



**FOSKOR (PTY) LTD**

**TECHNICAL SCOPE OF REQUIREMENTS**

**FOR THE**

**THE SUPPLY OF A TRACTOR-LOADER-BACKHOE (TLB) FOR CLEANING  
TIPPING BAYS**

<b>DOCUMENT- AND PROJECT APPROVAL</b>		
<b>FOSKOR OFFICIAL</b>	<b>SIGNATURE</b>	<b>DATE</b>
Prepared by: <b>Vhofhani Mukatuni</b> Project Engineer Projects Department		
Checked by: <b>Audrit Mayenetja</b> Acting Mech Services Superintendent TSS		
Approved by: <b>Josephine Malatji</b> Senior Manager Crushers Mining Department		

# SCOPE OF REQUIREMENTS for THE SUPPLY OF A TLB

## 1. INTRODUCTION

Foskor (Pty) Ltd. is an opencast mining and beneficiation operation situated in Phalaborwa. The core business of the Phalaborwa operation is the mining and beneficiation of phosphate rock. (The Foskor operation situated in Richards Bay is primarily a producer of phosphoric acid, phosphate-based fertilizers, and lower volumes of sulphuric acid)

As part of its mining and beneficiation operations approximately 1 800 000 tons of Phosphate ore/rock is crushed monthly at the crusher plant. during this process spillages accumulate at the tipping bays and conveyor belts, which poses a safety risk and possible damage to equipment when left unattended and for this purpose Foskor is now in the process of purchasing a Tractor-Loader-Backhoe (TLB).

## 2. BASIC REQUIREMENT

The supply of ONE self-propelled, 4X4 wheel driven, diesel powered TLB with a flywheel power rating of at least 64kW, a minimum loader bucket capacity of 1 m<sup>3</sup> (±0.1m<sup>3</sup>) and minimum backhoe bucket capacity of 0.3 m<sup>3</sup> (±0.05m<sup>3</sup>) designed to operate in rough terrain and soft sandy underfoot conditions.

The TLB must be delivered fully equipped, fully fuelled and ready for operation and must comply with all the specifications and requirements of this scope.

The TLB must be manufactured and tested to meet all SAE, ISO and/or SANS standards and requirements for TLB.

### **IMPORTANT NOTICE**

**BIDDER TO ENSURE THAT ALL ITEMS MENTIONED IN THIS SCOPE HAVE BEEN READ, IS UNDERSTOOD AND PROVIDED FOR.**

**TO ENSURE THAT THE BIDDER SUBMITS A VALID QUOTE AND TO ASSIST WITH THE TENDER EVALUATION PROCESS, BIDDER TO COMPLETE AND PROVIDE ALL INFORMATION AS REQUESTED IN THE FOLLOWING TABLES:**

- 13.1 MANDATORY SUPPLY ITEMS AND INFORMATION**
- 13.2 TECHNICAL EVALUATION**

**OMISSION OR FAILURE TO INCLUDE OR TO INDICATE THAT EACH AND EVERY MANDATORY REQUESTED ITEM, REQUIREMENT, SPECIFICATION OR REQUESTED INFORMATION WILL BE PROVIDED FOR WILL RESULT IN IMMEDIATE REJECTION OF QUOTATION OR BID.**

**ANY BID/QUOTATION WITH A TECHNICAL SCORE OF LESS THAN 70% WILL NOT BE CONSIDERED.**

**INFORMATION PROVIDED MUST BE DETAILED, CLEAR AND CONTAIN SUFFICIENT INFORMATION TO ENABLE BID EVALUATION COMMITTEE TO MAKE A DECISIVE ASSESSMENT.**

**DO NOT TICK (✓), USE THE WORD YES OR SIMILAR SHORT STATEMENT.**

### 3. SITE AND OPERATIONAL CONDITIONS

The TLB will, for the major part of each year operates at the Foskor Crushers plant for the following purposes but not limited to:

- The TLB will mainly be used for cleaning spillages at the tipping bay thus making the area safe for trucks when tipping to prevent safety incidents.
- Cleaning of spillage accumulation around conveyor belts thus preventing excessive spillage build up which affects conveyor belt structures.
- Digging of trenches and grounds to expose leaking pipes.

The TLB will normally travel on both rough gravel and fine sand with a hard-crystalline structure. During the extreme summer months Primary crushers temperatures can reach up to 45 °C.

Under normal conditions the TLB will be utilised for 24 hours per day, 7 days a week, although actual utilisation during this time will be approximately 8 hours per day.

It is the responsibility of the supplier to do a site study and to evaluate the suitability of the TLB offered to the Foskor site and actual working conditions. A site visit can be arranged on request.

### 4. MINIMUM PRE-BID QUALIFICATION CRITERIA AND -REQUIREMENTS

The bidder/supplier (Company) must be an industry recognized dealer in the supply of top-branded earth moving machines- and equipment within the mining-, construction-, and industrial industries and must comply with the following mandatory pre-qualification criteria and -requirements before any bid will be considered for technical- and/or commercial evaluation and assessment.

