SHE -& Quality requirements and price it in full to make sure compliance at all times

B. PRICE LIST FOR NON ROUTINES O&M SERVICES

PRICING GUIDELINES of NON ROUTINE Breakdown Maintenance, Callouts & Improvements:

The following guidelines to be used when finalizing PRICE LIST B, NON ROUTINE section:

Breakdowns that will require additional resources:

- Allowance will be made for these breakdown call outs & provisional quantities will be stated in the Price List based on history and expected failures due to aging plant, but a quote per breakdown/job will be required, assessed and approved by the Service Manager before a Task order (Purchase order 45____) will be issued to proceed.
- **SEE PRICE LIST B FOR NON ROUTINE COST BREAKDOWN**
- 6. P&G's NON ROUTINE: SHE-, MANAGEMENT-& SITE ESTABLISHMENT COSTS for CALL OUTS (In TOTAL B sheet)
- 7. LABOUR NON ROUTINE(In TOTAL B sheet)
- 8. TRANSPORT(In TOTAL B sheet)
- 9. ACCOMMODATION for SPECIALIST (s) CALL OUTS: Extra over normal Labour -& Project Management Rates
- 10. MATERIALS & SPARES REQUIREMENTS (separate sheet feeding into TOTAL B)
- 11. EQUIPMENT REQUIREMENTS (separate sheet feeding into TOTAL B)
- Direct cost of the Contractors will apply with the applicable direct fee% to cover Site establishment and management cost (Calculated at end of TOTAL B sheet)
- Sub -contracting would be allowed and the subcontract fee % will apply to cover for site establishment & management overhead expenses. (Calculated at end of TOTAL B sheet)
- Scaffolding and related team will be supplied by the Employer

Additional resources allowed for:

- **A Technical Person (s) with Operational and or Electro-mechanical and or C&I and or Civil & Plumbing experience to lead investigations, scoping and specifications of additional work and the supervision and quality assurance of major repair work**

Improvements in Operations Advisor

- Pricing to be done for 5 call outs, 2 days allowed per call out over the 5 year period including report writing and presenting.

Breakdown Assessments Advisor

- Additional Technical expertise to resolve breakdowns
- Expert advisor (s) to advice on method statement, SHEQ requirements and resource requirements for the field of expertise required depending on the breakdown
- Pricing to be done for 20 call outs, 2 days allowed per call out over the 5 year period including report writing, presenting and quotations for work to be done.
- SHE cost for the Operation- and or Technical person will not be done per call out but as part of the annual SHE cost
- Site Establishment cost deemed to be part of main price list and not charged again here.
- Labour rates to include report writing & quotes

- Transport include travelling from Contractor's base to Ingula and a separate line for local travel (Ladysmith- Ingula – Ladysmith)
- Accommodation and living out to be stated in line with the callouts and days allowed.

Operational changes that would require additional resources:

- **Sewage system blockages and STP not operational**
 - Chemical toilets to be supplied complete with removal services to an approved disposal point
 - Price for 10 temporary chemical toilets for 10 WEEKS over the 5 year contract period. Payment will be done per actual supply.
 - Price per delivery of a batch of toilets
 - Price for removal of batch of toilets
 - Price for servicing including, twice a week & disposal of effluent at Ingula STP and replacement of chemicals
 - Price for disposal at Ladysmith Munic Sewage Works.
 - Labour, transport, material & equipment to be included in above rates
 - Sewage on site removal to assist with unblocking and prevent spilling
 - Price for 5 call outs over the 5year contract period
 - The pricing to reflect the cost to get truck to Ingula and assisting with clearing up during a normal time day trip. Cost per trip & assume an 8hour day.
 - Labour, transport, material & equipment to be included in above rates
 -
 - Sewage removal using the vacuum tanker to Ladysmith Munic Sewage works.
 - Price for 5 call outs and 4 round trips per call out to the Munic Sewage works over the 5 year period The pricing to reflect the cost of removal of sewage from Ingula to Ladysmith Municipality Sewage Treatment works (assume 65 km one way trip).
 - The pricing to reflect the cost to get truck to Ingula. Cost per trip
 - The pricing to reflect the cost to move sewage from Ingula to Ladysmith. Cost per trip
 - Labour, transport, material & equipment to be included in above rates
 - SHE cost for above Sub contractor (s) will be done per call out but and reflect as a project under P&G's project SHE cost.
 - Site Establishment not applicable as the sub contractor deemed to be local
 - Supervisor of contractor not applicable and deemed to be included in fee.
 - Labour specific to be included in rates per trip
 - Overtime rates to be indicated separately for use as and when required.
 - Transport of drivers to town if large vehicle stay on site to be arranged by main contractor.
- **Potable water shortages**
 - Water to be carted from other sources i.e Bedford Dam WTP, 80 km roundtrip from lower site WTP using a 10000 litre tanker (up and down De Beers Pass)
 - Allow for 5 trips during contract period
 - Tanker to be certified as clean prior to delivering potable water
 - Tanker to be supplied, fully road worthy with licensed Driver
 - The pricing to reflect the cost to get truck to Ingula and return to base. Cost per trip
 - The pricing to reflect the cost to move water from Bedford Dam to Lower site WTP. Cost per km and trip.
 - Labour, transport, material & equipment to be included in above rates
 - SHE cost for above Sub contractor (s) will be done per call out.
 - Site Establishment not applicable and deemed to be included in fee
 - Supervisor of contractor not applicable and deemed to be included in fee.
 - Labour to be included in rates per trip.
 - Overtime rates to be indicted separately for use if and when required to work overtime

- **Electrical related**

- Fault finding, reporting and assistance with scoping, specifications and quotations of repairs/replacement and actual repairs, replacement testing & commissioning
- Qualified Electrician: Pricing to be done for 10 call outs, 2 days allowed per call out over the 5 year period including off site repairs
- Pricing guide

DESCRIPTION	NOTES	Rate	Quantity allowed
SHE Cost	Include in project SHE cost	R/call out	10
Site establishment	Included in annual cost	Fee%	
Supervision	Included in monthly Supervision cost	Fee%	
Labour			
On site	Electrician	R/h	80 h
	Assistant	R/h	80 h
Labour			
Off site: Strip & quote	Electrician	R/h	80 h
	Assistant	R/h	80 h
Transport	Local trip	R/ trip	10 round trips
Transport: for off site strip & quote & repairs for rewinding/ repair of motors	INCL in local trips		
Accommodation & Living out	Staff	R/day	0 man days Assumed to be local sub contractor
Spares & Materials	See combined spares list		
Tools & Equipment	Electrician toolbox and testing equipment	R/day	10

- **Control & Instrumentation**

- Fault finding, reporting and assistance with scoping, specifications and quotations of repairs/replacement and actual repairs, replacement testing & commissioning
- Qualified OEM technician(s): Pricing to be done for 10 call outs, 2 days allowed per call out over the 5 year period
- Pricing guide

DESCRIPTION	NOTES	Rate	Quantity allowed
SHE Cost	Included in project SHE cost	R/ callout	10
Site establishment	Included in annual cost	Fee%	
Supervision	Included in monthly Supervision cost	Fee%	
Labour			
	OEM Technician (Prentec STP installer)	R/h	80 h
	OEM Technician (Flow meter installer)	R/h	80 h
Transport	From OEM (STP)base	R/trip	5 trips
	From OEM (Flow meter) base	R/trip	5 trips
	Local trip	R/ trip	10 trips

Accommodation & Living out	Staff	R/day	20 man days
Spares & Materials	Part of combined price list		
Tools & Equipment	Laptop & Software	R/ trip	5 trips
	Calibration equipment	R/ flow meter	10 calibrations /year

- **Civil/Plumbing related**

Plumbing

- Price for 10 after hour call outs for a plumber and assistant for a period of 8 hours per call out
- No additional payments for the Plumber replacement will be done if services required during normal hours (07H00-16H00 MON - FRI)
- After hours call outs will be allowed for and to be priced and paid as per rates in the price list plus fee %.
- SHE cost for standby Plumbing Sub contractor will not be done per call out but as part of the annual SHE cost
- Site Establishment cost deemed to be part of main price list and not charged again here.
- Supervisor of contractor could be required and pricing per overtime rate to be included.
- Transport of Supervisor to be at local distance and contract rates
- Labour includes cost additional Plumber & Assistant overtime hours.
- Transport include additional after hour call out travelling from local base (Ladysmith-Ingula – Ladysmith) and return if spares not available and need exists to source additional spares & equipment. Transport rates and quantities will be applicable
- Spares and material cost not in stock to be quoted on
- Tools cost deemed to be part of the qualified Plumber rates
- Equipment not available on site to be indicated and will be quoted on as per rates

- **TLB & Rehab Services**

- Fault finding, reporting and assistance with scoping, specifications and quotations of repairs/replacement and actual trenching, closing up, compaction and repairs of disturbed areas
- Civil Eng Supervisor x 1
- General Labour for digging and closing up x 3
- Qualified Operator of TLB
 - Pricing to be done for 5 call outs, 3 days allowed per call out over the 5 year period
 - Pricing to be done for 5 call outs ,3 days per call out over 5 years for closing up, compaction and rehab of disturbed areas
- Pricing guide

DESCRIPTION	NOTES	Rate	Quantity allowed
SHE Cost	Included in annual SHE cost for normal plumbing call outs. Include SHE cost for additional resources i.e. TLB, Civil Team	R/ Call out	5
Site establishment	Included in annual cost	Fee %	
Supervision	Included in monthly Supervision cost	Fee %	
Labour	Civil Supervisor	R/h	120 h
	TLB Operator	R/h	120 h
	General Labour	R/h	360 h
	Plumber OT	R/h	120
	Plumber Assistant OT	R/h	120
Transport	Staff from base	R/trip	5 trips

	Staff Local trip	R/ trip	15 trips
	TLB	R/Trip	5 trips
	TLB see detail on Price List		
Accommodation & Living out	Staff	R/day	180 man days
Spares & Materials			
Tools & Equipment	TLB Hiring (WET RATE)	R/day	15 days
	TLB Operating	R/h	60 h

