

# PORT ELIZABETH MULTI-PURPOSE TERMINAL

| Document Title:   |  |  |  |
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| SCOPE OF WORK   |  |  |  |
|   |  |  |  |
| Project Title:  |  |  |  |
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| Excavator Cab Replacement & Undercarriage Inspection for Transnet SOC limited (Reg. No. 1990/000900/30) operating as Transnet Port Terminals (hereinafter referred to as "TPT") at the Port of Port Elizabeth Multi-Purpose Terminal as a once off service. |  |  |  |



# **DOCUMENT PREPARATION**

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### 1 BACKGROUND

Port Elizabeth Multi-Purpose Terminal (PEMPT's) core business is to export dry bulk cargo manganese ore. This is accomplished with terminal infrastructure such as rail wagon tippler, feeders, conveyor belts, storage facilities and ship-loaders and a network of machine mobile equipment such as excavators and bulldozers. The larger network of conveyors is connected via chute and diverter chutes which allow for easy conveying of bulk material to the different conveyor lines. To ensure health and safety of TPT mobile heavy equipment operators and to extend the life of this equipment, the Technical Department aims to replace two (2) excavator cabs as detailed in this Scope of Work.

### **2 OBJECTIVE**

The purpose of this Scope of Work is for the tasks for two (2) Volvo Excavator machines for PE terminal:

- Supply and install two (2) new Excavator cabs
- o Inspection of undercarriage



## 3 SCOPE OF WORK

- 3.1 This scope is for the two (2) excavator machines shall include:
  - 3.1.1 Supply and installation of two (2) new Excavator Cabs
  - 3.1.2 Inspection of the undercarriage
- 3.2 Any components fitted must be completely compatible and interchangeable with the currently installed on the Volvo Construction Equipment excavator machines.
- 3.3 The excavator cabs replacement must meet Original Equipment Manufacturer standards. The specification of the excavator machines is:

Manufacturer: Volvo Construction Equipment

Model/Type: EC210B LC

3.4 Currently installed are operator cabs on the machines with the following specification:

Manufacturer: Volvo Construction Equipment

o Part No.: 14538703

- 3.5 The installation of the new cabs shall include:
  - 3.5.1 New cab glass/windows and seals.
  - 3.5.2 New engine speed control switch/knob for the operator inside the cab.
  - 3.5.3 New windscreen wipers.
  - 3.5.4 Door locks and keys.
  - 3.5.5 New front instrument panel.
  - 3.5.6 Battery compartment covers and engine compartment covers, hydraulic compartment covers.
  - 3.5.7 Clean and vacuum the interior of the machine.
- 3.6 The excavator cabs to be installed must have a Roll-Over Protective Structure (ROPS) in accordance with International Standards Organization (ISO) 12117-2 Earth-moving machinery Laboratory tests and performance requirements for protective structures



of excavators – Part 2: Roll-over protective structures (ROPS) for excavators of over 6 t.

- 3.7 The inspection of the undercarriage shall cover:
  - 3.7.1 Pressure wash and clean the undercarriage.
  - 3.7.2 Conduct an undercarriage inspection for both excavators and provide report to TPT clearly detailing all the finds and recommendations.
- 3.8 A Diesel Mechanic is required for the fitment of the cabs.
- 3.9 An Automotive Electrician is required for fitting the front instrument panel and all other interior components after replacing the cab and ensuring that they are fully functional upon installation.
- 3.10 After all works are completed, the machine shall be left in a clean state inside and outside.
- 3.11 Commissioning of the machines shall constitute 40 operational hours upon arrival to TPT premises. If equipment fails the 40-hour test due to a component(s) repaired or replaced, the service provider shall rectify the fault and commissioning shall continue.

## 4 QUALITY

- 4.1 The excavators will be accepted when the machines have been successfully commissioned and tested and all manuals, and drawings required for the newly installed components have been delivered to TPT.
- 4.2 The service provider is required to submit a detailed bar chart/project plan showing all major activities and identifying all major milestones to be achieved in this project.
- 4.3 The service provider is required to have a site manager who has been delegated sufficient authority to manage the site activities up until commissioning and acceptance of the machines.
- 4.4 The service provider shall be required to install and operate a quality management system.



- 4.5 Each bidder must submit a detailed statement of his/her quality system which shall include the following:
  - 4.5.1 Statement of quality management policy and objectives.
  - 4.5.2 Statement of customer requirements evaluation.
  - 4.5.3 Statement of documentation and change control procedure.
  - 4.5.4 Statement of the quality control procedures that will apply to purchased materials.
  - 4.5.5 Statement of the quality control plan for all components manufactured or supplied so that inspection is carried out to ensure conformance to the specification.
  - 4.5.6 Statement of the quality control procedure that will apply to installation of the equipment and components.
- 4.6 The sole responsibility for ensuring that the components supplied conform to the specification shall rest with the service provider.
- 4.7 The service provider must provide a certificate to TPT for all tests passed by the equipment/components.
- 4.8 TPT reserves the right to conduct a quality assurance audit on the service provider's quality control system.
- 4.9 The service provider shall produce evidence that his/her welding procedures and welder have passed all the relevant tests required in terms of BS 5135 and SABS 044 Part III and IV.
- 4.10 The service provider shall not change any design or specification feature which has any of the following impacts without formal approval by TPT: 1) Financial, 2) Interface with other equipment or installations, 3) Safety, and 4) Departure from TPT requirements.
- 4.11 A Data Pack must be submitted to TPT at commissioning stage and must contain the following for all components supplied:
  - 4.11.1 Maintenance Instruction Manual for the excavator.
  - 4.11.2 Parts Catalogue for the excavator.
  - 4.11.3 Warranty on the workmanship.