**Provide the following supporting information on an official company letterhead, -brochure or similar document:**

- a) Be a recognised dealer in the supply of CAT 444 (Caterpillar), Similar Komatsu, Similar Liebherr, Similar Bell or equivalent.  
(Provide company details)
- b) Have supplied at least three (3) same or similar sized crawler TLB in the past two (2) years.  
(Provide details of previous orders/projects successfully completed, i.e. TLB description, client, contact person, date of purchase order and delivery, etc)
- c) Have available a fully equipped maintenance workshop able to conduct major machine repair-, service-, component refurbishment and general maintenance requirements.  
(Provide details on location, workshop size, machines and equipment, technical staff, photos, etc.)
- d) Must have in its employ a fully trained and qualified field maintenance- and support team that will be on-site within 24-hours after receiving an official request or purchase order for technical assistance.  
(Provide details on number of teams, vehicles, response times, typical cost to travel to Phalaborwa, etc)

**IMPORTANT NOTICE**

**ALL NON-OEM (Original Equipment Manufacturer) DEALERS OR BIDDERS MUST INCLUDE AND ATTACH TO THE OFFICIAL TENDER SUBMISSION A LETTER STATING THAT THE BRANDED OEM:**

- 1. IS A RECOGNISED SUPPLIER OF KOMATSU OR CAT BRANDED EARTH MOVING MACHINES AND EQUIPMENT.**
- 2. HAS SUPPLIED AT LEAST THREE OF THE SAME OR SIMILAR SIZED TLB IN THE PAST TWO YEARS (Provide TLB description, client, contact person, date of purchase order, etc)**
- 3. WILL CARRY FULL RESPONSIBILITY OF THE TLB SUPPLIED WHILST UNDER WARRANTY CONDITIONS.**
- 4. WILL PROVIDE FULL AFTER SALES SERVICE.**
- 5. HAS LOCALLY AVAILABLE MORE THAN 95% OFF REQUIRED SPARES TO SERVICE AND MAINTAIN THE TLB.**
- 6. HAS IN ITS EMPLOY A FULLY TRAINED AND QUALIFIED FIELD MAINTENANCE- AND SUPPORT TEAM**

## **5. TLB SPECIFICATIONS AND REQUIREMENTS**

This scope covers the minimum specifications, requirements, and basic characteristics for a self-propelled, diesel powered TLB.

### **5.1. GENERAL**

- a) The TLB must be equipped to ensure optimal efficiency under given Foscoper operating conditions.
- b) The TLB offered must comply with the following standards of safety:
  - I. Foscoper standard procedures and requirements for safety and health.
  - II. The Mines Health and Safety Act and Regulations, 29/1996
  - III. All relevant SAE, ISO and SANS standards
- c) All materials and parts used must be freely available in the Republic of South Africa for a minimum period of fifteen (15) years.
- d) All tests and inspections of the assembled TLB and major components must be conducted at the suppliers' premises prior to dispatching to site in Phalaborwa.
- e) The supplier is responsible for the transporting to site and offloading of the TLB.
- g) All meetings will be held on Foscoper premises, unless arranged otherwise.
- h) Upon delivery, the TLB will undergo a complete inspection to ensure that all the requirements of this SCOPE have been met.

### **5.2. BUCKET LOADING/PERFORMANCE REQUIREMENTS**

- a) Loader bucket:
  - I. Minimum Bucket volume: 1.0 m<sup>3</sup> (±0.1m<sup>3</sup>)
  - II. Minimum breakout force (ISO 14397): 6,000kg
  - III. Minimum lifting capacity at maximum height: 3,500kg
  - IV. Minimum lifting height: 2.7m
- b) Backhoe bucket:
  - I. Minimum Bucket volume: 0.3 m<sup>3</sup> (±0.05m<sup>3</sup>)
  - II. Minimum breakout force (ISO 6015): 6,000kg
  - III. Minimum horizontal digging reach: 4.0m
  - IV. Minimum vertical digging depth: 4.0m
  - V. Minimum dump height: 3.7m
  - VI. Minimum vertical cutting height: 5.5m
  - VII. Minimum boom rotational angle: 180°
- c) Buckets to be fitted with flush mounted weld-on adaptors-and-teeth.
- d) Approximate specifications of typical materials to be loaded (wet or dry):

Phosphate rock	SG 3200 kg/m <sup>3</sup>
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### **5.3. ENGINE**

- a) TLB to be fitted with engine either from minimum 64 kW Cummins, Mercedes Benz, Caterpillar or Perkins.

(Please specify engine make and specifications of not comply)

- b) Exhaust emissions to meet all relevant ordinances.
- c) Engine power rating must be sufficient to easily ascend an incline of 30 degrees with loader bucket full.
- d) Engine cooling system must be compatible with NALCOOL 2000 or any Ethylene Glycol based coolant.
- e) Engine exhaust system must be securely mounted and must be routed at least 300mm from any electrical systems, electrical wiring and hydraulic/oil systems.
- f) Micro oil and air filters to be engine manufacturer specified.

