

PART C3: SERVICE INFORMATION

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C3.1 Service Information

1 Description of the service

1.1 Background

This scope of services covers the tank refurbishment required at Deal Party, Gqeberha and any other work arising out of or incidental to the above or required of the *Contractor* for the proper completion of the *Service* in accordance with the true meaning and intent of the contract.

1.2 Executive overview

The service that the *Contractor* is to perform is the tank refurbishment and listed as follows:

- Tank roof external repairs
- Tank roof nozzle repair
- Tank handrails, platforms, supports and access stairway repairs
- Tank shell external repair
- Tank shell nozzle repairs
- Tank internal repairs
- Tank floor repair
- Tank foundation repairs

1.3 Employers Objective

The Employer's current objective is to achieve the installation of underground suction line at Halfweg Loop 10 as soon as possible whilst still maintaining the highest quality and safety standards, without interfering with the normal day to day operations.



2 SERVICE

2.1 Temporary service, Affected Property & constraints on how the Contractor Provides the Service

2.1.1 Employer's Site entry and security control, permits, and Site regulations

The work to be carried out is at the Halfweg Depot Loop 10

2.1.2 The *Contractor* shall ensure the safe passage of traffic to and around the working areas at all times.

2.1.3 Restrictions to access on Affected Property, roads, walkways and barricades:

2.1.3.1 The *Contractor* is specifically excluded from entering the *Employer's* Operational Areas which are adjacent to the Affected Property. The *Contractor* plans and organises his work in such a manner to cause the least possible disruption to the *Employer's* operations.

2.1.3.2 The *Contractor* ensures safe passage of his team around the Affected Property working areas at all times.

2.1.3.3 The *Contractor* ensures that his staff, labour and Equipment moving outside of his allocated Affected Property and Service Areas does not obstruct the operations of the *Employer*. To this end, access routes are allocated and co-ordinated by the *Service Manager*.

2.1.3.4 The *Contractor* ensures that all his staff, labour and Equipment remains within his allocated and fenced off working Area.

2.1.3.5 All *Contractor's* staff and labour working within the service area complies with Transnet Rail Infrastructure Manager (TRIM) operational safety requirements and are equipped with all necessary personnel protective equipment (PPE) for the duration of the project.

2.1.3.6 Ensure conformance to safety requirements as per OHS Act and at Zone 1 Area as specified
by SANS 10089 Part 1 – 3.

2.1.4 People restrictions on Affected Property; hours of work, conduct and records:

2.1.4.1 The working hours shall be in accordance with the requirements of the Department of Labour or with the agreement of the relevant trade unions. This information relating to working hours shall
be supplied to the *Service Manager* prior to commencement of the proposed working hours.

2.1.4.2 The *Contractor* keeps daily records of his people engaged on the Affected Property with access to such daily records available for inspection by the *Service Manager* at all reasonable
times.

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2.1.5 Cooperating with and obtaining acceptance of others

2.1.5.1 The *Contractor* shall not commit or permit any act that may interfere with the performance of the other parties operating in the area and shall carry out work in close liaison with the *Service Manager*.

2.1.6 Publicity and progress photographs

2.1.6.1 The *Contractor* shall obtain the permission and approval of the *Employer* before erecting any notice boards or using the details of the contract in any advertising media.

2.1.6.2 The *Contractor* does not advertise the contract or the project to any third party, nor communicate directly with the media (in any jurisdiction) whatsoever without the express written notification and consent of the *Service Manager*.

2.1.7 Equipment provided by the *Employer*

2.1.7.1 None

2.1.8 Site Services and Facilities

2.1.8.1 The *Contractor* shall make his own arrangements for the supply of services such as electricity, potable water, ablutions, fire protection, lighting and all other services required for undertaking the service. The *Contractor* shall provide, maintain and finally remove proper portable latrines of sufficient number at his cost. Latrines shall be properly constructed and placed in suitable positions and maintained in a clean and sanitary working condition.

