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prasa

PASSENGER RAIL AGENCY
OF SOUTH AFRICA



metrorail

PROJECT SPECIFICATION AND BILL OF QUANTITY

FOR:

SUPPLY AND DELIVERY OF VARIOUS TOOLS FOR MAINTENANCE

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SPECIFICATION FOR SUPPLY AND DELIVERY OF VARIOUS TOOLS FOR MAINTENANCE

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SPECIFICATION FOR SUPPLY AND DELIVERY OF VARIOUS TOOLS FOR MAINTENANCE

1. PURPOSE OF THE PROJECT

The purpose of this project is to supply and deliver various Tools used to conduct maintenance for OHTE, Bonding and Substation Electrical team to the Durban Electrical Depot.

2. PROJECT DURATION

Prasa KZN requires that the Works be completed within **four (4) months** which period shall include any statutory and builder's holidays falling within this period. The completion date will be determined by adding the period specified above to the date of written notification of acceptance of tender, or to such later date as may be specified in the advice of award. Lead-time has been built into the period specified.

3. GENERAL

- 3.1 The Contractor's general obligations under the contract comprise the completion and, unless otherwise stipulated, the provision at his own expense of all labour, plant, tools, equipment, material, transport, consumable stores, services, samples and temporary works, and everything, whether of a temporary or permanent nature, required in and for the supply, deliver and completion of the works.
- 3.2 Any other work arising out of or incidental to the above or required of the contractor or the completion of the works in accordance with the true meaning and intent of the contract documents shall also be the responsibility of the contractor.
- 3.3 Metrorail reserves the right to inspect and or test any material or equipment delivered.
- 3.4 Completion of work shall be subjected to the approval of the Regional Electrical Engineer.
- 3.5 All equipment shall be visually inspected for damages during delivery. Any damages shall be reported immediately to the designated representative, who will issue the necessary instructions.

4. ADDITIONAL WORKS

Any additional work not authorized by the Project Manager, even if proven necessary for the successful completion of the project will be tenderer's own account.

5. DESCRIPTION OF WORK

The contractor shall perform the following tasks:

- 5.1 Supply and delivery of various Tools used to conduct maintenance in the Electrical environment as per the BOQ.
- 5.2 All tools to be supplied must be of good quality (must conform to SANS/IEC/SABS and etc) and of a known brand
- 5.3 Carry out all work required to successfully complete the work.

5.4 Deliver and off-load all tools at Durban Electrical Depot and provide a delivery note that must be verified by the Project Manager.

6. DELIVERY RATES

The contractor will be responsible for transportation of the required Tools and the rates must be included on the Bill of Quantities.

7. LABOUR RATE

See bill of quantities

8. PENALTIES

8.1 Should the Contractor supply wrong items, the sum of R 500.00 (five hundred Rand) will be charged per item.

8.2 The contractor will be charged a penalty of 0.3% of the contract price per day delayed after the project duration has expired but not exceeding 10% of the contract value.

9. GUARANTEE

9.1 All tools supplied by the Contractor shall be subject to a guarantee for a period of one year against faulty.

9.2 The guarantee period shall commence the day the tools are formally delivered/ handed over to and accepted by the local PRASA staff.

9.3 Should any failure arise due to bad workmanship and/or faulty materials during the guarantee period, the contractor shall replace or repair the equipment within 7 days of the notification.

9.4 Should the Contractor fail to comply with the requirements stipulated above, PRASA shall be entitled to undertake the necessary repair work or effect replacement of defective apparatus or material, and the Contractor shall reimburse PRASA the total cost of such repair or replacement, including the labour costs incurred in replacing defective material.

9.5 Retention money will not be deducted by Prasa KZN as part of this contract.

10. CIDB GRADING

CIDB grading is **not** applicable for this project

11. LOCAL CONTENT

Local content is not applicable for project (maintenance tools)

12. SITE MEETING

No site meeting required

13. HANDOVER

Handover will occur when the tools are supplied to the satisfaction of the Project Manager/Project Coordinator/ Technical Manager, in accordance with the details as set out in the handing over documentation of PRASA.