- **Mechanical related**

- Fault finding, reporting and assistance with scoping, specifications and quotations of repairs
- Reticulation pipe burst, pipe & clamp leaks, sewage and or water that would require a qualified Pipe Fitter
- Supply and deliver a Cherry picker with Operator
- Borehole pump lifting and inspection and cleaning
- Gearbox, couplings, agitator, valves & pump repairs and/ or replacement of components and or complete changes that would require a qualified Fitter, Lifting equipment Operators & Riggers & lifting tackle
- Replacement or repair of mobile compressor and piping for STP process control
- A mobile crane with the capacity to reach the position above the agitator, gearbox and motor in the middle of the SBR and that would lift the combined mass to be planned for.
 - Assume a crane with a 25 m reach, with a capacity of 1 ton at 25m.
 - A qualified rigger with all the lifting tackle to be supplied and crane operator to change an agitator and or gearbox and motor
- Mobile compressor
- High pressure water jet cleaners
- Strip & quote :Off site repair & refurbishment of equipment i.e. gearbox, agitators, valves & pumps by specialist sub contractors
- Replace or repair of the following:
- Mechanical Eng Supervisor x 1
- Fitter
- Semi skilled assistants x 3
- Qualified Operator of Crane x1
- Pricing to be done for 10 call outs, 3 days allowed per call out over the 5 year period
- Pricing guide

DESCRIPTION	NOTES	Rate	Quantity allowed
SHE Cost	Included per call out in SHE cost	R/ Call out	10
Site establishment	Included in annual cost	Fee%	
Supervision	Included in monthly Supervision cost	Fee%	
Labour on site	Mechanical Supervisor	R/h	240 h
	Crane Operator	R/h	120 h
	Fitter	R/h	240 h
	Cherry Picker Operator	R/h	120 h
	Semi skilled Labour	R/h	360 h
Labour off site: Strip &	Mechanical	R/h	240 h

Quote	Supervisor		
	Crane Operator	R/h	120 h
	Fitter	R/h	240 h
	Semi skilled Labour	R/h	120 h
Transport	Staff from base	R/trip	30 trips
	Staff Local trip	R/ trip	30 trips
	Equipment & material delivery & transport <1 ton	R/trip	10 trips
	Crane for agitator /gearbox replacement	R/Trip	2 trips
	Mobile Elevated Working Platform (MEWP) i.e cherry picker	R/Trip	5 trips
	Mobile compressor	R/trip	5 trips
Transport: for off site strip & quote & repairs of pumps and spares	To repair facility	R/ trip	3 round trips
Accommodation & Living out	Staff	R/day	180 man days
Spares & Materials	See detail spares and materials combined list		
Tools & Equipment	Crane for agitator /gearbox replacement	R/day	14 days
	Cherry Picker	R/day	28 days
	Compressor to clear blocked lines	R/day	

SHE additional requirements for breakdowns:

The following additional SHE maintenance support items would be required on an as and when required to ensure that all additional work related to above mentioned additional Electrical- ,Control & Instrumentation-, Plumbing-, Civil-, Mechanical Maintenance and Operations improvement related:

- Updated and revised SHEQ requirements and files will be required in preparation for breakdowns that require additional specialist resources. SHE related cost need to be detailed to allow for identified risks and mitigation and requirements not covered in the normal routine operating and maintenance of the plant i.e. additional risks and mitigation related for
 - Excavations i.e. Construction regulations
 - Biological risks i.e interaction with sewage
 - Working at Height risks i.e additional anchor points, life lines
 - Confined space entry i.e methane gas monitoring, oxygen sufficiency monitoring, rope rescue.
 - Lifting of staff & goods i.e Mechanical Elevated Platform Work equipment (cherry picker)
 - Lifting & rigging of spares i.e lifting & lowering of borehole pumps, sump pumps, gearboxes

PART C3 SERVICE INFORMATION

Document reference	Title	No of pages
C3.1	This cover page <i>Employer's Service Information</i>	
	Total number of pages	

1 Description of the service

2 Executive overview

The Employer's objective consists of the provision of

To provide Sewage & Water Plant & related infrastructure Operation & Maintenance Services to the Sewage & Water Plants situated at Ingula Pumped Storage Scheme for provision of potable water to employees in this area as well as sewage treatment service at Ingula Pumped Storage Scheme.

3 Employer's requirements for the service

The Ingula Pumped Storage Scheme is located about 23 km north-east of Van Reenen. It straddles the Little Drakensberg escarpment, which forms the border between the Free State and KwaZulu - Natal Provinces.

The provision of potable water is essential services provided by Eskom Holdings SOC Limited, Ingula Pumped Storage Scheme to the employees and contractors working at Ingula Pumped Storage Scheme.

Sound wastewater treatment is also required to ensure adherence to minimum standards as per the Water Use License applicable to Ingula Pumped Storage Scheme.

The services need to be supplied including cost related to:

Safety, Health, Environmental & Quality Assurance

Site Establishment

Supervision

Labour

Transport

Tools & Equipment

Materials & consumables

Additional operational and maintenance services as clarified lower down

1. Water Treatment Plants (WTP)

1.1. Bedford Dam Water Treatment Plant (BDWTP) including the borehole below the Bedford Dam wall, the reticulation system and the discharge point piping and valving.

1.2. Upper Water Treatment Plant (UWTP) on the mountain side of the HV yard (Secondary WTP), volume assumed to be 60 cub metres per day for the contract period but fluctuation in flow rates to be planned for in dosing of chemicals and quality of output of potable water supply.

1.3. Consumables i.e. chemicals Superfloc / Bromochlor tablets, filter sand etc will be supplied by the Contractor

1.4. WTP current layout:

1.4.1. Borehole feeding Primary Water Treatment Plant (PWTP) next to farm dam that pumps the water to the Upper Water Treatment Plant (UWTP) behind the HV yard

1.4.2. Two other boreholes situated close to the UWTP supply directly to this UWTP

1.4.3. The UWTP supply water to

1.4.3.1. The underground facilities

1.4.3.2. Remaining construction offices

1.4.3.3. Main Admin Building

1.4.3.4. Visitors Centre

1.4.3.5. Potable water extraction point for tankering

1.5. WTP future layout: (in about 18 months)

1.5.1. Three upgraded boreholes and reticulation lines will feed the UWTP.

1.5.2. Supply to the future Security Control Building (at the entrance to the MAT), will also be added.

2. Sewage Treatment Plant (STP)

2.1. STP on surface next to Voith Contractors Laydown area, capacity 200 cub meters per day but volumes have been reduced to below 30 cub metres per day for the contract period but fluctuation in flow rates to be planned for in dosing of chemicals and quality of output of discharge effluent.

- 2.2. Waste products shall not be permitted to pollute water (surface or ground). Ingula Power Station shall provide waste bins at a designated area at the Construction Offices Area about 1 km away from the STP and also shall be responsible their disposal to a designated site
- 2.3. Consumables i.e. Sodium hypochlorite, bags for dried flakes etc will be supplied by the Contractor. Drying bed sand will be supplied by Eskom but replacing of ground sheeting and sand will be done by the contractor.
- 2.4. Two underground sewage pump stations and reticulation to the STP. Distance to underground pump stations 3 km from STP via the MAT
- 2.5. Construction office complex at the Clinic will feed STP
- 2.6. Main Admin Building & Visitor Centre Complex will also feed the STP
- 2.7. Bedford-, Braamhoek Dams and future Security Control facilities will also feed the STP

3. Plumbing Service to be rendered to the following infrastructure:

- 3.1. The underground facilities
- 3.2. Remaining construction offices
- 3.3. Main Admin Building
- 3.4. Visitors Centre
- 3.5. Future Security Control Building will also be added in 18 months
- 3.6. WTP's
- 3.7. Main STP
- 3.8. Bedford Dam WTP
- 3.9. Boreholes infrastructure
- 3.10. Reticulation of potable water and waste water lines and connections

Allowance will be made for the supply, delivery, installation and commissioning of typical breakdowns and improvements. The contractor to state within 3 months of the start of the contract the typical spares, components, material and consumables to be kept or that could be required. Items will be quoted on a cost plus mark-up % (direct fee %) to ensure a quick turnaround time to fix emergent work.

Spares & consumables will be allowed in the Price List.

Spares not on the Price List will be supplied by Eskom but the Contractor to assist with specifications as and when required but if it is an emergency the contractor to submit urgent requirements and pricing as per the compensation event process.

- The dedicated Plumber to be fully qualified (Trade test certificate to be supplied)
- Tools to do first line maintenance to be supplied including equipment to unblock waste water drain.
- A vacuum tanker to be made available to control and assist with sewage blockages and to prevent spills.
- A mobile diesel driven compressor to be allowed for as and when required to assist in clearing of blockages and flushing of potable water lines.
- The team on site to do digging for the repair of leaks and closing of disturbed areas.

4. Employer's requirements for the service

The service required includes the daily operation of the Class C Potable Water Treatment Plant (WTP) and the Ingula Sewage Treatment Plant (STP) shall be managed under the supervision of a Class IV Process Controller as prescribed by the latest's Ingula Water Use License and a legal requirement in terms of the section 26 of the National Water Act (Act No.36 of 1998) and as promulgated in Regulation 813 in terms of the Water Services Act. The number of operators and supervisor that will be required to man and support the plants and reticulation must be estimated by the contractor tendering for this service and indicate the Class of Operator against the following guideline

DWS Class IV operator

- SITE MANAGER

DWS Class 4 operator

- SUPERVISOR

DWS Class 3 operator

DWS Class 2 operator

- a. The plant shall be operated and supervised by the Process Controllers that are suitable qualified and experienced to ensure proper functioning of the works and compliance to Regulation 2834 and Regulation 17 from Water Services Act 108
- b. The number, duties, training, qualifications and compulsory medical examination of persons employed at a Water Care Works shall be in accordance with the requirements of the plant's registration certificate which is Class C.
- c. The registration and classification certificates of Process Controllers working at the Water Care Works shall be displayed at sewage plant office and copies shall be given to the Employer representative.

5.1 The operations of the WTP & the STP include:

- That the plants are operational 24/7/365 and supervised from 07h00 to 16h00 every day of the year including week ends / public holidays. Overtime and shifts worked to be compensated as per BCEA.

A one shift cycle will apply and a minimum of two operators to be on duty at all times (Two man rule)

- The working hours of the operators are logged individually and be available to Eskom on request as deemed necessary.
- A comprehensive monthly report is submitted to the Service Agent covering the plants operational results and faults for action.

The standard operations requirements of the Plants must comply with SANS current specifications and the Water Use License.

