



# **ANNEXURE "A"**

# **SCOPE OF WORK**

PROVISION OF RIGGING AND CRANE HIRE SERVICES ON AN AS AND WHEN REQUIRED BASIS FOR A PERIOD OF EIGHT (08) MONTHS FOR TRANSNET SOC LTD TERMINALS RICHARDS BAY (TPT RCB)





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### **Table 1:List of Abbreviations**

Abbreviation	Meaning given to the abbreviation
AIA	Authorized Inspection Authority
BBBEE	Broad Based Black Economic Empowerment
QA	Quality Assurance
SES	Standard Environmental Specification
SHE	Safety, Health and Environment
SHEC	Safety, Health and Environment Co-ordinator
SIP	Site Induction Programme
SMP	Safety Management Plan
SSRC	Site Safety Review Committee
TPT	Transnet Port Terminal
KZN	Kwa-Zulu Natal
ECSA	Engineering Council of South Africa
RCB	Richards Bay
PPE	Personal Protective Equipment
OEM	Original Equipment Manufacturer
COF	Certificates of Fitness
TNPA	Transnet National Port Authority
TRCB	Transnet Richards Bay (TPT & TNPA)
sqm	Square meter
DBT	Dry Bulk Terminal
MPT	Multi-Purpose Terminal
SOC	State Owned Company

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# **Table 2:List of Abbreviations Conti.**

Abbreviation	Meaning given to the abbreviation
CEMP	Construction Environmental Management Plan
CD	Compact Disc
CDS	Contractor Documentation Schedule
COC	Certificate of Compliance
CSHEO	Contractor's Safety, Health and Environmental Officer
CM	Construction Manager
DTI	Department of Trade and Industry
EO	Environmental Officer
HAZOP	Hazard and Operability Study
HSSP	Health and Safety Surveillance Plan
HVAC	Heating Ventilation and Air Conditioning
IR	Industrial Relations
IRCC	Industrial Relations Co-ordinating Committee
JSA	Job Safety Analysis
CIRP	Contractor's Industrial Relations Practitioner
Native	Original electronic file format of documentation
NHBRC	National Home Builder Registration Council
PES	Project Environmental Specifications
PIRM	Project Industrial Relations Manager
PIRPMP	Project Industrial Relations Policy and Management Plan
PLA	Project Labour Agreements
PSIRM	Project Site Industrial Relations Manager
PSPM	Project Safety Program Manager
PSSM	Project Site Safety Manager
PrEng	Professional Engineer
ProgEM	Programme Environmental Manager
ProjEM	Project Environmental Manager
QA	Quality Assurance
reefer	Refrigerated unit
SANS	South African National Standards
SES	Standard Environmental Specification
SHE	Safety, Health and Environment
SHEC	Safety, Health and Environment Co-ordinator
SIP	Site Induction Programme
SMP	Safety Management Plan
SSRC	Site Safety Review Committee
CIDB	Construction Industry Development Board

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# 1 OVERVIEW OF THE WORK

### 1.1 Executive Overview

TPT is a division of Transnet SOC Limited whose core business is to provide cargo handling to a wide spectrum of customers, including shipping lines, freight forwarders and cargo owners. Operations are divided into five major business segments, namely containers, bulk, break bulk, automotive and national port authority. All divisions operating under one umbrella, Richards Bay is one of TPT Bulk and Break-Bulk handling terminal divided into two namely, DBT and MPT. DBT comprise of conveyor belts, ship loaders, ship unloaders, stackers and conveyor belt systems infrastructure for import, export and stacking of bulk commodities like coal, chloride, magnetite, and Sulphur to list few. MPT handles a mixture of commodities with the use of road truck transport, skips, forklifts, mobile ship loader cranes, ship unloader mobile cranes, straddlers and many more.

In order to achieve the handling of these high volumes, the port requires continuous operation and hence there is a requirement at all times for a rigging crew to be available timeously to support the technical team to respond to breakdowns.

The works consists of rigging services and crane hire for TPT on an ad hoc basis for a fixed term of 08 months. Rigging services and crane hire is required when the technical team is performing these tasks; splicing, pulley repairs, replacing bearings, pulley lagging, lifting mechanical drives and heavy components.

The provision of rigging services is essential in ensuring that the response time for repairs is kept at a minimum during breakdowns and crane hire costs are controlled. It is important to note that, there is no alternative to the service provision, the service is essential and most technical repair and maintenance work cannot be completed without the rigging service.

