

# ***Transnet Operating Division***

## ***Technical Demand Request***

The purpose of this guidance document is to outline the technical specifications required in the intended tender and receive approval for the specifications from all stakeholders prior to the creation of a business case/tender. This document sets out the key areas that should be included in a specification document.



***Project Title: Proposed refurbishment of  
Various Buildings on Robben Island for  
LNS***

***Date: 20 September 2013***

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## 1. **Background:**

The objective of the procurement is to refurbish the Foghorn building and four houses on Robben Island for Transnet Light house Navigational Services. Due to extreme weather conditions and exposure to the elements the buildings have deteriorated significantly and require urgent refurbishment.

## 2. **Purpose/ Objective:**

The works include for the complete renovation and repair to the Foghorn building interior and exterior, including electrical work and the trenching and laying of a main electrical feeder cable from the Lighthouse to the Foghorn Building over an estimated distance of 2100 m. Also included will be the complete interior and exterior renovation of four staff quarters (residences) situated close to the Light house building.

All work to be carried out by a competent, specialist painting and renovation contractor. The tenderers will therefore be evaluated on specific qualities such as: Previous experience on painting projects. High standard of quality control on site specific to the preparation of the surface, before painting as well as the implementation of holding points for inspection by RME. Health and Safety, specific to working at heights and levels of expertise of the staff. A thorough method statement on how the work will be carried out and the time it will take to complete the works considering the logistics of delivery and access to the island as well as compliance to Conservation legislation.

## 3. **Confidentiality:**

A fundamental requirement of the procurement process is that tender information is kept confidential at all times. No team members or stakeholders are to communicate these technical specifications to anyone outside of the process. See CIDB Standard Conditions of Tender clause F3.6 Non-disclosure.

### a) **Current consumption per annum:**

N/A

### b) **Current suppliers and level of engagement with TFR (e.g. performance etc.):**

To be advertised on the TFR Website the CIDB level is 3 GB

### c) **Duration of contract:**

12 weeks from award of contract.

d) **Area/s of deployment (e.g. National, Regional):**

Regional (Cape Town)

e) **Timeline/ Timeframe for Procurement:**

In terms of CIDB Standard of Uniformity in Construction Procurement:

Collection of tender document: 1 (one) week

Closing date 1 (one) week after the clarification meeting.

## **4. The Technical Specification**

### **4.1 Introduction**

Transnet National Ports Authority have appointed Transnet Freight Rail RME as the main contractor who in turn will appoint a specialist subcontractor to execute the work.

### **4.2 Scope**

#### **4.2.1 Fog Horn Building:**

This contractor is required to carry out major repair work to the exterior and interior of the building and shall include the following:

- Demolish Radio Beacon kiosk and mast stay concrete foundations, situated close to the Light house. Rubble to be broken up and bagged for removal from the island. Backfill with approved material from the site.
- Fog Horn building - Remove existing plaster, repair cracks in wall with one part Grip and one part OPC mixed and trowelled in cracks to form smooth surface to accept plaster. Re-plaster walls internally and externally with 20mm plaster 1:6 mix.
- Remove existing roof and replace complete roof timber structure and roof sheeting with Big Six profile fibre cement sheeting fixed with stainless steel roof screws. Roof to be fitted with 225mmx12mm thick fibre cement fascia's, bargeboards and rain water goods.
- Break out existing concrete floor slab and cast new 100mm thick concrete slab complete with floor ducting to match existing. Prepare and paint existing duct covers. 1 off 1200x150mm and 2 off 1500x150mm
- Remove glass bricks and build in 1235mm wide x1250mm high anodised aluminium window with 4mm obscure glass.( with opening section)
- Cast 85mm thick (20mpa) concrete apron slab around the building, finish off with steel trowel.

- Replace hinges with grade 316L stainless steel and door lock with new Yale brass lock.
- Prepare and paint the interior and exterior with Prominent Neutron paint as per supplier's specifications. Colour- white.
- Install 4mm Flexit ceiling, nailed to 38x38mm SAP branding complete with 600x600mm trap door and Flexit coved cornice. Paint as per specification.
- Strip out existing cabling and carry out a complete new electrical installation in the building, allowing for new connection of main feeder cable.
- Trench and install new 35mm squared 4 core armoured feeder cable from Light house to Foghorn building over an approximate distance of 2100m. Cable route to be pointed out on site by LNS.