#### 5.4. STEERING SYSTEM

- a) Must be hydrostatically actuated and must have unlimited manoeuvrability for full power turns.
- b) Minimum turning radius (Outer tyre): 4.0m

#### 5.5. CAB

- a) A ROPS-type canopy according to ISO 3471 (1994) must be provided.
- b) A FOPS-type canopy according to ISO 3449 (1992) must be provided.  
**A CERTIFICATE AUTHENTICATING ROPS & FOPS COMPLIANCE TO BE ATTACHED TO OFFICIAL QUOTE / SUPPLIED WITH TLB**
- c) Large clearly marked, tinted safety glass must be used through-out to provide good visibility
- d) Sliding windows with flat handles must be fitted on both sides of the cab.
- e) Fitted with lockable doors
- f) Clearly audible horn. The sound must be clearly audible at a distance of at least 90 meters.
- g) Rear view mirrors – regular and wide angle
- h) Cab sound level with doors and windows closed and engine running at full power may not exceed 82 dB(A).  
**COMPLIANCE CERTIFICATE TO BE ATTACHED TO OFFICIAL QUOTE / SUPPLIED WITH TLB.**
- i) 2-way radio must be installed in overhead console.  
Make RTS model DV2066 programmed to the following frequencies:  
Channel 1: TX 76,375 RX 69,450  
Channel 2: TX 76,350 RX 69,425  
Channel 3: TX 76,975 RX 71,525  
Channel 4: TX 72,800 RX 72,800 (Channel 4 with CTCSS encode + decode 94,8Hz)  
(Contact the local agent Danie Ferreira at [dfelectronicent@gmail.com](mailto:dfelectronicent@gmail.com) for details or further information)
- j) Cab offered must have at least the following features:
  - I. 2 x two speed electric windscreen wipers
  - II. Windscreen demister
  - III. Adjustable sun visor
  - IV. Air suspension seat with a dual-sided support recliner, fully height-backrest adjustable (90° to 120°), adjustable armrests, seat belt and thicker cushions.
  - V. Full size trainer seat fitted with a retractable seatbelt. Seatbelt to be in accordance with the National Road Traffic Act.
  - VI. Seats and door padding to be covered in heavy duty rip-stop material.

#### 5.6. AIR CONDITIONER

- a) The air conditioner unit must be designed to maintain a cabin temperature of between 18°C and 25°C under the following given extreme conditions:

PARAMETER	VALUE
Maximum outside summer temperature	45°C
Maximum outside winter temperature	30°C
Minimum outside winter temperature	0°C
Approximate altitude above sea level	450 m

- b) All major components of the air conditioner, except the condenser and cab-heating unit, must be housed together in one modular unit.
- c) The compressor must be designed to deliver the required cooling output at the average engine speed encountered during the machines normal operating cycle.
- d) All units offered must be ozone friendly and operate on refrigerant R134A.

#### 5.7. BRAKES

- a) Fail safe braking system to be fitted.  
(Full description of the braking system to be attached to official quotation)

**COMPLIANCE CERTIFICATE TO BE ATTACHED TO OFFICIAL QUOTE / SUPPLIED WITH TLB.**

- b) All steel pipes in the hydraulic braking circuit must be seamless.

**5.8. TYRES**

- a) Tyres must be suited to operate in rough terrain.

**5.9. PAINTING AND COLOUR**

- a) TLB to be painted with high quality automotive paint.
- b) Cab to be painted white. (If standard, then cab uprights/corner posts may remain in black. Cab roof white)
- c) Frame, loader arms, backhoe boom, buckets, bonnet, and undercarriage to be painted in Foskor's corporate green. RAL code 6001.
- d) Standard manufactures logos, machine insignia and decorative markings may remain.

NOTE: Bidder to quote PAINTING AND COLOUR as optional extra.

**5.10. BATTERY ANTI-THEFT PREVENTION GUARD**

- a) TLB to be provided with a guard, case or similar locking mechanism to prevent battery theft.

**5.11. FUEL TANKS**

- a) Fuel tanks of sufficient capacity for 12 hours continuous operation must be fitted.
- b) Fuel tank to be fitted with a lockable fuel cap.
- c) A level probe, indicating full, as well as 3-hour fuel reserve, must be supplied and must be connected to the Vital Signs system or warning panel.
- d) A 400-mm standpipe on breather must be supplied. Breather design must prevent spillage during filling.

**5.12. HYDRAULIC COMPONENTS**

- a) Where possible, hydraulic lines must be of steel and routed separately from electrical cables, hot engine components and exhaust system.
- b) The hydraulic pressure rating must be indicated.
- c) Hydraulic filters must be specified, and electrical by-pass indication must be indicated.
- d) Contamination control instrument coupling must be installed to draw oil samples.

**5.13. INSTRUMENTATION AND LIGHTING**

- a) All instruments must be metric and labelled in English.
- b) All instruments must be illuminated.
- c) TLB must have PDS (Pedestrian Detection System)
- d) TLB to be provided with 2 forward facing headlights, 2 forward (For loader) facing working lights and 2 rear facing (For backhoe) working lights.
- e) Headlights and working lights must be HELLA MEGA BEAM LED lights and must provide adequate lighting for safe nighttime operation.