14. BILL OF QUANTITIES

ITEM NO	DESCRIPTION	UNIT	QTY	Local Content	RATE		AMOUNT	
					R	C	R	C
1.	TOOLS FOR TECHNICAL ASSISTANT/ELECTRICIANS							
1.1	Padlock 40mm	EA	5	N/A				
1.2	Toolbox 5 Tier die cast aluminum	EA	5	N/A				
1.3	Socket set 1/2" drive 25 pieces	EA	5	N/A				
1.4	Spanner set Combination 14pce	EA	5	N/A				
1.5	Spanner Shifting 150mm	EA	5	N/A				
1.6	Spanner Shifting 200mm	EA	5	N/A				
1.7	Spanner Shifting 300mm	EA	5	N/A				
1.8	Spanner Combination Type 1B 10mm	EA	5	N/A				
1.9	Spanner Combination Type 1B 11mm	EA	5	N/A				
1.10	Spanner Combination Type 1B 12mm	EA	5	N/A				
1.11	Spanner Combination Type 1B 13mm	EA	5	N/A				
1.12	Spanner Combination Type 1B 14mm	EA	5	N/A				
1.13	Spanner Combination Type 1B 15mm	EA	5	N/A				
1.14	Spanner Combination Type 1B 16mm	EA	5	N/A				
1.15	Spanner Combination Type 1B 17mm	EA	5	N/A				
1.16	Spanner Combination Type 1B 19mm	EA	5	N/A				
1.17	Spanner Combination Type 1B 20mm	EA	5	N/A				
1.18	Spanner Combination Type 1B 21mm	EA	5	N/A				
1.19	Spanner Combination Type 1B 22mm	EA	5	N/A				

1.20	Spanner Combination Type 1B 24mm	EA	5	N/A			
1.21	Spanner Combination Type 1B 26mm	EA	5	N/A			
1.22	Spanner Combination Type 1B 28mm	EA	5	N/A			
1.23	Spanner Combination Type 1B 30mm	EA	5	N/A			
1.24	Spanner Combination Type 1B 32mm	EA	5	N/A			
1.25	Screwdriver Mechanical Flat 10 x 250mm	EA	5	N/A			
1.26	Screwdriver 9 piece set Black tip	EA	5	N/A			
1.27	Screwdriver Phillips PH3 x 150mm Blacktip	EA	5	N/A			
1.28	Torx Driver 11-piece Set	EA	5	N/A			
1.29	Pliers Combination Insulated 200mm	EA	5	N/A			
1.30	Pliers long nose Insulated 178mm	EA	5	N/A			
1.31	Pliers Diagonal cutters Insulated 178mm	EA	5	N/A			
1.32	Pliers Gas	EA	5	N/A			
1.33	Water pump Pliers 250mm	EA	5	N/A			
1.34	Pliers Vice Grip	EA	5	N/A			
1.35	Hammer Ball Pein 300G with Wooden Handle	EA	5	N/A			
1.36	Hammer Ball Pein 900G with Wooden Handle	EA	5	N/A			
1.37	Drill Bit set 25 piece 1 to 13mm in steel box	EA	5	N/A			
1.38	Knife Trimming with retractable blade	EA	5	N/A			
1.39	Measure Tape 3M x 19mm	EA	5	N/A			
1.40	Engineers Combination Square 300mm	EA	5	N/A			
1.41	Hacksaw Large Square Frame	EA	5	N/A			
1.42	Hacksaw Junior	EA	5	N/A			
1.43	File Round First cut 300mm	EA	5	N/A			
1.44	File Flat First cut 300mm	EA	5	N/A			
1.45	File Brush	EA	5	N/A			
1.46	File Handle	EA	5	N/A			