#### 4.2.2 Houses (Staff Quarters):

##### 4.2.2.1 LH. No 1 ASSET No. 01HK001. (Quarters)

- Re-do Bathroom.
- Re-tile kitchen.
- Replace ceiling entrance porch.
- Re-position power point in sunroom and repair skirting.
- Re-position light switch in entrance hall and make good.
- Service windows, doors and replace hinges, locks, handles where necessary
- Provide and install wooden venetian blinds to all windows.
- Service built in cupboard doors and hinges and replace where necessary.
- Service all taps, cistern and shower doors.
- Replace all broken or cracked window panes.
- Paint interior.
- High-pressure clean and paint boundary wall.
- Replace garage door with new.
- Repair all leaks on roof.
- Clean and paint house and outbuilding exterior (colours to match existing) roofs permanent green and walls colour (pale buff.)
- Clean yard and paving from all grass and bushes.
- Replace wooden gate next to outbuilding with new.
- Replace gates with new 1 double and 1 single.
- Fence: Loosen 4mm diam. wire at straining post, strain and re-tie to post.

##### 4.2.2.2 LH. No2 ASSET No. 01DK002. (Vacant)

- Replace all cupboards in kitchen and scullery.
- Replace carpets in Living room, bedroom1, bedroom 2 and bedroom 3.
- Replace all cupboards in bedroom 1, 2 and 3.
- Service windows, doors and replace hinges, locks, handles where necessary and replace front putty before painting.

- Replace all broken or cracked window panes.
- Provide and install wooden venetian blinds to all windows.
- Service all taps and cistern.
- Replace shower door.
- Paint interior.
- High-pressure clean and paint boundary wall.
- Replace garage door with new.
- Repair all leaks on roof. Especially on flat roof against wall under main roof, repair flashing
- Clean and paint house and outbuilding exterior (colours to match existing) roofs permanent green and walls colour (pale buff).
  - Clean yard and paving from all grass and bushes.
  - Replace wooden gate next to outbuilding with new.
  - Replace gates with new 1 double and 1 single.
  - Fence: Loosen 4mm diam. wire at straining post, strain and re-tie to post.

#### 4.2.2.3 LH. No 3 ASSET No 01HK002 (rent house)

- Service windows, doors and replace hinges, locks, handles where necessary and replace front putty before painting.
- Replace all broken or cracked window panes.
- Provide and install wooden venetian blinds to all windows.
- Service all taps, cistern and shower door.
- Paint interior.
- High-pressure clean and paint boundary wall.
- Replace garage door with new.
- Repair all leaks on roof. Especially on flat roof against wall under main roof, repair flashing.
- Clean and paint house and outbuilding exterior (colours to match existing) roofs colour (permanent green) and walls, colour (pale buff).
  - Clean yard and paving from all grass and bushes.
  - Replace wooden gate next to outbuilding with new.
  - Replace gates with new 1 double and 1 single.
  - Fence: Loosen 4mm diam. wire at straining post, strain and re-tie to post.
- Service built in cupboards doors, hinges, catches, etc. and replace where necessary. (Kitchen & bedrooms).

#### 4.2.2.4 LH. No 4 ASSET No 01DK003 (Light-keepers house)

- Replace cupboard in scullery.
- Repair cupboards in kitchen.
- Replace ceiling in passage.
- Waterproof and repair tiles in shower.
- Service windows, doors and replace hinges, locks, handles where necessary.
- Replace all broken or cracked window panes.
- Provide and install wooden venetian blinds to all windows.
- Service all taps and cistern and shower door.
- Paint interior.