- Additional operational requirements over and above the SANS current Specifications includes:
- Documented access control to gates and plant.
- Gates are to be locked all times. Access to be granted to site and the contractor only
- No entry to Plants with the exception of the operator/s on shift and site personnel is allowed. Access must be sought from the Service Agent or Ingula Plant Manager for entry.
- Indications via sign board as to where the operators are if they are not at the plant
- Twice, daily physical monitoring and entry into log of the levels of the reservoirs
- Operate equipment to purify and clarify water. This includes the supply and administering of chemicals to achieve the desired water quality required as per the SANS current standards to operate a water plant.
- Monitor operating conditions, meters and gauges.
- Recording of pH, CI, FLOC turbidity, SDC reading, Adjustments stock on hand etc.

The contractor shall inspect and fix broken water pipelines which includes but not limited to portable water pipeline, raw water pipeline, and raw sewage pipeline.

Daily recording of input and output volumes of water and effluent.

- Daily recording of schedule or other draining and cleaning of clarifiers
- Daily recording of scheduled or the backwashing of updraft polishers / filters
- Inspect equipment, all faults on the plant are logged and sent to the Service Agent. Any defects observed to be reported to the underground Operations Control room to ensure the raising of notifications on the SAP system for tracking, planning & progress on execution.

- Good housekeeping including clearing of areas and perimeter fences at STP & WTP's of weeds,

- Storing & Transport of hazardous chemicals substances and goods as per relevant SANS standard (SANS 10263-0:2010, it deals with the Warehousing of dangerous goods, and SANS 10228 deals with the classification and transportation of dangerous good via road)

- Clean and maintain equipment, tanks, filter beds and other work areas including fencing and gates and embankments.

Containment of and Clearing up of any sewage spills and correct disposal of materials used on and off site i.e. on route to other disposal areas.

Containment of and Clearing up of any hydrocarbon spills related to the execution of the Contractor's duties and correct disposal of materials used

- Walk water & sewage reticulation lines weekly and report condition of access routes and possible leaks.
- Inspect supply points of water i.e. dams and boreholes and report on performance and condition.
- Ensure that the access to boreholes are clear and grass cut by Horticultural team at and along all exposed infrastructure to prevent damage by fires. (another Contractor to cut grass)
- The contractor is expected to comply with all legislative requirements applicable for this activity including Municipal Bylaws and Provincial Laws.

Weekly removal of sewage from conservancy tanks based at the future Security Offices at entrance to the MAT to the main Sewage Treatment Plant on Ingula PSS site.

Vacuum Tanker to collect sewage from the areas and discharge at the STP. Pricing to be reflected separately based on the following assumptions:

Security Access Control Building at entrance to the MAT once facility installed

2 km away from Area 2 STP, thus 4 km round trip.

1000 litres per week

Sewage collection to be done weekly and if not required weekly the Vacuum Tanker could be used weekly or as and when required to assist with unblocking of drains and removal of sewage from the sumps.

Pricing to reflect weekly on site removal rates.

The pricing to reflect the cost of removal of sewage from Ingula to Ladysmith Municipality Sewage Treatment works (assume 65 km one way trip)

5.2 Supply laboratory services

- The contractor shall assume full responsibility for compliance with relevant statutory requirements
- The contractor shall operate a mini laboratory at the Ingula to determine the daily STP & WTP operational parameters such as pH, dissolve oxygen, MLSS, Sludge age, free chlorine and etc. to ensure performance to the SANS criteria and WUL. Trends on key parameters will be made available in graphical as well table format highlighting deviations from standards.
- The Contractor to price for equipment and consumables accordingly including, maintenance and calibration of equipment
- The on site laboratory does not have to be accredited but samples have to be sent to an accredited laboratory at least twice a month to compare with operational lab results and with results of another independent contractor. An ongoing comparative record to be kept and presented on a monthly basis of the operational results vs accredited lab and independent contractor results.
- Another independent contractor shall do monthly analysis at an accredited laboratory, the results of analysis shall be made available by IPSS and will form part of the month end report by the Contractor
- Key points of sampling that need to be included and compared with are as per the WUL and are typical at the point of effluent discharge at the STP, at point of contact at the water stream below the farm dam, the water quality above the point of contact and a point downstream from this point.

- g. It is expected that the Contractor to sample at the same time than the independent contractor for a controlled comparison of results at the following sampling points:
- Sewage discharge point at the STP
 - Sewage discharge at point of contact as per point (f)
 - Potable raw water at Farm Dam & from each of four boreholes
 - Potable treated water at each of five points of consumption

- Water supply specifications to be checked according to Eskom's Potable Water Standard (240-55864764) and/or SANS241-1 and SANS241-2

5.3 The supplier is responsible for the following:

5.3.1 ROUTINE: Normal Operations and Maintenance:

Supervising the works including interaction with other departments, including working as per the Employer's Work Management SAP based system of collecting and returning Works Orders on time as per maintenance schedules, communicate defects and partake in scheduling of notifications & work. Provide weekly feedback report over and above the monthly feedback report

- Staff trained to comply with all SHE requirements
 - Ensure the team is equipped, qualified and experienced to ensure the
- Upkeep of the SHEQ files and quarterly SHE inspections, audits and reporting as per Employer's - and OHS Act requirements
- Working as per SHE requirements stated & Personnel Protective Equipment & training required to carry out the works
- Monthly feedback on the first day of the month on man hours worked with supporting time sheets and summaries for submission to track SHE stats i.e. LTI, First Aid & Medicals.
- A member of the Supervision and or Technical staff will attend and pass the Plant Safety Regulations (PSR), prepare a portfolio of evidence on systems to be worked on and appear in front of the PSR committee to be appointed as a Responsible Person i.t.o the Permit to Work (PTW) system
- Initial site establishment including setting up of operational lab. An office will be made available.
- All labour as required.
- Transport for movement of staff, material, equipment and tools with at least one diesel driven double cab. Note that no pedestrians allowed on site & that there is no public transport available to Ingula PSS.
- Accommodation and travelling costs for routine team members that are from outside feeder area.
- Technical management person(s) with Water- and Waste Water Treatment Plant Operational & Electro-mechanical experience to do routine formal inspections and reporting on plant health status on a quarterly frequency
 - Ensure team is available, qualified and experienced
- Preventative maintenance of the Plumbing-, Mechanical-, Electrical- and Control and Instrumentation installations. The resources required to do routine tasks and minor break downs on an as and when required bases
 - Ensure team is available, qualified and experienced
 - Inspection of the following major plant & components are included:

EQUIPMENT	DETAILS	SPARES	U.O.M.	QUANTITY	CHECKS
Gearbox Aerator	FlenderZR108-K2-S132M4W	Gearbox Oil, Seals, Gaskets	LT/mm	5lt	Weekly
Surface Aerator	Kalbskopf Prentel	Bearings/Blades	Inner Diam mm/Outer Diam mm	4 blades/4 bearings	Weekly
SBR Sludge Pump	Ebara DWO 4007	Impellar/Mechanical Seal	Shaft Size/Diam mm	1 imp/1m/seal	Monthly
Submersible Pump	DP Type DP3057	Impellar/Mechanical Seal	Shaft Size Diam mm	1 impellar	Monthly
Actuated Valves	GC Barrs	Actuator/Valve	80 mm/150 mm	1 Actuator/1 Valve	Monthly
Level Float Switch	ITT Flygtt ENM6	Pear type float	Voltage 230V	2 Spare Float Switch	Weekly
Solenoid Valves	Burkett 4/2 way 230V	Valve/230V Coils	Voltage 230V	2 Valves/2 Coils	Weekly
Compressor	Fini SKM10-2M	V Belts/Compressor	LT/mm	3 V Belts/1lt Oil	Weekly

		Oil/Drain Cock			
Dosing Pump	Grundfos 208.18.10013	4/6 MM Polypropylene Tubing	Diam/mm	10 m Tubing 4/6 mm	Weekly
Dosing Pump	Grundfos DM 1208	4/6 MM Polypropylene Tubing	Diam/mm	10 m Tubing 4/6 mm	Weekly
Pipes	1/2-4 inch	Hot Dipped Galvanised	Diam/mtrs	Pipe and Fittings as Needed	

- Sampling, collection, transport, testing and reporting of all key variables required in the WUL & applicable SANS for sewage and potable water
- Tools, equipment & material supply, delivery and application for operations & first line maintenance as per O & M Manuals including:
 - o Plumbing
 - o Lubrication
 - o Housekeeping
 - o Clearing up of sewage- and hydro carbon spills related to the contractor's area of responsibility.
 - o STP Sump & Tank cleaning
 - o WTP and all potable water reservoirs internal and external cleaning
 - o Sand filter materials and disposal of old sand.
 - o Sodium hypochlorite and Superfloc chemicals.
 - o Purchasing, maintenance and calibration of laboratory & operational testing equipment and materials to do raw, interim and final sampling & testing. Allow for Service, Test & Calibration (Includes Letters of Calibration on an annual basis)

Plumbing

- A permanent dedicated Plumber for the Plumbing services as per point 4 to be part of the team. The Plumber could be part of the shift operating structure
 - o No additional payments for the Plumber replacement will be done if plumbing services required during normal hours (Mon- Fri 07h00-16h00)
- The Contractor's operational team to assist the qualified plumber during breakdowns in normal time to do fault finding, digging, closing of areas as well.

