

## **CLEANING OF SERVICE TUNNELS AT PIER 1 & 2 IN THE PORT OF DURBAN**

### **1. SCOPE OF WORK**

For the purpose of this contract "Work" shall include the cleaning of service tunnels as and when required for a period of thirtysix (36) months at Pier 1 and 2 in the Port of Durban.

Working in conjunction with the electrician starting at berth 101 the contractor must:

- Adhere to all safety requirements and specifications regarding working in confined spaces i.e. the provision of an oxygen metre.
- Remove all loose grit rubble and any other unwanted material.
- Cart all unwanted material gathered from tunnel to authorized waste skip.
- Site to be left clean and tidy when work is completed.
- Competent persons to work in confined spaced areas.

### **2. BACKGROUND**

A tunnel may be described as an underground passage housing many services such as electrical cable networks and many fresh water and saltwater valves. The service tunnels at Pier 1 and 2 have been riddled with litter, debris and fine silts that gather within the tunnel due to weather i.e. tide and wind. In order for the tunnel to carry out its function effectively this litter and debris needs to be removed periodically.

### **3. DURATION OF CONTRACT**

The contract period will be 36 months from the date of the contractor being notified of the acceptance of his tender till the end of the 36 months or the monetary value is reached whichever comes first.

### **4. SUPERVISION**

The service provider or a responsible person empowered to act for him/her shall be constantly on the site to supervise and receive the instructions of the Engineer.

### **5. TO BE SUPPLIED BY THE CONTRACTOR**

The service provider shall supply all necessary materials, labour, tools, plant, Personal Protective Equipment (PPE), demarcating signage and transport required for the proper completion of the works. Safety plan must be provided showing how safety will be managed.

### **6. TO BE SUPPLIED BY TRANSNET NATIONAL PORTS AUTHORITY**

Transnet National Ports Authority will supply the necessary onsite quality control/ supervision.

## **7.1 INFORMATION TO BE OBTAINED ON SITE**

The service provider shall visit the site of the proposed work and acquaint himself / herself with the nature of the work, the conditions under which the work is to be performed, the means of access to the site, any limitations or other authorities and in general with all matters that may influence or affect the contract and shall be deemed to have allowed in his / her service provider for any additional cost involved due to the foregoing, as no claims for any extras in connection with the position or nature of the work will be entertained.

## **7.2 DAMAGES TO TRANSNET PROPERTY AND EQUIPMENT**

The Service Provider is to ensure that all valves, cables and equipment in the tunnels are protected from damages caused during cleaning. The contractor will be solely responsible for any damages caused by their staff and sub-contractors. Promptly repair damages caused to equipment and property at no cost to Transnet.

## **8. ACT 85 OF 1993**

### **8.1 HANDING OVER SITE TO THE CONTRACTOR**

For the purpose of the Occupational Health and Safety Act 1993 (Act No 85 of 1993) the site (place of work) is transferred, for the duration of the contract, to the control of the Contractor as if it were his property. As employer he is in every respect responsible for the compliance of the provision of this Act, as well as the application of General Administration Regulations 13 to the employees of Transnet National Ports Authority who visit the site. All works/contractors to be subject to the Act and control of the relevant Transnet National Ports Authority Risk Official.

### **8.2 SPECIAL REQUIREMENTS**

The service provider shall pay special attention and compliance to Transnet National Ports Authority SHE Specification. Contractor to also submit a Safety Health Environmental file to risk department for assessment and approval.

**SHE File is to be kept and maintained on site at all times. The file is to contain amongst others:**

- Comprehensive procedure for Confine Space Entry which is in compliance with the relevant legislation.
- Calibration certificate for gas testing equipment.
- Training certificates for working in confined spaces
- Comprehensive risk assessment together with a Risk Methodology and profile
- Comprehensive SHE Plan based on the Client SHE Specification

### **8.3 SAFETY HEALTH AND ENVIRONMENT FILE REQUIREMENTS**

**SHE File: The file must contain amongst others, if applicable:**

- 1 Principal Contractors/Contractors Organogram
- 2 Letter of Good Standing with Compensation Fund
- 3 General Liability Insurance (Summary of Policy)
- 3 Notification Letter of Construction Work ~ Department of Labour (If Applicable)
- 4 Appointments (Inclusive of legal appointments)
- 5 Contractor Induction: Employees and Visitors
- 6 Principal Contractor's SHEQ Policy
- 7 Health & Safety Plan
- 8 Fall Protection Plan inclusive of Fall Protection Risk assessment (If Applicable)
- 9 Risk Assessments (inclusive of action plan to manage controls)
- 10 Method Statements
- 11 Safe Operating Procedures
- 12 Incidents / Accidents Register and Investigation Report Template
- 13 Emergency Contact Telephone Numbers
- 14 Contractor Site Emergency Plan (For Site establishment)
- 15 Documented Proof of Daily Toolbox Safety Talks/ DSTI
- 16 Inspections Checklist
- 17 All Registers
- 18 Welfare Facilities arranged
- 19 Electrical Compliance (COC) (If Applicable)
- 20 Communication Plan
- 21 Training Records and Competency Certificates
- 22 Employee Personal Profile Dossier completed
- 23 Staff Medical Certificates (Must correspond with Employee Personal Dossier)
- 24 Employee Personal Profile Dossier completed
- 25 Environmental Management Plan
- 26 Environmental Risk Assessments

