

## **1. SCOPE OF WORK**

### **1.1 BACKGROUND**

The purpose of this Contract is to provide Plumbing Maintenance, Civil services, Carpentry and Wood Cutting, Welding, Glass Glazing, Alteration and Building Works, Welding services and General Maintenance for Standerton and Thuthukani Area on an “as and when required” basis over a period of 60 months.

### **1.2 REQUIREMENTS AND CONDITIONS**

- The contractor will be responsible to deliver the services as required in the scope of work “as and when required”.
- The contractor will be required to supply sufficient personnel and transport as and when required to service this contract, being it during work hours or after hours.
- The contractor needs to familiarize itself with the area of work and take proper care to make sure it complies with all the requirements set by Eskom.

#### **Plumbing**

The supply of two qualified plumbers registered at the Plumbing Industries Registration Board (PIRB) with assistants, transport, and tools on an “As and when required basis” to fix all required plumbing defects at Eskom Real Estate in Standerton and Thuthukani

Assistant plumber who is qualified and has experience.

Contractor is responsible to inspect and maintain all needed and required equipment to carry out all plumbing duties.

This will include one electrical drain-cleaning machines with 30m spring, and all required cutting bits. Both teams will also have electrical threat cutting machines for ½ inch and ¾ inch galvanized pipes. Each team will have their own manual operated set off drain rods (Min of 30m) and all other equipment needed to carry out the work.

If Eskom house drains are blocked due to municipality drains, it is the contractor’s responsibility to notify, follow up as well as to obtain a work reference number for the drains to be unblocked.

Contractor is responsible for transporting as well as for the costs for their employees to and from work as well as to perform daily working duties.

Costs of transport for daily working hours and after hours to be included in the original costs per hour (Plumber and Assistant) for defects in Standerton and Thuthukani.

Contractor to supply a monthly standby list to Eskom and ensure that the standby plumber is available after hours, over weekends and including public holidays. The standby need to have a cellphone.

The contractor must make provision to pay for standby and overtime hours work.

Contractor is responsible for all excavation works as well as the steel barricading of such excavations needed for pipe repairs if required and site to be left in the original condition when work has been completed. Additional staff to be supplied for excavations.

### **Carpentry and Wood Cutting**

The carpenter must be in possession of all the required carpenter tools generally associated with a carpenter's work.

This will include all hand tools, electrical equipment, measurement tools etc. to complete the work required according to Eskom's satisfaction.

The carpenter will be required to hang doors, fix cub boards, install new cub boards, supply and installation of built in floor sink cupboard, Supply and installation of waterproof worktop, supply and installation of slatted shelving, remove and install ceilings, install locking mechanisms, Supply and installation of drywall partition system

Supply and installation of wall papers according to Eskom latest specification and perform all general duties associated with a qualified carpenter's job description.

All cupboards are to have ABS edging.

Specific wood should be used. The cutting should be done according to Eskom specification. Cutting should have edging on.

### **The following wood should be available as and when required:**

Cherry Royal

9mm Chipboard

3mm White Masonite

3mm Brown Masonite

16mm Chipboard

16mm White Supa Wood

16mm Plywood

Cutting and edging

## **Glass Glazing(As and when required)**

Glass glazing services at Standerton and Thuthukani Real Estate as and when required.

Glazing is to be carried out in strict accordance with the SANS 0137/2000 code of Practice: "The Installation of Glazing in Buildings" and where required, safety glazing materials must conform to SANS 1263.

The contractor shall provide a certificate of conformance with these standards.

Where so described, openings and sashes of windows and doors shall be fitted with approved clip-on aluminum glazing beads sufficient in size and profile to suit the method of glazing employed, finished to match the windows and doors.

Screws where necessary shall be of aluminum or 300 Series stainless steel and have pan or raised heads finished to match the beads.

Laminated safety glazing shall be warranted, by the manufacturer, against delamination and color degradation for not less than 5 years.

Gasket seals for glazing are to be approved seals as recommended by the manufacturer and to suit the glazing thickness.

Provide all glazing equipment which will be needed to perform glazing work marked vehicles and extension ladders.

Each team should have a toolbox which is fixed and locked at the back of the vehicle.

Anything they find in the houses must returned in the Eskom offices.

## **Alteration and Building Works**

The breaking down and demolition of existing block walls, hacking off existing plaster, etc. is to be executed with care so as to prevent damage to remaining floor and wall surface and finishes.