Routine Spare & Materials

A4	ROUTINE MATERIALS & SPARES:		
Service no.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
4.1	TOTAL MATERIALS APPLICATION SERVICES	EACH	1 725
	Description		
10	CEANING MATERIALS	EA	60
20	FILTER SAND	EA	1 000
30	Sodium hypochlorite FOR DOSING	EA	300
40	REAGENTS FOR ANALYSES OF SAMPLES IN OPERATIONAL LAB	EA	60
50	BROMOCHLOR	EA	80

	TABLETS		
60	SUPERFLOC FLOCCULANT	EA	80
70	HYDRO CARBON SPILL KIT REPLENISHMENT: OILSEP 4m Booms • Absorbent booms for wet or dry surfaces • 4m x 19cm	EA	30
80	SEWAGE SPILL KIT & REPLENISHMENT	EA	5
90	Gearbox Aerator: OIL	EA	50
100	BUDGET: PLUMBING MATERIALS, FITTINGS, SPARES	EACH	60
	SUPPLY & DELIVER MATERIAL, PREPARE & APPLY MATERIAL including EQUIPMENT & TOOLS, CLEANING MATERIALS & CONSUMABLES:		
	(excl P&G, LABOUR & TRANSPORT COVERED ELSEWHERE) Routine Tools & Equipment		
A5	ROUTINE TOOLS & EQUIPMENT		
ITEM NO	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
	TOTAL EQUIPMENT		
	SPECIAL TOOLS & EQUIPMENT : SMALL- MEDIUM NOT LISTED/PART OF MATERIAL APPLICATION SERVICES	EA	163
10	PLUMBERS TOOLBOX	EA	60
20	PLUMBERS EQUIPMENT i.e RODDING	M	100
30	SUMP PUMP MOBILE:GRUNDFOS SL pump: Product No.: 96106566	EA	1
40	HIGH PRESSURE WATER JET	EA	2
50	ELECTRICAL EXTENTION CORD(s): 3 PHASE 380 V	EA	30

70	ELECTRICAL EXTENTION CORD(s): 220 V	EA	30
80	POWER TOOLS	EA	5
90	HYDRO CARBON SPILL KIT INCL TROLLEY BIN	EA	1
100	SEWAGE SPILL KIT INCL TROLLEY BIN	EA	2
110		EA	1
120		EA	1
130		EA	1
	Any SHE equipment not covered under SHE cost to be detailed here & priced		
	SPECIAL TOOLS & EQUIPMENT : LARGE		
	TRANSPORT, MOVEMENT, HIRING, OPERATE & MAINTAIN OF LARGE/ HEAVY ITEMS & MATERIALS	UNIT	TOTAL QUANTITY
10	SEWAGE SUCTION TANKER: WEEKLY		
	WEEKLY SUCKING/TANKERING all movements to and from site, labour, operating,servicing & maintenance included	TRIPS	260

5.3.2 NON ROUTINE: Breakdown Maintenance, Callouts & Improvements:

Overview of additional requirements:

- **Call out of a Technical Competent Person (s) with Operational and or Electro-mechanical and or Civil & Plumbing experience to lead investigations, scoping and specifications of additional work and the supervision and quality assurance of major repair work**

Improvements in Operations

- Additional Operational expertise & processes to solve issues & improve in plant performance
- Operations expert advisor to advice on process improvements
- Additional Biological and or chemical additives could be proposed
- The Service Manager with support of Employer specialist to confirm scope of additional work and specifications before work could commence with a Task Order instruction.

Breakdown Assessments

- Additional Technical expertise to resolve breakdowns
- Expert advisor to advice on method statement, SHEQ requirements and resource requirements
- The Service Manager with support of Employer specialist to confirm scope of additional work and specifications before work could commence with a Task Order instruction.

Operational changes that would require additional resources:

- **Sewage system blockages and STP not operational**
 - Chemical toilets to be supplied complete with removal services to an approved disposal point. Allow for 10 toilets
 - Sewage removal to assist with unblocking and prevent spilling
 - Sewage removal using the vacuum tanker to Ladysmith Munic Sewage works

- **Potable water shortages**

- Water to be carted from other sources i.e Bedford Dam WTP, 80 km roundtrip from lower site WTP using a 10000 litre tanker (up and down De Beers Pass)
- Tanker to be certified as clean prior to delivering potable water
- Tanker to be supplied, fully road worthy with licensed Driver

Breakdowns that will require additional resources:

- Allowance will be made for these breakdown call outs & provisional quantities will be stated in the Price List based on history and expected failures due to aging plant, but a quote per breakdown/job will be required, assessed and approved by the Service Manager before a Task order (Purchase order 45____) will be issued to proceed.
- Direct cost of the Contractor will apply with the applicable direct fee%
- Sub -contracting would be allowed and the subcontract fee % will apply
- Scaffolding and related team will be supplied by the Employer
- Telehandler will be supplied where access is possible

- **Electrical related**

- Fault finding, reporting and assistance with scoping, specifications and quotations of repairs/replacement
- Electrical work that would require a qualified Electrician i.e testing, disconnections and connections, testing and commissioning.
- Assistance with Lifting of submersible pumps and cable disconnection & connection
- Cable replacement and repairs
- The electrician to be qualified /registered to issue a COC (Certificate of Compliance)
- Changing of lights
- Pump motor repairs and/ or replacement of components and or complete changes that would require a qualified Electrical
- Installation of hydro boils (15 litres) x 4
- Connect & disconnect Sewage & Water pump i.e. GRUNDFOS SL pump is a portable pump for both domestic and industrial applications Product No.: 96106566 x 2
- Off site repair & refurbishment of equipment i.e. pump motors by specialist sub contractors
- The Service Manager with support of Employer specialist to confirm scope of additional work and specifications before work could commence with a Task Order instruction.

- **Control & Instrumentation**

- Fault finding, reporting and assistance with scoping, specifications and quotations of repairs/replacement
- Instrumentation work that would require a qualified Technician i.e testing, disconnections and connections, testing and commissioning of probes
- OEM specialist technician to supply, deliver, install, commission hardware and adjust or upgrade software for the operating of the plant
- Flow meters calibration, repairs and/ or replacement of components and or complete changes that would require a qualified C & I technician
- Off site repair & refurbishment of equipment i.e. flow meters by specialist sub contractors
- The Service Manager with support of Employer specialist to confirm scope of additional work and specifications before work could commence with a Task Order instruction
-

- **Plumbing/ Civil related:**

Plumbing

- A permanent dedicated Plumber for the Plumbing services as per point 4 to be part of the team. The Plumber could be part of the shift operating structure, but if the Plumber is not available for normal duties a standby qualified plumber or a plumbing sub- contractor to be ready, fully cleared as per Security- and SHE requirements.
 - No additional payments for the Plumber replacement will be done if services required during normal hours
 - After hours call outs will be allowed for. Response time < 3 hours, Mon- Sun

- A job card system and timesheet to be kept per after hour incident and signed off by the Senior Shift Controller in the underground control room
- The Contractor's operational team to assist the qualified plumber during breakdowns in normal time to do fault finding, digging, closing of areas as well as .
 - After hours call outs will allow for assistants but numbers to be agreed depending on the breakdown at hand.
 - Fault finding, reporting and assistance with scoping, specifications and quotations of repairs
 - Reticulation pipe burst, blockages of sewage and or water that would require a qualified TLB and or a mini excavator & Operator to open up piping for repair, trenching of new routes and controlled closing of excavations
 - Repair of road and infrastructure crossings damaged by digging related to the works
 - Repair of gates and fencing related to the works
 - Repair of walls and floors damaged by plumbing or other related works
 - The Service Manager with support of Employer specialist to confirm scope of additional work and specifications before work could commence with a Task Order instruction
 -
- **Mechanical related**
 - Fault finding, reporting and assistance with scoping, specifications and quotations of repairs
 - Reticulation pipe burst, pipe & clamp leaks, sewage and or water that would require a qualified Pipe Fitter
 - Mobile elevated working platform (MEWP) for major repairs down the Main Access Tunnel inclined at 1 in 10 could be required with for working at heights from 4 to 6 m heights to change de- aeration valves, clamps and piping and also for changing of lights on the outside plant.
 - Borehole pump lifting and inspection and cleaning
 - Gearbox, couplings, agitator, valves & pump repairs and/ or replacement of components and or complete changes that would require a qualified Fitter, Lifting equipment Operators & Riggers & lifting tackle
 - Replacement or repair of mobile compressor and piping for STP process control
 - specs for the compressor are as follows:
 - Speed – 1050 rpm
 - Weight – 326 Lbs
 - Power – 3 Hp
 - Displacement – 360 L/min
 - Pressure – 115 Psi
 - Tank – 150 l
 - Matching of flexible piping and fittings to match pressure rating (allow for 20 m)
 - A mobile crane with the capacity to reach the position above the agitator, gearbox and motor in the middle of the SBR and that would lift the combined mass to be planned for.
 - Assume a crane with a 25 m reach, that will clear the elevated height of the SBR tank with a capacity of 1 ton at 25m.
 - A qualified rigger with all the lifting tackle to be supplied and crane operator to change an agitator and or gearbox and motor
 - Mobile compressor (diesel driven) to pressure clear blocked sewage pipes and piping up to 30 meters include connections. Hydro jetting plumbing involves cleaning with high-pressure water streams to eliminate debris and buildup [in main lines](#) and sumps. When we talk about hydro jet sewer cleaning, we mean *washing* the sewer lines or drain at a pressure 2000 psi per minute using water as the liquid. In a nutshell, hydro jetting plumbing means cleaning or unclogging your drains with extreme water pressure.
 - High pressure water jet cleaners for reservoir and sump descaling & cleaning (Karcher K4)
 - Strip & quote :Off site repair & refurbishment of equipment i.e. gearbox, agitators, valves & pumps by specialist sub contractors
 - Mechanical Eng Supervisor x 1
 - Fitter x1

- General Labour for digging and closing up x 3
- Qualified Operator of Crane x1
- Rigger x1

SHE additional requirements for breakdowns:

The following additional SHE maintenance support items would be required on an as and when required to ensure that all additional work related to above mentioned additional Electrical-, Control & Instrumentation-, Plumbing-, Civil-, Mechanical Maintenance and Operations improvement related:

- Updated and revised SHEQ requirements and files will be required in preparation for breakdowns that require additional specialist resources. SHE related cost need to be detailed to allow for identified risks and mitigation and requirements not covered in the normal routine operating and maintenance of the plant i.e. additional risks and mitigation related for
 - Excavations i.e. Construction regulations
 - Biological risks i.e interaction with sewage
 - Working at Height risks i.e additional anchor points, life lines
 - Confined space entry i.e methane gas monitoring, oxygen sufficiency monitoring, rope rescue.
 - Lifting of staff & goods i.e Mechanical Elevated Platform Work equipment (cherry picker)