*(The following groups supply Automotive LED globes: HELLA, AC/DC Dynamics, Electro Diesel Group, TRYSOME, and FARASONN Auto Electrical)*

**5.14. SAFETY EQUIPMENT, ALARMS AND WARNING DEVICES**

- a) TLB to be fitted with a lockable master switch (Bosch 4 pole master switch and isolator locking bracket Trysome part. T170015403) to disconnect negative side of battery. Switch to be mounted within the engine compartment and be easily accessible for quick isolation.
- b) TLB to be fitted with a heavy-duty amber LED strobe light mounted in the center on the roof. The strobe light must be activated by means of an **independent** ON-OFF switch mounted on the TLB control panel, a LED light must indicate if strobe light is ON or OFF. Electrical wires must be concealed and run neatly through body panels.  
**Strobe light may not to be wired into the ignition or light circuit.**
- c) TLB to be provided with two heavy duty stop-blocks (Chock blocks).
  - I. Stop-blocks to be manufactured from all-weather heavy-duty material. Colour bright yellow.
  - II. Stop-blocks to fit wheel radius snugly and be suitable for the TLB.

- III. Stop-blocks to be mounted in a heavy-duty bracket, in an un-obstructive position and must be easily accessible.
- IV. Stop-blocks to be fitted with non-slip pads and a handle for easy handling.
- d) TLB to be supplied with a set of emergency warning triangles mounted in a heavy-duty bracket, in an un-obstructive position and must be easily accessible.
- e) Taillights to be fitted with rugged metal guards. Guards to be affixed with corrosion resistant screws. (Guards are not to be riveted on)
- f) TLB to be fitted with an electrical horn. The sound must be clearly audible at a distance of at least 90 meters.
- g) TLB to be fitted with an electrical audible back-up warning device (ECCO 787). The sound must be intermitting and clearly audible at a distance of at least 90 meters.

#### **5.15.SAVER / PROTECTION SYSTEM**

- a) TLB must be provided with a standard factory fitted saver / protection system to ensure that the engine and major components are not endangered when the following operational parameters are exceeded.
  - I. Low engine oil pressure
  - II. Low coolant level
  - III. Low engine oil level
  - IV. High engine temperature
  - V. Engine over speed
  - VI. Hydraulic tank oil temperature exceeding 80°C
  - VII. Blocked engine oil filters
- b) If TLB not fitted with a standard factory fitted saver / protection an AMS fail save protection system supplied and fitted by Autoelectron cc to be supplied.

#### **5.16.FIRE PROTECTION SYSTEM**

- a) TLB to be fitted with an automatic & manually activated fixed nozzle fire suppression system using a minimum 22kg of MAP 90% dry chemical agent.  
Automatic fire protection system (Specification: ASTEX or ANSUL) to be supplied and installed by a SANS 1475-1 authority permitted to apply a certification mark. Provision must be made to protect all major components.  
**COMPLIANCE CERTIFICATE TO BE ATTACHED TO OFFICIAL QUOTE / SUPPLIED WITH LOADER.**
- b) Loader to be supplied with a 2.5kg, SABS approved, dry powder, 50% Mono Ammonium Phosphate based fire extinguisher mounted in a heavy-duty quick release bracket, inside the operator's cab and in an un-obstructive and easily accessible position.

#### **5.17.COLLISION AVOIDANCE (PROXIMITY DETECTION) SYSTEM**

- a) TLB to be supplied with a FAVORSEA CAS-L7 (level 7) Mine Collision Avoidance System.
- b) The cabin display unit must be mounted neatly, permanently and unobstructive on the TLB' dash and must be easily observable to the operator.
- c) Display unit must be visible at night.
- d) CAS system to be powered directly from the TLB own power source (No batteries)
- e) CAS system must be equipped so that when an object within a 10.0-meter distance from the TLB is detected, an intermitting audible warning signal will activate. Noise intensity of 85 - 90dB
- f) All wiring and cabling must be neat, unobstructive and concealed within body panels.
- g) **COMPLIANCE CERTIFICATE TO BE SUPPLIED WITH TLB** certifying that the CAS system was supplied, installed and commissioned by FAVORSEA Africa or an official FAVORSEA appointed agent/authority.

#### **FAVORSEA AFRICA**

Maina Nyoni  
Projects and Admin Manager  
TEL: +27 12 003 3299 -Centurion  
TEL: +27 87 897 4981 -Emalahleni  
MOBILE: +27 71 624 8937  
EMAIL: [mnyoni@favorsea.com](mailto:mnyoni@favorsea.com)

## 5.18. CONSPICUITY MARKING FILM

- a) TLB shall be provided with conspicuity marking strips (Tape) as follows:
- I. SIDES: Yellow (3M Diamond grade 983-71)



- II. REAR roof edge and cab pillars: Red (3M Diamond grade 4092)
- III. FRONT roof edge, cab pillars and bonnet front edge: White (3M Diamond grade 4090)
- IV. Tape strips shall be placed in a straight line with the least number of interferences (eg. Door handles, light lenses, exterior mirrors, etc) to clearly indicate vehicle length/width, height and general outline.
- V. Tape strips to be cut 25mm shorter than desired length so that the strip ends short of a panel edge.
- VI. Round corners (10mm radius) of tape strip to prevent film lifting away from surface/panel
- VII. Tape strips to be flat and smooth, no wrinkles.
- VIII. Tape strip may not be placed on any rotating part of TLB.
- IX. Tape strip may not be placed on any windows (Front, rear or side).

