



GAUTENG PROVINCE
INFRASTRUCTURE DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

Tender No:

ANNEXURE A

Specification

Price rates for renovations, servicing, repairs and maintenance of the lift & escalators installations

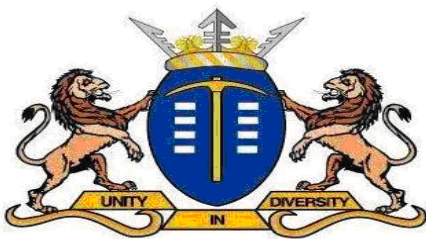
Under

Cluster 4 buildings

On behalf of

Gauteng Department of Infrastructure Development

Contract Period: 36 months



GAUTENG PROVINCE
INFRASTRUCTURE DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

Tender No:

PART 1

List of elevators



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Tender No:

PART 1

List of elevators

Institution name	Manufacturer	Lift Type	Lift Number	Capacity (kg)	No. of floors
Charlotte Maxeke Hospital Block 1A	Hyundai	Pass/stretchers	01/L5473	2000	6
Charlotte Maxeke Hospital Block 1B	Hyundai	Pass/stretchers	01/L5474	2000	6
Charlotte Maxeke Hospital Block 1C	Hyundai	Pass/stretchers	01/L5475	2000	6
Charlotte Maxeke Hospital Block 2A	Hyundai	Pass/stretchers	01/L5476	2000	6
Charlotte Maxeke Hospital Block 2B	Hyundai	Pass/stretchers	01/L5477	2000	6
Charlotte Maxeke Hospital Block 2C	Hyundai	Pass/stretchers	01/L5478	2000	6
Charlotte Maxeke Hospital Block 1E	Hyundai	Pass/stretchers	01/L5479	1150	11
Charlotte Maxeke Hospital Block 2E	Hyundai	Pass/stretchers	01/L5480	1150	7
Charlotte Maxeke Hospital Block AA	Hyundai	Pass/stretchers	01/L5481	1000	10
Charlotte Maxeke Hospital Block AB	Hyundai	Pass/stretchers	01/L5482	1000	10
Charlotte Maxeke Hospital Block BA	Hyundai	Pass/stretchers	01/L5483	1000	18
Charlotte Maxeke Hospital Block BB	Hyundai	Pass/stretchers	01/L5484	1000	18
Charlotte Maxeke Hospital Block CB	Hyundai	Pass/stretchers	01/L5485	1000	18
Charlotte Maxeke Hospital Block CA	Hyundai	Pass/stretchers	01/L5486	1000	18
Charlotte Maxeke Hospital Block EA	Hyundai	Pass/stretchers	01/L5487	1000	10
Charlotte Maxeke Hospital Block EB	Hyundai	Pass/stretchers	01/L5488	1000	10
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE6592	2000	9



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Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6595	2000	9
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6589	2000	9
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6598	1200	14
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE7878	1200	14
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6596	2000	9
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6593	2000	9
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6298	1200	14
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6599	2000	9
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6547	2000	9
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6594	2000	9
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6591	2000	9
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6584	1200	9
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE7873	2000	9
Charlotte Maxeke Hospital (theatre lift)	Koyo	Pass/stretch		2000	9
Charlotte Maxeke Hospital	Koyo	Goods		4000	6
Charlotte Maxeke Hospital	Koyo	Escalator	JESC279	N/A	N/A
Charlotte Maxeke Hospital	Koyo	Escalator	JESC280	N/A	N/A
Charlotte Maxeke Hospital	Koyo	Escalator	JESC281	N/A	N/A
Charlotte Maxeke Hospital	Koyo	Escalator	JESC282	N/A	N/A
Charlotte Maxeke Hospital	Koyo	Escalator	JESC283	N/A	N/A
Charlotte Maxeke Hospital	Koyo	Escalator	JESC284	N/A	N/A
Charlotte Maxeke admin lift	IFE	Passenger	02/L5759	450	4
Charlotte Maxeke escalator	IFE	Escalator	E823	N/A	N/A
Charlotte Maxeke escalator	IFE	Escalator	E824	N/A	N/A
Charlotte Maxeke hospital Block D	Koyo	Passenger	02/L4484	1000	18
Charlotte Maxeke hospital Block D	Koyo	Passenger	02/L4494	1000	18
Charlotte Maxeke hospital Golden Oaks	Koyo	Passenger	JE6634	1050	19
Charlotte Maxeke hospital Golden Oaks	Koyo	Passenger	JE6635	1050	19
Transvaal Memorial Institution lift A	Vision	Passenger	02/L2138	1600	4
Transvaal Memorial Institution lift B	Vision	Passenger	02/L2139	1600	4
Transvaal Memorial Institution lift C	Vision	Passenger	02/L2140	1600	4

