

## **SPECIFICATION AS AND WHEN REQUIRED: ELECTRICAL REPAIRS AND MAINTENANCE AT GAUTENG SOUTH STATIONS.**

### **1. SCOPE OF WORK**

1.1. The scope of the work / services to be provided by the contractor is as follows:

- Carry out planned maintenance and corrective maintenance to electrical installations and infrastructure at various Railway Station Platforms, Buildings, Offices, Workshops, Substations and Signal Relay Rooms.
- The scope also includes a 24hr, Monday to Sunday emergency standby service as and when required by PRASA-CRES (FACILITIES).

1.2. Contract duration will be for 36 months from the time of accepting the appointment.

### **2. DEFINITIONS.**

2.1 PRASA-CRES: One of the subsidiaries of Passenger Rail Agency of South Africa (PRASA) group responsible for managing the property portfolio of the group and the maintenance thereof.

2.2 Facilities Manager: A manager of PRASA-CRES responsible of building and infrastructure portfolio or any person authorised to act in that capacity.

2.3 Normal Working Hours: in this contract normal working hours will be 07h00 to 17h00 Mondays to Fridays excluding public holidays and weekends.

2.4 Contractor: Successful tender who is appointed by PRASA-CRES and will be responsible to carry out the works as per this specification.

### **3. MAINTENANCE REFERENCES**

3.1. All electrical work will be in accordance with the following publications.

- SABS 0142, SABS 1152, and SABS 0147 Code of Practices
- OHS Act 85 of 1993 as amended and
- Other applicable Municipal By-Laws and Regulations

#### **4. MAINTENANCE**

4.1. All planned work will be carried out during normal working hours at the cost tendered for in the Bill of Quantities. Visits to the premises will be as scheduled for the contractor to carry out maintenance work as per the specification. Sites have visitors book which is to be properly completed by the Contractor on every visit and the reason for the visit recorded in the book.

4.2. The Contractor shall produce and issue to PRASA-CRES a written report or service sheet of any testing, inspection, examination, investigation and/or assessment undertaken and execution of any repairs by the Contractor. Reports will highlight.

- the type of work or service done
- problems experienced
- results of inspection
- faults found and their priority thereof

Quotations for any corrective work required shall be submitted to PRASA-CRES and on the approval of such quotations the Contractor will correct or repair accordingly.

The contractor is expected to produce a job card and the job card must be signed by PRASA CRES supervisor.

4.3. PRASA-CRES reserves the right to conduct an independent safety and quality audit to be carried out on the work completed by the contractor. The contractor shall provide his own quality controls to ensure compliance with the specifications and any changes to legislation or regulations applicable. Possible modernisation products to upgrade or to improve the reliability and performance of the installation will be brought to PRASA-CRES for consideration.

#### **5. Contract Performance**

5.1. The contractor will sign a service level agreement with the PRASA-CRES. The performance of the Contractor will be discussed on the monthly basis at meetings scheduled to sit at PRASA CRES offices. Performance Items to be discussed will include:

- the number of breakdowns for specific period
- the turn around time to attend to emergency callouts
- planned vs. actual progress

- submission of reports, invoices and other administration duties
- payment of invoices

## **5.2. Services Measure And Expectations**

Response Times for:

- Emergencies – within 2hrs to determine the status of fault on site.
- Urgent - within 3 hrs
- Non-Urgent - within 12 hrs

## **6. General Information**

- 6.1. The contract shall be registered with the ECB as laid down in the Electrical Installation Regulations of the Occupational Health and Safety Act 85/1993, clause 5.
- 6.2. The electrical contractor shall be or have in his employment an accredited person. Proof must be supplied of the above requirements
- 6.3. The Contractor must have the capacity to be able to work on more than one site at any given time.
- 6.4. Where day to day repairs are to be undertaken, the Contractor shall first estimate the labor and material cost based on the schedule of prices, before proceeding with the job.
- 6.5. All material removed to be returned to PRASA-CRES unless otherwise stated.
- 6.6. Compliance certificates to be issued on completion of all new work done at no cost to PRASA-CRES. Compliance certificates required for existing installations to be priced out at the prescribed set rate.