#### **COVID 19 REQUIREMENTS (to be included in the SHE file)**

1. Covid 19 Risk assessment and Action plan
2. Contractor Covid 19 induction Training
3. Covid 19 Communication plan (Attendance registers DOL Directive 479, Risk assessment, etc.)
4. Appointment of Covid 19 Manager/Representative
5. Covid 19 Operational Plan(include Return to work questionnaire, Covid 19 Reporting and investigation procedure, social distancing, Symptom screening procedure, sanitising and disinfecting procedures, Cloth masks and other PPE, Measures in respect of workplaces to which public have access, Ventilation, Hygiene and cleaning measures and Waste Management, and not limited to the above specifications).
6. Covid 19 Registers and Checklists

**\* N.B. All Safety, Health and Environmental costs must be built into your Bill of Quantities.**

#### **8.4 ENVIRONMENTAL MANAGEMENT PLAN**

**The EMP must include, but not limited to the following sections detailing the environmental risks/possible impacts and management controls (mitigation measures) pertaining to the risks listed in the section:**

- Site establishment including contractor's site camp;
- Protection of sensitive/no-go areas;
- Management of hazardous chemicals and flammable substances;
- Pollution control & Spill response;
- Waste Management;
- Environmental education and awareness;
- Protection of marine species and birds;
- Removal of project waste and debris from the marina waters;
- Decommissioning of site camp;
- Monitoring and auditing and;
- Record keeping.
- Take a sample of the waste from each of the skips located at both Pier 1 and 2 to determine if it is hazardous or non-hazardous. The sample must be analysed at a SANAS Accredited facility.
- The waste must be managed, classified, assessed for disposal and disposed in terms of the following:
  - 8.4.1 National Environmental Management Waste Act (Act 59 of 2008)
  - 8.4.2 Other applicable environmental laws, legislation and by-laws.

#### **9. CLEARING OF SITE**

All excess and discarded material shall be disposed of at a registered landfill site. The service provider must ensure while working on site the discarded material shall be placed in a suitable waste container or skip to avoid ground or water pollution. The service provider must receive weighbridge slip or disposal certificate from the landfill site. The certificate or weighbridge slip must be forwarded to the Engineer. The work will not be deemed to be complete unless the site is cleared to the satisfaction of the Engineer. Burying of discarded material will not be tolerated. All relevant legislation pertaining "WASTE" must be adhered to.

#### **10. WORK SPECIFICATIONS**

**Note:** Company signage must be displayed at all times when work is taking place. Working hours Monday-Friday are 07:00am – 15:30pm, weekend and working after hours to be approved by project leader.

- Service provider must display signage at all times when work is taking place.
- Work area to be demarcated according to the latest construction regulation.



- Demarcate area using relevant signage and safety equipment
- Service provider to arrange safe traffic flow procedure must be in place when working on roads or high traffic areas in the Port.
- All gear applied, installed, erected or utilized to conform to manufacturer's specifications.
- All work to be completed by a relevantly qualified person that have been trained to work in confined spaced areas.
- Service provider to comply with All Local and Regional municipal by-laws.
- PPE to be utilized at all times.
- All S.H.E guidelines to be adhered at all times.

**The following work needs to be done 'as and when' required for a period of 36 months on the Cleaning of Service tunnels at Pier 1&2 in the Port of Durban:**

- Service provider to provide a work program to TNPA one week before any work commences.
- Work to be done in conjunction with confined space regulations and implementations for this project
- Competent persons to work in confined spaced areas.
- Service provider to supply an air testing machine for testing air before entering or working in a manhole.
- Service provider to supply extractor fan for purging of air when working in the tunnels
- All plant and equipment must be available to Transnet throughout the contract
- The service provider is to inform Transnet electrician of any live or exposed power cables in the tunnels.
- When carrying out operations in bunkers and electrical tunnels open at least three or more manhole covers by using hammers, crow bars and manhole lifting tools.
- Using flat shovels working from Berth 101 to Berth 205 remove all loose grit rubble, coal plastic bags and any other unwanted material.
- The service provider must collect the samples of sand or slit found in the tunnels and send it to the accredited Laboratory to be analyzed any contamination.
- All rubble and Debris must be cleared from site and site cleaned on completion
- No dumping of any substances into the Harbour. This will result in instant termination of contract.
- Safety officer for the duration of the project.

## 11. BILL OF QUANTITIES

Item	Description	Unit	Quantities	Rate	Total
1	Cleaning service tunnels along the berths at Pier 1 & 2 (Berth 101-205) as and when required	m	13000		
2	Samples of sand or slit found in the tunnels to be sent to an accredited Laboratory to be analyzed for any contamination.	no.	15		
3	Extractor fan and generator with petrol	no.	1		
4	Gas testing machine (calibration to be done annually on machine	no.	1		
5	Safety File (Documents to be updated and approved annually)	no.	1		
6	Safety officer	no.	1		
	<b>Total excluding VAT</b>				

<b>Total price for 36 Months</b>	
<b>Total Price for Year 1 (Y1) = Grand Total ÷ 3</b>	
<b>Total Price for year (Y2) = (Total Price for year 1 + CPI)</b>	
<b>Total Price for year (Y3) = (Total Price for year 2 + CPI)</b>	
<b>Total contract value excluding VAT = Y1 + Y2 + Y3</b>	

For the first year's value, we divide total value by 3 years. No CPI involved as there will be no inflation in year one (1).

For the second year's value, we take the value of year one (1) and multiply it by the CPI rate (whatever rate the supplier propose) and add that inflation value.

For the third year value, we take the value of year two (2) and multiply it by the CPI rate (whatever rate the supplier propose) and add that inflation value.

Then add, year one (1), year two (2) and year three (3) which makes the total contract value for three (3) years – thirtysix (36) months, **excluding VAT**