2.1.8.2 Where any of the above services can be made available by the *Employer*, the cost of meters, connections, reticulation and all other usage costs associated with the provision of services shall be to the *Contractor's* account. The applicable tariffs will be those that the Local Authority charges Transnet Freight Rail and shall be obtained by the *Contractor*.

2.1.9 The *Employer* provides the following facilities for the *Contractor*:

2.1.9.1 A Suitable construction site will be made available free of charge to the *Contractor* for the duration of the contract.

2.1.9.2 The site shall be clearly sign posted as being a construction site and shall be compliant with the relevant prevailing safety regulations and restrictions that might be in place until the



Contractor has de-established from site and has been approved by the *Service Manager* or his duly appointed representative.

- 2.1.9.3 The layout of any construction site, if required, shall be submitted to the *Service Manager* for his approval before the *Contractor* starts erecting his camp. The layout of any construction site, if required, shall be submitted to the *Service Manager* for his approval before the *Contractor* starts erecting his camp.

2.1.10 Facilities provided by the Contractor

- 2.1.10.1 The *Contractor* shall make his own arrangements for the accommodation of all labour and comply with the requirements of the respective authorities.

- 2.1.10.2 No accommodation for the *Contractor's* and/or sub-contractor's employees will be available on site. No employee, with the exception of security watchmen, may, without written approval from the *Service Manager*, be accommodated on site.

- 2.1.10.3 The *Contractor* shall, at his own expense, provide for security and access to his construction sites as he may require. Control of access for construction plant onto public roads shall be in accordance with the requirements of the relevant roads authority and *Service Manager*.

2.1.11 The Contractor provides the following facilities for the Service Manager.

- 2.1.11.1 The *Contractor* will not be required to provide any facilities for the use of the *Service Manager*.

2.1.12 Existing premises, inspection of adjoining properties and checking work of Others

- 2.1.12.1 The *Contractor* and the *Service Manager* will inspect the immediate surroundings and record any damage before work is started.

- 2.1.12.2 The *Contractor* shall ensure that no damage occurs to adjoining property. The *Contractor* shall negotiate with the property owner(s) for permission to work on their land for the purpose of carrying out the work (if necessary). The *Contractor* shall ensure that his workmen do not abuse any permissions granted by adjoining property owners allowing them on to their property for the execution of the work.

2.1.13 To be provided by the Contractor

- 2.1.13.1 The *Contractor* shall supply all labour, tools, materials, scaffolding, platforms and all safety harnesses that are required to execute this work, moreover, observe all working at heights regulations; all safety regulations and guidelines concerning construction works.
- 2.1.13.2 The maintenance, leasing, hiring and insurance of this equipment will solely rest with the *Contractor*.

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2.1.13.3 The *Contractor* shall be responsible for his own arrangements with regards to the transport and safe keeping of this equipment and materials.

2.1.13.4 No liability will be accepted by Transnet for the safekeeping of the *Contractor's* materials.

2.1.13.5 The making of fires, for whatever purpose, on Transnet property is strictly prohibited



2.1.14 Restoring of work site

2.1.14.1 The contractor's responsibility to leave the site and facilities clean, no drain blockages and no contamination to the environment. The *Service Manager* may order the *Contractor* to stop all work, until such time as, in his opinion, this condition has been met.

2.1.15 Existing Services

2.1.15.1 The *Contractor* shall take all reasonable precautions to protect existing services during the execution of the work and during relocation of such services.

2.1.15.2 Any pipe, cable, conduit or other services of any nature whatsoever indicated to the *Contractor* and subsequently damaged as a result of the *Contractor's* operations, shall be repaired and reinstated forthwith by the *Contractor* or by the Authority concerned, all at the expense of the *Contractor* and to the satisfaction of the *Service Manager*.

