

C2.1 Pricing Assumptions  
(No Content)

**Part C2: Pricing Data**  
C2.2 Pricing Schedules

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## 1. PRICE SCHEDULES

The price schedules herewith will be used during the Contract period.

## 2. LABOUR COSTS

The following labour costs per appropriate skill level is required (per hour, unless otherwise specified). All prices given must **exclude** VAT.

LEVEL	NORMAL TIME	OVERTIME	TRAVELLING TIME	STANDBY TIME	DAILY LIVING OUT ALLOWANCE
Engineer (E)					
Technician (T)					
Project Manager (PM)					
Safety Officer (SO)					
Specialist Artisan(SA) / Foreman					
Artisan (A)					
Semi Skilled (SS)					
Driver – EHMV (D)					
General Worker (GW)					

### *Working Hours:*

The contractor shall work 8 hours per day. Time shall be in accordance with DWS regulations or as agreed between the Contractor and DWS

### *Overtime:*

The Contractor shall request in writing approval prior to working overtime. Approval will be granted at the discretion of the Engineer. The contractor shall, at request of the Engineer, indicate the benefit of the overtime to the Department. Emergency repairs will be exempted from the above prior approval process. Overtime shall be in accordance with the Basic Conditions of the Employment Act.

### *Travelling time:*

The travelling time shall be the rates charged for personnel while travelling to and from site in order to execute the required tasks. Only 70% of the labour rate may be claimed for travelling.

### *Living Out Allowance:*

The living out allowance shall include all food costs as well as any other costs that might arise when staying out, excluding accommodation.

*Accommodation:*

1. Departmental Accommodation

The Department may at its discretion provide accommodation for the contractor’s personnel at the Departmental Guesthouses situated at the Dams.

2. Contractors Mobile Accommodation. (Furnish full rates and/or unit costs for these). Failure to do so shall render this option none-available for the duration of contract.

3. Approved Establishments (Hotel, Guesthouses etc.) A maximum of R1,400.00 per person per night including dinner, bed, breakfast and parking shall be claimed. No alcohol. Approved establishments’ quotation and invoice shall be kept as proof and submitted during invoicing. NO proforma invoices to be used as proof of actual expenditure.

Accommodation cost can vary on availability of DWS vs. private accommodation. The Department may at its discretion provide accommodation for the contractor’s personnel at the Departmental Guesthouses at the Dams.

Cost containment as per the National Treasury requirements and Practice Notes shall be applicable.

No mark-up or handling fee shall be claimed by the Contractor for accommodation, food, beverages, fuel for vehicles or equipment, etc.

**3. TRANSPORT COSTS**

Tariff is in cents per kilometre (exclusive of VAT) as from the dates below: No back charge of tariffs will be made before the under-mentioned dates for invoices already processed.

The rates will be updated as the Department of Transport rates are adjusted.

The contractor must decide which vehicle/s to use in order to calculate the transport costs in the price schedules.

**Petrol**

Engine swept volume CC	Sedan/station wagon	Light delivery vehicle (LDV) 4x2	Light delivery vehicle (LDV) 4x4	Mini bus/MPV
	A	B	C	D
	From Mar 2021	From Mar 2021	From Mar 2021	From Mar 2021
Up to 1250	270.3	230.3	374.9	352.5
1251 to 1550	340.4	302.8		<b>378.1</b>
1551 to 1750	<b>367.4</b>	335.8		
1751 to 1950	420.4	388.9	<b>459.8</b>	441.2
1951 to 2150	454.0	399.4		501.5
2151 to 2500	514.2	<b>425.7</b>		647.4
2501 to 3500	643.7	456.8	608.9	740.8
Over 3500	753.5	515.6		

## Diesel

Engine swept volume CC	Sedan/station wagon	Light delivery vehicle (LDV) 4x2	Light delivery vehicle (LDV) 4x4	Mini bus/MPV
	A	B	C	D
	From Mar 2021	From Mar 2021	From Mar 2021	From Mar 2021
Up to 1250	255.8	270.2	408.5	471.9
1251 to 1550	312.3	364.2		
1551 to 1750	<b>341.3</b>	371.8		
1751 to 1950	353.1	391.9		
1951 to 2150	417.9	394.3	<b>479.2</b>	
2151 to 2500	482.8	<b>412.6</b>		585.1
2501 to 3500	611.2	428.7	532.4	617.6
Over 3500		561.9	639.2	721.3

## Heavy and Extra Heavy Motor Vehicles (Diesel)

Load Capacity in (Tonne)	Rate per Kilometre (Rand/km)
5 to 8 Tonne (drop-side)	
5 to 8 Tonne (with crane)	
10 to 14 Tonne (drop-side)	
10 to 14 Tonne (with crane)	
20 to 30 Tonne (flat-deck)	

**RATE PER KILOMETRE (Rand/km)** = this rate must include the driver/operator and is expressed in rand/km.

NOTE: 1) Escalation according to SEIFSA rates/indices shall apply for fuel and labour costs.

2) Complete above table in full

Rates for all vehicles not listed above must be supplied by the bidder for approval.

**NB** There is no provision for an additional rate for towing a trailer.

## ACTUAL/DIRECT EXPENSES

Reasonable actual expenses for hiring a car, light delivery vehicle or Minibus, limited to Class B vehicles, when flying to site.

## EQUIPMENT COSTS

- The cost of the equipment to perform the duties as per each item shall be included in the table. Sufficient space is provided to include detailed breakdown of the equipment to be used and its relevant cost.
- Small tools, instruments and quality control instruments cost such as vacuum cleaner, drills, angle grinders etc. shall be considered to be part of the Production Artisan, Quality Inspector's, etc labour cost.

- For the purpose of performing factory tests as required in terms of this specification and where considered practical according to the discretion of the Engineer, complete assemblies will be required.

### **Labour information**

The Bidder shall submit, with their **bid**, a complete list of **personnel** (from the rank of Artisan upwards) to be involved with this contract together with summarised Curriculum Vitae. The **Curriculum Vitae** shall indicate details such as **name, age, nationality, date of nationality** including qualifications and **relevant** experience. The bidder shall also submit an organogram of those individuals. Find attached an example of summarised Curriculum Vitae. Failure to submit the supporting CVs with the bid **may** disqualify your bid.

**Personnel:** Individuals in the permanent employment of the contractor.

The contractor shall at all times keep the list updated for his and his sub-contractor's staff.

### **4. SPECIFIC INSTALLATION FOR ADJUDICATION PURPOSES**

For the purpose of adjudication of this Bid specific sites have been chosen containing a representative number of components for the region.

The following tables refer to specific equipment that will be shown and if necessary demonstrated to the bidder at the site meeting referred to in the Instructions to bidders.

The prices below **exclude the cost of spares**. The rate includes the cost of all staff required (cost / hour) plus all overheads where appropriate, and the guarantee of all parts, materials and workmanship. The cost of equipment (such as blasting/spraying equipment, compressors, generators, machinery etc.) must be included where asked for in the pricing schedules. All prices given must **exclude** VAT.

Each table must be completed in full and the total from each brought to the summary table. Adjudication will be based on the total and not on rates.

For adjudication purposes, the Department specified the manpower level as deemed required as well as the number of hours to do the specific task. If the Bidder strongly feels that the listed manpower levels and number of hours is not a realistic indication, it should be noted at the site meeting and alternative offers may then be considered.

For adjudication purposes it shall be assumed that all the items are located at the different Dams to have a more realistic comparison of cost for contractors based in different centres.

Transport cost should reflect the transport cost of personnel to and from these sites for removal and installation of equipment as well as the transporting of equipment to and from your workshop.

## **5. WORKSHOP**

The Contractor's workshop shall be situated where possible within the boundaries of the applicable Operational Areas or located within reasonable distance from the major schemes.

## **6. FACILITIES**

The Contractors workshop must have the facilities to perform maintenance, repair and refurbishment of equipment.

Equipment deemed essential:

- Overhead crane, welding facilities, lathe, drill press, hydraulic press, hydraulic testing facilities (pressure testing).

## **7. ORGANIZATIONAL CAPABILITY**

The Department will evaluate the organisation, technical personnel and supportive personnel of the contractor.