1.47	Lantern LED Spotlight Rechargeable with warning light cover	EA	5	N/A			
1.48	Scriber Engineers190mm	EA	5	N/A			
1.49	Wire Stripper	EA	5	N/A			
1.50	Extension Lead 2.5 x 30M,16A double socket	EA	5	N/A			
1.51	Bradawl tool 2.5mm x 32mm	EA	5	N/A			
1.52	Tin Snips Aviation Yellow Straight Cut	EA	5	N/A			
1.53	Tin Snips Aviation Red Left Hand Cut	EA	5	N/A			
1.54	Tin Snips Aviation Green Right- Hand Cut	EA	5	N/A			
1.55	Tap Wrench	EA	5	N/A			
1.56	Centre punch 6mm 150mm	EA	5	N/A			
1.57	Gauge Feeler 26 Blades 0.03- 1mm	EA	5	N/A			
1.58	Allen Key Set 10pcs Metric 1.5 to 10mm	EA	5	N/A			
1.59	Allen Key Set 10pcs Imperial 1/16 to 3/8	EA	5	N/A			
1.60	Tube Spanner set	EA	5	N/A			
1.61	Hammer Impact Screwdriver set	EA	5	N/A			
1.62	Wrench Pipe 450mm	EA	5	N/A			
1.63	Soldering iron 120W 230V	EA	5	N/A			
1.64	Drilling Machine Electric F/R 750W Impact	EA	5	N/A			
1.65	Drilling Machine cordless 1 Li 2.8A/H & Charger	EA	5	N/A			
1.66	Impact Screwdriver cordless 1 Li 2.8A/H Battery	EA	5	N/A			
1.67	Measure Tape 30M nonconductive	EA	5	N/A			
1.69	Meter Multi	EA	5	N/A			
2	TOOLS FOR TRACTION LINESMEN						
2.1	Socket 15MM Type D19	EA	20	N/A			
2.2	Socket 16MM Type D19	EA	20	N/A			
2.3	Socket 17MM Type D19	EA	20	N/A			

2.4	Socket 19MM Type D19	EA	20	N/A			
2.5	Socket 20MM Type D19	EA	20	N/A			
2.6	Socket 21MM Type D19	EA	20	N/A			
2.7	Socket 15MM Type C19	EA	20	N/A			
2.8	Socket 16MM Type C19	EA	20	N/A			
2.9	Socket 17MM Type C19	EA	20	N/A			
2.10	Socket 19MM Type C19	EA	20	N/A			
2.11	Socket 20MM Type C19	EA	20	N/A			
2.12	Socket 21MM Type C19	EA	20	N/A			
2.13	Socket 17MM Type 19L	EA	20	N/A			
2.14	Socket 19MM Type 19L	EA	20	N/A			
2.15	Socket 21MM Type 19L	EA	20	N/A			
2.16	Ratchet	EA	20	N/A			
2.17	Extension 125MM	EA	20	N/A			
2.18	Spanner Shifting 200mm	EA	20	N/A			
2.19	Spanner Shifting 300mm	EA	20	N/A			
2.20	Spanner Combination Type 1B 13mm	EA	20	N/A			
2.21	Spanner Combination Type 1B 15mm	EA	20	N/A			
2.22	Spanner Combination Type 1B 16mm	EA	20	N/A			
2.23	Spanner Combination Type 1B 17mm	EA	20	N/A			
2.24	Spanner Combination Type 1B 19mm	EA	20	N/A			
2.25	Spanner Combination Type 1B 21mm	EA	20	N/A			
2.26	Spanner Combination Type 1B 22mm	EA	20	N/A			
2.27	Spanner Combination Type 1B 24mm	EA	20	N/A			
2.28	Spanner Combination Type 1B 26mm	EA	20	N/A			
2.29	Spanner Combination Type 1B 28mm	EA	20	N/A			
2.30	Spanner Combination Type 1B 30mm	EA	20	N/A			