- b) “Blank” vehicle identification labels shall be placed on each side of the TLB.

- I. Dimensions 400 x 300. Corner radius 30mm.
- II. Material reflective 3M Digital Grade DG3 Reflective Sheeting 4083 – Yellow
- III. Border to be printed in Screen Print in 3M Ink Series 880i, black 12 mm thick



- c) “Blank” vehicle identification label shall be placed on bonnet of the TLB.

- I. Dimensions 750 x 250. Corner radius 30mm.
- II. Material reflective 3M Digital Grade DG3 Reflective Sheeting 4083 – Yellow
- III. Border to be printed in Screen Print in 3M Ink Series 880i, black 12 mm thick.



## 6. DATA PACK (DOCUMENTATION AND CERTIFICATION)

The TLB must be delivered with the following ORIGINAL certificates and documentation:

- a) Certificate authenticating that the **FIRE PROTECTION SYSTEM** was fitted/mounted by a SANS 1475-1 authority.
- b) Certificate authenticating that the **CAS LEVEL-7 SYSTEM** was supplied by FAVORSEA Africa or an official FAVORSEA appointed agent/authority.



- c) Certificate authenticating that the working **LIGHTS** illumination was tested by a competent authority for functional performance requirements.

## 7. MAINTENANCE AND OPERATOR TRAINING

- a) Supplier to provide one comprehensive ON-SITE training session for at least ten (10) nominated operators in the safe and correct manner to inspect and safely operate the TLB.
  - i. Supplier to issue trained operator/s with a formal certificate declaring the operator competent to inspect and operate the TLB safely and correctly.
  - ii. Training sessions can be conducted during official delivery or hand over.
- b) Supplier to provide one comprehensive ON-SITE training session for at least twenty (20) nominated maintenance personnel in the safe and correct manner to service, repair, maintain and carry out fault finding exercises on the TLB.
  - i. Maintenance personnel will include all mechanical and electrical disciplines.
  - ii. Supplier to issue trained maintenance personnel with a formal certificate declaring the maintenance person competent to service, repair and maintain the TLB.
  - iii. Training for maintenance personnel can be conducted during the first service.
- c) Maintenance and operator training to be included in the purchase price.

## 8. FIRST ON-SITE FULL SCHEDULED SERVICE AND INSPECTION

The supplier shall conduct the first on-site full scheduled service of the TLB. The supplier shall supply all labour, travelling, accommodation, service kits and any other item of expense to complete the service as per the maintenance schedule. During the service the supplier shall also conduct a thorough inspection of the TLB to ensure that the TLB and all components are secure and functioning according to requirement. Foscort will provide lubricants and cooling fluids.

(The supplier must take note that he will be required to undergo specific inductions, training and obtain authorisations before being allowed to enter and work on the Foscort site – details can be forwarded on request)

## 9. INFORMATION REQUIRED

The following additional information is to be submitted together with the official quotation:

- a) Details of closest service and parts centre to Foscort, Phalaborwa.
- b) Names and contact details of other clients that have purchased similar machines within the past 24 months.
- c) Engine repair- and maintenance cost estimates based on 30,000 operating hours, with a minimum of 3,000 hours per year.
- d) Estimated running costs. Estimates must include detailed information on the following:
  - i. Time between overhauls and / or replacements
  - ii. Spares cost for all overhauls
  - iii. Labor hours required for overhauls.
  - iv. Quantities, replacement intervals and cost of all filters and consumables
  - v. Oil changing intervals and volumes required. Minimum ISO / SAE lubrication specifications to be included in quotation.
  - vi. Summarized detailed repair- and maintenance estimates.  
(Running costs must exclude operator costs)
  - vii. Stipulate guarantee period on all major components.
  - viii. List of critical spares that must be kept on site.

## 10. MANUALS AND DOCUMENTATION

FULL WORKSHOP MANUALS (NOT SERVICE MANUALS) MUST BE IN ENGLISH, MUST BE SUBMITTED IN A BOOK OR BINDING ARCH FILE FORMAT AND MUST BE DURABLE AND OF HIGH QUALITY (**NO SOFT COPIES**)

- a) **Three “safety manuals”** containing detailed and step-by-step task descriptions for general maintenance, major component replacements and abnormal operating conditions. Task descriptions to show identified hazards and what corrective actions must be taken. (Risk assessment and safety precautions)
- b) **Three “operator manuals”** to be supplied. The operator’s manual must at least contain:

- i. Operator responsibilities overview
  - ii. Location of machine components
  - iii. Detailed operating instructions and safe operating practices.
  - iv. A daily or pre-start check list.
  - v. A preventative maintenance and safety check list.
  - vi. Maintenance work precautions
  - vii. Danger and warning requirements
- c) **Three “Workshop maintenance manuals”** to be supplied. The maintenance manuals must at least contain:
- i. Expected life of critical components.
  - ii. Comprehensive list of planned maintenance (PM) tasks (structural inspections, mechanical, electrical and electronic)
  - iii. Frequency of each PM task.
  - iv. List of spares (with part no's) and special tools required to do each PM task.
  - v. Comprehensive task description consisting of procedures and all technical information, such as pressure settings, temperature limits, torque specification, shaft alignment tolerances and voltage- & current limits, for each PM task.
  - vi. Condition monitoring information: Recommended techniques, monitoring points, alarm values, etc
  - vii. List of reconditionable components.
  - viii. Exploded view of each component.
  - ix. Strip and assembly procedures.
  - x. Logics and piping diagrams for both lubricating and hydraulic systems.
  - xi. Welding specifications for structural repairs.
  - xii. Lubrication specifications. Manual must contain at least the following information:
    - a. Full specification of the required lubricant for each application / compartment.
    - b. Quantities of initial fills
    - c. Expected consumption rate in each application.
    - d. Recommended intervals for complete lubricant charges.
    - e. A list of at least 3 approved lubricant brands (different companies and their part no)
    - f. Acceptable ISO-contamination levels in lubricants and hydraulic fluids
- d) **Three “Workshop Electrical and Electronic maintenance manuals”** to be supplied. The maintenance manuals must at least contain:
- i. Logic and wiring diagrams of all electrical systems.
  - ii. Logic and wiring diagrams of all electronic systems.
  - iii. Fault finding and test procedures.
  - iv. Voltage and pressure settings and limits
  - v. Repair procedures for electric motors and switchgear.
  - vi. Technical descriptions of all components (Power supplies, PLC's, ECM's, transducers, instrumentation, and operation interface panels)
  - vii. PLC or ECM's programming and users guide with **software**.
  - viii. Safety features
- e) **Three “Spare parts manuals”** to be supplied. The parts manual must at least contain:
- i. A list of the top 50 moving parts.
  - ii. List of all spare parts
  - iii. Index reflecting all part No's in numerical sequence with page no's on which the part no's appear
  - iv. Special tools and their replaceable components
  - v. All accessories and their replaceable components
  - vi. Exploded view illustration of each item identified by OEM part number.
  - vii. Identification of service exchangeable items
  - viii. A list of window sizes for replacements
  - ix. Vendor brand names and vendor part numbers of all non-OEM manufactured items that are approved by the OEM.
  - x. Each hydraulic pipe described in terms of:
    - a. Rubber pipe length
    - b. Pressure rating

- c. Internal diameter of pipe
- d. Descriptions of standard fittings on both ends
- f) **Three “Maintenance training manuals”** to be supplied. The training manual must at least contain:
  - i. Mechanical Maintenance Training
  - ii. Electrical Maintenance Training
  - iii. Electronic Maintenance Training
  - iv. Operator Training
  - v. This manual must be written from a lecturer’s perspective and contain the necessary visual aids for training purposes such as transparencies, wall charts and videos.
- g) **Three “Sets electrical drawings”** including harness lay-out, wiring numbers and connectors positions.
- h) If available, three copies of sectional arrangement drawings and/or illustrations showing characteristic, features and leading dimensions of the truck in wall chart format.

## 11. QUALITY ASSURANCE

Quality assurance and workmanship of the supplied TLB and/or any support, components, spares, installations, and training is the responsibility of the supplier. Omission from any prescribed or agreed upon item, procedure or service that could have an adverse effect on the quality of the TLB and/or any support, components, spares, and training will be brought to the attention of the supplier. Failure by the supplier to correct any reported defects or to show objective evidence of acceptable conformance to requirements will result in immediate termination of contract.

Components or systems not fitted by the OEM (Original Equipment Manufacturer) shall meet the OEM standards and be approved by the OEM, who will carry the full responsibility and guarantee.

## 12. AFTER SALES SERVICE

- a) Full guarantee on TLB and all spares, major and minor components, materials, equipment, auxiliaries, and installations for a minimum period of at least 24 months / 4000 hours or alternatively standard TLB warranty to be mentioned in the official tender.
- b) **Full description of planned support during and after the guarantee period to be attached to the official quotation.**

### 13. COMMERCIAL and BID ASSESSMENT

#### **IMPORTANT NOTICE**

It remains the responsibility of the bidder to ensure that the above-mentioned specifications and requirements have been read, is understood and provided for in the official quotation.

To assist the bidder and to ensure that all items listed in this SCOPE have been provided for, and to assist with the tender evaluation process, the bidder is required to complete following tables.