## 8 NORTHERN OPERATIONS (LIMPOPO) TZANEEN AREA

8.1 BUTTERFLY VALVE – TZANEEN DAM  
(DN 1600, MANUALLY OPERATED) 9 Ton

S 23° 48' 03" E 30° 10' 01"

### LABOUR COSTS:

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XPM,1XSO		4,4,4	
Travelling time (1 trip to site and back)	1XT,1XPM,1XSO			
Remove	1XSA,2XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Transport from site (1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		9,9	
Blast	1XSS		4	
Clean	1XGW		3	
Inspect	1XSS,1XSA		2,2	
Report	1XSA		1	
Re – blast	1XA,1XSS		4,12	
Coat (Epoxy)	1XA,1XSS		2,14	
Reassemble	1XSA,2XGW		12,12	
Pressure Test	1XSS,1XT,2XGW		1,4,4	
Pressure test certificate	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,2XGW		9,9	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XT,1XPM		6,6	
Travelling time (1 trip to site and back)	1XT,1XPM			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

### TRANSPORT COSTS:

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 10 – 14 Ton drop-side)			
Transport equipment from your workshop to site for installation (Truck 10 – 14 Ton drop-side)			
4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			<b>(excl. VAT)</b>

### TOTAL COST:

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	



**8.2 BUTTERFLY VALVE – NHZELELE DAM**  
(DN 900, MANUALLY OPERATED) 3 Ton

S 22° 43' 30'' E 30° 05' 45''

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XPM,1XSO		4,4,4	
Travelling time (1 trip to site and back)	1XT,1XPM,1XSO			
Remove	1XSA,1XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Transport from site (1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		9,9	
Blast	1XSS		4	
Clean	1XGW		3	
Inspect	1XSS,1XSA		2,2	
Report	1XSA		1	
Re – blast	1XA,1XSS		4,12	
Coat (Epoxy)	1XA,1XSS		2,14	
Reassemble	1XSA,2XGW		12,12	
Pressure Test	1XSS,1XSA,2XGW		1,4,4	
Pressure test certificate	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,1XGW		9,9	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XT,1XSA,1XPM		6,6,6	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS</b> (excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 5 – 8 Ton drop-side)			
Transport equipment from your workshop to site for installation (Truck 5 – 8 Ton drop-side)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		(excl. VAT)	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**8.3 SLEEVE VALVE – MIDDLE LETABA DAM**  
(DN 610, with Electric actuator) 1½ Ton

S 23° 16' 24'' E 30° 24' 14''

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM,1XSO			
Remove	1XSA,1XGW		9,9	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Transport from site (1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		16,16	
Blast	1XSS		5	
Clean	1XGW		3	
Inspect	1XSS,1XSA		1,3	
Report	1XSA		1	
Re – blast	1XSA,1XSS		5,15	
Coat (Epoxy)	1XSA,1XSS		2,14	
Reassemble	1XSA,2XGW		9,9	
Pressure Test	1XSS,1XSA,2XGW		1,3,3	
Pressure test certificate	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,1XGW		7,7	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XT,1XSA,1XPM		4,4,4	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 5 – 8 Ton with crane)			
Transport equipment from your workshop to site for installation (Truck 5 – 8 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		(excl. VAT)	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	(excl. VAT)	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	(incl. VAT)	

**8.4 SLEEVE VALVE – LUPHEPHE DAM**  
(DN 381, with Electric actuator) ½ Ton

S 22° 38' 02'' E 30° 24' 07''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XSS,1XSA,1XPM,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XSS,1XSA,1XPM,1XSO			
Remove	1XSA,2XGW		9,9	
Travelling & transport (1 trip to site and back)	1XSA,2XGW			
Dismantle	1XSA,2XGW		16,16	
Blast	1XSS		5	
Clean	1XGW		3	
Inspect	1XSS,1XSA		1,3	
Report	1XSA		1	
Re – blast	1XSA,1XSS		5,15	
Coat (Epoxy)	1XSA,1XSS		2,14	
Reassemble	1XSA,2XGW		9,9	
Pressure Test	1XSS,1XSA,2XGW		1,3,3	
Pressure test certificate	1XSA		1	
Install	1XSA,2XGW		7,7	
Travelling & transport (1 trip to site and back)	1XSA,2XGW			
Commission	1XSS,1XSA,1XPM		4,4,4	
Travelling time (1 trip to site and back)	1XSS,1XSA,1XPM			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
(excl. VAT)			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**8.5 GATE VALVE – THABINA DAM**  
(DN 400, MANUALLY OPERATED) ½ Ton

S 24° 01' 40'' E 30° 10' 09''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM, 1XSO		2,2,2,2	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM, 1XSO			
Remove	1XSA,1XGW		3,3	
Travelling time & transport (1 trip to site and back)	1XSA,1XGW			
Dismantle in workshop	1XSA		5	
Clean	2XGW		2	
Inspect	1XT,1XSA		1,1	
Report	1XSA		0.5	
Reassemble	1XSA		5	
Reset limits/calibrate	1XSA,1XSS		1,1	
Coat	1XSS		1	
Test certificate	1XSA		1	
Install	1XSA,1XGW		4,4	
Travelling time & transport (1 trip to site and back)	1XSA,1XGW			
Commission	1XT,1XSA,1XPM		1,1,1	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**8.6 SUBMERSIBLE PUMP – ALBASINI DAM**

**S 23° 06' 30'' E 30° 07' 30''**

(CENTRIFUGAL, SUBMERSIBLE PUMP 3,6kW) ½ Ton

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM,1XSO		2,2,2,2	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM,1XSO			
Uncouple coupling and loosen pipework	1XSA,2XGW		2,2	
Travelling time & transport equipment (1 trip to site and back)	1XSA,2XGW			
Remove pump	1XSA,2XGW		2,2	
Dismantle in Workshop	1XSA,2XGW		4,4	
Rough blast and clean pump and piping	2XGW		3	
Inspect	1XT,1XSA		1	
Report	1XSA		1	
Final blast to Sa3	1XSA,1XSS		1,3	
Coat internally (epoxy-minimum DFT of 400µm)	1XSA,1XSS		2,6	
Replace shaft and impeller with new Stainless Steel shaft	1XSA,1XGW		1,1	
Replace impeller with new Stainless Steel impeller	1XSA,1XGW		1,1	
Replace all brass sleeves with new brass sleeves	1XSA,1XGW		1,1	
Balancing of assembled impeller plus test reports	1XT,1XSA		2,2	
Replace existing wearing rings with two new Brass wearing rings (include new brass bolts)	1XSA,1XGW		1,1	
Replace packing	1XSA,1XGW		1,1	
Fit parts and reassemble pump	1XSA,1XGW		2,2	
Coat pump externally to existing colour code to minimum DFT of 300µm (epoxy and recoatable polyurethane)	1XSA,1XSS		2,6	
Supply test report	1XSA		2	
Install and couple pump	1XSA,2XGW		5,5	
Test run	1XT,1XGW		2,2	
Travelling time & transport equipment (1 trip to site and back)	1XSA,2XGW			
Commission	1XT,1XSA,1XPM		3,3,3	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**8.7 BOOSTER PUMP – TZANEEN DAM (HOUSING COMPLEX) S 23° 48' 03'' E 30° 10' 01''**  
 (CENTRIFUGAL, PUMP, 30kW) ¾ Ton

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XPM,1XSA,1XSO		2,2,2,2	
Travel time (1 trip to site & back)	1XT,1XPM,1XSA,1XSO			
Uncouple coupling and loosen pipe work	1XSA,2XGW		3,3	
Travel time (1 trip to site and back & transport equipment)	1XSA,2XGW			
Remove pump	1XSA,2XGW		2,2	
Dismantle in Workshop	1XSA,2XGW		6,6	
Rough blast and clean pump and piping	2XGW		4	
Inspect	1XSA		2	
Report	1XSA		1	
Final blast to Sa3	1XSA,1XSS		1,4	
Coat internally (epoxy-minimum DFT of 400µm)	1XSA,1XSS		2,6	
Replace shaft and impeller with new Stainless Steel shaft impeller	1XSA,1XGW		2,2	
Replace all brass sleeves with new brass sleeves	1XSA,1XGW		1,1	
Balancing of assembled impeller plus test reports	1XSA,1XGW		2,2	
Replace existing wearing rings with two new Brass wearing rings (include new brass bolts)	1XSA,1XGW		4,4	
Replace packing, fit parts and reassemble pump	1XSA,1XGW		3,3	
Coat pump externally to existing colour code to minimum DFT of 300µm (epoxy and recoatable polyurethane)	1XSA,1XSS		1,6	
Supply test report	1XSA		1	
Install and couple pump	1XSA,2XGW		5,5	
Align with laser	1XSA,1XGW		1,1	
Test run	1XSA		3	
Travel time (1 trip to site and back & transport equipment)	1XSA,2XGW			
Commission	1XT,1XPM,1XSA		6,6,6	
Travel time (1 trip to site & back)	1XT,1XPM,1XSA			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
(excl. VAT)			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**8.8 SWITCHGEAR – MUTSHEDZI DAM**  
(LOW VOLTAGE, 400V, 3200A)

S 22° 56' 45'' E 30° 09' 50''

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM, 1XT,1SA,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XPM, 1XT,1XSA,1XSO			
Cleaning of all switchgear units' components and capacitors (internal and external)	1XSA,1XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Checking of all terminations	1XSA		3	
Tightening of all loose contacts	1XSA		4	
Testing of all relevant instrumentation, relays, contactors, etc.	1XSA		6	
Detailed report for each individual switchgear and capacitor unit	1XSA		2	
Identification of obsolete switchgear	1XSA		1	
Detailed reports of obsolete switchgear	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XPM,1XT,1XSA		4,4,4	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
(excl. VAT)			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**8.9 CRANE – NANDONI DAM**  
(15 Ton, Service of Overhead Crane)