2.1.15.3 Whenever unknown services are encountered which interfere with the execution of the work and which require to be moved and relocated, the *Contractor* shall advise the *Service Manager*, in writing within 24 hours of such encounter, and the *Service Manager* will determine the extent of the work, if any, to be undertaken by the *Contractor* in removing, relocating, and reinstating such services.

2.1.15.4 Any work required to be undertaken by the *Contractor* in the moving and relocation of unknown services for which no provision is made in the contract document, or for which no applicable tender rates exist, will be dealt with according to the NEC TSC compensation events procedure.

2.2 Completion, testing, commissioning and correction of defects

2.2.1 The work to be done by the Completion Date

2.2.1.1 On or before the Completion Date the *Contractor* shall have done everything required to provide the *Service* before the Completion Date. The *Service Manager* cannot certify Completion until all the work has been done and is also free of Defects, which would have, in his opinion, prevented the *Employer* from using the works and others from doing their work.

2.2.1.2 The *Service Manager* arranges for the *Employer* to allow the *Contractor* access to and use of part of the *works* which he has taken over if they are needed for correcting a Defect. In this case the *defect correction period* begins when the necessary access and use have been provided.



2.3 Plant and Materials Standards and Workmanship

2.3.1 SUPPORTING SPECIFICATIONS

Transnet Rail Infrastructure Manager (enclosed)

- Health and Safety Specification TFR-ISM-RN-R&C-FM009
- TFR Standard Environmental Specifications (SES)

2.3.2 GENERAL

- 2.3.2.1 A site access certificate will be issued to the *Contractor* and must be displayed to any person on request thereof.
- 2.3.2.2 In the event the *Service Manager* is dissatisfied for whatever reason with any or all the work performed by the *Contractor*, the *Service Manager* shall notify the *Contractor* thereof. The *Contractor* shall then correct and or redo the *works* at his own expense to the satisfaction of the *Service Manager*.
- 2.3.2.3 No advancement of any money will be considered.
- 2.3.2.4 The *Contractor* will issue all workers employed by him with the necessary protection clothing.

2.3.3 TECHNICAL REQUIREMENTS

Tank Information

- Quantity: 1
- Length: 3m
- Width: 2.438 m
- Height : 2.896 m
- Volume/Capacity : 12 m³
- Material :Steel
- Age : unknown

A. Roof External

- Sand blast the entire tank roof.
- Supply and installing both normal and emergency venting systems. Equip them with a screen mesh that complies with API 653.
- Installing an anti-slip strip on the roof to cover all service points.

B. Roof Nozzles

- Replace goose neck vent in kind or replace.
- Repair corroded areas
- Fit new seal to dip hatch.



- Tighten any loose bolts on auto gauge nozzle.

C. HANDRAILS, PLATFORMS, SUPPORTS AND ACCESS STAIRWAY:

- Sand blast/wire brush handrails, platforms and access stairway.
- Replace severely corroded staircases in kind.
- Repair all extensively corroded areas of handrails and mid-rails.
- The cracked attachments welds must be removed by grinding and a suitable reinforcement plate with radius corners to be welded to the shell plate where applicable. The support frame can be re-welded to the reinforcement plates.
- Install suitably designed support structures permanently anchored to foundation.

D. SHELL EXTERNAL:

- Sand blast the entire tank shell.
- Remove and replace all non-conforming patch plates with rounded patch plates in accordance with API 653 standard.
- Conduct a Positive Material Identification (PMI) test prior any welding work.
- All welding procedures prepared for this repair work should consider the PMI test results.
- Install data plates which comply with API 650 and API 653.
- Install an API- Style tank name plate.