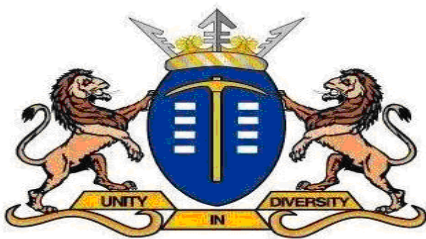


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Transvaal Memorial Institution lift D	Vision	Passenger	02/L2141	1000	2
Transvaal Memorial Institution lift E	Vision	Passenger	02/L2142	1350	5
Hillbrow CHC Xray	Koyo	Passenger	02/L4490	1000	2
Hillbrow CHC Boiler house	Koyo	Passenger	02/L4609	1050	3
Hillbrow CHC Ward 21	Koyo	Passenger	02/L4489	1600	3
Hillbrow CHC Stores	Koyo	Passenger/Go ods	02/L4608	1000	3
Hillbrow CHC Admin	Otis	Passenger			2
Hillbrow CHC Admin	Otis	Passenger			2
Hillbrow CHC Pink building	Otis	Passenger		420	2
Discoverers CHC	Koyo	Passenger	02/L4492	1350	6
Discoverers CHC	Koyo	Passenger/Str etcher	02/L4493	1350	6
Westhoven Regional office	Schindler	Passenger	JE5623	690	4
Bonalesedi	Vision	Passenger	02/L2127	1000	8
Bonalesedi	Vision	Passenger	02/L2128	1000	8
Leratong Hospital lift A	Wells	Pass/stretch	02/L2530	1840	4
Leratong Hospital lift B	Wells	Pass/stretch	02/L2520	1840	4
Leratong Hospital lift C	Wells	Pass/stretch	02/L2522	1840	4
Leratong Hospital lift D	Wells	Pass/stretch	02/L2521	1840	4
Leratong Hospital lift E	Wells	Pass/stretch	02/L2523	1840	4
Leratong Hospital lift F	Wells	Pass/stretch	02/L2524	1840	4
Leratong Hospital Nurses A	Wells	Passenger	02/L2527	980	10
Leratong Hospital Nurses B	Wells	Passenger	02/L2528	980	10
Leratong hospital hoist		Hoist			3
Leratong Hospital hoist		Hoist			3
Dr Yusuf Dadoo	Shorts Lifts	Pass/stretch	02/L2319	1600	4
Dr Yusuf Dadoo	Shorts Lifts	Pass/stretch	02/L2320	1250	2
Dr Yusuf Dadoo	Shorts Lifts	Pass/stretch	02/L2321	1600	4
Dr Yusuf Dadoo	Koyo	Pass/stretch	JE357	1600	4
Dr Yusuf Dadoo Pharmacy		Goods		1600	2



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PART 2

SCOPE OF CONTRACT



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PART 2

2. SCOPE OF CONTRACT

This Tender/Contract relates to the provision of comprehensive maintenance and repairs of the elevators as stated in Annexure "F" in accordance with the requirements as laid down in this document.

No office or telephone facilities will be provided to the contractor, the contractor may use a lift motor room as an office.

The Contractor Agrees and Undertakes to:

Provide fully comprehensive maintenance on the elevators in accordance with the terms of this agreement.

Acknowledges that planned, preventative maintenance on the units shall be the major objective of this agreement.

Systematically and regularly examine and where necessary adjust the equipment in accordance with the Occupational Health and Safety Act of 1993 and the South African National Standards 50081 regulations, latest published editions.

Ensure valid annexures as required by the Department of labour to be kept in place in the motor room.

Ensure that only a "competent" person as defined in the Occupational Health and Safety Act directly employed and supervised by him shall carry out all the repair and maintenance work of a technical nature.

The response time to any callout are kept to an absolute minimum. In terms of this agreement the Contractor agrees that the maximum response time to any life-threatening situation or occupied callback will not exceed thirty (30) minutes and the maximum response time to any other callout will be a maximum of sixty (60) minutes during or after normal working hours. The response time means the period of time from when the Contractor was first notified of the problem until the time the technician arrives on site.

Provide a callout service seven (7) days a week, twenty-four (24) hours per day without additional expense to the Department except for call-outs caused by abuse or misuse of the equipment.



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Callouts due to abuse or misuse of the equipment must also be attended to seven (7) days a week, twenty-four (24) hours per day.

Perform the maintenance and repair work, except in the case of callouts, required in terms of this agreement during normal working hours, Monday to Friday, public holidays excluded.

Supply and use only new replacement parts that are correctly designed and manufactured in all respects.

Supply, repair or replace all parts made necessary by normal wear and tear or failure without expense to the Department.

Replace all ropes whenever necessary to ensure an adequate factor of safety.

Replace all motor room, shaft, pit and lift car enclosure lamps and fittings or florescent tubes, starters and ballasts where necessary.

Maintenance, repair or replacement of existing sump pumps in the pit(s)

Provide a maintenance register in the motor room of each elevator and accurately maintain records of all maintenance procedures, repairs, breakdowns, call-outs, safety operation checks and tests and all site visits.

No modification to the equipment may be carried out without the Customers prior approval and written consent.

The Contractor must ensure the reliability of the equipment and the safety and comfort of the passengers using the equipment.

Inform the Customers authorized agent at every visit before commencing any maintenance or repair work.

The downtime of the equipment shall be kept to a minimum.

The contractor shall appoint a Independent Lift Inspector for the Annexure B inspections and Certificate

2.2 Exclusions from the Elevator Contractor's obligations

Renewals or repairs necessitated by means of negligence, malicious damage or misuse of the "equipment".

2.3 Liability Contractor shall not be held responsible for any injuries or damage caused to any person(s) or property except for such injuries and/or damage directly occasioned by the acts or omissions of the Contractor or his employees.



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The Contractor shall not be liable for any loss, damage or delay caused by strikes, lockouts, fire, explosions, theft, floods, riots, civil commotion, war or any cause outside his direct control.

The Contractor shall not be held liable for consequential damage unless caused by his negligence or that of his employees or representatives.

2.5 Access to machine room (s)

Should any representative of the Customer require access to the machine room for maintenance or inspection purposes, the Contractor must provide access to the representative at no additional cost.

2.6 Inspections

The Customer reserves the right to authorize independent inspections of individual or entire installations, using suitable qualified persons at any time. The independent inspections shall in no way limit the Contractor's liabilities or obligations in terms of this agreement. The Contractor or his representative shall be present at every inspection of the installation and the Contractor, in terms of this agreement, shall provide the necessary facilities at no additional cost.



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PART 3

TECHNICAL SPECIFICATIONS



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PART 3

TECHNICAL SPECIFICATION AND DETAIL REQUIREMENTS OF THIS TENDER

3.1 The service provider shall be required to maintain the complete installation and equipment in a proper and safe operating condition, to clean, adjust and lubricate the equipment as required in terms of the Contract, repair or replace all electrical and mechanical parts as necessary due to wear and tear.