S 22° 58' 52'' E 30° 35' 51''

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	Total Distance km (1 trip to site & back)		
		RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		6,6,6,6	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Complete service	1XSA,1XSS,1XGW		6,6,6	
Travelling time (1 trip to site and back)	1XSA,1XSS,1XGW			
Inspect rotating components, brakes, structure and rope	1XSA,1XSS		4,4	
Load test	1XSA,1XSS,1XGW		10,10,10	
Set all limits	1XSA,1XSS		8,8	
Test reports	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,1XSS,1XGW			
Commission	1XPM,1XT,1XSA		6,6,6	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			<b>(excl. VAT)</b>

<b>TOTAL COST:</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS (excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS (incl. VAT)</b>	



**8.10 SCREENS – TZANEEN DAM**

S 23° 48' 03'' E 30° 10' 01''

(Trash racks, 3000X2500XAnodised Aluminium) 10 Ton

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		5,5,5,5	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1XSS,1XSA,2XGW		8,8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Dismantle in workshop	1XSA,1XGW		24,24	
Clean	1XGW		16	
Inspect	1XT,1XSA		1	
Report	1XSA		1	
Repair	1XSA,1XGW		16,16	
Corrosion Protect	1XSA,1XSS		16,16	
Assemble	1XSA,1XSS		16,16	
Test reports	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		8,8,8	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 10 – 14 Ton with crane)			
Transport equipment from your workshop to site (Truck 10 – 14 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
(excl. VAT)			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**8.11 STOP LOGS – GLEN ALPINE DAM**  
(Service gate, 3000X2500) 7 Ton

S 23° 11' 32'' E 28° 41' 54''

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1XSS,1XSA,2XGW		8,8,8	
Travelling time (1 trip to site and back)	1XSS,1XSA,2XGW			
Transport equipment to workshop (1 trip to site and back)	1XD,1XGW			
Dismantle in workshop	1XSA,2XGW		12,12	
Rough Blast and clean	1XSA,1XSS		14,14	
Inspect	1XPM,1XSA		3,3	
Report	1XSA		2	
Mechanical repair (10 m welding and 12m <sup>2</sup> grinding)	1XSS,1XSA,2XGW		16,16,16	
Final Blast to Sa 3	1XSA, 1XSS		15,15	
Application of corrosion protection (epoxy and recoatable polyurethane to DFT 400 µm)	1XSA,1XSS		40,40	
Replace seals	1XSS,1XSA,2XGW		2,8,8	
Replace lashing strips with stainless steel lashing strips (epoxy coat)	1XSS,1XSA,2XGW		2,8,8	
Replace all fasteners with stainless steel fasteners (powder coat head and shank)	1XSS,1XSA,2XGW		2,8,8	
Assemble	1XSA,2XGW		12,12	
Transport equipment to site (1 trip to site and back)	1XD,1XGW			
Install	1XSS,1XSA,2XGW		8,8,8	
Travelling time (1 trip to site and back)	1XSS,1XSA,2XGW			
Commission and Report	1XPM,1XT,1XSA		8,8,8	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 5 – 8 Ton drop-side)			
Transport equipment from your workshop to site (Truck 5 – 8 Ton drop-side)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**8.12 ELECTRICAL ACTUATOR – EBENEZER DAM**  
(200-9000Nm, SA100E, 180l/min) ½ Ton

S 23° 56' 30'' E 29° 59' 06''

**LABOUR COSTS:** Total Distance \_\_\_\_\_ km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XSA,1XSO		5,5,5	
Travelling time (1 trip to site and back)	1XPM,1XSA,1XSO			
Remove	1XSA,1XGW		2,2	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Dismantle in workshop	1XSA,1XGW		2,2	
Clean	1XGW		16	
Inspect	1XT,1XSA		1	
Report	1XSA		1	
Repair	1XSA,1XGW		2,2	
Corrosion Protect	1XSA,1XSS		4,4	
Reassemble	1XSA,1XSS		2,2	
Reconnect wiring	1XSA,1XSS		2,2	
Reset limits/calibrate	1XSA,1XSS		2,2	
Test	1XSA		1	
Test certificate	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XPM,1XSA		8,8	
Travelling time (1 trip to site and back)	1XPM,1XSA			
<b>TOTAL LABOUR COSTS</b>				<b>(excl. VAT)</b>

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			<b>(excl. VAT)</b>

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**8.13 TRANSFORMERS – NSAMI DAM**  
(2MVA, 22000/400V, 3-Phase, 50Hz) 6 Ton

S 23° 15' 23'' E 30° 46' 14''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA		3,3,3	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
Remove	1XSA,2XGW		2,2	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Transport equipment (1 trip to site & back)	1XD,1XGW			
Dismantle in workshop	1XSA,1XGW		5,5	
Clean	1XGW		6	
Inspect	1XT,1XSA		1,1	
Report	1XSA		1	
Repair	1XSA,1XGW		16,16	
Corrosion Protect	1XSA,1XSS		16,16	
Assemble	1XSA,1XSS		8,8	
Test reports	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		8,8,8	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 5 – 8 Ton with crane)			
Transport equipment from your workshop to site (Truck 5 – 8 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
(excl. VAT)			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**8.14 ELECTRICAL MOTOR – NONDWENI DAM**

**S 23° 41' 13'' E 30° 52' 00''**

(SQUIRREL CAGE, INDUCTION MOTOR, 300kW, STAR-DELTA, 1500RPM, 50Hz) 2 Ton

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XSA,1XSO		5,5,5	
Travel time (1 trip to site and back)	1XPM,1XSA,1XSO			
Remove	1XSA,2XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Transport equipment (1 trip to site & back)	1XD,1XGW			
Dismantle in workshop	1XSA,1XGW		2,2	
Clean	1XGW		6	
Inspect	1XT,1XSA		2,2	
Report	1XSA		1	
Rewind stator	1XSA,1XSS		24,24	
Check motor heaters	1XSA,1XSS		1,1	
Bearing RTD's & thermistors	1XSA,1XSS		1,1	
Replace bearings (DE & NDE)	1XSA,1XSS		2,2	
Re-balance rotor shaft	1XSA,1XSS		4,4	
Check shaft extension run-out	1XSA,1XSS		1,1	
Assemble	1XSA,1XSS		1,1	
Performance test	1XSA,1XSS		3,3	
Routine test (no-load & short circuit)	1XSA,1XSS		1,1	
Megger test	1XSA,1XSS		1,1	
Check winding resistance	1XSA,1XSS		1,1	
Corrosion Protect	1XSA,1XSS		16,16	
Test reports before & after	1XSA		1	
Laser align	1XSA,1XSS		3,3	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		2,2,2	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 5 – 8 Ton with crane)			
Transport equipment from your workshop to site (Truck 5 – 8 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
(excl. VAT)			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

## 8.15 ACCOMMODATION

ACCOMMODATION OPTIONS			1	2	3	4			LOWEST DAILY COST (1 – 4)
ITEM	NUMBER OF DAYS	NUMBER OF PERSONS	DAILY RATE*	ACCOMMODATION ALLOWANCE		CONTRACTORS MOBILE ACCOMMODATION			TOTAL (Excl. VAT)
				With meals (R600 + Allowance)	Without meals (R450 + Allowance)	Cost/person/day**	Rand/km***	Site Mobilisation & De-Mobilisation	
Item 8.1	10	5							
Item 8.2	8	4							
Item 8.3	4	4							
Item 8.11	4	6							
Item 8.13	6	5							
<b>SUB TOTAL (excl. VAT)</b>									
<b>SUB TOTAL (incl. VAT)</b>									

\***DAILY RATE** means the cost of a person for each 24 hour day if own accommodation is utilised, expressed in Rand/person/day.

\*\***Cost/person/day** rental for own mobile accommodation units, expressed in Rand/person/day.

\*\*\***Rand/km** these are transport rates to site and they include travel time and are expressed in Rand/km.