The contractor must allow for any necessary protection of the existing surfaces as may be necessary.

Particular care is required to protect the existing timber doors, doorframes, and windows. Repairing any existing work will be for the contractor's account.

All existing items taken out from the works unless otherwise stated are to be handed over to the Eskom Officials/Representative who shall direct where on the site such items are to be stored for the removal by others.

Rubble resulting from breaking down, demolishing, etc. is to be removed from the site by the Contractor on an ongoing basis to avoid accumulation of mounds of such rubble or earth.

All preparatory work, alterations, demolitions, etc. to existing asbestos cement roof sheeting, gutters, rainwater pipes, etc. is to be carried out strictly in accordance with statutory requirements (Occupational Health and Safety Act, 1993- Asbestos Regulations, 2001) and all necessary precautions must be taken when work with and disposing of asbestos cement products and the disposing of wastewater resulting from cleaning operations, etc.

## **Welding**

The contractor will be responsible to deliver the services as required in the price list and the scope of work “as and when required.”

### **General Maintenance and Onsite Services**

General civil maintenance services at Standerton and Thuthukani Real Estate as and when required.

The contractor will be responsible to deliver the services as required in the price list and the scope of work.

## **Contractor Employees**

### **Site Supervisor**

It will be an advantage if the Contractor’s supervisor has a sound knowledge of NEC3 Contract Management.

As part of the Supervisors daily duties will be the control of overall operations and expenses in liaison with the Eskom Contract Manager to ensure that all task orders issued will be completed and accounted for.

The Supervisor and his team will be required to conduct a site-specific risk assessment, to determine any risks and challenges, which maybe encountered in terms of the space, position, location (surrounding environment) and work that needs to be performed.

The Supplier’s Supervisor shall be knowledgeable, competent, and able to perform supervision duties without direct and continuous supervision by the Employer, to liaise and co-ordinate activities with Contractor, including the Employer’s personnel in order to fulfill all obligations.

On absence of the Supervisor from site an alternate Supervisor (one of laborers) must be identified (in writing) to take over supervision duties temporarily.

The Contractor Supervisor must have his own vehicle and a valid driver license.

The Supervisor should attend morning meetings, attend to all defects, and give feedback the following meeting of all the defects completed.

## **Bricklayer Duties and Requirements**

- A bricklayer must be a skilled person with a sound knowledge of the brick laying trade and must be physical able to construct a brick wall to the standards required by Eskom. The bricklayer must also be able to plaster vertical and horizontal surfaces including all corner types.
- Assistant bricklayer must have a sound knowledge of the brick laying trade and must be physical able to construct a brick wall to the standards required by Eskom.

- It is a requirement by Eskom that the Bricklayer can lay tiles to Eskom standards horizontal and vertical.
- The brick layer must also be able to cast concrete on small and bigger surfaces to Eskom's standards and requirements.
- The brick layer must also be in possession of all the required brick laying and tiling tools generally associated with this work. This will include all hand tools, electrical equipment, measurement tools etc to complete the work required according to Eskom's satisfaction.
- The team must have their own marked vehicle with a trailer. Must have a lockable toolbox installed at the back of the vehicle.
- Repairs and building modifications as required to buildings, paving, wall, and floor tiles etc.
- Repairs and additions to concrete floors, paving, storm water channels etc. as and when required.
- Laying of new floor ceramic tile, wall tiles and Marley tiles
- Building of brick walls including building with face brick
- Laying and breaking of concrete
- Structural repairs to brick/block walls including plaster layers.
- All Bricklaying maintenance

### **Glaziers**

Provide proof of competency and a minimum of three (3) years' experience. Skilled workers must have a Trade Certificate and a minimum of two (2) years' experience.

### **Carpenter Maintenance Duties and Requirements**

- Trade Tested with a nationally recognized accreditation program for civil contractors. Should have a recognized trade qualification with certified hours of practical experience, leading to registration as a Certified Tradesperson
- A qualified and experienced assistant carpenter.
- Repairs to fire doors and furniture.
- Fitting of doors and ceilings.
- Repairs / replacement of defective installations such as ceilings, skirtings, doors, door locks etc.
- Roof repairs and replacements.
- Repairs of existing and installation of new dry walls as and when required.
- Repairs of existing office/houses furnishings and installation of new workstations, cupboards and related notice boards/ white boards as required.
- All carpentry maintenance

## **Plumbing Duties and Requirements**

- Two Qualified Plumbers, registered with the Plumber Industries Registration Board (PIRB).
- All employees must have a driver's license.
- Laying and joining of Steel/Copper, PVC and HDPE pipes
- Opening, cleaning and unblocking of sewage drains and manholes.
- Opening, cleaning and unblocking of open channels.
- Cleaning of gutters and roof sheeting.
- All Plumbing maintenance.