This shall include, but not limited to the following:

- a) Examine the system in accordance with any applicable regulation framed under the Occupational Health and Safety Act 85 of 1993, as per SANS 1545
- b) Properly maintain, adjust and keep the installation and equipment in a safe and proper operating condition at all times,
- c) Repair/replace all parts of the installation which may become necessary for the proper use and / or operation of the installation,
- d) Examine, adjust and lubricate the complete installation, supply of all lubricants, replacement parts and the cleaning of material as required for proper maintenance of the equipment,
- e) Examine, periodically and when necessary, all devices and perform any statutory safety tests on a shift basis where applicable, and before the expiring of the required intervals.
- f) Complete the services, maintenance or repair action report, which shall be submitted with any invoice(s).
- g) Provide manufactures warranty & guarantee for all equipment replaced.



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SERVICING SCHEDULES:

Contractor to provide Log/Record book in motor room:

3.2 MAINTENANCE INSTRUCTIONS FOR SERVICING OF LIFTS

Monthly maintenance

- 3.2.1 See owner's representative and attend to all complaints
- 3.2.2 Inspect the operating conditions for the lift and machine room, check for noise, vibrations and clean the hoist way pit.
- 3.2.2 Inspect, clean the equipment in machine room and check temperatures.
- 3.2.4 Check condition of brake.
- 3.2.5 Check all landing door locks and car door switch thoroughly,** adjust where necessary.
- 3.2.6 Inspect the hoist way, cage and door interlocks.
- 3.2.7 Inspect the car door and top of car.
- 3.2.8 Check the pit environments and thoroughly clean.
- 3.2.9 Check all limits and safeties.**
- 3.2.10 Check pit switches
- 3.2.11 Check floor levels on every floor, hall lanterns, hall position indicators, tell tale lights, push and touch buttons. Check car operating panel buttons, tell tale lights, floor position indicators, operation of fan, alarm bell, intercom and emergency light unit.
- 3.2.12 Check operation of detectors, light rays or safety shoes. Check flexes for any damage or wear.
- 3.2.13 Clean car light diffusers

Quarterly maintenance (3 monthly)

- 3.3.1 All monthly maintenance activities
- 3.3.2 Check the DC, AC electric brake parts.
- 3.3.3 Check voltage of any concerning parts.
- 3.3.4 Check tightness for all of power terminals (motor & control panel).
- 3.3.5 Clean landing door hanger cases. Lubricate moving parts. Check and adjust where necessary all landing door hangers, upthrust rollers, air cords and landing door shoes.
- 3.3.6 Check terminal slow down and final limit switches.
- 3.3.7 Level control device check.
- 3.3.8 Guide shoe wearing check & operation of roller guide shoe check, rail cleaning check.
- 3.3.9 Check tightness of hoist way inside expansion bolts and cage bolts.
- 3.3.10 Check the flange and limit switch.
- 3.3.11 Check oil condition of the rail.



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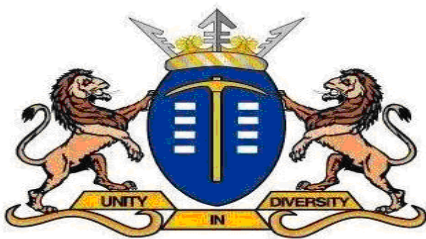
- 3.3.12 Inspect the plunger surface.
- 3.3.13 Check condition of the buffers.

Semi-annual maintenance (6 monthly)

- 3.4.1 All quarterly activities
- 3.4.2 Check all the fuses on controller. Check all connections on controller and main motor
- 3.4.3 Check and clean traction machine components.
- 3.4.4 Check counterweight overrun.
- 3.4.5 Check guide rails and rail fixings
- 3.4.6 Check oiling on all rotators.
- 3.4.7 Inspect all the switches at the car top.
- 3.4.8 Inspect and adjust rope tensions and lubricate main ropes.**
- 3.4.9 Clean and lubricate governor sheave in pit.
- 3.4.10 Inspect the trailing cables for damage and trailing cable hitch under the car.
- 3.4.11 Overload setting and singles check & check functionality of final limit switch.

Annual maintenance (12 monthly)

- 3.5.1 All semi-annual activities
- 3.5.2 Strip, clean and adjust brake. Check condition of brake linings.
- 3.5.3 Change oil in main gearbox
- 3.5.4 Clean governor and lubricate all pins, check operation and operate safeties**
- 3.5.5 Testing of the buffers**



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PART 4

Priced rates for servicing, repairs, maintenance of the lifts installation



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PART 4

Priced rates for servicing, repairs, maintenance of the lifts installation

- 4.1 All prices are to be quoted in RSA currency.
- 4.2 Prices to carry out the scheduled servicing, repairs and maintenance of the **Lift Installation at various institutions as listed per Section 2** Prices must include all labour, traveling cost and cleaning material.
- 4.3 A 5% price adjustment for inflation will be applied annually to the maintenance rates provided below for the year 2 and year 3 of the contract period.