**NOTE:**

- All open spaces must be completed in full.
- If option 4 is used, the contractor will be able to provide own mobile accommodation

**8.17 SUMMARY**

<b>TABLE NUMBER</b>	<b>LABOUR (excl. VAT)</b>	<b>TRANSPORT (excl. VAT)</b>	<b>ACCOMMODATION (excl. VAT)</b>	<b>TOTAL (excl. VAT)</b>
From Item 8.1				
From Item 8.2				
From Item 8.3				
From Item 8.4			XXXXXXXXXXXXXXXX	
From Item 8.5			XXXXXXXXXXXXXXXX	
From Item 8.6			XXXXXXXXXXXXXXXX	
From Item 8.7			XXXXXXXXXXXXXXXX	
From Item 8.8			XXXXXXXXXXXXXXXX	
From Item 8.9			XXXXXXXXXXXXXXXX	
From Item 8.10			XXXXXXXXXXXXXXXX	
From Item 8.11				
From Item 8.12			XXXXXXXXXXXXXXXX	
From Item 8.13				
From Item 8.14			XXXXXXXXXXXXXXXX	
<b>TOTAL (excl. VAT)</b>				
<b>TOTAL (incl. VAT)</b>				

## 9 NORTHERN OPERATIONS (MPUMALANGA) GROBLERSDAL AREA

### 9.1 SPHERICAL VALVE – BLYDERIVIERSPOORT DAM

S 24° 32' 15" E 30° 47' 45"

(DN 2200, 10 Bar, with hydraulic cylinder and power pack) 15 Ton

#### LABOUR COSTS:

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1xSA,2XGW		6,6	
Travelling time to remove (1 trip to site and back)	1xSA,2XGW			
Transport to your workshop(1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		12,12	
Blast	1XSS		6	
Clean	1XGW		3	
Inspection	1XT,1XSS,1XSA		2,2,4	
Report	1XSA		1	
Re – blast	1XA,1XSS		6,16	
Coat (Epoxy)	1XA,1XSS		3,18	
Reassemble	1XSA, 2XGW		16,16	
Pressure Test	1XSS,1XSA,2XGW		1,4,4	
Pressure test certificate	1XSA		1	
Inspection	1XT,1XSA		4,4	
Strip Hydraulic cylinder	1XSA,1XGW		2,4	
Replace seals	1XSA,1XGW		2,4	
Assemble hydraulic cylinder	1XSA,1XGW		2,4	
Test cylinder	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,2XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		5,5,5	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

#### TRANSPORT COSTS:

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 20 – 30 Ton flat-deck)			
Transport valve from your workshop to site for installation (Truck 20 – 30 Ton flat-deck)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		(excl. VAT)	

#### TOTAL COST:

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	(excl. VAT)	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	(incl. VAT)	



**9.2 BUTTERFLY VALVE – MKHOMBO DAM**  
(DN 1600, MANUALLY OPERATED) 9 Ton

S 25° 05' 50'' E 28° 55' 00''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XPM		4,4	
Travelling time (1 trip to site and back)	1XT,1XPM			
Remove	1XSA,2XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Transport from site (1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		9,9	
Blast	1XSS		4	
Clean	1XGW		3	
Inspect	1XSS,1XSA		2,2	
Report	1XSA		1	
Re – blast	1XA,1XSS		4,12	
Coat (Epoxy)	1XA,1XSS		2,14	
Reassemble	1XSA,2XGW		12,12	
Pressure Test	1XSS,1XT,2XGW		1,4,4	
Pressure test certificate	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,2XGW		9,9	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XT,1XPM		6,6	
Travelling time (1 trip to site and back)	1XT,1XPM			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 10 – 14 Ton drop-side)			
Transport equipment from your workshop to site for installation (Truck 10 – 14 Ton drop-side)			
4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		(excl. VAT)	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.3 BUTTERFLY VALVE – LOSKOP DAM**  
(DN 900, MANUALLY OPERATED) 3 Ton

S 25° 25' 00'' E 29° 21' 30''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM		4,4,4	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
Remove	1XSA,1XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Transport from site (1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		9,9	
Blast	1XSS		4	
Clean	1XGW		3	
Inspect	1XSS,1XSA		2,2	
Report	1XSA		1	
Re – blast	1XA,1XSS		4,12	
Coat (Epoxy)	1XA,1XSS		2,14	
Reassemble	1XSA,2XGW		12,12	
Pressure Test	1XSS,1XSA,2XGW		1,4,4	
Pressure test certificate	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,1XGW		9,9	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XT,1XSA,1XPM		6,6,6	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 5 – 8 Ton drop-side)			
Transport equipment from your workshop to site for installation (Truck 5 – 8 Ton drop-side)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		(excl. VAT)	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.4 SLEEVE VALVE – WITKLIP DAM**  
(DN 610, with Electric actuator) 1½ Ton

S 25° 14' 15'' E 30° 45' 00''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM		4,4,4	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
Remove	1XSA,1XGW		9,9	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Transport from site (1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		16,16	
Blast	1XSS		5	
Clean	1XGW		3	
Inspect	1XSS,1XSA		1,3	
Report	1XSA		1	
Re – blast	1XSA,1XSS		5,15	
Coat (Epoxy)	1XSA,1XSS		2,14	
Reassemble	1XSA,2XGW		9,9	
Pressure Test	1XSS,1XSA,2XGW		1,3,3	
Pressure test certificate	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,1XGW		7,7	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XT,1XSA,1XPM		4,4,4	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 5 – 8 Ton with crane)			
Transport equipment from your workshop to site for installation (Truck 5 – 8 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		(excl. VAT)	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.5 SLEEVE VALVE – MKHOMBO DAM**  
(DN 381, with Electric actuator) ½ Ton

S 25° 05' 50'' E 28° 55' 00''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM,1XSO			
Remove	1XSA,2XGW		9,9	
Travelling & transport (1 trip to site and back)	1XSA,2XGW			
Dismantle	1XSA,2XGW		16,16	
Blast	1XSS		5	
Clean	1XGW		3	
Inspect	1XSS,1XSA		1,3	
Report	1XSA		1	
Re – blast	1XSA,1XSS		5,15	
Coat (Epoxy)	1XSA,1XSS		2,14	
Reassemble	1XSA,2XGW		9,9	
Pressure Test	1XSS,1XSA,2XGW		1,3,3	
Pressure test certificate	1XSA		1	
Install	1XSA,2XGW		7,7	
Travelling & transport (1 trip to site and back)	1XSA,2XGW			
Commission	1XSS,1XSA,1XPM		4,4,4	
Travelling time (1 trip to site and back)	1XSS,1XSA,1XPM			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		(excl. VAT)	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.6 GATE VALVE – KLASERIE DAM**  
(DN 500, MANUALLY OPERATED) ½ Ton

S 24° 31' 30'' E 31° 04' 16''

**LABOUR COSTS:** Total Distance \_\_\_\_\_ km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM,1XSO		2,2,2,2	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM,1XSO			
Remove	1XSA,1XGW		3,3	
Travelling time & transport (1 trip to site and back)	1XSA,1XGW			
Dismantle in workshop	1XSA		5	
Clean	2XGW		2	
Inspect	1XT,1XSA		1,1	
Report	1XSA		0.5	
Reassemble	1XSA		5	
Reset limits/calibrate	1XSA,1XSS		1,1	
Coat	1XSS		1	
Test certificate	1XSA		1	
Install	1XSA,1XGW		4,4	
Travelling time & transport (1 trip to site and back)	1XSA,1XGW			
Commission	1XT,1XSA,1XPM		1,1,1	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.7 SUBMERSIBLE PUMP – FLAG-BOSHIELO DAM**

**S 24° 46' 49'' E 29° 25' 34''**

(CENTRIFUGAL, SUBMERSIBLE PUMP 3,6kW) ½ Ton

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM,1XSO		2,2,2,2	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM,1XSO			
Uncouple coupling and loosen pipework	1XSA,2XGW		2,2	
Travelling time & transport equipment (1 trip to site and back)	1XSA,2XGW			
Remove pump	1XSA,2XGW		2,2	
Dismantle in Workshop	1XSA,2XGW		4,4	
Rough blast and clean pump and piping	2XGW		3	
Inspect	1XT,1XSA		1	
Report	1XSA		1	
Final blast to Sa3	1XSA,1XSS		1,3	
Coat internally (epoxy-minimum DFT of 400µm)	1XSA,1XSS		2,6	
Replace shaft and impeller with new Stainless Steel shaft	1XSA,1XGW		1,1	
Replace impeller with new Stainless Steel impeller	1XSA,1XGW		1,1	
Replace all brass sleeves with new brass sleeves	1XSA,1XGW		1,1	
Balancing of assembled impeller plus test reports	1XT,1XSA		2,2	
Replace existing wearing rings with two new Brass wearing rings (include new brass bolts)	1XSA,1XGW		1,1	
Replace packing	1XSA,1XGW		1,1	
Fit parts and reassemble pump	1XSA,1XGW		2,2	
Coat pump externally to existing colour code to minimum DFT of 300µm (epoxy and recoatable polyurethane)	1XSA,1XSS		2,6	
Supply test report	1XSA		2	
Install and couple pump	1XSA,2XGW		5,5	
Test run	1XT,1XGW		2,2	
Travelling time & transport equipment (1 trip to site and back)	1XSA,2XGW			
Commission	1XT,1XSA,1XPM		3,3,3	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS (excl. VAT)</b>			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS (excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS (incl. VAT)</b>	