## 1.2 Main Work Information

The contractor is required to provide rigging and crane hire services as per the following categories:

- 1.2.1 Provide rigging and crane hire services on a 24 hours and 7 days basis for all breakdowns.
- 1.2.2 Provide rigging and crane hire services for planned work.
- 1.2.3 Minimum required rigging and crane hire services.
- 1.2.4 Majority of the work to be performed estimated.

# 2 DETAILED SCOPE OF WORK

### 2.1 Provide rigging and crane hire services on a 24/7 basis for all breakdowns

- 2.1.1 The contractor will be expected to arrive on site in 60 mins after receiving a callout from TPT technical representative to assess and prepare for service.
- 2.1.2 The contractor must have a qualified crew readily available 24/7 to attend to rigging and crane hire services.
- 2.1.3 The contractor must expect to work on height, underground and on confined spaces.

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### 2.2 The contractor will be expected to perform

2.2.1 The contractor will be expected to align with TPT planned work like maintenance and shutdowns and provide rigging and crane hire services accordingly.

### 2.3 Minimum required rigging and crane hire services

- 2.3.1 The contractor must be able to provide the following crane sizes (8 tons, 16 tons, 20 tons, 30 tons, 35 tons, 50 tons, 80 tons, 90 tons, 100 tons, 120 tons, 160 tons, 200 tons, 220 tons and 250 tons).
- 2.3.2 The service provider will be expected to conduct rigging studies and risk assessments before conducting any lifting.
- 2.3.3 The service provider will be expected to ensure that all rigging equipment are certified (load tested) and properly inspected prior to using them as per the OHSAct No. 85 of 1993 or latest.

### 2.4 Majority of the work to be performed estimate

- 2.4.1 Counterweight rigging is 70%. The counterweights are of different weight and arrangements, 50% are heavy counterweights which require at least 4 are 10- ton chain blocks with long chains for lifting and 20% are light counterweights which require at least 4 are 5-ton chain blocks with long chains for lifting.
- 2.4.2 Chute rigging on ship loaders/unloaders and chutes on conveyor belts is 20%.
- 2.4.3 Lifting items for maintenance activities is 10%

# **3 STAFF SKILLS REQUIREMENTS**

The contractor will be expected to provide a minimum of three (3) rigging crews at any given time. These will be shared between the TPT's maintenance teams and the standby teams. As rigging is entirely dependent on the skill, the contractor has to prove that they have at least the following competent tradespersons as part of their rigging personnel:

### 3.1 Supervisor (Qualified Rigger)

- 3.1.1 Minimum years practicing as a rigger: five (5) years port environment.
- 3.1.2 Minimum Qualifications: NQF Level 4, Trade Tested Rigger.
- 3.1.3 Three (3) Years as a rigging Supervisor (supervisors).
- 3.1.4 Minimum of three (3) years' experience as a qualified rigger

### 3.2 Skilled rigger (Qualified Rigger)

- 3.2.1 Minimum years in the Rigging field: three (3) years.
- 3.2.2 Qualification: NQF level 4, trade tested rigger.

### 3.3 Semi-skilled rigger

- 3.3.1 Minimum years in the Rigging field: one (1) year.
- 3.3.2 Qualification: Matric & Basic training in rigging (Working at height, Basic rigging and rigging and slinging).

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### 3.4 Assistant

- 3.4.1 Minimum years in the technical field: six (6) months working in a technical environment/workshop.
- 3.4.2 Qualification: Not required but the person should have a technical background.

### 3.5 Crane Driver

3.5.1 Although not part of the daily rigging personal (i.e. only required on request), the Supplier needs to ensure that all their crane drivers are certified according to SAQA Qual ID 242982.

# 4 COMPANY ACCREDITATION

### 4.1 ISO 9001 certification:

As TPT is an ISO 9001 certified organization which strives for the best quality management processes and dealings. The contractor that is to be appointed to provide the rigging service and crane hire should also aspire to these high-quality management systems, therefore the contractor is to provide a valid certificate indicating that their company is ISO 9001 accredited.

## 4.2 Member of Lifting Equipment Engineering Association of South Africa (LEEASA):

Furthermore, to show that service providers are well knowledgeable/informed of any lifting equipment requirements/changes, for this reason a service provider is requested to provide their affiliation with the lifting equipment association.

### 5 WORKMANSHIP AND COMPLIANCE TO REGULATIONS

# 5.1 The following is expected from the Contractor to ensure compliance to the OHSAct and for good workmanship:

- 5.1.1 Use of qualified riggers (NQF Level 4, Trade Tested Rigger) and well-trained crane drivers (SAQA 242982) to carry out the rigging service at all times.
- 5.1.2 Use of compliant lifting equipment and attachments as per the applicable regulations (refer to Section 6 and Paragraph 10 of the Scope of Works).