## **7. SAFETY AND PROVISION OF MATERIALS:**

- 7.1. The contractor is responsible for supply of all material required to repair the faults as per job cards /work order.
- 7.2. All material used shall be SABS approved.
- 7.3. The material item price shall be based on standard market related plus the percentage mark-up fee.

7.4. Prasa Cres Maintenance Manager /Supervisor reserve the right to query price of any material that is on the material list. He /she may request that the contractor justifies a copy of the material purchased, invoices or actual quotes from reputable suppliers.

7.4.1. All materials supplied and workmanship to meet the prescribed Statutory Requirements, including the Occupational Health and Safety Act of 1993.

NB: The contractor material supplier must be reputable material supplier and only market related material prices will not be accepted by PRASA.

**7.5. Provision of a Safety File is a requirement and must be submitted prior to any work commences. The provisional amount of R6000.00 for a Safety File is included in the schedule of rates table, proof of cost will be required before the contract claim the amount.**

#### **8. Quality Of Work and Workmanship:**

- Works with poor workmanship will not be signed off and PRASA Cres reserve the right to hold payments until satisfied with the quality of the works.

#### **9. Non-Compliance:**

- **Safety** – the contractor will always ensure that work is performed in accordance with all the prescribed legal prescripts.
- **NB:** No work is to be done without approval of Safety File and valid signed site access certificate being issued to the contractor. No Contractor will be allowed on site without having attended the safety Induction training and proof is to be submitted to the Project Manager
- **Response time** – if an appointed service provider as per the General provisions of the As and When fails to adhere to the priority levels as prescribed PRASA CRES Facilities department hereby reserves the right to penalise the service provider a penalty fee of 10% of the value of the work and if this provision is continually be violated the contract will be terminated.
- **Proof of Work done**> the contractor will provide photos of before/during and after work completed with claim submitted . Photos can be submitted electronically.
- **Qualified personnel**- It is a requirement that personnel performing/overseeing works issued to the contractor be qualified in specific Trade.

#### **10. Pre-qualification requirements**

If you do not submit the following documents/information, your submission will be disqualified automatically.

- CIDB grade 3 (EB) or higher

- Valid COIDA

#### 11. MATERIAL LIST PRICING BILL

ITEM	DESCRIPTION	UNIT	YEAR 1 RATES ( EXCL VATE)	YEAR 2 RATES ( EXCL VAT )	YEAR 3 RATES ( EXCL VAT)
1.0	LIGHTING				
1.1	LAMP PL 9 COOL WHITE DULUX S 923 TYPE OSRAM	Ea	R	R	R
1.2	LAMP PL13 2PIN ENERGY SAVING	Ea			
1.3	LAMP PL18 4PIN ENERGY SAVING	Ea.			
1.4	LAMP PL18 2PIN ENERGY SAVER	Ea			
1.5	LAMP PL26, 2PIN ENERGY SAVING	Ea			
1.6	LAMP 2 D 16 WATT OSRAM	Ea			
1.7	LAMP 2 D 28 WATT	Ea			
1.8	LAMP. 70 W FOR ONE TYPE HS. SON- E 230 V, 50HZ (INTERNAL IGNITOR)	Ea			
1.9	LAMP, SODIUM VAPOUR. E40 BASE 400 W HIGH PRESSURE, TUBULAR. 230V. 47 MM DIA X 283 MM LONG.( 55/32906-BAL)	Ea			
1.10	LAMPS, SODIUM VAPOUR. E40 BASE, 250 W HIGH PRESSURE, TUBULAR. UNIVERSAL BURNING 220V - 230V. USERS DESCRIPTION 47 MM DIA X 257 MM LONG.	Ea			
1.11	LAMPS, SODIUM VAPOUR. E27 BASE, 70 W HIGH PRESSURE, ELLIPTICAL. INCORPORATING INTERNAL IGNITION DEVICE. UNIVERSAL BURNING 220 -	Ea			