**9.8 BOOSTER PUMP – INYAKA DAM**  
(CENTRIFUGAL, PUMP, 720kW) ¾ Ton

S 24° 52' 56'' E 31° 4' 37''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XPM,1XSA,1XSO		2,2,2,2	
Travel time (1 trip to site & back)	1XT,1XPM,1XSA,1XSO			
Uncouple coupling and loosen pipe work	1XSA,2XGW		3,3	
Travel time (1 trip to site and back & transport equipment)	1XSA,2XGW			
Remove pump	1XSA,2XGW		2,2	
Dismantle in Workshop	1XSA,2XGW		6,6	
Rough blast and clean pump and piping	2XGW		4	
Inspect	1XSA		2	
Report	1XSA		1	
Final blast to Sa3	1XSA,1XSS		1,4	
Coat internally (epoxy-minimum DFT of 400µm)	1XSA,1XSS		2,6	
Replace shaft and impeller with new Stainless Steel shaft impeller	1XSA,1XGW		2,2	
Replace all brass sleeves with new brass sleeves	1XSA,1XGW		1,1	
Balancing of assembled impeller plus test reports	1XSA,1XGW		2,2	
Replace existing wearing rings with two new Brass wearing rings (include new brass bolts)	1XSA,1XGW		4,4	
Replace packing, fit parts and reassemble pump	1XSA,1XGW		3,3	
Coat pump externally to existing colour code to minimum DFT of 300µm (epoxy and recoatable polyurethane)	1XSA,1XSS		1,6	
Supply test report	1XSA		1	
Install and couple pump	1XSA,2XGW		5,5	
Align with laser	1XSA,1XGW		1,1	
Test run	1XSA		3	
Travel time (1 trip to site and back & transport equipment)	1XSA,2XGW			
Commission	1XT,1XPM,1XSA		6,6,6	
Travel time (1 trip to site & back)	1XT,1XPM,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.9 SWITCHGEAR – GROBLERSDAL AREA OFF. (AQUAVILLE) S 25° 10' 46'' E 29° 20' 59''**  
(MEDIUM VOLTAGE, 6.6kV, 600A)

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM, 1XT,1SA,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XPM, 1XT,1SA,1XSO			
Cleaning of all switchgear units' components and capacitors (internal and external)	1XSA,1XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Checking of all terminations	1XSA		3	
Tightening of all loose contacts	1XSA		4	
Testing of all relevant instrumentation, relays, contactors, etc.	1XSA		6	
Detailed report for each individual switchgear and capacitor unit	1XSA		2	
Identification of obsolete switchgear	1XSA		1	
Detailed reports of obsolete switchgear	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XPM,1XT,1XSA		4,4,4	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	



**9.10 CRANE – KWENA DAM**  
(10 Ton, Service of Overhead Crane)

S 25° 21' 33'' E 30° 23' 13''

**LABOUR COSTS:** Total Distance \_\_\_\_\_ km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		6,6,6,6	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Complete service	1XSA,1XSS,1XGW		6,6,6	
Travelling time (1 trip to site and back)	1XSA,1XSS,1XGW			
Inspect rotating components, brakes, structure and rope	1XSA,1XSS		4,4	
Load test	1XSA,1XSS,1XGW		10,10,10	
Set all limits	1XSA,1XSS		8,8	
Test reports	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,1XSS,1XGW			
Commission	1XPM,1XT,1XSA		6,6,6	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		(excl. VAT)	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.11 SCREENS – LOSKOP DAM**

**S 25° 25' 00'' E 29° 21' 30''**

(Trash racks, 3000X2500mm, Anodised Aluminium) 10 Ton

**LABOUR COSTS:**

Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		5,5,5,5	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1XSS,1XSA,2XGW		8,8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Dismantle in workshop	1XSA,1XGW		24,24	
Clean	1XGW		16	
Inspect	1XT,1XSA		1	
Report	1XSA		1	
Repair	1XSA,1XGW		16,16	
Corrosion Protect	1XSA,1XSS		16,16	
Assemble	1XSA,1XSS		16,16	
Test reports	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		8,8,8	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 10 – 14 Ton with crane)			
Transport equipment from your workshop to site (Truck 10 – 14 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.12 STOP LOGS – LOSKOP DAM**  
(Service gate, 3000X2500mm) 7 Ton

S 25° 25' 00'' E 29° 21' 30''

**LABOUR COSTS:**

Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1XSS,1XSA,2XGW		8,8,8	
Travelling time (1 trip to site and back)	1XSS,1XSA,2XGW			
Transport equipment to workshop (1 trip to site and back)	1XD,1XGW			
Dismantle in workshop	1XSA,2XGW		12,12	
Rough Blast and clean	1XSA,1XSS		14,14	
Inspect	1XPM,1XSA		3,3	
Report	1XSA		2	
Mechanical repair (10 m welding and 12m <sup>2</sup> grinding)	1XSS,1XSA,2XGW		16,16,16	
Final Blast to Sa 3	1XSA, 1XSS		15,15	
Application of corrosion protection (epoxy and recoatable polyurethane to DFT 400 µm)	1XSA,1XSS		40,40	
Replace seals	1XSS,1XSA,2XGW		2,8,8	
Replace lashing strips with stainless steel lashing strips (epoxy coat)	1XSS,1XSA,2XGW		2,8,8	
Replace all fasteners with stainless steel fasteners (powder coat head and shank)	1XSS,1XSA,2XGW		2,8,8	
Assemble	1XSA,2XGW		12,12	
Transport equipment to site (1 trip to site and back)	1XD,1XGW			
Install	1XSS,1XSA,2XGW		8,8,8	
Travelling time (1 trip to site and back)	1XSS,1XSA,2XGW			
Commission and Report	1XPM,1XT,1XSA		8,8,8	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 5 – 8 Ton drop-side)			
Transport equipment from your workshop to site (Truck 5 – 8 Ton drop-side)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.13 ELECTRICAL ACTUATOR – INYAKA DAM**  
(200-9000Nm, SA100E, 180l/min) ½ Ton

S 24° 52' 56'' E 31° 4' 37''

**LABOUR COSTS:**

Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XSA,1XSO		5,5,5,5	
Travelling time (1 trip to site and back)	1XPM,1XSA,1XSO			
Remove	1XSA,1XGW		2,2	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Dismantle in workshop	1XSA,1XGW		2,2	
Clean	1XGW		16	
Inspect	1XT,1XSA		1	
Report	1XSA		1	
Repair	1XSA,1XGW		2,2	
Corrosion Protect	1XSA,1XSS		4,4	
Reassemble	1XSA,1XSS		2,2	
Reconnect wiring	1XSA,1XSS		2,2	
Reset limits/calibrate	1XSA,1XSS		2,2	
Test	1XSA		1	
Test certificate	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XPM,1XSA		8,8	
Travelling time (1 trip to site and back)	1XPM,1XSA			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
(excl. VAT)			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.14 TRANSFORMERS – INYAKA DAM**  
(500kVA, 22000/6.6V, 3-Phase, 50Hz) 6 Ton

S 24° 52' 56'' E 31° 4' 37''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		3,3,3,3	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1XSA,2XGW		2,2	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Transport equipment (1 trip to site & back)	1XD,1XGW			
Dismantle in workshop	1XSA,1XGW		5,5	
Clean	1XGW		6	
Inspect	1XT,1XSA		1,1	
Report	1XSA		1	
Repair	1XSA,1XGW		16,16	
Corrosion Protect	1XSA,1XSS		16,16	
Assemble	1XSA,1XSS		8,8	
Test reports	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		8,8,8	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 5 – 8 Ton with crane)			
Transport equipment from your workshop to site (Truck 5 – 8 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
(excl. VAT)			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**9.15 ELECTRICAL MOTOR – INYAKA DAM**

**S 24° 52' 56'' E 31° 4' 37''**

(SQUIRREL CAGE, INDUCTION MOTOR, 300kW, STAR-DELTA, 1500RPM, 50Hz) 2 Ton

**LABOUR COSTS:**

Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XSA,1XSO		5,5,5	
Travel time (1 trip to site and back)	1XPM,1XSA			
Remove	1XSA,2XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Transport equipment (1 trip to site & back)	1XD,1XGW			
Dismantle in workshop	1XSA,1XGW		2,2	
Clean	1XGW		6	
Inspect	1XT,1XSS		2,2	
Report	1XSA		1	
Rewind stator	1XSA,1XSS		24,24	
Check motor heaters	1XSA,1XSS		1,1	
Bearing RTD's & thermistors	1XSA,1XSS		1,1	
Replace bearings (DE & NDE)	1XSA,1XSS		2,2	
Re-balance rotor shaft	1XSA,1XSS		4,4	
Check shaft extension run-out	1XSA,1XSS		1,1	
Assemble	1XSA,1XSS		1,1	
Performance test	1XSA,1XSS		3,3	
Routine test (no-load & short circuit)	1XSA,1XSS		1,1	
Megger test	1XSA,1XSS		1,1	
Check winding resistance	1XSA,1XSS		1,1	
Corrosion Protect	1XSA,1XSS		16,16	
Test reports before & after	1XSA		1	
Laser align	1XSA,1XSS		3,3	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		2,2,2	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 5 – 8 Ton with crane)			
Transport equipment from your workshop to site (Truck 5 – 8 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
(excl. VAT)			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

9.16 ACCOMMODATION

ACCOMMODATION OPTIONS			1	2	3	4			LOWEST DAILY COST (1 – 4)
ITEM	NUMBER OF DAYS	NUMBER OF PERSONS	DAILY RATE*	ACCOMMODATION ALLOWANCE		CONTRACTORS MOBILE ACCOMMODATION			TOTAL (Excl. VAT)
				With meals (R600 + Allowance)	Without meals (R450 + Allowance)	Cost/person/day**	Rand/km***	Site Mobilisation & De-Mobilisation	
Item 9.1	12	5							
Item 9.2	10	5							
Item 9.3	8	4							
Item 9.4	4	4							
Item 9.12	4	6							
Item 9.14	6	5							
<b>SUB TOTAL (excl. VAT)</b>									
<b>SUB TOTAL (incl. VAT)</b>									

\***DAILY RATE** means the cost of a person for each 24 hour day if own accommodation is utilised, expressed in Rand/person/day.