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Summary Price Schedule:

Institution name	Manufacturer	Lift Type	Lift Number	Capacity (kg)	No. of floors	Price per Month	Price per Year
Charlotte Maxeke Hospital Block 1A	Hyundai	Pass/stretch	01/L5473	2000	6		
Charlotte Maxeke Hospital Block 1B	Hyundai	Pass/stretch	01/L5474	2000	6		
Charlotte Maxeke Hospital Block 1C	Hyundai	Pass/stretch	01/L5475	2000	6		
Charlotte Maxeke Hospital Block 2A	Hyundai	Pass/stretch	01/L5476	2000	6		
Charlotte Maxeke Hospital Block 2B	Hyundai	Pass/stretch	01/L5477	2000	6		
Charlotte Maxeke Hospital Block 2C	Hyundai	Pass/stretch	01/L5478	2000	6		
Charlotte Maxeke Hospital Block 1E	Hyundai	Pass/stretch	01/L5479	1150	11		
Charlotte Maxeke Hospital Block 2E	Hyundai	Pass/stretch	01/L5480	1150	7		
Charlotte Maxeke Hospital Block AA	Hyundai	Pass/stretch	01/L5481	1000	10		
Charlotte Maxeke Hospital Block AB	Hyundai	Pass/stretch	01/L5482	1000	10		
Charlotte Maxeke Hospital Block BA	Hyundai	Pass/stretch	01/L5483	1000	18		
Charlotte Maxeke Hospital Block BB	Hyundai	Pass/stretch	01/L5484	1000	18		
Charlotte Maxeke Hospital Block CB	Hyundai	Pass/stretch	01/L5485	1000	18		
Charlotte Maxeke Hospital Block CA	Hyundai	Pass/stretch	01/L5486	1000	18		
Charlotte Maxeke Hospital Block EA	Hyundai	Pass/stretch	01/L5487	1000	10		
Charlotte Maxeke Hospital Block EB	Hyundai	Pass/stretch	01/L5488	1000	10		
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6592	2000	9		
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6595	2000	9		
Charlotte Maxeke Hospital	Koyo	Pass/stretch	JE6589	2000	9		



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Hospital							
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE6598	1200	14		
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE7878	1200	14		
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE6596	2000	9		
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE6593	2000	9		
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE6298	1200	14		
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE6599	2000	9		
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE6547	2000	9		
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE6594	2000	9		
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE6591	2000	9		
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE6584	1200	9		
Charlotte Maxeke Hospital	Koyo	Pass/stretchers	JE7873	2000	9		
Charlotte Maxeke Hospital (theatre lift)	Koyo	Pass/stretchers		2000	9		
Charlotte Maxeke Hospital	Koyo	Goods		4000	6		
Charlotte Maxeke Hospital	Koyo	Escalator	JESC279	N/A	N/A		
Charlotte Maxeke Hospital	Koyo	Escalator	JESC280	N/A	N/A		
Charlotte Maxeke Hospital	Koyo	Escalator	JESC281	N/A	N/A		
Charlotte Maxeke Hospital	Koyo	Escalator	JESC282	N/A	N/A		
Charlotte Maxeke Hospital	Koyo	Escalator	JESC283	N/A	N/A		
Charlotte Maxeke Hospital	Koyo	Escalator	JESC284	N/A	N/A		
Charlotte Maxeke admin	IFE	Passenger	02/L5759	450	4		



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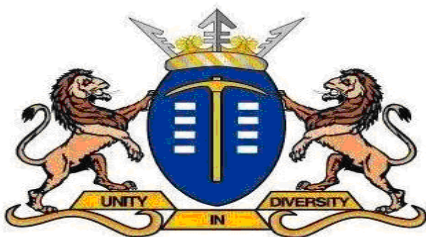
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lift							
Charlotte Maxeke escalator	IFE	Escalator	E823	N/A	N/A		
Charlotte Maxeke escalator	IFE	Escalator	E824	N/A	N/A		
Charlotte Maxeke hospital Block D	Koyo	Passenger	02/L4484	1000	18		
Charlotte Maxeke hospital Block D	Koyo	Passenger	02/L4494	1000	18		
Charlotte Maxeke hospital Golden Oaks	Koyo	Passenger	JE6634	1050	19		
Charlotte Maxeke hospital Golden Oaks	Koyo	Passenger	JE6635	1050	19		
Transvaal Memorial Institution lift A	Vision	Passenger	02/L2138	1600	4		
Transvaal Memorial Institution lift B	Vision	Passenger	02/L2139	1600	4		
Transvaal Memorial Institution lift C	Vision	Passenger	02/L2140	1600	4		
Transvaal Memorial Institution lift D	Vision	Passenger	02/L2141	1000	2		
Transvaal Memorial Institution lift E	Vision	Passenger	02/L2142	1350	5		
Hillbrow CHC Xray	Koyo	Passenger	02/L4490	1000	2		
Hillbrow CHC Boiler house	Koyo	Passenger	02/L4609	1050	3		
Hillbrow CHC Ward 21	Koyo	Passenger	02/L4489	1600	3		
Hillbrow CHC Stores	Koyo	Passenger/Go ods	02/L4608	1000	3		
Hillbrow CHC Admin	Otis	Passenger			2		
Hillbrow CHC Admin	Otis	Passenger			2		
Hillbrow CHC Pink building	Otis	Passenger		420	2		
Discoverers CHC	Koyo	Passenger	02/L4492	1350	6		
Discoverers CHC	Koyo	Passenger/Str etcher	02/L4493	1350	6		
Westhoven Regional office	Schindler	Passenger	JE5623	690	4		
Bonalesedi	Vision	Passenger	02/L2127	1000	8		
Bonalesedi	Vision	Passenger	02/L2128	1000	8		



Leratong Hospital lift A	Wells	Pass/stretchor	02/L2530	1840	4		
Leratong Hospital lift B	Wells	Pass/stretchor	02/L2520	1840	4		
Leratong Hospital lift C	Wells	Pass/stretchor	02/L2522	1840	4		
Leratong Hospital lift D	Wells	Pass/stretchor	02/L2521	1840	4		
Leratong Hospital lift E	Wells	Pass/stretchor	02/L2523	1840	4		
Leratong Hospital lift F	Wells	Pass/stretchor	02/L2524	1840	4		
Leratong Hospital Nurses A	Wells	Passenger	02/L2527	980	10		
Leratong Hospital Nurses B	Wells	Passenger	02/L2528	980	10		
Leratong hospital hoist		Hoist			3		
Leratong Hospital hoist		Hoist			3		
Dr Yusuf Dadoo	Shorts Lifts	Pass/stretchor	02/L2319	1600	4		
Dr Yusuf Dadoo	Shorts Lifts	Pass/stretchor	02/L2320	1250	2		
Dr Yusuf Dadoo	Shorts Lifts	Pass/stretchor	02/L2321	1600	4		
Dr Yusuf Dadoo	Koyo	Pass/stretchor	JE357	1600	4		
Dr Yusuf Dadoo Pharmacy		Goods		1600	2		
Sub-total							
Add VAT @ 15%							
Grand Total (Total of prices carried to form of Offer and Acceptance in Part C1.1)							