	230V. USERS DESCRIPTION 71 MM DIA X 156 MM				
1.12	LAMP. 70 W FOR ONE TYPE HS. SON- E E-27 230 V, 50HZ (EXTERNAL IGNITOR)	Ea			
1.13	LAMP, FLUORESCENT. 1,2 M LONG X 26 MM DIA 36 W COOL WHITE, SWITCH START	Ea			
1.14	LAMP, FLUORESCENT 590 MM LONG X 26 MM DIA 18 W ,WHITE, SWITCH START	Ea			
1.15	LAMP, FLUORESCENT. 1,5 M LONG X 26 MM DIA.58 W COOL WHITE, SWITCH START ONLY.	Ea			
1.16	54 W T5 FLUORESCENT TUBE, 4100 LM, 1200MM	Ea			
1.17	35 W T5 FLUORESCENT TUBE, 3300 LM, 1450MM	Ea			
1.18	FLUORESCENT LAMP T5 28 WATT COOL WHITE 1150MM	Ea			
1.19	14 W T5 FLUORESCENT TUBE, 1100 LM, 550MM,	Ea			
1.20	18 W T8 LED 4 FOOT TUBE	Ea			
1.21	LAMPHOLDER. 250 V. BAYONET-CAP. B.22. BRASS, THREADED 20 MM FOR ELECTRICAL CONDUIT, WITH SHADE RING.	Ea			
1.22	LAMPHOLDER. 250 V, EDISON SCREW E.27, PORCELAIN, NON-SKIRTED, BATTEN TYPE, WITH A BASE AND MOUNTING FACILITIES ON THE OUTSIDE	Ea			



1.23	LAMPHOLDER. 250 V,GOLIATH EDISON SCREW E40 PORCELAIN, NON-SKIRTED.	Ea			
1.24	LAMPHOLDER. 250 V, BAYONET-CAP, B.22, BRASS, THREADED 1/2 (26 TPI), WITH SHADE RING,	Ea			
1.25	LAMPHOLDER. 250 V, BAYONET-CAP, B.22, PORCELAIN, NON-SKIRTED, BATTEN TYPE.	Ea			
1.26	BALLAST FLUORESCENT 13 WATT FOR 1 * PL/2D LAMP. HARPER NR. C31B1230 OR SIMILAR. 0.17 AMPS. LOW POWER FACTOR	Ea			
1.27	BALLAST FOR 2 x 1.200 METRE 36W 230W ELECTRONIC INSTANT START	Ea			
1.28	CAPACITOR FIXED, 250 VOLT AC. 50 HZ.20 UF SUITABLE FOR 250 W. MERCURY VAPOUR AND 35/55 W. LOW PRESSURE SODIUM VAPOUR LAMPS.	Ea			
1.29	IGNITOR. FOR 250 & 400 WATT METAL HALIDE & HIGH PRESSURE SODIUM LAMPS UP TO 6A.	Ea			
1.29	160W SELF-BALLAST LAMPS	Ea			
<b>2</b>					
2.1	Cabtyre Cable 1.5mm sq.	/M			
2.2	Cabtyre Cable 2.5mm sq.	/M			
2.3	Suffix Cable 1.5mm sq.	/M			
2.4	Suffix Cable 2.5mm sq.	/M			
2.5	Suffix Cable 4mm sq.	/M			