\*\***Cost/person/day** rental for own mobile accommodation units, expressed in Rand/person/day.

\*\*\***Rand/km** these are transport rates to site and they include travel time and are expressed in Rand/km.

NOTE:

- All open spaces must be completed in full.
- If option 4 is used, the contractor will be able to provide own mobile accommodation

**9.17 SUMMARY**

<b>TABLE NUMBER</b>	<b>LABOUR (excl. VAT)</b>	<b>TRANSPORT (excl. VAT)</b>	<b>ACCOMMODATION (excl. VAT)</b>	<b>TOTAL (excl. VAT)</b>
From Item 9.1				
From Item 9.2				
From Item 9.3				
From Item 9.4				
From Item 9.5			XXXXXXXXXXXXXXXX	
From Item 9.6			XXXXXXXXXXXXXXXX	
From Item 9.7			XXXXXXXXXXXXXXXX	
From Item 9.8			XXXXXXXXXXXXXXXX	
From Item 9.9			XXXXXXXXXXXXXXXX	
From Item 9.10			XXXXXXXXXXXXXXXX	
From Item 9.11			XXXXXXXXXXXXXXXX	
From Item 9.12				
From Item 9.13			XXXXXXXXXXXXXXXX	
From Item 9.14				
From Item 9.15			XXXXXXXXXXXXXXXX	
<b>TOTAL (excl. VAT)</b>				
<b>TOTAL (incl. VAT)</b>				



## 10 NORTHERN OPERATIONS (NORTH-WEST) **HARTBEESPOORT AREA**

### 10.1 SPHERICAL VALVE – MOKOLO DAM

S 23° 59' 02'' E 27° 43' 13''

(DN 2200, 10 Bar, with hydraulic cylinder and power pack) 15 Ton

#### LABOUR COSTS:

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1XSA,2XGW		6,6	
Travelling time to remove (1 trip to site and back)	1XSA,2XGW			
Transport to your workshop(1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		12,12	
Blast	1XSS		6	
Clean	1XGW		3	
Inspection	1XT,1XSS,1XSA		2,2,4	
Report	1XSA		1	
Re – blast	1XA,1XSS		6,16	
Coat (Epoxy)	1XA,1XSS		3,18	
Reassemble	1XSA, 2XGW		16,16	
Pressure Test	1XSS,1XSA,2XGW		1,4,4	
Pressure test certificate	1XSA		1	
Inspection	1XT,1XSA		4,4	
Strip Hydraulic cylinder	1XSA,1XGW		2,4	
Replace seals	1XSA,1XGW		2,4	
Assemble hydraulic cylinder	1XSA,1XGW		2,4	
Test cylinder	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,2XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		5,5,5	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

#### TRANSPORT COSTS:

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 20 – 30 Ton flat-deck)			
Transport valve from your workshop to site for installation (Truck 20 – 30 Ton flat-deck)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS (excl. VAT)</b>			

#### TOTAL COST:

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS (excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS (incl. VAT)</b>	

**10.2 SPHERICAL VALVE – HARTBEESPOORT DAM**  
(DN 2200, 10 Bar, with hydraulic cylinder and power pack) 15 Ton

S 27° 51' 01'' E 25° 43' 30''

**LABOUR COSTS:**

Total Distance \_\_\_\_\_ km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1XSA,2XGW		6,6	
Travelling time to remove (1 trip to site and back)	1XSA,2XGW			
Transport to your workshop(1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		12,12	
Blast	1XSS		6	
Clean	1XGW		3	
Inspection	1XT,1XSS,1XSA		2,2,4	
Report	1XSA		1	
Re – blast	1XA,1XSS		6,16	
Coat (Epoxy)	1XA,1XSS		3,18	
Reassemble	1XSA, 2XGW		16,16	
Pressure Test	1XSS,1XSA,2XGW		1,4,4	
Pressure test certificate	1XSA		1	
Inspection	1XT,1XSA		4,4	
Strip Hydraulic cylinder	1XSA,1XGW		2,4	
Replace seals	1XSA,1XGW		2,4	
Assemble hydraulic cylinder	1XSA,1XGW		2,4	
Test cylinder	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,2XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		5,5,5	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 20 – 30 Ton flat-deck)			
Transport valve from your workshop to site for installation (Truck 20 – 30 Ton flat-deck)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS (excl. VAT)</b>			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS (excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS (incl. VAT)</b>	

**10.3 BUTTERFLY VALVE – KLIPVOOR DAM**  
(DN 1600, MANUALLY OPERATED) 9 Ton

S 27° 48' 01'' E 25° 07' 01''

**LABOUR COSTS:**

Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XPM,1XSO		4,4,4	
Travelling time (1 trip to site and back)	1XT,1XPM,1XSO			
Remove	1XSA,2XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Transport from site (1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		9,9	
Blast	1XSS		4	
Clean	1XGW		3	
Inspect	1XSS,1XSA		2,2	
Report	1XSA		1	
Re – blast	1XA,1XSS		4,12	
Coat (Epoxy)	1XA,1XSS		2,14	
Reassemble	1XSA,2XGW		12,12	
Pressure Test	1XSA,1XT,2XGW		1,4,4	
Pressure test certificate	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,2XGW		9,9	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XT,1XPM		6,6	
Travelling time (1 trip to site and back)	1XT,1XPM			
<b>TOTAL LABOUR COSTS</b>			<b>(excl. VAT)</b>	

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 10 – 14 Ton drop-side)			
Transport equipment from your workshop to site for installation (Truck 10 – 14 Ton drop-side)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**10.4 BUTTERFLY VALVE – KOSTER DAM**  
(DN 900, WITH ELECTRICAL ACTUATOR) 3 Ton

S 26° 54' 15'' E 25° 42' 01''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM,1XSO			
Remove	1XSA,1XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Transport from site (1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		9,9	
Blast	1XSS		4	
Clean	1XGW		3	
Inspect	1XSS,1XSA		2,2	
Report	1XSA		1	
Re – blast	1XA,1XSS		4,12	
Coat (Epoxy)	1XA,1XSS		2,14	
Reassemble	1XSA,2XGW		12,12	
Pressure Test	1XSS,1XSA,2XGW		1,4,4	
Pressure test certificate	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,1XGW		9,9	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XT,1XSA,1XPM		6,6,6	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS</b>		<b>(excl. VAT)</b>		

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 5 – 8 Ton drop-side)			
Transport equipment from your workshop to site for installation (Truck 5 – 8 Ton drop-side)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**10.5 SLEEVE VALVE – KROMELLENBOOG DAM**  
(DN 610, with Electric actuator) 1½ Ton

S 26° 20' 45'' E 25° 26' 30''

**LABOUR COSTS:**

Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM,1XSO			
Remove	1XSA,1XGW		9,9	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Transport from site (1 trip to site and back)	1XD,1XGW			
Dismantle	1XSA,2XGW		16,16	
Blast	1XSS		5	
Clean	1XGW		3	
Inspect	1XSS,1XSA		1,3	
Report	1XSA		1	
Re – blast	1XSA,1XSS		5,15	
Coat (Epoxy)	1XSA,1XSS		2,14	
Reassemble	1XSA,2XGW		9,9	
Pressure Test	1XSS,1XSA,2XGW		1,3,3	
Pressure test certificate	1XSA		1	
Transport to site (1 trip to site and back)	1XD,1XGW			
Install	1XSA,1XGW		7,7	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XT,1XSA,1XPM		4,4,4	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS</b>			<b>(excl. VAT)</b>	

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop for refurbishment (Truck 5 – 8 Ton with crane)			
Transport equipment from your workshop to site for installation (Truck 5 – 8 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS (excl. VAT)</b>			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**10.6 SLEEVE VALVE – NGOTWANE DAM**  
(DN 381, with Electric actuator) ½ Ton

S 25° 48' 48" E 25° 11' 52"