None Routine Spares & Materials

NOTES	5.1	MATERIALS & SPARES SUPPLY	NOTES	EACH	581
		Description			
PLUMBING SPARES	10	HDPE 75 MM Pipe	PLUMBING SPARES	M	400
	20	75 MM HDPE Couplings		EACH	8
	30	(75 MM X 80 MM) Compression Male Adaptor		EACH	2
	40	VJ Flange adaptor 160 MM		EACH	2
	50	160 MM Metal flange		EACH	2
	60	160 MM Flange Gasket		EACH	2
	70	(150 MM X 100 MM) Bush reducer		EACH	2
	80	(100 MM x 80MM) Bush reducer		EACH	2
	90	75 MM HDPE 90 Degree Bends		EACH	16
FLOW METERS	100	Flowmeter 5W4C1H-10KC1/0 (5W4C1H-AAELHP4AUD5K0A+AA) Promag W 400 DN100 4"	FLOW METER COMPLETE WITH CALIBRATION CERTIFICATE	EA	10
PROCESS CONTROL	110	HMI: MODEL: PWS6500S-S, VERSION:V11-12-10, DATE: 0749, S/N: 6500005879, 24VDC/12W	OEM PRENTEC	EA	4
	120	PLC	OEM PRENTEC	EA	2
	130	SOFTWARE UPGRADE (OEM PRENTEC TECHNICAL SERVICES	OEM PRENTEC	EA	2
MOBILE PUMP	140	GRUNDFOS SL pump: Product No.: 96106566		EA	4
SEWAGE PLANT SPARES	150	FlenderZR108-K2-S132M4W	New gearbox complete	EA	1
	160		Gearbox Oil,	EA	5
	170		Seals,	EA	2
	180		Gaskets	EA	2
	190	Kalbskopf Prentel	New Surface Aerator	EA	1
	200		Bearings	EA	4
	210		Blades	EA	4
	220	Ebara DWO 4007	Impellar	EA	1

	230		Mechanical Seal	EA	1
	240	DP Type DP3057	Impellar/Mechanical Seal	EA	1
	250	GC Barrs	Actuator 80mm	EA	4
	260	GC Barrs	Valve 80mm	EA	4
	270	GC Barrs	Actuator 150mm	EA	4
	280	GC Barrs	Valve 150mm	EA	4
	290	ITT Flygtt ENM6	Pear type float, 230V	EA	2
	300	Burkett 4/2 way 230V	Valve	EA	2
	310		230V Coils	EA	2
	320	Fini SKM10-2M	Complete new Compressor	EA	1
	330		V Belts	EA	3
	340		Compressor Oil	EA	10
	350		Drain Cock	EA	5
	360	Grundfos 208.18.10013	Complete new DOSING Pump	EA	1
	370		4 MM Polypropylene Tubing	EA	4
	380		6 MM Polypropylene Tubing	EA	4
	390	Grundfos DM 1208	Complete new DOSING Pump	EA	1
	400		4 MM Polypropylene Tubing	EA	4
	410		6 MM Polypropylene Tubing	EA	4
PLUMBING HP PIPING	420	PIPE:Hot Dipped Galvanised	PIPE 1/2 INCH	EA	20
	430		PIPE 4 INCH	EA	20
	440	MEMBRANE FOR DRYING BEDS	BUDGET ALLOWED	EA	1
	450	ADDATIVES FOR PROCESS RESULTS ENHANCEMENT	BUDGET ALLOWED	EA	1

Non Routine Equipment &Tools

NOTES	B6	NON ROUTINE O & M: CALL OUTS, BREAKDOWNS & IMPROVEMENTS		
	ITEM NO	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
	B6	TOTAL EQUIPMENT		
	B6.1	SPECIAL TOOLS & EQUIPMENT : SMALL & MEDIUM	EA	
		Items that fit into a 1 t LDV		
	10	Mobile Sump pump:GRUNDFOS SL pump: Product No.: 96106566	EA	1

	20	LIFTING EQUIPMENT TO RAISE BOREHOLE PUMP (80M) & SUMP PUMPS (3M)	EA	1
	30	GAS TESTING (for METHANE, calibrated)	EA	2
		Any SHE equipment not covered under SHE cost structure to be detailed & priced		
		Operating of SMALL TOOLS & EQUIPMENT will be covered under rates as per Labour rates. Labour supplied full time and/ or additional to be able to Operate small tools safely. No mark up on Labour.		
	B6.2	SPECIAL TOOLS & EQUIPMENT : LARGE		
		TRANSPORT, MOVEMENT, HIRING, OPERATE & MAINTAIN OF LARGE/ HEAVY ITEMS & MATERIALS		
	20	TLB WITH BACKHOE: 3 M TRENCHING		
	10	Supply, deliver& operate TLB all labour, operating & maintenance included	EA	5
	20	Collect TLB	EA	5
	30	TLB hiring	DAY	25
	40	TLB: operate, maintain and render service.	H	250
	30	SEWAGE SUCTION TANKER: NON ROUTINE		
	10	SEWAGE BLOCKAGE REMOVAL, SUCKING/TANKERING all labour, operating & maintenance included	EA	5
	20	SUPPLY OF TANKER SERVICES TO SITE AND MOVEMENT OF RAW SEWAGE FROM POINT OF BLOCKAGE TO ON SITE SEWAGE WORKS	EA	5
	30	SEWAGE OFF SITE REMOVAL, SUCKING/TANKERING all labour, operating & maintenance included	EA	5
	40	TRANSPORT AND DELIVER SEWAGE TO LADYSMITH MUNIC SEWAGE WORKS 60 KM FROM INGULLA (120 KM ROUND TRIP)	EA	5
	40	MOBILE CHEMICAL TOILETS: NON ROUTINE		
	10	Supply, deliver& batch of chemical mobile toilets	EA	5
	20	Collect batch of toilets	EA	5
	30	Hiring & servicing (twice per week)	TOILET WEEKS	50
	50	POTABLE WATER TANKER: NON ROUTINE		
	10	COLLECTION, TRANSPORT AND DELIVERY all labour, operating & maintenance included	EA	5

	20	TRANSPORT AND DELIVER FROM BEDFORD DAM WATER WORKS 80 KM (RETURN TRIP) FROM INGULLA LOWER SITE	EA	5
	60	CRANE FOR GEARBOX REMOVAL/ PLACEMENT		
	10	Supply, deliver& operate CRANE & slings all permits to move crane, labour, operating & maintenance included	EA	5
	20	Collect CRANE & RIGGING EQUIPMENT, all transport permits and resources incl	EA	5
	30	CRANE & RIGGING EQUIPMENT hiring	DAY	25
	40	CRANE: operate, maintain and render service.	H	250
	70	MEWP (CHERRY PICKER) FOR PIPE & VALVE REPLACEMENT & REPAIRS UNDERGROUND		
	10	Supply, deliver& operate MEWP & slings all permits to move CHERRY PICKER, labour, operating & maintenance included	EA	5
	20	Collect MEWP EQUIPMENT, all transport permits and resources incl	EA	5
	30	MEWP EQUIPMENT hiring	DAY	25
	40	MEWP: operate, maintain and render service.	H	250
	80	MOBILE (diesel driven)COMPRESSOR / HIGH PRESSURE (2500 PSI) WATER JET FOR PIPE FLUSHING		
	10	Supply, deliver& operate COMPRESSOR / HIGH PRESSURE WATERJET CLEANER including Piping to reach 30 m, labour, operating & maintenance included	EA	5
	20	Collect COMPRESSOR & EQUIPMENT, all transport permits and resources incl	EA	5
	30	COMPRESSOR & EQUIPMENT hiring	DAY	25
	40	COMPRESSOR: operate, maintain and render service.	H	250
	80	HIGH PRESSURE (2500 PSI) WATER JET FOR PIPE FLUSHING		
	10	Supply, deliver& operate COMPRESSOR / HIGH PRESSURE WATERJET CLEANER including Piping to reach 30 m, labour, operating & maintenance included	EA	5

	20	Collect COMPRESSOR & EQUIPMENT, all transport permits and resources incl	EA	5
	30	COMPRESSOR & EQUIPMENT hiring	DAY	25
	40	COMPRESSOR: operate, maintain and render service.	H	250

Title	Date or revision	Tick if publicly available
<u>General Specifications:</u>		
Occupational Health and Safety Act – 85 of 1993	Latest	✓
Eskom Vehicle and Driver Safety Management Procedure 240-62946386	Latest	*
Eskom Incident Management Procedure 32-95	Latest	*
Eskom SHE Requirements Commercial 32-726	Latest	*
Eskom SHEQ Policy 32-727	Latest	*
Eskom Contractor Health and Safety Requirements 32-136	Latest	*
<u>Eskom Life Saving Rules Directive 32-421</u>	Latest	*
Eskom Smoking Policy 32-1126	Latest	*
Eskom Supplier Quality Requirements Specification 240-105658000	Latest	*

Title	Date or revision	Tick if publicly available
<u>Specific Specifications:</u>		
Eskom Ingula PSS Water Use License: 11/V12B/ABGAFIJC/10497	Latest	*

OTHER

4 Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
LAR	Labour Relations Act
SANS	South African National Standard
SHE	Safety, Health and Environment
SHEQ	Safety, Health, Environment & Quality
QA	Quality Assurance

QC	Quality Control
BRA	Baseline Risk Assessment
CEO	Chief Executive Officer
MD	Managing Director

Management strategy and start up.

5 The Contractor's plan for the service

For operations services:

- The plan should indicate the number of people that will be assigned per shift as well their designations.
- Plan should also include how leave will be managed

For maintenance work – on an as and when required basis

- To be discussed before each task can be carried out between the Contractor and Employer
- Contractor and Service Manager will do a final inspection on the completion of the scope of work before signing of any documents.
- No work shall commence until the scope of work has been finalised and accepted by both the Service Manager and Contractor

6 Management meetings

Regular meetings of a general nature may be convened and chaired by the *Supply Manager* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	Weekly on _____ at _____	<i>Employer's site</i>	<i>Employer & Contractor</i>
Overall contract progress and feedback	Monthly on _____ at _____	<i>Employer's site</i>	<i>Employer & Contractor</i>

Meetings of a specialist nature may be convened as specified elsewhere in this Service Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the service. Records of these meetings shall be submitted to the *Service Manager* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

7 Contractor's management, supervision and key people

The Contractor provides an organogram of the proposed company structure with the tender showing the number of people, all relevant designations and applicable qualifications. The contractor is to have a minimum of 3 years of experience in Water Treatment Plant, this includes Management, Supervisors and field staff members.

It is necessary for the *Contractor* to have a dedicated *Site Supervisor* appointed to manage all site activities.

The contractor is to have a minimum of 3 years of experience in Water Treatment Plant. Each employee (management, Supervisors and field staff members) of the contracting company must provide their work history and area of specialist as per organogram

The Supervisors must have completed matric (Grade 12), have prior work experience of at least 3 (three) years in the Water Treatment Plant with 1 (one) year performing supervision and be fully capable of overseeing activities. Effective verbal and written communication in English is required as well as attendance of meetings for reporting purposes and performing any other activity required.

The Plant Operator and The Junior Plant Operator must have completed Grade 12, have prior work experience of at least 3 (three) years in the Water Treatment Plant.

