TRANSNET PORT TERMINALS

Document Title:

Scope of Work

PROJECT TITLE:

REPAIR FENCE AND GATES AT VARIOUS AREAS AT RORO TERMINAL

1. INTRODUCTION

Transnet Port Terminal is looking to appoint an experienced and qualified contractor to install and repair existing fences and gates that have been damaged at various areas in RORO Terminal.

2. SCOPE OF WORKS SPECIFICATIONS

2.1. Rail Fence at 111

2.1.1. The specifications below must be used for all fencing repairs and installation requirements, Clear Vu specifications:

a) Mesh size: 12.7 X 76.2mm
b) Post: 100 X 55mm "IPE" Post
c) Spider clamps for IPE post Double quantity clamps
d) High security Clear Vu weld mesh
e) Clamps and snap-off nuts and bolts to hot dipped galvanized and painted green with enamel paint
f) Post and mesh to be hot dipped galvanized and PVC powder coated green
g) Powder coating compliance specifications – ASTM D 523-89, ASTM D 3359-97, ASTM D 2474-92, ASTM D 522-93A, ASTM 643-84, ASTM D279, ASTM B-217, ASTM D 2247

2.1.2. Fence specifications

a) The height of the fencing is to be ±2.4m high
b) The width of the fencing is to be ±3.31m wide.
c) The length of the fencing to be installed is ±271.5m
d) Supply and install new Clear Vu fencing with "I" beam poles, the specification above.

2.1.3. The "I" beam poles are to have base plate on them with four holes to rawl bolt the post to the concrete.

2.1.4. The poles are to be rawl bolted with galvanized rawl bolts M16 minimum thickness.

2.1.5. The fencing and the poles are to be galvanized and powder coated green as per the specifications above.

2.1.6. The fencing must have 8 spider clamps per side and bolted with galvanized snap off nuts and couch bolts.

2.1.7. The poles that need to go in the ground are to be 500mm in the ground and with concrete.

2.1.8. Clean and clear site.

2.2. Quayside Road fence near Ingate Park home

2.2.1. Remove and replace damage palisade fence as per existing.

2.2.2. Upright angle iron to be manufactured from 40mm x 40mm x 3mm angle iron per existing.

2.2.3. Rails for the palisade fence to be made as per existing from 50mm x 50mm x 5mm angle iron and galvanized after manufactured.

2.2.4. Remove and replace "I" beam post as per existing 100mm x 50mm and galvanized after manufacturing, X2 ea.

2.2.5. Galvanized "I" beam post is to be reinstalled in concrete 500mm in ground as per existing and the concrete is to be finished as per existing in 25MPa concrete.

2.2.6. The height of the fencing is to be ±2,5m high.

2.2.7. Bolt the galvanized palisade fencing to the posts with galvanized nuts and bolts as per existing.

2.2.8. Clean and clear site.

2.3. Q/R Wharf side inspection fence

2.3.1. Remove and replace Clear Vu damaged post in the ground and replace in 25Mpa concrete as per existing type post as per specifications. The post has to be green in colour with holes for

electric fence on top of post.

2.3.2. Reinstall Clear Vu fence with spider clamps as per specifications to the new post with 7 spider clamps per side.

2.3.3. Clean and clear site.

2.4. L Rail gate and Posts

2.4.1. Remove and replace gate posts with 160mm x 6mm galvanized pipe with endcaps in 500mm deep in ground with concrete.

2.4.2. The opening between posts is ±5,880m with the gate posts ±3,170m above ground. The posts must be painted green x 3 coats. The same colour green as the fencing.

2.4.3. Manufacture and install double gates to fit opening as per existing with 76mm x 76mm x 3mm square tubing with option to install electric fence on top of gates. The inner parts of the gates are to have Clear Vu fencing installed on them as per fencing and specification. |Gates height is ±3,150m.

2.4.4. The gates are to be galvanized, painted green as per fencing.

2.4.5. The gates are to have locking mechanism to fit 76mm padlock to gate.

2.4.6. The gates to have 20mm thick locking pins installed on each gate. The locking pin holes in the ground are to be installed in concrete with galvanized piping for the locking pins to lock into the open and closed positions of the gate.