- High-pressure clean and paint boundary wall.
- Replace garage door with new.
- Repair all leaks on roof. Especially on flat roof against wall under main roof, repair flashing.
- Clean and paint house and outbuilding exterior (colours to match existing) roofs permanent green and walls pale buff.
- Clean yard and paving from all grass and bushes.
- Fill ground at end of paving and install concrete rain-water channel.
- Replace wooden gate next to outbuilding with new.
- Replace gates with new 1 double and 1 single.
- Fence: Loosen 4mm diam. wire at straining post, strain and re-tie to post.
- Service built in cupboards doors, hinges, catches, etc. and replace where necessary. (Kitchen & bedrooms).
- Service windows, doors and replace hinges, locks, handles where necessary and replace front putty before

#### 4.2.2.5 Materials and Specifications

- OPC
- Clean washed river sand.
- 19mm stone.
- Concrete rain-water channel.
- Stainless steel grade 316L double gate complete with post. 4 pairs.
- Stainless steel grade 316L single gate complete with post. 4 each.
- Meranti garden gate complete with posts. (all fixing material to be stainless steel) 4each.
- Stainless steel grade 316L hook and band hinges.
- Coroma Meranti tip-up garage doors. 4 each
- Neutron AL Sealer.
- Prominent Neutron Neuklad for exterior walls (Colour to match existing)
- Prominent Neutron Neuklad for roofs (colour to match existing)
- Prominent Neutron pink primer for wood (exterior).
- Prominent Neutron universal undercoat (exterior).
- Prominent Neutron High Gloss (exterior).
- Dulux Wash 'n Wear Matt.(for interior walls)
- Dulux Super Eggshell.(for all interior woodwork)
- Dulux Pink primer.
- Dulux Universal Undercoat.
- Granite tops for kitchen cupboards.
- S/Steel pull handles.
- Grass stainless steel concealed self-closing hinges.
- Melamine chipboard 16mm colour white.
- 150x30mm Meranti PAR for cupboard base.
- Oak beading 20x10mm with 16x4mm rebate.
- Drawer runners to be stainless steel.
- Franke Admiral sink double bowl 1160x500mm. ADG 621 Product Code 821008.
- Franke Admiral Graphite swivel sink mixer Product code 303222.
- Franke spazio11 plumbing kit Product Code: 301251.

- 1<sup>st</sup> Grade ceramic wall tiles.
- 1<sup>st</sup> Grade porcelain floor tiles.
- TAL tile cement.
- TAL tile cement for porcelain tiles.
- TAL tile grout.
- Wooden venetian blinds.
- Dominus Fusion Toilet Roll Holder FB604.
- Dominus Fusion Toilet Brush Set FB626.
- Dominus Fusion Spare Paper Holder FB604A
- Dominus Fusion Towel Ring FB603
- Dominus Fusion Double Towel Rail.
- Libra chrome shower waste.
- Bath mixer, under tile with looped handle as Cobra CO-756LH.
- Shower mixer, under tile with looped handle as Cobra CO-756LH.
- 028 Shower arm and 076 Selecta overhead showerhead as Cobra.
- ABE Dura flex (to waterproof before tiling)
- 10mm Safety clear glass frameless shower door and side panel 2m high.
- Mirror 600x800x6mm with polished edges complete with 4 holes for mirror screws.
- Tuscany basin complete with pedestal.(as VAAL)
- Tuscany closed coupled suite complete with double flap seat.(as VAAL)
- Libra Utopia ultra-luxury plain minimalist bath.
- Bath click plug with built in filler spout.
- Basin mixer with pop-up waste as Cobra CO-750LH
- SA.Pine treated 50x38mm.
- Lafarge 6.4mm Plasterboard.
- Lafarge Skimming Compounds.
- Nouwens Carpets Contracta spec Gold Spinner.
- Glazing putty for wood.
- 3mm Clear glass.
- 3mm obscure glass (to match existing).

Where trade names are specified the term “ Or Similar and Approved “ will imply.

### **4.3 The Requirements:**

Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a 3 GB or higher class of construction work, are eligible to have their tenders evaluated. The procedure for the evaluation of responsive tenders is Method 2 (price, preference)The minimum number of evaluation points for quality is 60. Tenderers who do not achieve the 60 points or higher for quality, are eliminated.

A a competent, specialist painting and renovation contractor is required to do this work. The tenders will therefore be evaluated on Quality, specific to requirements such as: Previous experience on painting projects. High



standard of quality control on site specific to the preparation of the surface, before painting as well as the implementation of holding points for inspection by the paint supplier. Health and Safety, specific to working at heights and levels of expertise of the staff. A thorough method statement on how the work will be carried out and the time it will take to complete the works considering that the work will have to be executed under and during normal operational conditions.