The *Contractor* and the *Contractors Supervisor* works closely with the all *Employer's* personnel
The *Contractor* is responsible for the supervisory and management of people allocated for this service.

8 Provision of bonds and guarantees

Not applicable

9 Documentation control

- Each instruction, certificates, submission, proposal, record, acceptance, notification, reply and other communication, which this contract requires is communicated in a form, which can be read, copied and recorded.
- Writing is in the *language of this contract*.
- All communications must be printed and filed in the *Service Managers* file.

10 Invoicing and payment

Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Service Manager's* payment certificate.

The *Contractor* shall address the tax invoice to

Eskom Holdings SOC Limited; and include on each invoice the following information:

- Name and address of the *Contractor* and the *Service Manager*;
- The contract number and title;
- The Purchase Order Number (without this the invoice will bear no value)
- *Contractor's* VAT registration number;
- The *Employer's* VAT registration number 4740101508;
- Description of service provided for each item invoiced based on the Price List;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT; (add other as required)

The Employer has now introduced an online system for all payments made.

All invoices must be submitted electronically to:

invoiceseskomlocal@eskom.co.za, refer to Annexure A in this regard

A 30 day payment term will apply

11 Contract change management

- Changing the service information
- Access
- Provision by the *Employer's*
- Stopping work
- Work of the *Employer* or others

- Reply to communication
- Changing a decision
- Withholding acceptance
- Delayed tests or inspections
- Change of affected property
- Materials, facilities etc. for tests
- *Employer's* risks
- Assumption about compensation events
- *Employer's* breach of contract

12 Records of Defined Cost to be kept by the *Contractor*

Not applicable

13 Insurance provided by the *Employer*

As indicated in document C1.2 TSC3 Contract Data, Core Clause 86.1.

14 Training workshops and technology transfer

- The *Contractor's* personnel to do safety induction before entering the site and commencing with any work.
- *Contractor* to be trained on "Working at Heights" and proof of training to be handed over to *Service Manager*
- *Contractor* to be trained on "First Aid" and proof of training to be handed over to *Service Manager*
- *Contractor* to be trained on "Basic Fire Fighting" and proof of training to be handed over to *Service Manager*

15 Design and supply of Equipment

- *Contractor* to provide all tools and equipment necessary to perform the required *service*.
- All Machinery and equipment provided by the *Contractor* must comply with all relevant standards and regulations.

16 Things provided at the end of the *service period* for the *Employer's* use

Equipment

- N/A

Information and other things

- All Reports/Documents to be compiled, filed, discussed and handed over to the *Employer* on a weekly basis (the day in the week to be announced by *Employer*) and at the end of the *service*.
- On completion of contract the *Contractors* safety file will be hand over to the *Service Manager* and will be saved for 40 Years after completion / termination of the contract
- *Contractor* is Responsible to ensure that his Letter of Good standing is valid at all times as stipulated in the construction regulations point 7 (C) (iv) and she specifications 2.5.2 (iv) and 3.10 *Contractor* will not be allowed on site if the *Contractors* letter of good standing is not valid

17 Management of work done by Task Order

- A Task Order is the instruction to commence work
- No work shall commence until Task Order is issued and has been finalised and accepted and signed by both the *Employer* and *Contractor* and a Purchase Order number has been issued to the *Contractor*
- Completion certificate to be issued after task on Task Order is completed and Assessment Certificate to be completed
- Task Orders, Assessments and Completion Certificates will be used for work required
- All work will be issued via SAP Maintenance or as per Task Order system.

18 Health and safety, the environment and quality assurance

19 Health and safety risk management

The *Contractor* shall comply with the South African Occupational Health and Safety Act No. 85 of 1993 and regulations, Eskom Safety, Health, Environment and Quality (SHEQ) Policy 32-727, National Building Regulations as well as SANS 10400 for all works. Furthermore, the *Contractor* shall comply with any additional current statutory requirements of any relevant Government Departments regarding health and safety and environmental health.

Ingula SHE Specification, applicable procedures, policies, guidelines and standards which will be used as Eskom's minimum requirements for Health and Safety will be provided.

The *Contractor* shall comply with the requirements for COVID-19 as per Government Directive from Department of Employment and Labour (DEL); Consolidate COVID-19 Direction on Health and Safety Measures in Workplaces issued by Minister in terms of Regulation 4(10) of the National Disaster Regulation.

Only the latest version/ revision of the applicable legislation, acts and regulations shall be deemed to be accepted at the Ingula Power Station. Not limited to the following below legislation, acts and regulations are complied with:

- Compensation for Occupational Injuries and Diseases Act 130 of 1993
- National Water Act 36 of 1998
- Occupational Health and Safety Act and Regulations (85 of 1993)
- National Environmental Management Act 107 of 1998
- Applicable South African National Standards (SANS)
- National Road Traffic Act 93 of 1996
- Basic Conditions of Employment Act 75 of 1997
- National Veld and Forest Fire Act and Regulations 101 of 1998
- Environmental Conservation Act and Regulations 73 of 1989
- Committee of Land Transport Officials (COLTO)
- SACPCMP Act no. 48 of 2000
- Radiation Protection Act

The *Contractor* shall establish and enforce rules to ensure the health and safety of his own employees and those of its Subcontractors so that high standards of personnel health and safety are achieved and maintained. The *Contractor* shall exercise and enforce all necessary care and measures to preclude exposure of personnel, labour and nearby residents (if any) to potential health hazards and environmental pollutants.

The *Contractor* shall ensure that all persons which are employed and or deployed to work on site undergo police clearance and are certified to have no criminal records. This shall be done prior to them being allowed or given access to start work on site.

The *Contractor* is required to compile a SHE File to comply with the *Employer's* specification, which includes but not limited to the following:

- Safety, Health and Environmental Plan (SHE Plan)
- SHE organization within the Company-Responsibility & Accountability
- OHS Incident management Procedure (32-95)
- Planning of conduct of work activities including planning for changes and emergency work (Operational Plan)
- Management of PPE- Personal Protective Equipment (Procedure with the matrix)

- Emergency planning and fire risk management
- Vehicle and driver behaviour safety (Competency, Traffic Management, etc.)
- Sub-Contractor or supplier selection and management
- Design and specifications (Drawings)
- Key personnel competency, training, appointments
- Communication and awareness Plan
- Behavioural Based Safety Procedure
- *Employer's* Baseline SHE Risk Assessment (BRA).
- *Contractor's* Baseline Risk Assessment in line with the *Employer's* BRA (Identification, assessment and management of Safety, Health and Environmental risks related to the scope of work. The methodology used for the risk assessment must be provided together with the BRA.)
- **Valid Letter of Good Standing (COIDA or equivalent)**
- **SHE policy signed by CEO/ MD- Comply to OHS Act Section 7 or ISO 45001**
- **Occupational hygiene and health risk assessment**
- Medical surveillance
- Method Statements/ Safe Working Procedures
- COVID-19 Risk Assessments and Workplace Plan

Reference is made to Part C3.1 Scope of Service (Eskom's Minimum Requirements for a Health and Safety Specification for Provision of General Site Maintenance Service for the Ingula Pumped Storage Scheme.

The *Contractor* shall put in place and maintain a risk management plan at commencement of the *service*, subject to the acceptance of the *Service Manager*. The risk management plan shall be structured and implemented in such a way that baseline risk assessments are submitted to the *Service Manager* prior to commencement of any work activity. A baseline risk assessment shall give consideration to:

- a) Identification of hazards associated with the scope of work.
- b) Any abnormal conditions relating to the work to be performed**
- c) The exposure limits of personnel using tools, equipment, machinery, etc.;**
- d) Environmental hazards and conditions;**
- e) The consequences should such hazards occur and the severity thereof;**
- f) The control and monitoring measures which need to be in place; and**
- g) In case control measures are inadequate or insufficient, the risk mitigation shall be implemented.**

2. The issue based risk assessment shall follow from the baseline risk assessment (i.e. Specific crew risk assessments).

3. Continuous Baseline Risk Assessment

This constitutes Planned Tasks Observations, Change of Work Processes, incident occurrences, work conditions, etc.

The *Contractor* shall furthermore implement and maintain an appropriate safety related incident reporting system, which must be aligned to 32-95 Eskom Incident Management Procedure rev8

, Part C3 of Service Information. The safety statistics generated by this reporting system shall be tabled for discussion at the bi-weekly site meeting (refer Section C3.4.9) and in case of an incident, if so

requested by the *Service Manager*, the baseline risk assessment for the work activity in question shall be revised and appropriate measures put in place to either eliminate or mitigate the risk/s identified and /or similar incidences from recurring.

In the *Contractor's* Health and Safety File, the *Contractor* shall indicate all health and safety measures to be taken to prevent incidents, the spread of diseases and epidemics applicable to his staff, offices and accommodation. The *Contractor's* Health and Safety Plan shall be included in the Health and Safety File which shall be in accordance with the *Employers/ Clients* Health and Safety Specification and applicable legislation. The Health and Safety Plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the *Contractor* as the provision of services progresses.

The *Contractor* shall comply with the health and safety requirements :

The *Contractor* shall comply with the South African Occupational Health and Safety Act No. 85 of 1993 and regulations, Eskom Safety, Health, Environment and Quality (SHEQ) Policy 32-727, National Building Regulations as well as SANS 10400 for all works. Furthermore, the *Contractor* shall comply with any additional current statutory requirements of any relevant Government Departments regarding health and safety and environmental health.

Ingula SHE Specification, applicable procedures, policies, guidelines and standards which will be used as Eskom's minimum requirements for Health and Safety will be provided.

The *Contractor* shall comply with the requirements for COVID-19 as per Government Directive from Department of Employment and Labour (DEL); Consolidate COVID-19 Direction on Health and Safety Measures in Workplaces issued by Minister in terms of Regulation 4(10) of the National Disaster Regulation.

Only the latest version/ revision of the applicable legislation, acts and regulations shall be deemed to be accepted at the Ingula Power Station. Not limited to the following below legislation, acts and regulations are complied with:

- Compensation for Occupational Injuries and Diseases Act 130 of 1993
- National Water Act 36 of 1998
- Occupational Health and Safety Act and Regulations (85 of 1993)
- National Environmental Management Act 107 of 1998
- Applicable South African National Standards (SANS)
- National Road Traffic Act 93 of 1996
- Basic Conditions of Employment Act 75 of 1997
- National Veld and Forest Fire Act and Regulations 101 of 1998
- Environmental Conservation Act and Regulations 73 of 1989
- Committee of Land Transport Officials (COLTO)
- SACPCMP Act no. 48 of 2000
- Radiation Protection Act

The *Contractor* shall establish and enforce rules to ensure the health and safety of his own employees and those of its Subcontractors so that high standards of personnel health and safety are achieved and maintained. The *Contractor* shall exercise and enforce all necessary care and measures to preclude exposure of personnel, labour and nearby residents (if any) to potential health hazards and environmental pollutants.