E. SHELL NOZZLES:

- Carry out remedial grinding to remove welds, carry out repairs in accordance with API 653 standards.
- All threaded connections to be replaced by welded connections in accordance with API 653.
- Remove coating around the nozzles and perform dye-pen test to identify the pin-hole leak, repair the leak as per API 653 code.
- Remove plugs from tell-tale hole on all reinforcement.
- Supply and install welded thermal relief system with isolation valves around tank inlet and outlet valves. Supply, calibrate and Install a PRV set at 350 KPa, refer to the attached drawing for the installation.
- Supply and replace all old types of tank valves (Ball) with the new ones including bolts and nuts. Supply and fit spiral wound gaskets on flanges where required.
- Remove the existing drainpipe supports that do not comply API requirements and supply and install the H-type supports.
- In some instances, the inlet nozzle and the inlet pipe seem to be misaligned; Review to current system design and correct this and the reviewed designed drawing should be submitted to Transnet Engineer for approval.
- Boxing up the tank, supply and install a new graphite gasket on the tank manhole including new bolts and nuts

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**F. SHELL INTERNAL:**

- Remove all non-conforming patch plates and replace them with conforming rounded patch plates in accordance with API 653.
- Prepare the first strake of the shell and the floor for painting.
- Apply epoxy coating on the first strake of the shell and the tank floor once the repairs have been completed.

G. TANK FLOOR:

- Repair all marked pitted areas from 3.00 mm and above by means of scab/overlay welding using approved weld procedures and qualified welders.
- Install a strike plate 200 mm x 200 mm x 6 mm EN10025 Grade S355 JO directly under dipping location where it does not exist.
- Change clearance distance of water draw-off pipe to sump bottom as per API 650 requirements by trimming water draw-off pipe back to acceptable height where required.
- Supply and apply epoxy coating on the tank floor.

H. TANK FOUNDATION:

- Grind/wire brush/grit blast, repair and reinstate coating system on corroded areas of floor projection plate around entire tank periphery to arrest further corrosion.
- Fill and compact all voids with suitable material designed at 45 degrees and higher enough to avoid water to ingress the bottom of the tank also aid to draw the water away from the tank as well as the foundation.
- Ensuring the bottom-to-shell connection meets the requirements of API 650 5.1.2.7
- Re-install waterproof membrane around tank projection plate.
- Install a dip hatch and striker plate. See SANS 10131 section A.3.10.10 where required.

I. PAINTING:

- Prepare tanks for painting.
- Spray paint the tank externally including handrails, platforms and access stairway using the oxide primer as first coat.
- Spray paint two coats of silver aluminium paint as second and final coats on the entire tank including handrails, platform, and access stairway.

J. LIMITS AND EXCLUSIONS

- No scope changes must be made onsite without obtaining approval from the project manager.
- Install wear plates on the ATG supports

K. Handover

Generate a hand-over report with records of activities , technical details of material used for construction.



2.3.4 Constraints on how the Contractor provides the works

- The appointed contractor shall provide all tools, materials, water, electricity, etc that are required to execute this work, moreover, observe all safety regulations and guidelines.
- Provide site specific PPE for contract workers for the duration of the work.
- It is the responsibility of the contractor to leave the site clean and tidy

2.3.5 SAFE WORKING ACCESS

- 2.3.4.1 The *Contractor* shall specify and submit the type and quality of safe access to be provided for approval by the *Service Manager*.

2.3.6 DAILY SITE DIARY AND INSPECTION

- 2.3.5.1 The *Contractor* shall provide an A4 size triplicate book to be used as a Daily Diary for the duration of the Contract. The *Service Manager* shall retain the original copy and the *Contractor* shall retain the first and second copy. The diary shall be completed on a daily basis.
- 2.3.5.2 In addition to this the *Contractor* shall provide an A4 size triplicate book to act as Site Instruction Book. The *Service Manager* shall retain the original copy and the *Contractor* shall retain the first and second copy. The diary shall be completed on a daily basis. Only the *Service Manager* will have the authority to issue site instructions to the *Contractor*.