**DO NOT OMIT ANY INFORMATION AS REQUESTED IN THE TABLES BELOW  
INFORMATION AND DETAILS MUST BE PROVIDED FOR EACH ITEM.**

**ATTACH AND REFERENCE IF SPACE INSUFFICIENT**

**INFORMATION PROVIDED MUST BE DETAILED AND CLEAR AND CONTAIN  
SUFFICIENT INFORMATION TO ENABLE BID EVALUATION COMMITTEE TO MAKE A  
DECISIVE ASSESSMENT.**

**DO NOT ONLY TICK (✓) OR USE THE WORD YES.**

#### 13.1. MANDATORY SUPPLY ITEMS AND INFORMATION

**FAILURE NOT TO PROVIDE FOR ALL MANDATORY REQUESTED ITEMS OR  
INFORMATION WILL RESULT IN IMMEDIATE REJECTION OF QUOTE OR BID**

**ALL NON-OEM (Original Equipment Manufacturer) DEALERS OR BIDDERS MUST INCLUDE AND ATTACH TO THE OFFICIAL TENDER SUBMISSION A LETTER STATING THAT THE BRANDED OEM:**

- 1. IS A RECOGNISED SUPPLIER OF EARTH MOVING MACHINES AND EQUIPMENT.**
- 2. HAS SUPPLIED AT LEAST THREE OF THE SAME OR SIMILAR SIZED TLB IN THE PAST TWO YEARS  
(Provide TLB description, client, contact person, date of purchase order, etc)**
- 3. WILL CARRY FULL RESPONSIBILITY OF THE TLB SUPPLIED WHILST UNDER WARRANTY CONDITIONS.**
- 4. WILL PROVIDE FULL AFTER SALES SERVICE.**
- 5. HAS LOCALLY AVAILABLE MORE THAN 95% OFF REQUIRED SPARES TO SERVICE AND MAINTAIN THE TLB.**
- 6. HAS IN ITS EMPLOY A FULLY TRAINED AND QUALIFIED FIELD MAINTENANCE- AND SUPPORT TEAM**

		<b>INFORMATION PROVIDED MUST BE <u>DETAILED</u> AND <u>CLEAR</u> AND CONTAIN <u>SUFFICIENT</u> INFORMATION FOR BID EVALUATION COMMITTEE TO MAKE A <u>DECISIVE</u> ASSESSMENT. <u>DO NOT</u> TICK (✓), USE THE WORD YES OR SIMILAR SHORT STATEMENT</b>
1.	<b>As per PRE-BID QUALIFICATION CRITERIA:</b> Supply company details as a dealer in CAT 444 (Caterpillar), Similar Komatsu, Similar Liebherr, Similar Bell or equivalent.	<i>Attach and reference if space insufficient</i>
2.	<b>As per PRE-BID QUALIFICATION CRITERIA:</b> Supply details of at least three (3) of the same or similar TLB sold in the past two (2) years. (Provide details of previous orders/projects successfully completed, i.e. TLB make and model, client, contact person, date of purchase order and delivery, etc)	<i>Attach and reference if space insufficient</i>
3.	<b>As per PRE-BID QUALIFICATION CRITERIA:</b> Confirm that more than 95% of spares for proposed TLB locally (South Africa) available. (Provide details of spares warehouse, stock value, -supply chain procedures, typical local- and import spares delivery times, etc.)	<i>Attach and reference if space insufficient</i>
4.	<b>As per PRE-BID QUALIFICATION CRITERIA:</b> Confirm availability of a fully equipped maintenance workshop able to conduct major machine repair-, service-, component refurbishment and general maintenance requirements. (Provide details on location, workshop size, machines and equipment, technical staff, photos, etc.)	<i>Attach and reference if space insufficient</i>
5.	<b>As per PRE-BID QUALIFICATION CRITERIA:</b> Confirm that in its employ the bidder has a fully trained and qualified field maintenance- and support team that will be on-site within 24 hours after receiving and official request or purchase order for technical assistance. (Provide details on number of teams, vehicles, response times, typical cost to travel to Phalaborwa, etc)	<i>Attach and reference if space insufficient</i>
6.	<b>As per PRE-BID QUALIFICATION CRITERIA:</b> CIPC certificate (Companies and Intellectual Property Commission) as a service provider in supply of earth moving machines and related equipment and in the after sales maintenance- and repair support of own branded machines and equipment. (Provide copy of certificate)	<i>Attach and reference if space insufficient</i>
7.	Confirm Bosch 4 pole master switch and isolator locking bracket (Trysome part number T170015403) to be fitted in engine compartment.	<i>Attach and reference if space insufficient</i>
8.	Confirm TLB cab is ROPS compliant (ISO 3471 1994)	<i>Attach and reference if space insufficient</i>
9.	Confirm TLB cab is FOPS compliant (ISO 3449 1992)	<i>Attach and reference if space insufficient</i>