## **Welding Duties and Requirements (As and when required)**

- A trade tested artisan Welder.
- All employees must have a driver's license.
- Repairs and replacement of burglar bars, security gates etc.
- Repairs to all metal roller shutter and sliding doors at stores, logistics etc.
- Repairs / replacement of existing notice boards and the installation of new signs etc.
- Repairs and replacement of metal handrails, balustrades etc.
- Repairs to security gates, booms and palisade fencing.
- Repairs to zippel filing cabinets.
- Repairs to all parking garages and residential properties.

## **General assistants**

- General assistance workers for excavations.
- Must be able to help artisans when needed.
- These general assistants must also be able to fix old fencing, concrete pre-cast walls and must also consist of a good overall general knowledge as an assistant to the civil trade.

## **Response time on defects**

- Call outs: Contractor to be on the site within 30 minutes.
- Priority 1 (Urgent defects) Defects to be completed or assessed within 1 hour.
- Priority 2 (As soon as possible) Defects to be completed the same day.
- Priority 3 (Normal ) Defects to be completed the same day if possible but not longer than 5 working days.

**Required Equipment shall include the following, but not be restricted to the following:**

- Spades, shovels, rakes and picks
- Wheelbarrows
- Plaster tools (All)
- Brick laying tools (All)
- Tiling Equipment
- Spirit Levels
- Dumpy Level (One off)
- Push wheel measuring device.
- Tape measures
- Straight edges
- Building line
- Builders square (various required types)
- Plumbing, carpentry, and bricklaying toolbox (All required tools to be in the toolbox)
- Electrical Planers, electrical extensions 220VAC, saws, drilling machines, grinders, welding equipment etc.
- Civil team to have own power supply (Generator) on site at all times and one on standby if required.
- Ladders
- Contractor to ensure that all tools required to perform all maintenance on the Eskom properties as per scope of work and as required by Eskom are available on request.
- **Each team must have a generator.**

**Transport**

- 6 x LDV vehicles with lockable canopies and roof racks to carry ladders and equipment to be supplied by the contractor for normal working hours (07h00 to 17H00 Monday to Fridays.) 1 of which will be used for after hour call out, weekends and public holidays.
- 1 x Double Cab LDV to be supplied by the contractor for normal working hours (07h00 to 16h15 Mondays to Thursdays and 07h00 – 12h00 Fridays) and for after hour call outs, weekends and public holidays.
- Costs of transport for daily working hours and after hours to be included in the original costs.
- All vehicles to be clearly marked with company name and logo.
- Weekly vehicle inspection check sheets to be completed by the contractor and be available for inspection by Eskom when required.

- Vehicles to be as per safety, Health and Environmental requirements.
- Contractor's vehicles are to comply with the Eskom transport procedure.
- Contractors to ensure that no employees are transported at the back of LDV's.
- Vehicles should be cleaned over the weekends.

### **Safety**

- Contractor to comply with Eskom procedure for Safety, Health and Environmental requirements for contractors (Ref no: 14sapr h&s ctr-001) as well as Construction, Safety, Health and environment management in Eskom 32-136.
- Contractor employees will not be allowed on site if He / She have not attended the compulsory Tutuka Power Station Health and Safety general awareness training. (Induction).
- Contractors Employees shall undergo a medical screening examination before being allowed on site and all employees' medical fitness shall be kept in the contractor's safety file. (Medical screening examinations costs are the responsibility of the contractor).
- Contractor Safety files to be approved by the Eskom risk management before work may commence on site and be available at any time for audits by Eskom.
- Contractors to supply employees with all required personal protective equipment and the costs are the responsibility of the contractor.
- Personnel protective equipment must be clearly marked with company name and logo as well as to issue each employee with a permit that is clearly visible for identification.
- Contractor to ensure that toolbox talks, and a signed risk assessment has been conducted and that all employees have signed both documents for work that is to be conducted and ensure that they are signed by the Eskom responsible supervisor before work commences.
- Contractor responsible person to attend a morning meeting held at the Eskom properties maintenance office Monday to Friday at 07h00 for daily works requests and feedback on defects completed, Contractor also responsible to attend the monthly safety meeting as well as any other meeting requested by Eskom.
- Safety files should be kept in the vehicle so they can available when needed.