3 Health and Safety Information

3.1 General

The *Contractor's* attention is directed to the Health and Safety Specification TFR-ISM-RN-R&C-FM009, and in particular to his Health & Safety Program, which must be submitted with his tender, as well as the requirements of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended and

Regulations issued in terms thereof or un-repealed regulations issued in terms of the former Act no. 6 of 1983, in their entirety.

Without derogating from the Act or any un-repealed regulations issued in terms of legislation, or without purporting to limit the Contractor's responsibilities, the following are brought to the Contractor's attention:

- 3.1.1 For the purpose of the Act the site/s, to be demarcated as agreed to between the *Contractor* and the *Service Manager* before the works start, will be transferred to the control of the *Contractor* for the duration of the contract.
- 3.1.2 The *Contractor* shall appoint a health and safety coordinator to liaise at least fortnightly with the *Service Manager* on matters pertaining to occupational health and safety.
- 3.1.3 The *Contractor* is an 'employer' in his own right as defined in Section 1 of the Act 85 of 1993 and he shall fulfil all his obligations as an employer in terms of the Act.
- 3.1.4 The *Contractor* shall furnish the *Service Manager* with full particulars of any Sub-Contractor which he may involve in the contract and the Sub-Contractor shall be made aware of all the clauses in this contract pertaining to health and safety.
- 3.1.5 The *Contractor* shall advise the *Service Manager* of any hazardous or potentially hazardous situation, which may arise from, work being performed either by the *Contractor* or Sub-Contractor.
- 3.1.6 A letter of good standing in terms of Section 80 (*Employer* to register with the Compensation Commissioner) of the Compensation for Occupational Injuries and Deceases Act 1993 (Act 130 of 1993), must also be furnished.
- 3.1.7 The *Contractor* shall comply with the current Transnet Specification TFR-ISM-RN-R&C-FM009, Safety Arrangements and Procedural Compliance with the Occupational Health and Safety Act, Act 85 of 1993 and Regulations, and shall, before commencement with the execution of the Contract, which shall include site establishment and delivery of construction plant, equipment or materials, submit to the *Service Manager*:
 - documentary proof of his procedural compliance with the Act, and
 - particulars of the Health and Safety Program to be implemented on the site in accordance with the Transnet Specification TFR-ISM-RN-R&C-FM009.
 - The *Contractor's* Health and Safety Program will be subject to agreement by the *Service Manager*, who may order supplementary and/or additional safety arrangements and/or



different safe working methods to ensure full compliance by the *Contractor* with his obligations as an employer in terms of the Act.

3.1.8 All clauses in this contract pertaining to health and safety form an integral part of this contract and if not complied with may be construed as breach of contract entitling the *Employer* to the appropriate remedies.

NB: The *Contractor* and his employees shall have valid safety inductions and medical certificates when accessing or working on site. Copies of which shall be submitted to the *Service Manager*. This will be at a time and location Transnet will arrange.

3.2 Hazard identification and risk assessment

The *Contractor's* appointed Site Representative and the *Service Manager* shall finalize a site-specific HIRA (Hazard Identification and Risk Assessment) document, on the day of site handover to the *Contractor*. This site-specific HIRA document, based on a continuous HIRA, must cover site-specific hazards and the safe management of these hazards. The HIRA document must be signed by the abovementioned representatives, and be accepted by the *Service Manager*, before any construction work can commence.

3.3 Substance abuse

The OHSA (Act 85 of 1993) clearly states in the Safety Regulations no. 2A "INTOXICATION" **An employer or user, as the case may be, shall not permit any person who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace".** Transnet Freight Rail enforces this legislation by means of its Substance Abuse Policy, and therefore reserves the right to do substance abuse testing on anyone who enters their premises.

3.4 Safety Meetings

The *Contractor* shall ensure that a safety representative is appointed and regular safety meetings are held. Written minutes of these safety meetings shall be forwarded to the *Service Manager*. All costs related to the safety aspects required under this contract will be carried by the *Contractor's* and therefore be covered under the rates tendered.