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Tender No: _____

TENDERER'S SIGNATURE _____

PRINT NAME _____

NAME OF FIRM _____

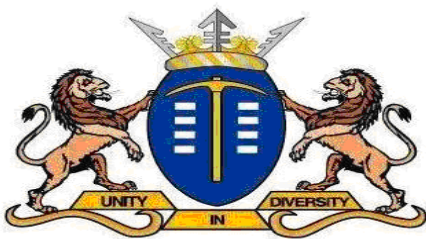
ADDRESS _____

_____ CODE _____

TELEPHONE NO _____ CELL NO _____

FAX NO _____

E-MAIL ADDRESS _____ DATE _____



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PART 5

ANNEXURES



GAUTENG PROVINCE

INFRASTRUCTURE DEVELOPMENT

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Tender No:

ANNEXURE B

PERFORMANCE SPECIFICATION (SCORE CARD)

1. GENERAL

The Contractors performance will be measured against the following four parameters.

- Minimum incidence of faults
- Minimum downtime
- Good record keeping
- Optimal service costs

Operational efficiency will be evaluated against the standards set out above. The statistics will be recorded and set out in the quarterly report submitted to the Department by the Contractor.

2. AVAILABILITY OF SYSTEMS

Any machine or system will in general be regarded as available when the system is performing the duty for which it originally was designed. When any component is "out of operation" this shall mean any component not working at all as well as when the component is still working but when the performance of the component cannot meet the design duties as originally specified.

3. PERFORMANCE STANDARD

The contractor shall restore each system as detailed in this specification and maintain it to ensure the successful operation thereof. For this purpose the minimum requirements shall be measured against availability of the overall system of 90% or better. This availability will be calculated as follows.



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$$\text{Availability} = \frac{(T_i - T_{di})}{T_i} \times 100$$

Where

T_i - The length of the time interval i for the applicable month under consideration expressed in hours

T_{di} - The total of the MTTR's for the individual system during the time interval i for the applicable month under consideration expressed in hours

MTTR- This mean the time to repair the system as determined from the fault/service/repair logbook, and shall be equivalent to the sum of all the times that the system or any part of the system, does not conform to the operational requirements.

4. **EXAMPLE CALCULATION**

4.1 April has 30 days @ 24 hour operation per day, this makes T_i 720 hours

4.2 During the month 3 breakdowns, each with a response time of 1 hour and a repair time of 5 hours. The scheduled services takes 20 hours.

In this example

MTTR1 $3 \times (1+5) = 18$ hours and MTTR2 = 20

Sum of MTTR's $18 + 20$ giving $T_{di} = 38$ hours

4.3 Availability
$$\frac{(720-38)}{720} \times 100$$
$$= 94,72\%$$



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The onus shall rest on the contractor to submit the necessary motivation to the Department for its consideration and decision for MTTR periods, which the contractor considers to have been caused by factors outside his control, and which should not be included in the calculations, e.g. malicious damage, lightning, import of material, etc. Actual damaged or faulty equipment shall be presented by the contractor as proof before removal thereof or repairs thereto.

Where breakages or faults are caused by factors outside the contractor's control, he shall immediately report the incident to the Department in writing, giving a full list of the details/persons involved. A specified quotation must be attached to the report including and showing mark up. If prices are unreasonably high, the Department reserves the right to pay the contractor an amount in line with current market related prices only, plus mark up.

5. GUARANTEE OF PERMORMANCE

The contractor shall guarantee the availability of 90% of all systems specified in this contract, as calculated and specified in paragraph 4 hereof. In the event of the contractor failing to achieve this specified availability, a penalty, equal to ten cents per One Hundred Rand of the total contract value will be levied against the contractor for each percentage point per month that the overall system availability is below the availability percentage as specified herein. The penalty will be levied each month during which the availability is below the specified percentage, and not on an annual or contract period basis.

6. CONDITIONS AND CIRCUMSTANCES EXCLUDED FROM THE AVAILABILITY CONCEPT

6.1 Elevators undergoing repairs where inspection authorities is involved.

6.2 In cases where spares have to be import or specially manufactured. In all these cases the fact must be proofed and estimated time needed to obtain the spares must be given.



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7. MAINTENANCE CONTROL SYSTEMS

7.1 MACHINE IDENTIFICATION NUMBER

A unique identification number shall be provided on each and every equipment item to be maintained after the acceptance of the tender. Each number is made up as follows:

- a) The building identification number. This number identifies each building and since machines installed are related to a building, it will not be necessary to provide the building ID number on the machines/equipment
- b) The system identification number. System numbers have been allocated to the type of service under which the equipment was originally installed.
- c) The machine number for each system type. Since the compressed air installation is related to the operation of boilers, the same system identification number has been used though out.

The number to be provided on any machine/installation in a building will thus be in the format of the system number followed by the machine number e.g. M17/12

The number shall be clearly engraved in an aluminum plate and shall not be less than 10mm high. The plate shall be fastened to the machine/equipment item in a conspicuous position with self-tapping screws or pop rivets.

Identification numbers will be issued to the contractor after the acceptance of his/their tender.

8. QUARTERLY REPORTS



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The Contractor shall submit written quarterly reports to the Department on the status of the systems and progress achieved. The schedules and service sheets comprising the quarterly report, enclosed as ANNEXURE "B" hereto, serve as a guide ONLY and give the MINIMUM requirements. The Contractor shall prepare his own schedules and service sheets for acceptance by the Department and shall make his own arrangements for printing and duplicating of quarterly reports and service sheets.