The *Contractor* shall ensure that all persons which are employed and or deployed to work on site undergo police clearance and are certified to have no criminal records. This shall be done prior to them being allowed or given access to start work on site.

The *Contractor* is required to compile a SHE File to comply with the *Employer's* specification, which includes but not limited to the following:

- Safety, Health and Environmental Plan (SHE Plan)
- SHE organization within the Company-Responsibility & Accountability
- OHS Incident management Procedure (32-95)
- Planning of conduct of work activities including planning for changes and emergency work (Operational Plan)
- Management of PPE- Personal Protective Equipment (Procedure with the matrix)
- Emergency planning and fire risk management
- Vehicle and driver behaviour safety (Competency, Traffic Management, etc.)
- Sub-Contractor or supplier selection and management
- Design and specifications (Drawings)
- Key personnel competency, training, appointments
- Communication and awareness Plan
- Behavioural Based Safety Procedure
- *Employer's* Baseline SHE Risk Assessment (BRA).
- *Contractor's* Baseline Risk Assessment in line with the *Employer's* BRA (Identification, assessment and management of Safety, Health and Environmental risks related to the scope of work. The methodology used for the risk assessment must be provided together with the BRA.)
- **Valid Letter of Good Standing (COIDA or equivalent)**
- **SHE policy signed by CEO/ MD- Comply to OHS Act Section 7 or ISO 45001**
- **Occupational hygiene and health risk assessment**
- Medical surveillance
- Method Statements/ Safe Working Procedures
- COVID-19 Risk Assessments and Workplace Plan

In addition, reference is to be made Health and Safety Specification, for documents and policies which the *Contractor* is to adhere to.

SHE File

The Contractor is required to compile a SHE File before the commencement of work. The SHE file must be submitted to the employer for review and acceptance, seven (7) days before any work can commence.

The following requirements will be complied with:

1. Annexure B: Eskom Acknowledgement Form for OHS legal and other requirements
 2. Occupational Health and Safety Plan aligned with the Occupational Health and Safety Specification or Requirements
 3. Costing for Occupational Health and Safety Management
 4. Baseline OHS Risk Assessment (BRA)
 5. Valid Letter of Good Standing (COIDA or equivalent)
 6. OHS policy signed by CEO or MD
 7. OHS Competency
- a) The OHS professional will evaluate the Occupational Health and Safety File. If satisfied, the letter of acceptance will be issued to the Contractor/Supplier. No work will commence before the Occupational Health and Safety File/document has been accepted by the OHS professional.

- b) When the OHS professional is satisfied with the contents of the OHS plan, it will be signed and initialled on the bottom right of each page by the client (Eskom OHS professional and the Project Manager) and the Contractor/Supplier Representative.
- c) The Contractor/Supplier employees shall also undergo the company's induction, which must be risk- or scope-based before commencement of any activities.
- d) Eskom will induct the Contractor/Supplier employees before commencement of any activities.
- e) Eskom will conduct risk-based inspections, audits, and blitz inspections to monitor OHS compliance and adherence to the OHS plan by the Contractor/Supplier.
- f) The frequency of the audit/inspection will be determined by the risk associated with the scope of work based on legal and other requirements as amended.

The Contractor's/Supplier's OHS File or copy thereof shall be handed over to the Project Manager on completion of the project 10 days before the contract ceases

In addition, reference is to be made Health and Safety Specification, for documents and policies which the *Contractor* is to adhere to.

20 Environmental constraints and management

The Contractor complies with all legislative, Eskom and Ingula PS environmental policies.

3.1.1 Environmental Standard:

3.3.2.1 Legislation:

Comply with all environmental legislation of South Africa in respect of controlling air pollution, water pollution and waste disposal, etc.

3.3.2.2 Green Practices:

The Contractor must carry out good environmental practices in carrying out the works for conserving the global & local environment. Such practices shall include but not be limited to the replacing all chemical based cleaning agents by other natural/organic alternatives.

During sweeping and dusting, the Contractor shall ensure that a minimum amount of dust is liberated into the atmosphere. The use of compressed air for cleaning is prohibited.

3.3.2.3 Waste Management

Domestic – all bins must be replenished with plastic disposable bags and when full moved to the designated waste areas within each area of the works.

All waste must then be disposed of in the following waste bins:

- Normal Yellow dust bin-all soft waste
- Oil will be disposed of in oil bins on site

No waste material must be accumulated or stored anywhere other than in the designated area.

Dried sludge will be placed in the approved areas in black refuse bags for Eskom to dispose

All waste must then be disposed in labelled bins provided by Ingula PSS.

21 Quality assurance requirements

The quality requirements are as per Eskom Supplier Quality Requirements Specification 240-105658000

- The Contractor defines the level of QA/QC or inspection imposed on his Sub-Contractors and suppliers.
- The programming of inspections, hold and witness points is agreed between the Employer and the Contractor prior to undertaking any work.
- The *Contractor* maintains a high standard of workmanship, as expected by the Employer and shall comply with any quality assurance and quality procedures implemented by the *Employer*.
- These methods to be employed by the Contractor are designed to ensure that regular maintenance is carried out at the highest quality.

22 Procurement

Disallowed costs are not applicable.

23 People

24 Minimum requirements of people employed

The *Contractor* must submit Curriculum Vitae's, certified copies of qualifications and/or certificates of its qualified staff prior to work commencing on site

- All staff required to perform the activities within the works information
- All relevant personnel names and titles must be specified to the *Service Manager*
- All staff to be appointed in writing.
- Contract Staff are not allowed to work on any other contract.
- All new staff to do induction training
- All replacements of staff will be in the same discipline (like an artisan with an artisan with proof of qualifications)
- All new staff to be approved by *Service Manager* before entering the site or commencing work
- All new staff must hand in all qualifications and relevant documentation to the *Service Manager*
- When changing personnel a new access to work form to be completed by the *Contractor*
- Only required specified approved amount of personnel to be allowed on site, pre-arrange with *Service Manager*
- In the case where one or more employees of the *Contractor* are requested to leave site for other reasons than Sick leave or Annual leave. The personnel must be replaced immediately with the same skill level, qualifications and experience's

25 BBBEE and preferencing scheme

- As per clause Z3 within contract data.

26 Subcontracting

Preferred subcontractors

- Sub contractors preferred with proven prior experience in the water and waste water process control & technical maintenance experience of more than 4 years in the discipline required.
- Sub contractor preferred that shall adhere to all SHEQ requirements as per main contract

Subcontract documentation, and assessment of subcontract tenders

- Quotations to be made available applicable as and when required during non routine type of work as specified and when full information is required for compensation events assessments and sub contractor fee% are applicable

Limitations on subcontracting

- Not more than 30% of scope excluding spares and materials cost.

Attendance on subcontractors

- As and when required

27 Plant and Materials

28 Specifications

- Materials used for this service is subject to the Employers prior acceptance
Sodium hypochlorite MSDS
Superfloc MSDS.

29 Correction of defects

- Rework of work will be seen as rework within a time from 0 to 90 days. Rework will be on the *Contractor* account and will also be issued with a Non conformance

30 Contractor's procurement of Plant and Materials

- Material list to be provided of all products, no plant or materials procured for the purpose of providing the service shall contravene the Safety & environmental and site regulations.

31 Tests and inspections before delivery

- Water discharge specifications to be checked according to Eskom's Potable Water Standard (240-55864764) or SANS241-1 and SANS241-2

32 Plant & Materials provided "free issue" by the *Employer*

- Building sand
- Spares & Equipment available from old plants

33 Cataloguing requirements by the *Contractor*

- Data sheets, Information & specifications of spares required for SOW to be sourced and given to the Employer for cataloguing

34 Working on the Affected Property

All *Contractor* will interact with various areas and different people on the *Contractors* site and will be required to conduct their duties in a professional manner.

The contractor must comply with the South African Labour Relations Act and ensure that their staff is compensated with a fair and reasonable wage.

The contractor provides a minimum of one Supervisor and two operators per shift qualified to operate the plant

The contractor provides his duties in accordance with the provisions of Labour Relations Act, 1995 made and entered into by and between, SANS current specifications.

35 *Employer's* site entry and security control, permits, and site regulations

- All management and staff must comply with the security requirements of the Ingula Pumped Storage Scheme.
- All contractor personnel are carefully screened before granted access to the *Employer's* premises.
- All contractor personnel must attend induction before working on site and must obtain gate permits via the *Service Manager*
- Each personnel to have an identification card/gate permit at all times. The Employer has the right to deny access to any person not having proper identification.
- Lifesaving rules to be adhered at all times.
- All Contractor personnel are subject to a random alcohol breathalyser test whilst in the Employer's premises. Any personnel found under the influence of alcohol will not be allowed on the Employer's property
- Unauthorized access to site is prohibited. The personnel are always expected to be at their working site area.
- No recruitment on site or at the main access gates or any of the *Employer's* Premises' is allowed.
- All activities to comply with the OSHACT and Regulations.
- All activities on plant must be preceded by a plant risk assessment – Risk assessment as per the *Employer's* standard, to be current at all times (Live Document).
- Asset registers of all tools and equipment incorporated or consumed in providing the service shall be maintained by the contractor and shall be audited and inspected by Employer from time to time.

36 People restrictions, hours of work, conduct and records

Working Hours

Monday to Sunday including holidays
06:00 to 14:00 morning shift
14:00 to 22:00 Afternoon shift

An attendance register will be required to be completed and retained by the *Contractor*. *Contractor* to use own time sheets or attendance register

37 Health and safety facilities on the Affected Property

- The Contractor is to provide own first aid box.

In case of an injury on duty, the contractor first aider must attend to the injured. An injury on duty must be reported to the Service Manager.

Normal working hours:

On site Control Room - dialling (036) 342 3015

38 Environmental controls, fauna & flora

Environmental management

- Proper care of the natural environment is important to prevent nuisance and environmental degradation.
- All *Contractors* shall comply with the *Employer's* environmental management procedures and Environmental legislation
- Environmental incidents shall be reported to the *Employer's* Environmental Department as per incident management requirements.