NB: The tendered amount shall include for all costs to confirm to the Health and Safety requirements.

4 Quality Assurance requirements

4.1 The onus rests on the *Contractor* to produce services which will conform in quality and accuracy of detail to the requirements of the Specifications and Drawings, and the *Contractor* must, at his own expense, institute a quality control system and provide experienced technical staff together with all transport, instruments and equipment to ensure adequate supervision and positive control of the works at all times.



- 4.2 The *Contractor* submits his Quality Management System documents to the *Service Manager* as part of his programme to include details of:
- Quality Plan for the contract;
 - Quality Policy
 - Index of Procedures to be used
- 4.3 The *Contractor* develops and maintains a comprehensive register of documents that will be generated throughout the contract including all quality related documents as part of its Quality Plan.
- 4.4 The *Service Manager* indicates those documents required to be submitted for either information, review or acceptance and the *Contractor* indicates such requirements within his register of documents. The register shall indicate the dates of issue of the documents with the *Service Manager* responding to documents submitted by the *Contractor* for review or acceptance within the *period for reply* prior to such documents being used by the *Contractor*.
- 4.5 The Quality Plan means the *Contractor's* statement, which outlines strategy, methodology, resources allocation, QA and Quality Control co-ordination activities to ensure that the *works* meet the standards stated in the *Service Information*.

5 Planning Constraints

- 5.1 The plan, progress reports, subsequent updates, revisions and supplementary plan as detailed in this section are an essential part of the project control system used by the *Employer* for managing the *Works* and in monitoring the progress of the work under the Contract. The information and data provided by the *Contractor* pursuant to this procedure must therefore be reliable, accurate and timely in presentation.
- 5.2 A plan is to be submitted with the tender. This plan shall comply with the requirements as indicated in the *Service Information*.
- 5.3 The *Contractor* shows on his Accepted Plan and all subsequently revised planning schedules showing the critical path or paths and all necessary logic diagrams demonstrating sequence of operations.
- 5.4 The *Contractor's* plan shows duration of operations in working days, the work week will be Monday's – Fridays 07:30 – 16:00.
- 5.5 The *Contractor* shows on each revised programme he submits to the *Service Manager* a resource histogram showing planned progress versus actual, deviations from the Accepted Plan and any remedial actions proposed by the *Contractor*.



6 Contractor's management, supervision and key people

- 6.1 The *Contractor* shall provide an organogram showing his key people and their lines of authority and communication.
- 6.2 The *Contractor* shall not change the project team as detailed in the organogram submitted by the *Contractor* and accepted by the *Service Manager* without the prior written approval of the *Service Manager*, which approval will not unreasonably be withheld by the *Service Manager*
- 6.3 The *Works* must conform to current professional engineering practices, standards and specifications and the *works* must be completed to the satisfaction of the *Service Manager*.
- 6.4 The *Contractor* and his sub-contractors, if any shall have suitably qualified Supervisors in charge of the project. The names and qualifications of the Supervisors together with full details of their experience in this field of work must be furnished. The tenderer must furnish the names and addresses of all proposed sub-contractors, which is subject to approval.

7 Insurance Provided by the Employer

- 7.1 Insurance provided by the *Employer* is contained in the Contract Data – Part 1.
- 7.2 Procedures for making insurance claims can be obtained from the *Service Manager*

8 Contract Change Management

- 8.1 The standard reporting forms that shall be used will be provided to the *Contractor*
- 8.2 No additional requirements apply to TSC Clause 60 series

9 Procurement

9.1 The *Contractor's* Invoices

- 9.1.1 The invoice states the following:
- Invoice addressed to Transnet SOC Limited;
 - Transnet Limited's VAT No: 4720103177;
 - Invoice number;
 - The *Contractor's* VAT Number; and

- 9.1.2 The invoice to be emailed to:

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