2.4.7. The gates are to have 3 each heavy-duty hinges installed on each gate as per discussion at site meeting.

2.4.8. Repair loose fence base plate on fence next to gate.

2.4.9. Clean and clear site.

2.5. Security Permit Office Gate

2.5.1. Remove and replace wheels on gate x 2 each

2.5.2. Remove and replace rollers on portal for gate and repair if necessary. Align gate with rollers.

2.5.3. Repair locking mechanism and stopper on closed position on pillar.

2.5.4. Repair gate upright. Weld all upright on gate and cold galvanized welding.

2.5.5. Paint gate and 2 side panels and posts next to sliding gate with enamel green as per existing fencing colour x 3 coats.

2.5.6. Install D5 Evo gate motor and track to gate. Motor to be installed in concrete and to have anti-theft cage over motor to prevent theft. To have x2 infra-red sensors on pillar. The gate motor is not to be smart type.

2.5.7. The gate is to have 3 EA remotes programmed togate for pedestrian and vehicle opening and closing.

2.5.8. COC for electrical work on gate motors must be issued.

2.5.9. Clean and clear site.

2.6. Fitment Centre Double Swing Gate

2.6.1. Repair and paint double swing gates. Gates to be painted green as per existing fence x3 coats.

2.6.2. Remove and replace gates posts with galvanized posts with endcaps on both posts 500mm in concrete. Gate posts are to be secured to the brick pillars. Posts to be painted green x3 coats.

2.6.3. Repair electric fencing and brackets on double gates.

2.6.4. Replace nuts on bolts on fencing next to the pillars with galvanized nuts and bolts.

2.6.5. Paint side fencing next to the swing gates green as per existing fencing x3 coats.

2.6.6. Add stopper on ground for closed position and make ramp from umngeni sand and cement. Stopper to be ±50mm high for gates.

2.6.7. Install Vantage 500 for larger light industrial swing gate application with infra-red sensors installed on the pillars.

2.6.8. Supply 3 each remotes programmed to the gate.

2.6.9. Clean and clear site.

2.7. Various Areas

Install spider clamps to various areas that are missing with galvanized nuts and bolts x 122 each.

2.8. Damaged fence opposite G shed

2.8.1. Remove and replace X3 each galvanized palisade steel fencing and 2X each "I" beam posts as per existing.

2.8.2. Replace 2X each "I" beam galvanized posts as per existing in 25MPA concrete 500mm in ground.

2.8.3. Manufacturer and install 3X each galvanized palisade fencing as per existing design, thickness, sizes, etc as per existing.

2.8.4. All nuts, bolts and brackets to be galvanized as per existing.

2.8.5. The damage area is: ±5,9m(L) X ±2,450m(H)

2.9. L Shed roadway and G stack yard fence

2.9.1. Remove damaged 5 each X Clear Vu fencing panels and 1each X damaged post.

2.9.2. Replace damaged 5each Clear Vu green fencing panels and 1each X post supplied by Transnet.

2.9.3. All spider clamps, nuts, bolts and rawl bolts required for replacing the panels X 5 each and X 1 each to be supplied by contractor whatever is damaged as per existing.

2.9.4. The size of the panel is ±3,050m(L) X ±2,4m(H)

2.9.5. The spider clamps are to be 10 per side of the panels as per existing.

2.10. L Car park fencing Area 1

2.10.1. Remove and replace X2 ea "I" beam with electric fence extension on posts in 500mm, 25mpa concrete in the ground. Posts to be supplied by the contractor, galvanized and powder coated green.

2.10.2. Remove electric fencing wire and not replace from pedestrian opening to end of fence near L shed.

2.10.3. Install X6 each spider clamps per side with cup head bolts and snap off nuts S/S. To be supplied by contractor.

2.10.4. Remove and replace X2 each clear Vu panels: 3,050m(W) X 2,4m(H). Panels to be supplied by Transnet.

2.10.5. All old steel to remain the property of Transnet.

2.11. L Car park fence Area 2

2.11.1. Remove and replace X1 each "I" beam with electric fence extension on post in 500mm, 25mpa concrete in the ground. Posts to be supplied by contractor. Galvanized and powder coated green.

2.11.2. Install X6 spider clamps per side with cup head, bolts and snap off nuts S/S. To be supplied by contractor.

2.11.3. Remove and replace X2 each Clear Vu panels 3,050m(W) X 2,4m(H). Panels to be supplied by Transnet.

2.11.4. All old steel to remain the property of Transnet.

2.12. G Security gate

2.12.1. Remove and replace gate post with ±210mm X 6mm galvanized pipe with endcap in 500mm deep in ground with 25mpa concrete with locking mechanism for vehicle gate to be locked to post.