Waste Management

- Waste segregation is important to facilitate recycling of waste. Ensure waste is disposed of in the correct colour bin.
- The *Contractor* periodically collects waste from the bins for disposal in the correct manner.
- No waste should be burned or buried on site.
- Where the *Employer* and the contractor have agreed that the contractor is responsible for the disposal of its waste, the contractor shall safely dispose of such waste and keep disposal certificates on file.

Types and colours of bins used on site:

- Black bin for domestic waste
- Orange bin for hazardous waste

Hazardous Substances

It is required in terms of the General Administrative Regulation (Regulation 7) of the Act that any manufacturer, importer, seller or supplier of hazardous chemical substances shall supply the receiver, free of charge with sufficient information for the user, to enable the user to introduce the necessary measures as regards the protection of the health and safety of persons. It is therefore the responsibility of the supplier (dealing directly with the *Employer*) to supply the information. If information is not available for whatever reason, the supplier must indicate and give reasons to the *Employer*.

Environmental management

The *Contractor* is required to ensure that all goods, services or works supplied in terms of the contract conform to all applicable environmental legislation. Where work is done on the Site, the goods, services or works supplied will also conform to the *Employer's* environmental specifications.

Handling of waste produced by the *Contractor*

All waste introduced to and/or produced on the *Employer's* premises, by the *Contractor*, for this contract, must be handled in accordance with the contractor's waste management plan and Ingula waste management plan.

The *Contractor* is responsible to appoint a waste coordinator to ensure that all waste produced is handled according to the applicable legislation.

The *Contractor* is required to ensure that all goods, services or work supplied in terms of the contract conform to all applicable environmental legislation. Where work is done on the *Employer's* site, the goods, services or work supplied also conforms to the *Employer's* environmental specifications.

Waste from the cleaning and maintenance of equipment

The *Contractor* is responsible to contain all waste due to cleaning and maintenance of equipment and disposes of as described below.

Stockpiling of waste

Waste is removed promptly to the designated deposit areas. No stockpiling is permitted.

Hazardous waste

Waste declared as hazardous substances in terms of the Hazardous Substances Act no 15 of 1973 is the responsibility of the *Contractor* to ensure safe removal from the property to a registered Class 1 site

Pest Control

- Only approved herbicides with a low environmental risk shall be used for pest control.
- Only registered pest controllers may apply herbicides on a commercial basis.
- Application of herbicides shall be in accordance with the Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 194.

Water Conservation

- Incidents related to water pollution must be reported to the *Employer* environmental department within 24 hours.
- Report/fix leaking taps and pipes to save water.
- Use water sparingly.
- Chemical substances shall not be disposed of in waste water or storm water drains.

Air Pollution

- Dust suppression measures must be in place to reduce airborne dust.
- Noxious and offensive odours arising from work activities shall be adequately controlled.

Ground Pollution

- Measures to prevent or control ground contamination shall be put in place e.g. drip trays, bund walls.

Spill containment, clean-up and ground rehabilitation shall be done as per Drakensberg procedures

39 Cooperating with and obtaining acceptance of Others

Interface with Others

It is likely that other *Contractors* will be working in the same area. Others might however from time to time require limited access to the same area in order to execute maintenance activities and the *Contractor* is to be accommodating in such instances.

40 Records of Contractor's Equipment

- The Contractor submits a list of all equipment and tools (with serial numbers, wherever possible) to the Security office in order to get approval before the items can be brought onto site.

- A copy of the approved list of items must be supplied to the Service Manager. Equipment that is not listed on a tool/equipment list cannot be removed from site once on the property unless proof of ownership is produced.
- Equipment and vehicles left on site is done so at the Contractor's own risk.
- All lost equipment and tools to be declared to the Service Manager and full details of incident.
- All Machinery and equipment provided by the Contractor must comply to all relevant standards and regulations

41 Equipment provided by the *Employer*

N/A

42 Site services and facilities

43 Provided by the *Employer*

Supply of electricity

220V and 380V electrical supply are generally available in the Water treatment plant premises. The nearest electrical power supply will be indicated but it is the *Contractor's* responsibility to arrange for all such services required in the execution of the works. No warranty is offered or given by the *Employer* that the existing available electrical supply will necessarily be adequate for the *Contractors* purposes nor that such supply is in any way guaranteed. The distribution of electricity shall be carried out by the *Contractor* strictly in accordance with the applicable laws and regulations.

Water

The *Employer* supplies potable water for the purpose of the works, at existing points and in reasonable quantities. Uninterrupted supply is not guaranteed and is not grounds for compensation events.

Accommodation of the *Contractor's* employees

The *Contractor* makes his own arrangements for accommodation and meals.

Telecommunications

The *Contractor* provides his own communication system and the cost thereof. Should the *Contractor* wish to use radio communication equipment on site, he will make his own arrangements with the relevant authorities. In this case though, he is required to liaise with the Head of Security at the Station to ensure that there is no interference with existing channels or equipment

Facilities availability

Employer will provide *Contractor* work space

44 Provided by the *Contractor*

- *Contractor* to provide and insure safe transportation services for all his *Contractors* and it must comply with 32-93 and 33-345 procedures.
- *Contractor* to provide own (Coffee, sugar, milk, tea etc.)
- All computers and printers accessories needed to be provided by the *Contractor*.
- The *Contractor* to provide accommodation and meals for his / her employees and costs for this to be included in the contract price.
- All PPE to be provided by *Contractor* as per construction regulations.
- Provide SABS approved Safety harnesses as per the *Employer's* Safety Requirements.
- *Contractor* will provide the method statement to explain how the scope of work will be executed and this must form part of the returnable.
- *Contractor* to supply own 220 or 380 VAC extension's at the *Contractor* own costs.
- Certified copies of ID's and Qualifications to be provided by the *Contractor* on contract reward.

- All power tools and hand tool necessary to perform the work according to the scope of work.
- *Contractor* to supply sufficient transport for the *Contractors* employees on site. This is to avoid wastage of time between work stations.
- *Contractor* to supply own communication system such as two way radios compatible with Ingula control room system

Personal Protective Equipment

The *Contractor* supplies, maintains and ensures that his personnel at all times wear personal protective equipment as required per site.

Housekeeping

The *Contractor's* Equipment does not impair the operation of the plant or access to the plant.

Access permits

All applicable *Contractor* personnel shall be issued with Photo ID Cards (*Contractor* Permit) by the contractor, which will contain the following information:

- Name
- ID Number
- Company name and logo
- Validity date
- Photo

The *Contractor* applies with Ingula Power Station Protective Services for the issuing of permits.

The *Contractor* submits his application at least 24 hours prior to entering the Security area. This application form must be delivered to Protective Services, or can be emailed to the service manager.

The form contains the following information:

- Employee Name.
- Employee ID Number.
- The *Employer's* Safety Co-ordinators signature.
- The *Employer's Service Manager's* signature.
- Copy of the first page of the ID book of every employee of the *Contractor*, photocopied to reduce the size to 65%.

The form is appended to the *Contractor's* Safety Manual, referred to in Section 2.3.2 (b).

The *Contractor's* visitors and personnel shall conform to the security arrangements in force at the Site at all times.

The Chief of Protective Services may, with valid cause, remove any of the *Contractor's* personnel from Site, either temporarily or permanently. He may deny access to the Site to any person whom, in the opinion of the said Chief of Protective Services, constitutes a security risk.

No unauthorized vehicles will be allowed on Site. Contract vehicle application should be directed to the *Service Manager*.

The *Contractor* will be limited to the working areas associated with the works. The *Contractor* is forbidden to enter any other areas, and must ensure that his employees abide by these regulations.

Parking inside the Power Station is allowed. The parking application must be addressed to the protective services. All *Contractors* will supply protective services with their vehicles registration numbers.

No recruiting of casual labour may be done on the *Employer's* premises, including the area outside the power station security gate.

The *Contractor* obtains the access procedures, from *the Service Manager*, which may change depending on the prevailing security situation.

45 Control of noise, dust, water and waste

- All necessary and relevant PPE must be used at all time when entering or working on plant
- Risk assessments must be completed before commencing with any task to be current at all times (Live Document).
- All relevant procedures to be used at all times.

46 Hook ups to existing works

- The *Employer* reserves the right to have any of the *Contractor's* personnel removed off site without cancelling the contract if, in the *Employer's* opinion, it is warranted.
- The *Employer* reserves the right to have any of the *Contractor's* personnel removed off site without any compensation to the *Contractor* in the event of the *Contractor's* personnel being in contravention with the OHS Act or any of the *Employer's* rules, regulations and procedures.
- The *Employer* reserves the right to request disciplinary/corrective action if, and when, required.
- The *Contractor* must submit Curriculum Vitae's of its entire staff prior to work commencing on site.
- The *Contractor* must submit certified copies of qualifications and or certificates of its entire staff prior to work commencing on site.
- The *Contractor* will be responsible for the full payment of the legislative training costs for every employee at the *Contractor's* cost, in the event that the employee have to redo the training due to failing at the first attempt as well as the subsequent attempts that follows until the employee is authorised.
- All unknown / known services will be brought to the attention of the *Contractor* by *Service Manager*. Should the *Contractor* encounter any other services in the work area, he will immediately bring them to the attention of the *Service Manager* who will issue instructions as to what actions are to be taken.
- No welding will be allowed on site unless permission is granted in writing by the *Service Manager*.
- The *Employer* carries no responsibility for unforeseen delays such as weather conditions unless such a delay is negotiated within 24 hours of the occurrence and written agreement is submitted by the *Employer*.
- Care must be taken to prevent damage to any surroundings such as the plant, roads and equipment in and around existing buildings.
- The *Contractor* and his employees will be required to conduct themselves at all times in proper and orderly manner while on the *Employer's* premises.
- The *Contractor* and his employees may only smoke in the allowed/designated areas.
- The *Employer* will take immediate steps to institute criminal investigations in the event of any suspected criminal acts e.g. theft etc.

Training

- The *Employer* will provide Induction and COVID-19 training before the contractor can have access to site.

47 Tests and inspections

48 Description of tests and inspections

- The water quality testing needs in accordance with SANS241-1, SANS241-2 and Eskom's Potable Water Standard (240-55864764) or SANS241-1 and SANS241-2
- Waste Water quality will be tested as per Water Use License criteria

49 Materials facilities and samples for tests and inspections

The Contractor is responsible to provide for the water quality testing.

List of drawings

50 Drawings issued by the *Employer*

None