2.31	Spanner Combination Type 1B 32mm	EA	20	N/A			
2.32	Screwdriver Mechanical Flat 10 x 250mm	EA	20	N/A			
2.33	Spanner Ring Set 13X14 MM	EA	20	N/A			
2.34	Spanner Ring Set 15X16 MM	EA	20	N/A			
2.3 5	Spanner Ring Set 17X19 MM	EA	20	N/A			
2.36	Spanner Ring Set 19X20 MM	EA	20	N/A			
2.37	Spanner Ring Set 20X21 MM	EA	20	N/A			
2.38	Spanner Ring Set 24X26 MM	EA	20	N/A			
2.39	Spanner Ring Set 26X28 MM	Ea.	20	N/A			
2.40	Spanner Ring Set 28X30 MM	EA	20	N/A			
2.41	Spanner Ring Set 30X32 MM	Ea.	20	N/A			
2.42	13-15 Double socket wrench ratchet	Ea.	20	N/A			
2.43	17-19 Double socket wrench ratchet	Ea.	20	N/A			
2.44	20-22 Double socket wrench ratchet	Ea.	20	N/A			
2.45	24-26 Double socket wrench ratchet	Ea.	20	N/A			
2.46	30-32 Double socket wrench ratchet	Ea.	20	N/A			
2.47	Pliers Combination Insulated 200mm VDE 1000	EA	20	N/A			
2.48	Pliers Gas	EA	20	N/A			
2.49	Pliers Vice Grip	EA	20	N/A			
2.50	Hammer Ball Pein 900G Fiber Glass Handle	EA	20	N/A			
2.51	Hammer Club 1.8Kg with Wooden Handle	EA	20	N/A			
2.52	Chisel cold flat 25mm	EA	20	N/A			
2.53	Tommy bar 450mm	EA	20	N/A			
2.54	Bolt Cutter 450mm	EA	20	N/A			
2.55	Hacksaw Large Square Frame	EA	20	N/A			
2.56	Hammer Copper Mallet 1.4kg with plastic handle	EA	20	N/A			
2.57	File Round Bastard 300mm	EA	20	N/A			

2.58	File Flat Bastard 300mm	EA	20	N/A			
2.59	File Brush	EA	20	N/A			
2.60	Hammer Fibre Glass Handle 2kg	Ea.	20	N/A			
2.61	Lantern LED Spotlight Rechargeable with warning light cover	EA	20	N/A			
2.62	Wrench Torque 25-135Nm	EA	20	N/A			
2.63	Measure Tape 30M non- conductive	EA	20	N/A			
2.64	Drift Punch	EA	20	N/A			
2.65	Kink Block	EA	20	N/A			
2.66	Boom Plate	EA	20	N/A			
2.67	Spike 300MM	EA	20	N/A			
2.68	Feeder hook	EA	20	N/A			
2.69	D Shackle 60mm+ Pin 22mm 4750Kg	EA	40	N/A			
2.70	Wire Grips for copper wire 2Ton	EA	40	N/A			
2.71	Contact Twister	EA	20	N/A			
2.72	Hand Line 13mm rope x 50M single sheave pulley (fibrous, white color, material: polyrene, load rating 3T, fabrication method:3 strand)	EA	20	N/A			
2.73	Tackle 3 x 2 Pulley 20mm rope x 100M (fibrous, white color, material: polyrene, load rating 3T, fabrication method:3 strand)	EA	10	N/A			
2.74	Tackle 3 x 2 Pulley 13mm rope x 100M (fibrous, white color, material: polyrene, load rating 3T, fabrication method:3 strand)	EA	20	N/A			
2.75	Stilson Wrench 350mm	EA	20	N/A			
2.76	Earth 11Kv Transmission jumper x 13m	EA	40	N/A			
2.77	1.5-ton lever operated chain hoist with a 3-meter-long chain	EA	20	N/A			
2.78	18-volt battery powered grinder 115mm	Ea.	4	N/A			
2.79	Battery powered crimping machine	Ea.	4	N/A			
2.80	Battery powered hydraulic cutter for aluminum, copper and steel cables and wires	Ea.	4	N/A			