The reports shall also be countersigned by the Department of Infrastructure Development Representative on site and he/she shall endorse the sheets to the effect that the plant is, in the opinion of the Officer in charge of the building operating satisfactorily. His/her name in print, his signature, the date and his telephone number must appear on the sheet.

This report shall show the following:

- Availability as calculated in paragraph 4 on a daily basis for continuous 30 day periods with the running average for those periods
- Any complaints received during the period, as well as the reason for the complaints, with corrective actions taken and dates
- Quarterly test results, showing, with dates:
 - equipment tested
 - faulty equipment
 - repairs undertaken
- Call-out log



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- Short description of call-outs with corrective action taken and dates
- Copies of the service sheets for each individual system issued for that period

The identification number of the machine/equipment item repaired/replaced together with the cost for the repair/replacement shall be clearly indicated in the quarterly report. Details of normal servicing need not be described unless a potential defect is found on any piece of equipment, which will need attention in future.

The Quarterly report shall be both narratives and statistical. The statistical content shall deal typically with the incidence and nature of breakdown maintenance carried out during the preceding quarter, equipment downtime and the frequency of spares replacement. The narrative content shall highlight corrective maintenance executed and shall draw attention to ongoing deficiencies being attended to by the Contractor and/or any matters requiring attention by the Chief Directorate: Public Works.

9. **SERVICE SHEETS**

Every service, repair, test etc., shall be fully described on a work sheet which must be completed on site and signed by the Chief Directorate: Public Works. The following minimum information shall appear on work sheets:

- The company name and address
- A work sheet serial number
- The building name
- The system number and system description

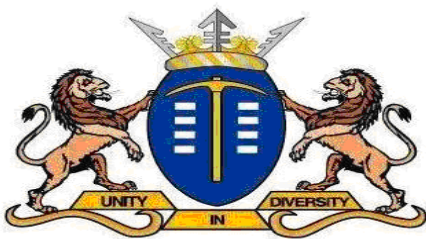


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- The call-out no. (if applicable)
- The nature of the call, i.e. urgent or normal call-out
- A general description of the problem or purpose of the work done
- A statement whether the individual system is in terms of the specification operational or not
- Should the system not be operational the response time and repair time shall be recorded individually
- The ID number, machine/equipment description and description of the repairs/replacements carried out on each machine/equipment item on that specific system
- A list of material used for each machine/component
- A detailed report on the extent of the work done together with the estimated cost involved
- Suggestions to avoid future problems
- A list of the Contractor's personnel responsible for the work with the date, starting time, completion time and distance traveled
- Signature and name of the responsible technician/artisan/engineer
- Signature of the Department of Infrastructure Development Representative



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Service sheets shall also be used for normal routine maintenance services.

10. **SITE MAINTENANCE FILES AND SHELVES**

The contractor shall provide and maintain hard cover A4 maintenance files for each individual system, which shall be kept in the contractor's site offices. These logbooks will remain the property of the Department and may not be removed from the site offices under any circumstances. The contractor shall be required to file all master copies of the Service Reports for each system in chronological order.

Suitable steel or timber shelves shall be provided by the Contractor for storing the maintenance files. These shelves shall become the property of the Department after delivery and erection on site.

11. **REPAIR AND RESPONSE TIME**

It shall be expected of the Contractor to relate his actions in respect of call-outs, repairs and general maintenance to specific prescribed response and repair times.

Depending on the urgency of the call-out, the response times may vary and the table below indicates maximum time-spans.

CALL-OUT TYPE	RESPONSE TIME	REPAIR TIME
Emergency/occupied	½ hour	Refer Definition below
Normal	1 hours	

where:



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RESPONSE TIME shall mean the time lapsed from the time the call-outs are logged by the system operator or person making the call. Until the Contractor responds on site. The time shall be recorded in the Service Sheet if the system is not operational as specified in terms of this specification.

REPAIR TIME shall mean the maximum time taken by the Contractor to repair the fault, in order to limit the downtime of the system to a minimum. The time shall be recorded in the Service Sheet if the system is not operational as specified in terms of this specification.

Unless for circumstances beyond the control of the contractor the down-time on systems shall be limited to the following:

48 hours for completion irrespective of the breakdown

DOWNTIME with respect to call-outs, shall mean the total time for which the system is not 100% operational, i.e. response time plus repair time.

With regard to Routine periodic services, the Contractor shall notify the Regional Representative and the institution at least 7 days in advance.

12. INSPECTION AND TESTING

The Department and/or its duly appointed representative, or any person he may appoint for the purpose, may inspect and test the various portions of the work at all times and shall have full power to reject all or any portion of the work that he may consider to be defective or inferior in quality of material, workmanship or design with respect to the original installation. Any portion of the work so rejected shall be replaced immediately by the Contractor, unless, in the opinion of the Department, the work rejected can be so treated and repaired as to render it fit for incorporation in the contract works. In this event the Contractor shall, at his own risk and expense, be at liberty to repair the work to the satisfaction of the Department. The Contractor



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shall carry out such tests as are necessary, in the opinion of the Department, to prove that the contract requirements are being complied with.

The cost of all tests and/or analyses shall be borne by the Contractor.

13. SITE MEETING

A meeting between the Department and/or its duly appointed representative, and the Contractor shall be held monthly or more frequently if so required by the Department, at a time, date and venue determined by the Department, to discuss all aspects of the maintenance of works as documented in the Quarterly Report. No additional compensation will be paid for this.

The site meetings will be under the chairmanship of the Regional Representative and/or his duly appointed representative.

14. SHUT DOWN OF EQUIPMENT AND PLANT

14.1 No mechanical/electrical equipment or plant involved in this Contract may be shut down, switched off or isolated in any way without prior written permission from the Head of the Institution concerned, being a Superintendent or the most Senior Personnel of the facility/Institution at the time of the request.