When employees are on sick leave, it is the contractor's responsibility to ensure that there is a replacement for them.

## **Attendance Registers**

Contractor to ensure that daily attendance registers for their employees are signed and kept on file.

Contractor to ensure that the QCP are signed off at all required holding points before work continues. A record of this documentation needs to be kept and a copy thereof to be issued to the Eskom Contractors Supervisor for future reference.

## **Personnel protective equipment shall include the following, but not be restricted to the following:**

- Safety boots.
- Eye and Face protection.
- Respiratory equipment (Dirty or dusty areas).
- Hand protection.
- Hearing protection. (Grinding, drilling).
- Safety Harness, when working in positions higher than 2 meters above ground level.
- Protective equipment to be marked with company name.
- Personnel protective equipment to be maintained in a good and clean condition and if torn needs to be replaced.
- Records for issuing of personnel protective equipment to employees to be kept by contractor for audits by Eskom when required.
- PPE should be embraced with a company logo and Contractor employees should be given a name tag with a company logo which should be on them be all the time.
- Employees should be given two set of PPE. In summer they should be provided with 2 set of golf shirts with a company logo. In winter they should be provided with warm jackets which are wearable even during rainy days, also embraced with a company logo, and two set of safety boots.

## **Barricading / Scaffolding**

- Contractor is responsible to supply his or her own barricading or scaffolding, which must comply with the construction regulations.
- Only solid barricading may be used (steal barricading).
- Contractor shall ensure that scaffolding when used, complies with the safety standards incorporated for this purpose into these Regulations under section 44 of the Act. SABS 085, SABS 1808 and SABS 1093.
- Contractor shall ensure all scaffolding work operations are carried out under supervision of a competent person who has been appointed in writing and that all scaffold erectors, team leaders and inspectors are competent to carry out their work.

## **Quality management**

The Contractor's Supervisor will when and as required be able to perform quality control and support Employer during execution of Tiling and Carpet Works. Contractor's Supervisor must be competent with the knowledge of NEC contracts.

The Contractor shall develop and implement a system for quality verification records, including site investigation plans, Record Books (Data Books) as specified in the Tutuka Quality Specifications.

Routine checks and inspections to be conducted as per Contractor's Quality Control Plan (QCP), illustrating defined intervention assessment points. The Contractor submits QCP for the Employer to review and approve before commencement of any works. The QCP include witness, hold, test, and inspection points.

The Contractor defines the level of QA/QC or inspection imposed on his Sub-Contractors and suppliers. The programming of inspections, hold and witness points is agreed between the Employer and the Contractor prior to undertaking any work.

Before commencement of the works, the Contractor compiles and present detailed method statement for the planned works. Contractor to present this during the kick-off meeting for Employer to approve before commencement of any works.

## **Environmental Management**

It is made known to the Contractor's that the Power Station is situated in an environmentally sensitive area.

The Contractor acquaints himself with all statutory and local environment regulations and adheres to these without exception.

The Contractor complies with the Hazardous Chemical Regulations when using any hazardous chemicals, as well as complying with the requirements of the National Environmental Management Act of 1998.

## **General**

No work to be conducted on a house without prior permission of the tenant, if tenant is not at home an Eskom work contact slip to be left as to inform tenant that you were there so that another time can be arranged.

Five job observations to be done each month as well as a copy of the tool inspection list and handed to the responsible Eskom supervisor.

The contractor must supply all labour, transport and tools to complete task orders issued for maintenance on the properties.

All sites must be cleaned etc. must be removed from site by the contractor to a registered dumping site.

All drill work at nu/tech fibre cement houses must be done according to regulations.

Contractor to follow correct procedures with the disposal of fluorescent tubes.

Assessment will be done on the 15th of each month or the first working day thereafter  
Assessment should be done by the project manager and the Contractor.

Signed invoice and assessment by the project manager will be the responsibility of the contractor to make sure that it been booked at the stores and invoice need to be submitted to invoice department with the GR number.