# 6 STATUTORY REQUIREMENTS FOR THE TOOLS AND MACHINERY

All the lifting equipment and lifting attachments used should be compliant to the applicable Standards, ACTS, Codes and regulations as listed in Section 6: Governing Codes, Standards and Specifications. As a minimum, this is:

# 6.1 Ropes/Chains/Sling

- 6.1.1 Inspected regularly for damage (minimum once a month).
- 6.1.2 Inspected before use by a Technical person (Tradesperson).

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### 6.2 Chain blocks/Lever Hoist

- 6.2.1 Certified valid load test certificate (minimum once a year).
- 6.2.2 Inspected regularly for damage (minimum once a month).
- 6.2.3 Inspected before use by a Technical person (Tradesperson).

### 6.3 Cranes

- 6.3.1 Certified valid load test certificate (minimum once a year).
- 6.3.2 Calibrated (when required as recommended during load tests).
- 6.3.3 Inspected regularly for damage by an LMI Lifting Machinery Inspector (minimum once every 3 months).
- 6.3.4 Inspected before use by a Technical person (Tradesperson).

### 6.4 General

- 6.4.1 The Monthly inspection and load test should be conducted by a qualified LMI as per the Department of Labour (ECSA Registered) and the proper certification and reports signed off and filed.
- 6.4.2 TPT bears the right to request any of these documentation at any stage and can reject the use of equipment if the condition is not acceptable or the documentation is not available.

# 7 INCLUSIONS AND EXCLUSIONS

### 7.1 Inclusions

The contractor is to provide all the resources that will be required for the successful execution of this scope, this is to include all equipment that will be required to complete rigging and crane hire services, the different materials that will be used for servicing, all labour, all transportation, all tools and any other item of expense that is essential for the completion of the work.

### 7.2 Exclusions

TPT reps will be made available at the discretion of the technical or engineering manager responsible, if requested, to assist in the assembling. TPT will, however, provide scaffolding and artisans to assist in the removal and installation of the components that need to be serviced (only if the work is done onsite).

### 8 CONTRACTORS' RESPONSIBILITIES

### 8.1 The Contractor Shall:

- 8.1.1 Provide all the necessary skills, resources, tools, equipment, and expertise to carry out the works.
- 8.1.2 Review, familiarize and understand the proposed site including all constraints and environmental factors.
- 8.1.3 Review, familiarize and understand the operational requirements of the facilities in the Port of Richards Bay.
- 8.1.4 Any other reasonable works required to successfully deliver the services to the Employer on time, on budget, at the accepted quality.

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- 8.1.5 Provide all necessary SHE compliance documentation as per TPT SHE specifications, including the submission and approval of a Safety File post award.
- 8.1.6 Hand over all documentation after services.

# 9 CONTRACTOR MANAGEMENT REQUIREMENTS

### 9.1 The contractor must comply with the following:

- 9.1.1 Weekly Report: A weekly report must be submitted to the Technical Manager; this must contain detailed information of all rigging and crane hire service done during that week and any challenges occurred.
- 9.1.2 Monthly Report: A detailed monthly status report must be submitted to the Technical Manager on the 26th day of every month, containing planned work, completions, outstanding actions, and occurred challenges.
- 9.1.3 Service Level Agreement (SLA) meetings: Compulsory quarterly attendance.
- 9.1.4 The contractor will be expected to submit and keep (and make available to TPT on request) all service reports for the duration of the contract, and 6 months after the contract term. All works to be in accordance with the SHEQ, Environmental Specification, Quality and General Requirements.

### 10 RESPONSE AND LEAD TIMES

The contractor is expected to commit to a response time, this is the time it will take for the contractor to arrive on site for breakdown after receiving a call from the TPT technical representative. This confirmation must be in a form of a letter on the company's letterhead signed/stamped, stating the delivery time the service provider will commit to. TPT requires 60 minutes turnaround time. Furthermore, the contractor is required to submit traceable references for successful response times from their last three customers where similar goods and services were delivered and accepted within the contractual or project agreement.

# 11 GOVERNING CODES, STANDARDS AND SPECIFICATIONS

The Contractor's works must be in accordance with the requirements of the latest edition of the national standards (SANS). In addition to this the workshop needs to comply with the OHS Act 85 of 1993 (Occupational Health and Safety Act and Regulations). The tests prescribed in the relevant standard specifications shall be carried out at the manufacturer's facilities before delivery. The test results shall be submitted to the Section's Engineering or Technical/Manager with each supplied / repaired pulley.

Work and Supplied Materials made and tested to alternative standard specifications will be considered at the discretion of the Section's Engineering Manager; provided that such specifications are not less stringent than those laid down. Regardless of which specifications are actually worked to when conducting the work, the work shall be capable of satisfactorily passing all tests laid down in the standard specifications called for.

