



DURBAN BBC TERMINALS

Document Title:

SCOPE OF WORK

Project Title:

Provision of Services for
Installing Height Restriction Barrier System on Maydon
Wharf Street

REVISION 01: FOR QUOTATION

SCOPE OF WORK

DOCUMENT APPROVAL

Name	Title	Signature	Date
Compiled by: Shawn Gallichan	Technical Assistant		27/11/2024
Reviewed by: Darren Chetty	Technical Manager		27/11/2024
<u>Approvals:</u>			
Linamandla Busakwe	Engineering Manager		27.11.2024

SCOPE OF WORK

Table of Contents

1. Background 4

2. Proposed solution and Engineering Work to be Provided 4

3. Technical evaluation **Error! Bookmark not defined.**

4. Additional information required..... 6

5. Quality requirements 6

6. Safety 6

7. Operating hours 7

8. Access Permits 7

TRANSNET PORT TERMINALS	Installing Height Restriction Barrier System				DURBAN BBC TERMINALS
	SOW		Page 3 of 7	Rev 01	

SCOPE OF WORK

1. Background

Transnet Port Terminals Agriport comprises of sheds, office buildings, the grain elevator and quayside equipment. The quayside equipment comprises of ship unloader, a ship loader and conveyor belts. One of these conveyor belts (CV03) crosses Quayside Road. A common user road not part of Transnet Port Terminals infrastructure. Due to the height of this belt, the structure is often damaged by road truck and heavy equipment driving under the belt. This has been an ongoing problem which has at some point resulted in the conveyor being out of operation due to structural damages.

2. Proposed solution and Engineering Work to be Provided

Transnet Port Terminals Agribulk is seeking a professionally qualified service provider to design and construct height restriction frames on both sides of the conveyor to restrict trucks and heavy machinery from driving into the conveyor structure. These frames are to be parallel to the lowest point of the conveyor structure such that vehicles, equipment and trucks are able to pass under the frame will also be able to pass under the conveyor without damaging it. The position of these frames will be discussed on site. Figure 1 illustrates a comparable solution. Furthermore, during the on-site meeting, discussions will encompass the dimensions of the structure, including its length and size, as well as determining the appropriate quantity and specifications of hanging chains to be incorporated as an alert system.



Figure 1 Height restriction barrier system

TRANSNET PORT TERMINALS	Installing Height Restriction Barrier System				DURBAN BBC TERMINALS
	SOW		Page 4 of 7	Rev 01	

SCOPE OF WORK

The frames must meet the following criteria:

- 2.1 The frames must be mounted on each side of the road and the horizontal beam must span the full width of the road.
- 2.2 The frames are to be mounted on concrete bases at 3x points per side.
- 2.3 The frames must not be mounted on existing conveyor structures or concrete.
- 2.4 The frames must be structurally sound and must be joined by means of bolts for easy replacement and repair.
- 2.5 The frames are to be painted with red and white chevron with white reflective paint/reflective tape.
- 2.6 The frames are to have height restriction sign on the horizontal section. The sign is to be of reflective background, red border, and black font and large enough to be seen from a distance.
- 2.7 Implementation of hanging chains on the structure to alert drivers in case of miscalculations in height. These chains serve as an alarm, especially in instances where a truck's head successfully passes but the trailer height exceeds the head due to design or cargo factors.
- 2.8 The hanging chains must be strategically positioned before the main restriction structure on both sides of the conveyor, acting as an early warning system for approaching vehicles.
- 2.9 Each vertical section is to have a warning road sign stating the minimum height of the frame and directional signage.
- 2.10 All bolts are to be of stainless steel and the metal frames should have paint work that complies with TPT's specification for corrosion protection. Suppliers are allowed to exceed the TPT specifications.
- 2.11 All design drawings and as built drawings, including those for the main restriction system and the hanging chains, must be signed and approved by the structural engineer. These approved design drawings are to be issued to Transnet Port Terminals for approval before the commencement of the fabrication process.

TRANSNET PORT TERMINALS	Installing Height Restriction Barrier System				DURBAN BBC TERMINALS
	SOW		Page 5 of 7	Rev 01	

SCOPE OF WORK

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.

4. Quality requirements

- 4.1 The awarded Service provider is to adhere to the below Employer Specifications where applicable.
- 4.2 EEAM-Q-006 - Structural steelwork
- 4.3 EEAM-Q-008 - Corrosion protection
- 4.4 EEAM-Q-009 - Quality Management
- 4.5 EEAM-Q-013 - Commissioning and hand over Rev1
- 4.6 BS 5493 - Code of practice for protective coating of iron and steel structures against corrosion
- 4.7 SANS 136 ISO metric precision hexagon-head bolts and screws, and hexagon nuts (coarse thread medium fit series)

5. Safety

The following safety procedures together with the terminal standard operating conditions are to be adhered to at all times. No exceptions will be tolerated.

- 5.1 All Technical personnel to be kitted with the appropriate personal protective equipment and to be kept clean all the time. ii. Vehicles used to be fitted with rotating flashing light and proper company signage when accessing the terminal. iii. All Technical personnel that are required to operate equipment must be certified to do so.
- 5.2 All and any TPT owned equipment or property before exiting the terminal should be signed off by TPT representative.
- 5.3 Mess and ablution facilities provided and must be kept clean at all times.
- 5.4 All discipline irregularities will be not be condoned. Offenders will be requested to leave the terminal immediately pending a full investigation.
- 5.5 Notification of arrival will be mandatory.

TRANSNET PORT TERMINALS	Installing Height Restriction Barrier System				DURBAN BBC TERMINALS
	SOW		Page 6 of 7	Rev 01	

SCOPE OF WORK

- 5.6 All work done within Transnet substations should be done under the supervision of an A- Brown qualified Transnet employee where relevant work and safety permits are issued by "CONTROL".

6. Operating hours

The Durban BBC terminals operate 24 hours a day. The infrastructure maintenance team mainly works a day shift (06h45 – 15h15 weekdays) 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.

7. Access Permits

Site meeting:

For the site meeting, all suppliers are required to bring with them the following in order to apply for the required permit:

- 7.1 Hardcopy of the RFQ;
- 7.2 Proof of identification for all employees attending;
- 7.3 Letter from the relevant company stating the names and surnames of the employees requesting access and reason for access;
- 7.4 Minimum PPE. Safety vest, hard hat and safety shoes;
- 7.5 Suppliers are advised to bring any/all required measuring tools for proper pricing.

TRANSNET PORT TERMINALS	Installing Height Restriction Barrier System				DURBAN BBC TERMINALS
	SOW		Page 7 of 7	Rev 01	