2.6	Suffix Cable 6mm sq.	/M			
2.7	Wire GP Red 1;5mm	/M			
2.8	Wire GP Black 1;5mm	/M			
2.9	Wire GP Black 4mm	/M			
2.10	Wire GP Red 4mm	/M			
2.11	Wire GP Black 10mm	/M			
2.12	Wire GP Black 16mm	/M			
2.13	Wire GP Red 10mm	/M			
2.14	Wire GP Red 16mm	/M			
2.15	Flexible Cable (Welding Cable) 50 mm	/M			
2.16	Flexible Cable (Welding Cable) 70 mm	/M			
2.17	Flexible Cable (Welding Cable) 95 mm	/M			
2.18	Earth Wire Green	/M			
2.19	1.5 mm sq. x 4 Core PVC SWA PVC	/M			
2.20	2.5mm sq. x4Core PVC SWA PVC	/M			
2.21	10mm sq. x 4 Core PVC SWA PVC	/M			
2.22	16mm sq. x 4 Core PVC SWA PVC	/M			
2.23	25mm sq. x 4 Core PVC SWA PVC	/M			
2.24	35mm sq. x 4 Core PVC SWA PVC	/M			
2.25	50mm sq. x 4 Core PVC SWA	/M			
2.26	70mm sq. x 4 Core PVC SWA PVC1KV	/M			
2.27	95mm sq. x 4 Core PVC SWAPVC 1KV	/M			
2.28	120mm sq. x 4 Core PVC SWA PVC 1KV	/M			
<b>3</b>					
3.1	box-20mm-1-way-galvanised	Ea.			
3.2	box-20mm-2-way-galvanised	Ea.			
3.3	box-20mm-3-way-galvanised	Ea.			
3.4	box-20mm-4-way-galvanised	Ea.			
3.5	box-side-entry-20mm-1-way-bosal	Ea.			





3.6	box-side-entry-20mm-2-way-angle-bosal	Ea.			
3.7	box-side-entry-20mm-2-way-through-bosal	Ea.			
3.8	box-side-entry-20mm-3-way-bosal	Ea.			
3.9	box-side-entry-20mm-4-way-bosal	Ea.			
3.10	box-side-entry-25mm-1-way-bosal	Ea.			
3.11	box-side-entry-25mm-2-way-angle-bosal	Ea.			
3.12	box-side-entry-25mm-2-way-through-bosal	Ea.			
3.13	box-side-entry-25mm-3-way-bosal	Ea.			
3.14	box-side-entry-25mm-4-way-bosal	Ea.			
3.15	male-adaptor-20mm-bosal	Ea.			
3.16	male-adaptor-25mm-bosal	Ea.			
3.17	male-adaptor-32mm-bosal	Ea.			
3.18	male-adaptor-50mm-bosal	Ea.			
3.19	coupling-20mm-bosal	Ea.			
3.20	coupling-25mm-bosal	Ea.			
3.21	coupling-32mm-bosal	Ea.			
3.22	coupling-50mm-bosal	Ea.			
3.23	solid-bend-20mm-bosal	Ea.			
3.24	solid-bend-25mm-bosal	Ea.			
3.25	solid-bend-32mm-bosal	Ea.			
3.26	solid-bend-50mm-bosal	Ea.			
3.27	Bosal conduit 20mm -galvanised	/M			
3.28	Bosal conduit 32mm- galvanised	/M			
3.29	Bosal conduit 50mm- galvanised	/M			
<b>4</b>					
4.1	box-20mm-4-knock-out-pvc	Ea.			