2.12.2. Manufacture, galvanize X1 each gate as per existing design from square tubing X3mm and angle irons, palisade type gate. Size is ±2,4m(H) X ±4,480mm with heavy duty hinges as per existing.

2.12.3. The gate is to have a locking mechanism to match the opposite gate to fit a 76mm padlock to gate.
2.12.4. The gate is to have a 30mm thick locking pin to be installed on the gate as per existing. To be galvanized.
2.12.5. Remove and replace damage 30m locking pin on opposite gate, to be galvanized.
2.12.6. All onsite welding to be cold galvanized X3 coats.

2.13. Exit side
2.13.1. Replace damaged locking pin on gate, to be galvanized, 30mm thick.
2.13.2. Install locking pin holes in concrete with metal plate, rawl bolted to concrete in the open and closed position for the gates as per existing type on the opposite side gate.
2.13.3. Remove and replace damaged angle irons as per existing, galvanized on both exit gates. All on site welding to be cold galvanized X3 coats.
2.13.4. Remove and replace damaged, galvanized locking mechanism on gate to fit 76mm padlock on gate as per existing.

2.14. Escape staircase X4 above MPC Shed.
2.14.1. Install stainless steel concertina razor wire to the top of the staircases to 4 each staircase. Coil size is 450m
2.14.2. Strand stranding wires from handrail to handrail and install X5 ea double concertina S/S razor wires to the stranding wire with S/S "C" clips on top of each other, the width is ±1,150m wide.
2.14.3. Install stainless steel concertina razor wire to either side on the handrails ±2,7m in length with stainless steel wire to secure to the handrails.
2.14.4. Clean and clear site.

2.15. Moving of fence line and crane service bay
2.15.1. Remove old fence lines ±18m including gate and ±60m of fencing. Fencing to be reused at new fence line.
2.15.2. Cut stainless steel rawl bolts from posts on concrete flush to concrete.
2.15.3. Remove old gate, portals for reuse in new fence line.
2.15.4. Remove old sliding gate rail in concrete. Repair concrete in the areas where the sliding gate rail was and the portals.
2.15.5. Manufacture and galvanize new sliding gate rail for the new fence line as per existing.
2.15.6. Install new galvanized sliding gate rail in the concrete portals as per site meeting.
2.15.7. Install existing fencing and posts on new fence line as per site meeting. To be installed by post in line with reefer box 10.
a) Posts to be installed with 4 X M10 stainless steel rawl bolts.
b) Fencing to have new stainless steel spider clamps X10 each per side, with anti-tamper snap off nuts and cup head bolts.
c) Fence panel size is ±3,050m (L) X ±2,4m (H)
2.15.8. Any damaged fencing or steel is to remain the property of Transnet.
2.15.9. Any current damaged panels will be replaced by Transnet.
2.15.10. Clean and clear site.

2.16. C Gate
2.16.1. Repair double gates hinges and weld back on posts. Cold galvanize X3 coats on all welding.

2.17. 503 Gate
2.17.1. Remove and replace posts and reinstall earth straps, etc to posts on both posts ±4,3m (L) X ±180mm X 3mm with end caps on top of posts. The posts are to be galvanized and to be ±600mm in concrete 25mpa in the ground.
2.17.2. All onsite welding to be cold galvanized X3 coats.

2.17.3. Manufacture, galvanize gates from 50mm galvanized pipe X3mm thick as per existing design. The gate hinges are to be the same as existing, ring hinges with threaded bar to be bolted to the posts. To be galvanized. The pipe gates to have end caps welded to the top gate pipes.
2.17.4. Install IBR galvanized 0,8mm thick sheets on to the 50mmgalvanized pipework gates. Sheeting to be secured to every bottom flute of the sheeting to the pipes gates. The sheets are to be cut by the locking mechanism as per existing gates. The gate sizes are: ±3,5m(H) X ±3,2m(W) X2ea
2.17.5. Gates to have a chain locking mechanism as per existing. Chain to be galvanized.
2.17.6. Gates to have a ±20mm locking pin on each gate to hold gate in an open and closed position.
2.17.7. Gates to have locking pin pipes in open position for locking pins to go into in concrete 25mpa
2.17.8. All old steel to remain the property of Transnet.
2.17.9. Clean and clear site.