2.81	3 KV DC “live” line tester	Ea.	20	N/A			
2.82	6.6-11 KV AC “live” line tester	Ea.	20	N/A			
2.83	Heavy duty bolt cutter (36 inch)	EA	10	N/A			
2.84	Heavy-duty lockable Aluminum tool trunk (D= 40mm X H=30mm X W=80mm)	Ea.	20	N/A			
2.84	Tool bag (D=340mm X H=265mm X W=495mm)	Ea.	20	N/A			
2.85	Wire grip for 500-800mm aluminum wire	Ea.	8	N/A			
2.86	Magnetic Drilling machine	Ea.	2	N/A			
3	TOOLS FOR BONDERS						
3.1	Toolbox Die-cast aluminum 5tier L-460mm x W-240mm x H-220mm	EA	2	N/A			
3.2	Shifting Spanner 200MM	EA	2	N/A			
3.3	Shifting Spanner 300MM	EA	2	N/A			
3.4	Combination Spanner 1B 13MM	EA	2	N/A			
3.5	Combination Spanner 1B 15MM	EA	2	N/A			
3.6	Combination Spanner 1B 16MM	EA	2	N/A			
3.7	Combination Spanner 1B 17MM	EA	2	N/A			
3.8	Combination Spanner 1B 19MM	EA	2	N/A			
3.9	Combination Spanner 1B 21MM	EA	2	N/A			
3.10	Combination Spanner 1B 22MM	EA	2	N/A			
3.11	Combination Spanner 1B 24MM	EA	2	N/A			
3.12	Combination Spanner 1B 26MM	EA	2	N/A			
3.13	Screwdriver Mechanical Flat 10MM x 250MM Type Black Tip	EA	2	N/A			
3.14	Combination Pliers 200MM Type Will 62/200mm VDE 1000V	EA	2	N/A			
3.15	Vice Grip 250MM	EA	2	N/A			
3.16	900G Ball Pein Hammer Type Gedore-8601	EA	2	N/A			
3.17	1.8Kg Sledgehammer with short handle reinforced plastic	EA	2	N/A			
3.18	Indent crimping tool for 95MM lugs type OPT 10-120MM	EA	2	N/A			

3.19	25MM x 300MM Cold Chisel	EA	2	N/A			
3.20	35MM Blacksmith chisel with handle	EA	2	N/A			
3.21	Trimming knife with retractable blade & 20 spare blades Type Stanley 10-099	EA	2	N/A			
3.22	Hacksaw Engineers type Eclipse 20T	EA	2	N/A			
3.23	Flat File Bustard 300MM	EA	2	N/A			
3.24	File brush	EA	2	N/A			
3.25	File Handle for 300MM file	EA	2	N/A			
3.26	Headlamp with 8 or more LEDs with 2 AA Batteries in head fitting	EA	60	N/A			
3.27	Hydraulic crimper for Aluminum wires, generator driven (jaws =500mm2 -800mm2	Ea.	2	N/A			
3.28	18-volt battery powered crimping machine: 5.3 Ton Die force	Ea.	4	N/A			
3.29	Low voltage insulation tester	Ea.	2	N/A			
3.30	Rotary Hammer drill 1250w-230v	Ea.	2	N/A			
3.31	High voltage insulation tester	Ea.	2	N/A			
3.32	Vacuum Blowers	Ea.	10	N/A			
3.33	SDS Core 1250W drilling machine with core drill bit set	Ea.	2	N/A			
3.34	Angle grinder with 2000W capacity, 230mm diameter	Ea.	2	N/A			
3.35	Angle grinder with 650W capacity and 115mm diameter	Ea.	1	N/A			
3.36	3 KV DC line tester	Ea.	10	N/A			
3.37	11 KV AC line tester	Ea.	4	N/A			
3.38	750 kg chain hoist	Ea.	10	N/A			
3.39	1.5 Ton chain hoist	Ea.	6	N/A			
3.40	Digital Vernier Caliper	Ea.	10	N/A			
3.41	Wire brush	Ea.	20	N/A			
3.42	5 tray toolboxes (empty)	Ea.	15	N/A			

			SUB TOTAL					
			VAT 15%					
			GRAND TOTAL					



Figure 1 Wire Grip



Figure 2: (500-800mm Wire Grip)



Figure 3: Feeder Hook



Figure 4: Contact Twister



Figure 5: Double socket wrench ratchet



Figure 6: Hand line/ single block



Figure 7: Tackle / double block



Figure 8: Tool trunk



Figure 9: Tool bag



Figure 10: Cable and wire cutter



Figure 11: Battery powered grinder.