4.2	conduit-box-20mm-y-box-pvc	Ea.			
4.3	conduit-box-20mm-u-box-pvc	Ea.			
4.4	conduit-box-20mm-pvc-angle-pvc	Ea.			
4.5	conduit-box-20mm-4-way-pvc	Ea.			
4.6	conduit-box-20mm-2-way-pvc	Ea.			
4.7	conduit-box-20mm-1-way-pvc	Ea.			
4.8	conduit-25mm-pvc	/M			
4.9	conduit-50mm-pvc	/M			
4.10	conduit-40mm-pvc	/M			
4.11	conduit-box-25mm-1-way-pvc	Ea.			
4.12	conduit-box-25mm-2-way-pvc	Ea.			
4.13	conduit-box-lid-pvc	Ea.			
4.14	conduit-box-20mm-8-knock-out-pvc	Ea.			
4.15	conduit-box-25mm-4-way-pvc	Ea.			
4.16	flexible-sprague-25mm-pvc	Ea.			
4.17	flexible-sprague-20mm-pvc	Ea.			
4.18	compression-gland-pvc-no-1	Ea.			
4.19	push-on-gland-pvc-no-0	Ea.			
4.20	saddles-25mm-pvc	Ea.			
4.21	25mm-spacer-bar-saddles-pvc	Ea.			
4.22	20mm-spacer-bar-saddles-pvc	Ea.			
4.23	compression-gland-pvc-no-2	Ea.			
4.24	compression-gland-pvc-no-0	Ea.			
4.25	female-adaptor-20mm-pvc	Ea.			
4.26	push-on-gland-pvc-no-1	Ea.			
<b>5</b>					
5.1	110mm HDPE double wall corrugated coil	/M			
<b>6</b>					
6.1	400 WATT, 41.08(VMP) SOLAR PANEL, MONO CELL	Ea			

6.2	105 A/H DEEP CYCLE BATTERIES	Ea			
6.3	INVERTOR 2000W	Ea			

## 12. Pricing Schedule : Electrical Maintenance Work Rates

Item	Description	Unit	Estimated Quantity	Rate (Excl. VAT)	Amount (Excl. VAT)
1	Provisional Sum for Approval of Safety File as per Annexure 1	Sum	Value/Amount	R 6 000.00	R 6 000.00
2	Provisional Sum (Material)	Material	Sum	Value/Amount	R 300 000.00
3	Percentage mark-up for materials not listed	Material	%	R 300 000.00	%
4	The Service Provider is to tender their total cost per hour on site per qualified	Artisan	Rate/hour	2 200 hours	R
5	Artisan and an assistant to perform service and repairs during <b>Normal working hours (07:00 – 17:00)</b> .	General Worker	Rate/hour	4 400 hours	R
6	The Service Provider is to tender their total cost per hour on site per qualified	Artisan	Rate/hour	250 hours	R
7	Artisan and an assistant to perform service and repairs during <b>After working hours and Saturdays (17:00 – 07:00)</b> .	General Worker	Rate/hour	500 hours	R
8	The Service Provider is to tender their total cost per hour on site per qualified	Artisan	Rate/hour	100 hours	R
9	Artisan and an assistant to perform service and repairs during <b>Sunday and Public Holiday</b> .	General Worker	Rate/hour	200 hours	R
10	Call-out rate (only when there is no fault found)	Sum	1	R	R
11	Travel cost	Rate/ km	20 000 kilometres	R	R

12	Percentage markup for the hire or use of his own specialized equipment (Proof of cost per/hr must be submitted with invoices)		%	R 50 000.00	%	R
<b>Total (Excl. VAT):</b>						<b>R</b>
<b>15% VAT:</b>						<b>R</b>
<b>Total (Incl. VAT):</b>						<b>R</b>

#### ANNEXURE 1: FINAL SUMMARY

##### As and When General Electrical Maintenance in Gauteng East Region

	STATION NAME	PAGE	AMOUNT
1	Material List	6 to 11	R -
2	Pricing Schedule: Electrical Maintenance Work Rates	12	R -
SUB TOTAL			R -
ADD VAT @ 15%			R -
TOTAL			R -

## **ANNEXURE 1: Health Safety Requirements Template For Issuing of Site Access**

### **CONTRACTOR SAFETY FILE CONTENTS LIST**

The purpose of this checklist is to guide the contractors and their sub-contractors as to what documents are required for them to prepare a safety file that must be issues to PRASA Cres Regional Departments or Head Office for evaluation before a site access is issued.

This checklist was revised to cater for **COVID 19** requirements as per RSA Government Disaster Management Act as amended and its Regulations.

Human Coronaviruses are common throughout the world. There are many different coronaviruses identified in animals but only a small number of these can cause disease in humans.