3. ADDITIONAL INFORMATION REQUIRED

3.1 All bidders must attend a compulsory briefing session and bidders who did not attend a briefing session will be disqualified.
3.2 Only SANS/SABS approved materials to be utilized.
3.3 Guarantee: The service provider is to provide a minimum 24 month guarantee on the quality and workmanship.

4 TECHNICAL EVALUATION

4.1 All vendors bidding for this tender will be technically evaluated and the scoring procedure is in reference to Appendix B. Bidders who do not submit documents as per Appendix B requirements before the closing date of the RFQ will be disqualified.
4.2 All bidders must be registered with the Construction Industry Development Board (CIDB) and have a minimum of level 1-GB

5 PRICING CONSIDERATION

The bidder must include the following cost implications in their quote:
5.1 All costs relating to obtaining an approved safety file from the SHEQ department.
5.2 The service provider is to quote on all items as listed in section 2.
5.3 All costs relating to the equipment hire, machinery, professional service, etc. are to be included in the bidder's quote for the success of this project.

6 SAFETY

The following safety procedures together with the terminal standard operating conditions are always to be adhered to. No exceptions will be tolerated.
6.1 All personnel reporting to the terminal must come in full personal protective equipment gear (safety vest, hard hat and safety shoes).
6.2 Vehicles used to be fitted with rotating flashing light and proper company signage when accessing the terminal.
6.3 Only certified or competent technical personnel are required to operate electrical machinery.
6.4 All TPT owned equipment, or property needs to be signed off by TPT representatives before exiting the terminal.
6.5 Terminal provides mess and ablution facilities and must always be kept clean.

6.6 No discipline irregularities will be condoned. Offenders will be requested to leave the terminal immediately pending a full investigation.
6.7 Notification of arrival will be mandatory.

7 QUALITY REQUIREMENTS

The awarded Service provider is to adhere to the below Employer Specifications where applicable.

7.1 EEAM-Q-006 - Structural steelwork
7.2 EEAM-Q-008 - Corrosion protection
7.3 EEAM-Q-009 - Quality Management
7.4 EEAM-Q-013 - Commissioning and hand over Rev1
7.5 BS 5493 - Code of practice for protective coating of iron and steel structures against corrosion
7.6 SANS 136 ISO metric precision hexagon-head bolts and screws, and hexagon nuts (coarse thread medium fit series)

8 OPERATING HOURS

The Durban BBC Terminals operate 24 hours a day. The infrastructure maintenance team mainly works a day shift (07h00 – 15h30) and all work should be done during this period.
Any work requiring irregular hours should be communicated timeously to a TPT representative and required approvals obtained.

9 ACCESS PERMIT

Site meeting: All suppliers are required to bring with them the following to apply for the required permit.

- Permits must be done prior to the site briefing. This is done by sending an email to TPT permit office (**tptdrtsecuritysupervisors@transnet.net**) stating the reason for entry, full name and ID number for personal entering the port. Once at the terminal you will need to collect a physical permit from the permit office. This note will allow you to enter the terminal.
- Hardcopy of RFQ
- Proof of identification for all service providers attending.
- Letter from the relevant company stating the names and surnames of the service provider requesting access and reason for access.
- Minimum PPE, safety vest, hard hat and safety shoes. Failing to come with the correct PPE will not be allowed into the terminal for the site briefing.
- Suppliers are advised to bring any/all required measuring tools for proper costing

10 CONDUCTING THE WORK

To acquire access permits for conducting work, external contractors will need to attend safety induction (valid for a year) and obtain an approved safety file before any work commences. Afterwards the appointed bidder will need to request a work permit from our Security department to gain access into the terminal. For vehicles access, all vehicles are required to have a company sign and are evolving light and access will be obtained at the security office.

11 SITE FACILITIES

No provision has been made for the site facilities. Security of the service providers tools, material and machinery remain his responsibility of the service provider to provide his own scaffolding, ladders etc. wherever necessary and /or required for the completion of the work.

Compiled by:

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Technical Supervisor
Date: 26/05/2025

Reviewed by:

Darren Chetty
Technical Manager
Date: 26/05/2025

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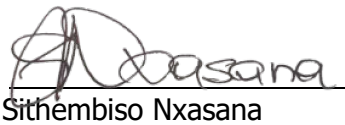

Sithembiso Nxasana
Senior Engineering Manager
Date: 28 May 2025