**LABOUR COSTS:**

Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XSS,1XSA,1XPM,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XSS,1XSA,1XPM,1XSO			
Remove	1XSA,2XGW		9,9	
Travelling & transport (1 trip to site and back)	1XSA,2XGW			
Dismantle	1XSA,2XGW		16,16	
Blast	1XSS		5	
Clean	1XGW		3	
Inspect	1XSS,1XSA		1,3	
Report	1XSA		1	
Re – blast	1XSA,1XSS		5,15	
Coat (Epoxy)	1XSA,1XSS		2,14	
Reassemble	1XSA,2XGW		9,9	
Pressure Test	1XSS,1XSA,2XGW		1,3,3	
Pressure test certificate	1XSA		1	
Install	1XSA,2XGW		7,7	
Travelling & transport (1 trip to site and back)	1XSA,2XGW			
Commission	1XSS,1XSA,1XPM		4,4,4	
Travelling time (1 trip to site and back)	1XSS,1XSA,1XPM			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS (excl. VAT)</b>			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**10.7 GATE VALVE – SEHUJWANE DAM**  
(DN 400, MANUALLY OPERATED) ½ Ton

S 25° 57' 00'' E 25° 19' 00''

**LABOUR COSTS:**

Total Distance \_\_\_\_\_ km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT, 1XSA, 1XPM, 1XSO		2,2,2,2	
Travelling time (1 trip to site and back)	1XT, 1XSA, 1XPM, 1XSO			
Remove	1XSA, 1XGW		3,3	
Travelling time & transport (1 trip to site and back)	1XSA, 1XGW			
Dismantle in workshop	1XSA		5	
Clean	2XGW		2	
Inspect	1XT, 1XSA		1,1	
Report	1XSA		0.5	
Reassemble	1XSA		5	
Reset limits/calibrate	1XSA, 1XSS		1,1	
Coat	1XSS		1	
Test certificate	1XSA		1	
Install	1XSA, 1XGW		4,4	
Travelling time & transport (1 trip to site and back)	1XSA, 1XGW			
Commission	1XT, 1XSA, 1XPM		1,1,1	
Travelling time (1 trip to site and back)	1XT, 1XSA, 1XPM			
<b>TOTAL LABOUR COSTS</b>		(excl. VAT)		

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>		(excl. VAT)	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	(excl. VAT)	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	(incl. VAT)	

**10.8 SUBMERSIBLE PUMP – BUFFELSPOORT DAM**

S 27° 29' 20'' E 25° 46' 50''

(CENTRIFUGAL, SUBMERSIBLE PUMP 3,6kW) ½ Ton

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XSA,1XPM,1XSO		2,2,2,2	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM,1XSO			
Uncouple coupling and loosen pipework	1XSA,2XGW		2,2	
Travelling time & transport equipment (1 trip to site and back)	1XSA,2XGW			
Remove pump	1XSA,2XGW		2,2	
Dismantle in Workshop	1XSA,2XGW		4,4	
Rough blast and clean pump and piping	2XGW		3	
Inspect	1XT,1XSA		1	
Report	1XSA		1	
Final blast to Sa3	1XSA,1XSS		1,3	
Coat internally (epoxy-minimum DFT of 400µm)	1XSA,1XSS		2,6	
Replace shaft and impeller with new Stainless Steel shaft	1XSA,1XGW		1,1	
Replace impeller with new Stainless Steel impeller	1XSA,1XGW		1,1	
Replace all brass sleeves with new brass sleeves	1XSA,1XGW		1,1	
Balancing of assembled impeller plus test reports	1XT,1XSA		2,2	
Replace existing wearing rings with two new Brass wearing rings (include new brass bolts)	1XSA,1XGW		1,1	
Replace packing	1XSA,1XGW		1,1	
Fit parts and reassemble pump	1XSA,1XGW		2,2	
Coat pump externally to existing colour code to minimum DFT of 300µm (epoxy and recoatable polyurethane)	1XSA,1XSS		2,6	
Supply test report	1XSA		2	
Install and couple pump	1XSA,2XGW		5,5	
Test run	1XT,1XGW		2,2	
Travelling time & transport equipment (1 trip to site and back)	1XSA,2XGW			
Commission	1XT,1XSA,1XPM		3,3,3	
Travelling time (1 trip to site and back)	1XT,1XSA,1XPM			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS (excl. VAT)</b>			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS (excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS (incl. VAT)</b>	



**10.9 PUMP – MOLATEDI DAM**  
(CENTRIFUGAL, MULTI-STAGE PUMP, 275KW) ¾ Ton

S 26° 27' 01'' E 24° 52' 01''

**LABOUR COSTS:** Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XT,1XPM,1XSA,1XSO		2,2,2,2	
Travel time (1 trip to site & back)	1XT,1XPM,1XSA,1XSO			
Uncouple coupling and loosen pipe work	1XSA,2XGW		3,3	
Travel time (1 trip to site and back & transport equipment)	1XSA,2XGW			
Remove pump	1XSA,2XGW		2,2	
Dismantle in Workshop	1XSA,2XGW		6,6	
Rough blast and clean pump and piping	2XGW		4	
Inspect	1XSA		2	
Report	1XSA		1	
Final blast to Sa3	1XSA,1XSS		1,4	
Coat internally (epoxy-minimum DFT of 400µm)	1XSA,1XSS		2,6	
Replace shaft and impeller with new Stainless Steel shaft impeller	1XSA,1XGW		2,2	
Replace all brass sleeves with new brass sleeves	1XSA,1XGW		1,1	
Balancing of assembled impeller plus test reports	1XSA,1XGW		2,2	
Replace existing wearing rings with two new Brass wearing rings (include new brass bolts)	1XSA,1XGW		4,4	
Replace packing, fit parts and reassemble pump	1XSA,1XGW		3,3	
Coat pump externally to existing colour code to minimum DFT of 300µm (epoxy and recoatable polyurethane)	1XSA,1XSS		1,6	
Supply test report	1XSA		1	
Install and couple pump	1XSA,2XGW		5,5	
Align with laser	1XSA,1XGW		1,1	
Test run	1XSA		3	
Travel time (1 trip to site and back & transport equipment)	1XSA,2XGW			
Commission	1XT,1XPM,1XSA		6,6,6	
Travel time (1 trip to site & back)	1XT,1XPM,1XSA			
<b>TOTAL LABOUR COSTS</b>			(excl. VAT)	

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>		(excl. VAT)	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	(excl. VAT)	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	(incl. VAT)	

**10.10 SWITCHGEAR – VAALKOP DAM**  
(LOW VOLTAGE, 400V, 3200A)

S 27° 28' 30'' E 25° 18' 30''

**LABOUR COSTS:**

Total Distance \_\_\_\_\_ km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM, 1XT,1SA,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XPM, 1XT,1SA,1XSO			
Cleaning of all switchgear units' components and capacitors (internal and external)	1XSA,1XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Checking of all terminations	1XSA		3	
Tightening of all loose contacts	1XSA		4	
Testing of all relevant instrumentation, relays, contactors, etc.	1XSA		6	
Detailed report for each individual switchgear and capacitor unit	1XSA		2	
Identification of obsolete switchgear	1XSA		1	
Detailed reports of obsolete switchgear	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XPM,1XT,1XSA		4,4,4	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS (excl. VAT)</b>			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**10.11 CRANE – ROODEKOPJES DAM**  
(20 Ton, Service of Portal Crane)

S 27° 35' 30'' E 25° 24' 15''

**LABOUR COSTS:**

Total Distance \_\_\_\_\_ km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA		6,6,6	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
Complete service	1XSA,1XSS,1XGW		6,6,6	
Travelling time (1 trip to site and back)	1XSA,1XSS,1XGW			
Inspect rotating components, brakes, structure and rope	1XSA,1XSS		4,4	
Load test	1XSA,1XSS,1XGW		10,10,10	
Set all limits	1XSA,1XSS		8,8	
Test reports	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,1XSS,1XGW			
Commission	1XPM,1XT,1XSA		6,6,6	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS (excl. VAT)</b>				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV for staff to service equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**10.12 SCREENS – ROODEPLAAT DAM**

**S 28° 22' 15'' E 25° 37' 15''**

(Trash racks, 3000X2500XAnodised Aluminium) 10 Ton

**LABOUR COSTS:**

Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		5,5,5,5	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1XSS,1XSA,2XGW		8,8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Dismantle in workshop	1XSA,1XGW		24,24	
Clean	1XGW		16	
Inspect	1XT,1XSS		1	
Report	1XSA		1	
Repair	1XSA,1XGW		16,16	
Corrosion Protect	1XSA,1XSS		16,16	
Assemble	1XSA,1XSS		16,16	
Test reports	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		8,8,8	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>				
(excl. VAT)				

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 10 – 14 Ton with crane)			
Transport equipment from your workshop to site (Truck 10 – 14 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
(excl. VAT)			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**10.13 STOP LOGS – ROODEKOPJES DAM**  
(Service gate, 3000X2500) 7 Ton

S 27° 35' 30'' E 25° 24' 15''