14.2 Maintenance and repairs shall be carried out timely, punctually and with the utmost care to minimize the necessity for affecting the services rendered by the installation/equipment covered by this Tender/Contract. Should during the effecting of any repair, it be deemed necessary to isolate any section of the plant arrangements shall be made with the Representative of the Department of Infrastructure Development who will make arrangements with the official in charge of the sections of the institution served, which will be affected by the intended shut-down, prior to proceeding with the intended activities.



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- 14.3 The request for a shut down shall be channeled in the following manner. The Contractor must first approach the Department of Infrastructure Development Representative on Site, so as to assess that the shutdown is necessary. The representative on site will approach the Institution/Facility's authorities for authorization of the shutdown. In the event of any emergency, and a Representative of the Department of Infrastructure Development is not available at the time, the Contractor shall get authority from the Superiors of the Institution or Facility concerned and shall thereafter furnish the Representative on Site with a copy of such written authorization for record purposes.



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15. REPLACEMENT PARTS AND MATERIAL PROVIDED FOR IN THE PARTS AND MATERIAL PRICE SCHEDULE

- 15.1 Authorization for the replacement of parts or materials shall, when such replacement is required, be obtained from the Representative of the Department of Infrastructure Development, before such replacement is executed, subject to the limits set out below.
- 15.2 All labour for scheduled services supervision, operation, and maintenance, standby and after hours repairs will be covered by the rates quoted for in this Tender/Contract. No extras will be paid for labour on this contract.
- 15.3 If replacement of parts or material are necessary for items not covered in the schedule the contractor must submit a written quote to the representative agent.
- 15.4 The Contract has two phases, a repair phase and a maintenance phase.
 Some differences between the phases are noted in the table below:

REPAIR PHASE	MAINTENANCE PHASE
Starts when access is given to an installation.	Starts on day one.
Ends 1 month later.	Ends after 12 months
Has penalties and a 5 % retention No	Has a payment reduction, score card.
12 month guarantee for replacement	No Guarantee. 12-month
Scorecard to apply	3 months defects liability period.
The exact work to be done is determined on site after inspections and tests on the Installations.	The scope is defined in this specification.
The items are measured after inspection on the installations.	The scorecard is used to measure the points and the performance of the Contractor is used to measure the payment reductions.

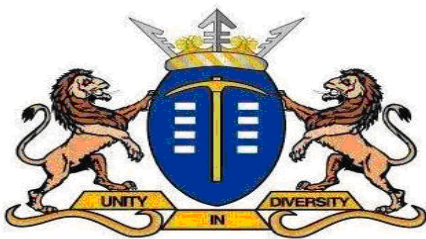


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- 15.5 Installations are to be repaired to a fully serviceable condition if necessary, before any maintenance can commence. Hence the following categories:



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15.5.1 Urgent/emergency repair work

- 15.5.1.1 This is life threatening situations or situations, which pose a potential serious damage.
- 15.5.1.2 Materials and parts for such repair work, shall be eligible for payment but prior authorization shall be obtained from the Representative of the Department of Infrastructure Development, required for the execution of such repairs.
- 15.5.1.3 The written report in respect of expenditure as well as the reasons for emergency/urgency thereof shall be submitted to the Representative of the Department of Infrastructure Development within 48 hours of the occurrence.

15.5.2 Minor Repair Work

- 15.5.2.1 It is needed when the installation show some signs of deterioration but which do not warrant major repairs.
- 15.5.2.2 Materials and parts for such repair work, shall be eligible for payment but prior authorization shall be obtained from the Representative of the Department of Infrastructure Development, required for the execution of such repairs.



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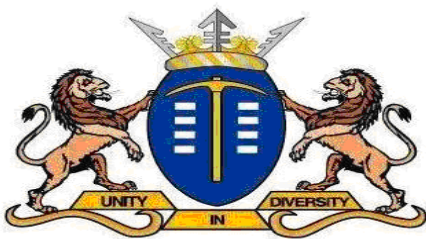
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15.5.3 Major Repair Work

- 15.5.3.1 This is usually the case when the installation concerned requires repairs as a result of the existence of the serious risk of imminent failure, usually the said repairs are executed by a specialist.
- 15.5.3.2 The prior authorization by the Representative of the Department of Infrastructure Development is a pre-requisite before any major repairs can be executed.

16. MAINTENANCE

- 16.1 Maintenance refers to a routine and/or remedial intervention required, ensuring that the asset is retained in a serviceable condition, and also to ensure that it retains its value and usefulness.
- 16.2 There are different kinds of maintenance services that are to be undertaken, depending on the installation to be maintained, namely: -
 - 16.2.1 Preventative Service Maintenance – for which the service provider has to perform certain actions to prevent failure on the operation of the installation in due course.
 - 16.2.2 Condition-based Maintenance – it is corrective maintenance to be performed to restore the installation to its required condition or standard.
 - 16.2.3 Statutory Maintenance – both preventative and condition-based maintenance may contain the elements of statutory maintenance which is defined in the Act as actions performed to meet legal requirements as contained in the



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Occupational Health and Safety Act No 85 of 1993 and other relevant regulations.

16.2.4 Emergency Maintenance – these are reactive maintenance actions performed to restore installations to operational condition.

16.2.5 Incident Maintenance – actions performed to restore an installation to an operational or safe condition after it was damaged as a result of external events.

16.3 The Contractor shall compile the Preventative Service Maintenance Works Programme for periods of three months and submit same in writing in advance to the Representative of the Department of Infrastructure Development, giving him/her enough time to evaluate and to notify the Contractor of possible amendments before approval.

16.4 The contractor shall compile a condition-based Maintenance programme based on the results of machinery inspections as per 16.2.1.