- 4.11.4 Guarantee on the components supplied.
- 4.11.5 Certification, inspection, testing records, and field inspection checklist to verify compliance with scope of work requirements.
- 4.11.6 A list of special processes (e.g. welding and non-destructive testing) used and proof thereof.
- 4.12 Upon completion of the works, a visual inspection and function test shall be conducted.

### **5 RETURNABLE DOCUMENTS**

- 5.1 The Bidder must submit the relevant qualifications and CVs for the personnel working on the machines i.e.:
  - 5.1.1 Trade test (red seal) for a Diesel Mechanic or Earthmoving Mechanic.
  - 5.1.2 Trade test (red seal) for an Automotive Electrician.
  - 5.1.3 CV with at least three (3) years as a Diesel Mechanic or Earthmoving Mechanic. The CV and red seal certificate in 5.1.1 shall belong to the same person.
  - 5.1.4 CV showing at least three (3) years as an Automotive Electrician. The CV and red seal certificate in 5.1.2 shall belong to the same person.

The qualifications and CVs must be attached to Returnable Schedule 1.

- 5.2 The Bidder must submit reference letters for previous works for the maintenance of heavy mobile equipment or earthmoving equipment. The Bidder must have a traceable track record, submit four (4) reference letters of completed work from previous clients in the past three (3) years on the client letterhead. The reference letters must be attached to Returnable Schedule 2.
- 5.3 The Bidder must provide a comprehensive Method Statement for the scope of work for the following activities:
  - 5.3.1 Installation of excavator cabs.
  - 5.3.2 Inspection of the undercarriage and compilation of the report for the findings.

The following must be included as a minimum: Each activity or task, requirement, and Specifications. The Method Statement documents must be attached to Returnable Schedule 3.



- 5.4 The Bidder shall submit confirmation of guarantee and warranty on a company letterhead indicating the guarantee on the components supplied and warranty on workmanship in accordance with the requirements of the scope and for a period not less than 12 months after handover of equipment to TPT. Paint and corrosion protection guarantee must be in line with EEAM-Q-008 Corrosion Protection specification. Guarantee confirmation must be attached to Returnable Schedule 4.
- 5.5 The Bidder must provide a signed confirmation of lead time on company letterhead for the lead time between receiving Letter of Award (LOA) from TPT and hand over of equipment to TPT. A project plan overview with a project roadmap, lead time, key milestones must also be attached. TPT requires a lead time of no more than 12 weeks. Lead time confirmation and project plan overview must be attached to Returnable Schedule 5.

### 6 SPECIFICATION AND STANDARDS APPLICABLE TO THE WORK

In Table 1, the guiding codes the supplier needs to adhere to:

Table 1: Applicable Standards for Works

| Guiding Code            | Definition                          |
|-------------------------|-------------------------------------|
| EEAM-Q-008 (Annexure A) | Corrosion Protection                |
| EEAM-Q-009 (Annexure B) | Quality Management                  |
| EEAM-Q-016 (Annexure C) | General Requirements and Conditions |

#### 7 TPT TO PROVIDE

7.1 Access to site and equipment for site visit and project execution.

#### 8 SITE INFORMATION

The site is at the Bulk Ore Terminal in the Port Elizabeth Multipurpose Terminal. Access will be from the existing public and maintenance road networks. Access to the Port will be subject to the TNPA and TPT security requirements and regulation.



### 9 SAFETY AND COMPLIANCE

- 9.1 The Service Provider will be required to adhere to Standard She File Requirement. See Annexure E, TIMMS Contractor's Compliance File Assessment Checklist.
- 9.2 The Service Provider will be required to always wear standard PPE for the site meeting and project execution.

## **10 SECURITY REQUIREMENTS**

The Service Provider will need to comply with the following security requirements once SHE file has been approved and find attached Annexure E application form to complete:

- Copy of Identification Document (SAPS Certified)
- Duration of permit required
- Name list of persons and list of vehicles
- Copy of Safety Induction Register
- Copy of Medical fitness certificates
- Driver's licenses for all vehicle's drivers (SAPS Certified)
- Valid roadworthy certificate for all vehicles / copy of latest license renewal
- Hired vehicle Proof of Lease agreement.

#### 11 ANNEXURES

Annexure A: EEAM-Q-008 - Corrosion Protection

Annexure B: EEAM-Q-009 - Quality Management

Annexure C: EEAM-Q-016 - General Requirements and Conditions

Annexure D: TIMMS Contractor's Compliance File Assessment Checklist

Annexure E: Security Application

Annexure F: Excavator and Cab Name Plates