**LABOUR COSTS:**

Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		4,4,4,4	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1XSS,1XSA,2XGW		8,8,8	
Travelling time (1 trip to site and back)	1XSS,1XSA,2XGW			
Transport equipment to workshop (1 trip to site and back)	1XD,1XGW			
Dismantle in workshop	1XSA,2XGW		12,12	
Rough Blast and clean	1XSA,1XSS		14,14	
Inspect	1XPM,1XSA		3,3	
Report	1XSA		2	
Mechanical repair (10 m welding and 12m <sup>2</sup> grinding)	1XSS,1XSA,2XGW		16,16,16	
Final Blast to Sa 3	1XSA, 1XSS		15,15	
Application of corrosion protection (epoxy and recoatable polyurethane to DFT 400 µm)	1XSA,1XSS		40,40	
Replace seals	1XSS,1XSA,2XGW		2,8,8	
Replace lashing strips with stainless steel lashing strips (epoxy coat)	1XSS,1XSA,2XGW		2,8,8	
Replace all fasteners with stainless steel fasteners (powder coat head and shank)	1XSS,1XSA,2XGW		2,8,8	
Assemble	1XSA,2XGW		12,12	
Transport equipment to site (1 trip to site and back)	1XD,1XGW			
Install	1XSS,1XSA,2XGW		8,8,8	
Travelling time (1 trip to site and back)	1XSS,1XSA,2XGW			
Commission and Report	1XPM,1XT,1XSA		8,8,8	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>				
				(excl. VAT)

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 5 – 8 Ton drop-side)			
Transport equipment from your workshop to site (Truck 5 – 8 Ton drop-side)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>			
			(excl. VAT)

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	(excl. VAT)	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	(incl. VAT)	

**10.14 ELECTRICAL ACTUATOR – MARICO-BOSVELD DAM**  
(200-9000Nm, SA100E, 180l/min) ½ Ton

S 26° 23' 30'' E 25° 28' 15''

**LABOUR COSTS:**

Total Distance

km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XSA,1XSO		5,5,5	
Travelling time (1 trip to site and back)	1XPM,1XSA,1XSO			
Remove	1XSA,1XGW		2,2	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Dismantle in workshop	1XSA,1XGW		2,2	
Clean	1XGW		16	
Inspect	1XT,1XSA		1	
Report	1XSA		1	
Repair	1XSA,1XGW		2,2	
Corrosion Protect	1XSA,1XSS		4,4	
Reassemble	1XSA,1XSS		2,2	
Reconnect wiring	1XSA,1XSS		2,2	
Reset limits/calibrate	1XSA,1XSS		2,2	
Test	1XSA		1	
Test certificate	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,1XGW			
Commission	1XPM,1XSA		8,8	
Travelling time (1 trip to site and back)	1XPM,1XSA			
<b>TOTAL LABOUR COSTS</b>			<b>(excl. VAT)</b>	

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment & transport equipment from site to your workshop			
2500cc 4x2 LDV for staff to install equipment & transport equipment from workshop to site			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS (excl. VAT)</b>			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**10.15 TRANSFORMER – BOSPOORT DAM**  
 (2MVA, 22000/400V, 3-Phase, 50Hz) 6 Ton

S 27° 21' 01'' E 25° 33' 45''

**LABOUR COSTS:**

Total Distance km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XT,1XSA,1XSO		3,3,3,3	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA,1XSO			
Remove	1XSA,2XGW		2,2	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Transport equipment (1 trip to site & back)	1XD,1XGW			
Dismantle in workshop	1XSA,1XGW		5,5	
Clean	1XGW		6	
Inspect	1XT,1XSA		1,1	
Report	1XSA		1	
Repair	1XSA,1XGW		16,16	
Corrosion Protect	1XSA,1XSS		16,16	
Assemble	1XSA,1XSS		8,8	
Test reports	1XSA		1	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		8,8,8	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>			<b>(excl. VAT)</b>	

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 5 – 8 Ton with crane)			
Transport equipment from your workshop to site (Truck 5 – 8 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS (excl. VAT)</b>			

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	

**10.16 ELECTRICAL MOTOR – TSWASA PS**

**S24° 44' 09.1'' E26° 25' 02.4''**

(SQUIRREL CAGE, INDUCTION MOTOR, 300kW, STAR-DELTA, 1500RPM, 50Hz) 2 Ton

**LABOUR COSTS:**

Total Distance \_\_\_\_\_ km (1 trip to site & back)

SCOPE OF WORK	SPECIFY LEVEL OF MANPOWER	RATE	NO OF HOURS	TOTAL
Inspection of equipment	1XPM,1XSA,1XSO		5,5,5	
Travel time (1 trip to site and back)	1XPM,1XSA,1XSO			
Remove	1XSA,2XGW		8,8	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Transport equipment (1 trip to site & back)	1XD,1XGW			
Dismantle in workshop	1XSA,1XGW		2,2	
Clean	1XGW		6	
Inspect	1XT,1XSA		2,2	
Report	1XSA		1	
Rewind stator	1XSA,1XSS		24,24	
Check motor heaters	1XSA,1XSS		1,1	
Bearing RTD's & thermistors	1XSA,1XSS		1,1	
Replace bearings (DE & NDE)	1XSA,1XSS		2,2	
Re-balance rotor shaft	1XSA,1XSS		4,4	
Check shaft extension run-out	1XSA,1XSS		1,1	
Assemble	1XSA,1XSS		1,1	
Performance test	1XSA,1XSS		3,3	
Routine test (no-load & short circuit)	1XSA,1XSS		1,1	
Megger test	1XSA,1XSS		1,1	
Check winding resistance	1XSA,1XSS		1,1	
Corrosion Protect	1XSA,1XSS		16,16	
Test reports before & after	1XSA		1	
Laser align	1XSA,1XSS		3,3	
Travelling time (1 trip to site and back)	1XSA,2XGW			
Commission	1XPM,1XT,1XSA		2,2,2	
Travelling time (1 trip to site and back)	1XPM,1XT,1XSA			
<b>TOTAL LABOUR COSTS</b>			<b>(excl. VAT)</b>	

**TRANSPORT COSTS:**

TYPE OF VEHICLE	RATE/km	TOTAL DISTANCE	TOTAL AMOUNT
Inspection using 2500cc 4x2 LDV			
2500cc 4x2 LDV for staff to remove equipment			
Transport equipment from site to your workshop (Truck 5 – 8 Ton with crane)			
Transport equipment from your workshop to site (Truck 5 – 8 Ton with crane)			
2500cc 4x2 LDV for staff to install equipment			
2500cc 4x2 LDV to test & commission			
<b>TOTAL TRANSPORT COSTS</b>		<b>(excl. VAT)</b>	

**TOTAL COST:**

<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(excl. VAT)</b>	
<b>TOTAL LABOUR COSTS + TOTAL TRANSPORT COSTS</b>	<b>(incl. VAT)</b>	



## 10.17 ACCOMMODATION

ACCOMMODATION OPTIONS			1	2	3	4			LOWEST DAILY COST (1 – 4)
ITEM	NUMBER OF DAYS	NUMBER OF PERSONS	DAILY RATE*	ACCOMMODATION ALLOWANCE		CONTRACTORS MOBILE ACCOMMODATION			TOTAL (Excl. VAT)
				With meals (R600 + Allowance)	Without meals (R450 + Allowance)	Cost/person/day**	Rand/km***	Site Mobilisation & De-Mobilisation	
Item 12.1	12	5							
Item 12.2	12	5							
Item 12.3	10	5							
Item 12.4	8	4							
Item 12.5	4	4							
Item 12.13	4	6							
Item 12.15	6	5							
<b>SUB TOTAL (excl. VAT)</b>									
<b>SUB TOTAL (incl. VAT)</b>									

\***DAILY RATE** means the cost of a person for each 24 hour day if own accommodation is utilised, expressed in Rand/person/day.

\*\***Cost/person/day** rental for own mobile accommodation units, expressed in Rand/person/day.

\*\*\***Rand/km** these are transport rates to site and they include travel time and are expressed in Rand/km.

NOTE:

- All open spaces must be completed in full.
- If option 4 is used, the contractor will be able to provide own mobile accommodation

**10.18 SUMMARY**

<b>TABLE NUMBER</b>	<b>LABOUR (excl. VAT)</b>	<b>TRANSPORT (excl. VAT)</b>	<b>ACCOMMODATION (excl. VAT)</b>	<b>TOTAL (excl. VAT)</b>
From Item 10.1				
From Item 10.2				
From Item 10.3				
From Item 10.4				
From Item 10.5				
From Item 10.6			XXXXXXXXXXXXXXXX	
From Item 10.7			XXXXXXXXXXXXXXXX	
From Item 10.8			XXXXXXXXXXXXXXXX	
From Item 10.9			XXXXXXXXXXXXXXXX	
From Item 10.10			XXXXXXXXXXXXXXXX	
From Item 10.11			XXXXXXXXXXXXXXXX	
From Item 10.12			XXXXXXXXXXXXXXXX	
From Item 10.13				
From Item 10.14			XXXXXXXXXXXXXXXX	
From Item 10.15				
From Item 10.16			XXXXXXXXXXXXXXXX	
<b>TOTAL (excl. VAT)</b>				
<b>TOTAL (incl. VAT)</b>				