17. LABOUR RATES

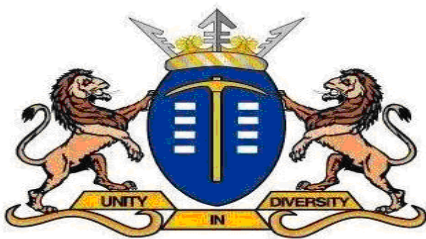
The rates to be used for any work outside of the monthly service scope which also includes attending call outs due to negligent use are as follows:

Lift Technician: R450 per hour

Assistant: R250 per hour

18. INSTRUCTIONS TO CONTRACTOR

18.1 No instructions from any personnel other than the Department of Infrastructure Development Project Manager shall be carried out.



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18.2 The Department of Infrastructure Development will ensure that a **logbook/job card** is kept on Site and that all faults and defects reported after hours are recorded. A report for each call-out will be entered by the Contractor's Supervisor in this book and signed by the Supervisor and the Project Manager employed by the Department of Infrastructure Development.

18.2 The nature of work at the Institutions is such that all repairs will be carried out punctually, with great care and minimal inconvenience to the facility.

19 **REDUNDANT MATERIAL**

The Contractor shall hand over all used parts (worn and/or damaged) to the Representative of the Department of Infrastructure Development as such become the property of the Department of Infrastructure Development and shall be handed to the Representative on Site. **(Refer to GP12)**



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ANNEXURE "C" (EXAMPLE REPORTS)

THE FOLLOWING REPORT FORMS IN THIS ANNEXURE ARE EXAMPLES ONLY AND ARE INCLUDED IN THE SPECIFICATION AS GUIDE TO GIVE THE TENDERER AN IDEA OF WHAT WILL BE EXPECTED OF HIM

(EXAMPLE ONLY)

QUARTERLY MAINTENANCE REPORT FOR THE PERIOD

_____ TO _____

CONTRACT NO. : _____

CITY / TOWN : _____

BUILDING : _____

SYSTEM ID NO. : _____

SYSTEM DESCRIPTION : _____

STATEMENT BY CONTRACTOR

THE CONTENTS OF THIS DOCUMENT IS TRUE AND CORRECT AND ALL SYSTEMS ARE FULLY OPERATIONAL EXCEPT WHERE INDICATED DIFFERENTLY IN THIS DOCUMENT

CONTRACTOR (PRINT) : _____

COMPILED BY (PRINT) : _____



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SIGNED BY (CONTRACTOR) : _____

DATE : _____

ENDORSED BY OFFICIAL IN CHARGE

ALL SYSTEMS WERE TESTED IN MY PRESENCE AND TO THE BEST OF MY
KNOWLEDGE IS FULLY OPERATIONAL EXCEPT WHERE INDICATED IN THIS
REPORT

OFFICIAL IN CHARGE (PRINT) : _____

OFFICIAL IN CHARGE (SIGN) : _____

TEL NUMBER : _____

DATE : _____

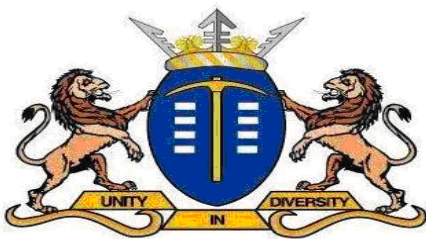


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**QUARTERLY MAINTENANCE REPORT
 WITH A SCORE CARD
 (EXAMPLE ONLY)**

AVAILABILITY OF THE SYSTEM/MACHINE

MONTH _____	MONTH _____	MONTH _____
T <i>i</i> hours	T <i>i</i> hours	T <i>i</i> hours
T <i>d</i> <i>i</i> hours	T <i>d</i> <i>i</i> hours	T <i>d</i> <i>i</i> hours
Availability %	Availability %	Availability %
Service Sheet reference no's	Service Sheet reference no's	Service Sheet reference no's
.....
.....
Notes (if any)	Notes (if any)	Notes (if any)
.....
.....
.....
.....



COMPLAINTS RECEIVED

[illegible]



REPAIRS CARRIED OUT DURING THIS PERIOD

[illegible]



<p>.....</p> <p>.....</p>	<p>.....</p> <p>.....</p>	<p>.....</p> <p>.....</p>	<p>.....</p> <p>.....</p>
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(EXAMPLE ONLY)

DATE	NATURE OF CALL-OUT	SERVICE SHEET REF. NO.
.....
.....
.....
.....
....
.....
.....



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NATURE OF SERVICE	CALL OUT	MAIN- TENANCE	REPAIRS	COM- PLAINT	INSPEC- TION	RESTORA- TION	COMMIS- SIONG	UNSCHE- DULED	OTHE R
-------------------------	-------------	------------------	---------	----------------	-----------------	------------------	------------------	------------------	-----------

* **Mark applicable item**

TIME SPENT AND DOWN TIME ON INSTALLATION	TIME IN (h) & TRAVEL	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
	RESPONSE TIME HOURS							
	WORKED DOWN TIME							
	TRAVELLING TIME							
	DISTANCE TRAVEL							

DESCRIPTION/SUGGESTIONS.

.....
.....
.....

LIST OF MATERIAL USED

.....
.....
.....
.....

ESTIMATED COST (EXCLUDING VAT)

MATERIALS **R**.....
LABOUR **R**.....
OVERHEADS **R**.....
TOTAL **R**.....

NAMES OF CONTRACTOR'S PERSONNEL RESPONSIBLE

.....

SIGNED
TECHNICIAN/ARTISAN/ENGINEER



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Tender No:

.....	DATE
-------	------------

COMMENT

.....

FOR USE OF CHIEF DIRECTORATE:WORKS FORMAN ONLY REF COMMENT	SIGNED TECHNICIAN/ARTISAN/ENGINEER DATE
FOR USE OF CHIEF DIRECTORATE: WORKS FORMAN ONLY REF COMMENT	SIGNED DATE