10.	Confirm noise emitted by TLB does not exceed 105dB(A) as per MHSC mandate of 2024	<i>Attach and reference if space insufficient</i>
11.	Confirm TLB cab internal sound level does not exceed 76dB (ISO 6396 2008)	<i>Attach and reference if space insufficient</i>
12.	Confirm TLB to be supplied with a FAVORSEA CAS-L7 (level 7) Mine Collision Avoidance System as specified in section of COLLISION AVOIDANCE (PROXIMITY DETECTION) SYSTEM of this document.	<i>Attach and reference if space insufficient</i>
13.	Confirm that three (3) sets of mechanical and electrical workshop maintenance, wiring (Including wiring diagrams) and spares parts manuals will be supplied. Only hard copies. ( <u>FULL</u> WORKSHOP MANUALS, <u>NOT</u> SERVICE MANUALS)	<i>Attach and reference if space insufficient</i>
14.	Confirm articulated TLB will be delivered with the following ORIGINAL certificates and documentation ( <b>DATA PACK</b> ): a) Certificate authenticating that the fire protection system fitted/mounted by a SANS 1475-1 authority. b) Certificate authenticating that the CAS Level-7 system supplied, installed, and commissioned by FAVORSEA Africa or an official FAVORSEA appointed agent/authority. d) Certificate authenticating that the working lights illumination was tested by a competent authority for functional performance requirements.	<i>Attach and reference if space insufficient</i>

### 13.2. TECHNICAL EVALUATION

**FAILURE TO CONFIRM COMPLIANCE OR NOT TO PROVIDE REQUESTED INFORMATION WILL RESULT IN A REDUCED TECHNICAL EVALUATION SCORE THAT COULD ADVERSELY AFFECT THE BIDDERS CHANCE OF BEING AWARDED THIS CONTRACT/ORDER.**

**ANY BID/QUOTATION WITH A TECHNICAL EVALUATION SCORE OF LESS THAN 70% WILL NOT BE CONSIDERED.**

	Criteria	Weight	Scores	Required document/proof
1.	Pre-existing dealership within the locality to facilitate after sales support and servicing of TLB.	10%	Within Ba-Phalaborwa = 100% Mopani District = 70% Limpopo Province = 60% Outside Limpopo = 55%	-Provide certificate of Dealership of the brand offered -Physical address (Proof thereof is a Valid lease and/or municipal statements)
2	Maintenance support service, ability for quick respond to breakdown callout.	10%	Respond within 24hours = 100% Respond within 48hours = 70% Respond within 72hours = 50% Respond exceeding 72hours = 0%	Provide confirmation.
3.	Guarantees/warranty on TLB and all spares, major and minor components, materials, equipment, auxiliaries, and installations for a minimum period of at least 48 months.	20%	Comply = 100% Between 24 months and 47 months = 50 % Less than 24 months = 0%	Provide confirmation
4.	Service Plan – service every 500hours (48 months). on-site scheduled service and inspection of the TLB, including the supply of labour, travelling, accommodation and service kits.	15%	Comply = 100% Between 24 months and 47 months = 50 % Less than 24 months = 0%	Provide confirmation.
5.	First (250 hour) on-site scheduled service and inspection of the TLB, including the supply of labour, travelling, accommodation and service kits.	10%	Comply = 100% No first service = 0%	Provide confirmation.
6.	Lead time for delivery of TLB	15%	<6 weeks = 100% >6 <=8 weeks = 80% >8 <=10 weeks = 70% >10 <=12 weeks = 50% >12 <=14 weeks = 30% >14 weeks = 0	Provide confirmation.
7.	On-site training for twenty (20 maximum) operational personnel and maintenance personnel (Mechanical and electrical).	20%	Training provided on-site = 100% Training not provided = 0%	Provide confirmation.
		100%		

### 13.3.BID / QUOTATION REQUIREMENTS

**BIDDER TO PROVIDED FOR AND CLEARLY INDICATE IN THE OFFICIAL QUOTATION THAT EACH AND EVERY ITEM HAS BEEN INCLUDED**

**OFFICIAL QUOTATION TO CONTAIN A DETAILED COST BREAKDOWN  
(Failure not to provide for all requested items could lead to rejection of quotation)**

**FOSKOR RESERVES THE RIGHT TO REMOVE ANY LISTED ITEM**

- i. Detailed description of any items or conditions that the bidder does not meet to be attached to the official quotation.
- ii. The bidders standard service warranty agreement to be attached to the official tender.
- iii. Any other optional features, support, spares, training or guarantee not mentioned in this scope may be noted on the official tender.
- iv. Quotation prices to be valid for at least **60 days**.
- v. If any minimum requirements may alter or be added for whatever reason, it will be brought to the attention of the bidder before the closing date for the submission of the tender.



#### 13.4. PRICING SCHEDULE

**Description: Supply of 1 X Self-propelled, 4X4 wheel driven, diesel powered TLB.**

All items of expense to be Included in Pricing Schedule.

1	ITEM	Quantity	Price per unit	Total
1	The supply of ONE self-propelled, 4X4 wheel driven, diesel powered TLB as per specified above in item 5 ( <b>MINIMUM SPECIFICATIONS AND REQUIREMENTS</b> )	1		
Total (excluding VAT)				
VAT				
TOTAL (Including VAT)				

#### LEAD TIME FOR DELIVERY

**Leadtime in weeks** (Delivery to site) : \_\_\_\_\_ Weeks (from date of award)

Delivery is crucial for this work. Foskor reserves the right to physically confirm/ inspect availability and progress with installations at bidder's site.