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NATIONAL & INTERNATIONAL STANDARDS					
<u>Title</u>	Document number				
Inspection and testing of non-fixed load-lifting attachments (2008 ver 1).	SANS 687				
Inspection, examination and testing of manually operated chain blocks and	SANS 500:2009 Ed. 1				
chain lever hoists in use.					
The inspection, examination and testing of lift trucks.	SANS10388:2008 Ed. 1				
Textile slings — Safety Part 1: Flat woven webbing slings made of man- made	SANS 94-1:2003 Ed. 1				
fibres for general purpose use.					
Part 2: Round slings made of man-made fibres for general purpose use.	SANS 94-2:2003				
Steel wire ropes for general purposes — Minimum requirements	SANS 2408:2005				
Manually operated chain lever hoists	SANS 1636:2007 Ed. 2				
Manually operated chain blocks	SANS 1594:2007 Ed 2.1				
Non-calibrated round steel link lifting chain and chain slings — Use and	ISO 3056:1986 Ed. 2				
maintenance					
Calibrated round steel link lifting chains — Guidelines to proper use and	SANS 7592:1983 Ed. 1				
maintenance					
Short-link steel chain (close-tolerance) for lifting appliances	SANS 1592:2005 Ed. 1.2				
Occupational Health and Safety Act and Regulations	No. 85 of 1993				
TPT Specifications					
Title	Document number				
TPT Quality Management Specification for Service provider/Construction	EEAM-Q-009				
TPT's General Health and Safety Requirements and Conditions	RCB TPT SHERQ/RS PRO 033				
TPT's Specification for Hydraulic Equipment	EEAM-Q-002				
General requirements and conditions (he9-2-9 ver 7) rev 1	EEAM-Q-016				

Note: \* When no Revision of Date is furnished, the latest revision/edition will apply

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# 12 CONTRACT MANAGEMENT REQUIREMENTS

### 12.1 Safety Requirements

The contractor shall take full responsibility for ensuring that his employees and or subcontractors will comply with all relevant safety legislation while performing their functions as required by this SOW (as a minimum this is to include the TPT's General Health and Safety Requirements and Conditions — RCB TPT SHERQ/RS PRO 033). In particular, the Contractor will:

- 12.1.1 Provide the health and safety statement.
- 12.1.2 Issue suitable PPE to all staff and ensure that they are using it while performing their duties in the terminal:
- 12.1.3 Ensure that all staff is inducted before performing any duties at TPT:
- 12.1.4 Ensure that all staff and/or sub-contractors that will be performing duties at TPT will undergo mandatory SHEQ Induction training before being allowed to enter the plant.
- 12.1.5 Ensure that all staff is always complying with operational requirements in the plant.
- 12.1.6 Ensure that the respective staff is issued with access permits to ease access into the port in case of after-hours services.

### 12.2 Safety File requirements

- 12.2.1 Letter of good standing with insurance body or compensation commissioner
- 12.2.2 An organizational safety structure (organogram) stipulating the names of all the persons proposed by the contractor who would hold legal appointments on the project in terms of the Construction Regulation issued in terms of the Occupational Health and safety Act (Act 85 of 1993).
- 12.2.3 The expected roles, responsibilities, and authority of those who are proposed to receive legal appointments.
- 12.2.4 The resume(s) of the proposed Safety Officer(s) and his/ their roles, responsibilities, and authority.
- 12.2.5 Contractors' Safety, health, and environmental policies.
- 12.2.6 Provide an overview of the safety system / program that is used to manage safety, health, and environment.
- 12.2.7 Provide an overview of your risk assessment process (methodology) as well as examples of completed assessments.
- 12.2.8 Provide a list of the different job families and categories for the project as well as competency requirements per job category. Also provide a plan regarding how all outstanding competency requirements will be met.

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# 13 SITE INFORMATION

### 13.1 Site Conditions

- 13.1.1 The groundwater table has been recorded at between 0.8 m and 1.5 m below ground level across the site during winter.
- 13.1.2 Altitude sea level
- 13.1.3 Ambient temperature 5°C to 45 °C
- 13.1.4 Relative humidity frequently 100%
- 13.1.5 Air Pollution heavily saline and dust laden; industrial and locomotive fumes; ignitable dusts
- 13.1.6 General wind velocities up to 60km/hr
- 13.1.7 Storm wind velocities up to 180 km/hr
- 13.1.8 Climate data for Richards Bay based on monthly averages for the 30-year period: 1961- 1990 (SAW, 2005)2

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