On 7 January 2020, 'Severe Acute Respiratory Syndrome Coronavirus 2' (SARS-CoV-2) was confirmed as the causative agent of 'Coronavirus Disease 2019' or COVID-19. The majority of the case-patients initially identified were dealers and vendors at a seafood, poultry and live wildlife market in China. Since then, the virus has spread to more than 100 countries, including South Africa.

The spread of the disease is thought to happen mainly via respiratory droplets produced when an infected person coughs or sneezes, similar to how influenza and other respiratory pathogens spread. Thus far, the majority of cases have occurred in people with close physical contact to cases and healthcare workers caring for patients with COVID-19.

Current symptoms reported for patients with COVID-19 have included mild to severe respiratory illness with cough, sore throat, shortness of breath or fever.

The complete clinical picture with regard to COVID-19 is still not fully clear. Reported illnesses have ranged from infected people with little to no symptoms to people being severely ill and dying.

**Name of the Contractor:**

**Project:**

**Safety File Assessor and Date:**

#	Requirement(s)	Compliance Status (Yes / No)	Comment(s)
1	Scope of works and Project Duration		
2	Notification to DOL (If applicable and as defined in the 2014 Construction Regulations)		
3	Registration of the project with DOL for the construction permit if the total project value is more than R45 Million  (If applicable and as defined in the 2014 Construction Regulations)		
4	Valid Letter of Good Standing		
5	Employee List and Certified Copies of their Identity Documents (RSA Citizens) or Passports or Work Permits for foreign Nationals (Employee register); Home address; Contact Numbers; Residential		



#	Requirement(s)	Compliance Status (Yes / No)	Comment(s)
	Address; Name of Next of kin with Contacts  (Very critical issue for contact tracing)		
6	Approved Organizational Structure		
7	Approved S/HE Policy		
8	Approved COVID 19 Policy / Declaration		
9	Approved S/HE Plan		
10	Risk Assessments for the projects as per project scope approved by the Risk Assessor and they should cover COVID 19 related risk and mitigation measures.		
11	<p>Proof of medical fitness of employees who will be working on the project and they should be from the Occupational Health Practitioner not a General Practitioner.</p> <ul style="list-style-type: none"> <li>• Protocols for dealing with COVID 19 positive cases.</li> <li>• Screening of contractors employees including sub- contractor</li> <li>• The type of thermometer that will be utilised and its calibration status.</li> </ul>		
12	Statutory Appointments including competency certificates and CVs e.g. COVID 19 Compliance Officer; First Aider and etc		



#	Requirement(s)	Compliance Status (Yes / No)	Comment(s)
	(Signed by the appointer and accepted by appointee's include CV's and competency certificates)		
13	Tool inspections Checklists and Register		
14	PPE Matrix and Records include COVID 19 PPE Requirements and list of the PPE to be provided.		
15	Safe Working Procedures or Method Statements Including COVID-19 control measures. A list of the documents required here is identified as a minimum <ul style="list-style-type: none"> <li>- Waste management protocol on how COVID 19 related waste will be managed.</li> <li>- Incident reporting procedure.</li> <li>- Emergency procedure.</li> <li>- COVID 19 case handling.</li> </ul>		
16	Tool box Talks Templates to include COVID 19 information for awareness purposes. Include induction material covering COVID 19		
17	Equipment Maintenance (Calibrations, Safe Working load certificates and Decontamination or Sanitation Records etc) if applicable		
18	Chemicals substances list; MSDSs for chemicals to be used (14 point format)		





#	Requirement(s)	Compliance Status (Yes / No)	Comment(s)
	including Proof of training on MSDS if applicable.		
19	Excavation plan (when applicable)		
20	Scaffolding plan (when applicable)		
21	Declaration of Sub-contractors (when applicable)		
22	Proof of Third Party Liability Cover		
	<b>Conclusion / Statement of Compliance</b>		