#### **4.4 The location for provision of Services:**

The work is to be carried out on Robben Island, situated in Table Bay, is approximately ten kilometres north of Green Point Lighthouse and six kilometres west of Blouberg Strand. The island is roughly oval in shape with a maximum length of little more than 1,5 kilometres and is managed by Lighthouse and Navigational Systems(LNS).

Robben Island is declared a National and World Heritage Site and such, all relevant legislation and agreements need to be complied with.

Latitude: 33°48' 52" S

Longitude: 18°22' 29" E

#### **4.5 Details of the conditions in which the Contractor must operate:**

Due to the risks related to the location and logistics regarding access to and from the island the contractor will have to allow for transport of plant and material to and from the island. All rubble will have to be broken up into manageable size in order to be bagged for loading and exporting from the island. No spilling on site will be allowed unless stipulated and approved by LNS and TFR RME.

All staff working on site to have valid medical certification and be equipped with the correct, certified PPE in accordance with the Occupational Health and **Safety Act, 1993(Act 85 of 1993)**.

Access to the tower to be arranged by the contractor with Transnet National Ports Authority and permits will be issued to the Contractor if required.

#### **4.6 Descriptions of required manufacturing processes, workmanship or**

##### **Materials:**

##### **Safe work access:**

The contractor to submit his methodology that will be adopted to access the site, in order to execute the work safely and the method and plant he will be utilizing to carry out the work, as part of the returnable tender documentation for tender adjudication purposes.

##### **Erection of Scaffolding:**

In the event of scaffolding or hydraulic lifting equipment etc. being erected Or used for safe access such scaffolding or equipment shall only be erected or operated by a qualified scaffold erector and equipment operator. Any such scaffolding/equipment shall be certified on completion and the required safe to enter tag shall be prominently displayed on each such scaffolding structure. In the case of hydraulic lifting equipment being

used the operator of such equipment has to be in possession of a valid operators and medical certificate. The *Contractor* shall provide a name of his preferred scaffold erector or plant supplier together with a copy of the scaffold erectors certificates and inspection compliance certificates when submitting his tender.

**Plant and material:**

All plant used by the *Contractor* on site shall be properly maintained and operated. All vehicles on public roads shall be roadworthy, with the Necessary licenses, permits and safety requirements. No transporting of people in the load box of any LDV's without the correct seating and seatbelts or a Kombi may be utilized providing that it has RWC.

**Construction Equipment:**

All equipment, scaffolding, or any other equipment necessary shall be supplied by the *Contractor* to successfully execute the *Works* safely, to completion. All tools, test equipment, i.e. wind-speed indicators, rain meter etc. shall be supplied by the *Contractor*.

**Information to be obtained from site:**

The attendance of a site clarification meeting will be compulsory and the prospective *Contractors* shall visit the site of the proposed *Works* and acquaint themselves with the nature of the *Works*, the conditions under which the work is to be performed, the means of access, any limitations or other authorities and in general with all matters that influence or affect the contract.

*Contractors* shall be deemed to have allowed in their tender for any additional cost to be involved due to the foregoing, as no claims for any extras in connection with the position or nature of the work will be entertained.

**Daily site diary and inspection book:**

The Contractor shall provide an A4 size triplicate book to be used as a Daily Diary for the duration of the Contract. The Project 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.

In addition to this the Contractor shall provide an A4 size triplicate book to act as Site Instruction Book. The Project 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 Project Manager or his delegated representative will have the authority to issue site instructions to the Contractor.

**4.7 Drawings of the goods, including site plans for installation:**

Drawings included in tender documentation. Specifications are in accordance with the Schedule of Rates included in this document and Specifications of the various suppliers.

**4.8 Details of performance parameters:**

The contract work must conform to current professional engineering practices, standards and specifications and the work must be completed to the satisfaction of the *Project Manager*.

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.

The *Contractor* shall not change the project team as detailed in the organogram submitted by the *Contractor* and accepted by the *Project Manager* without the prior written approval of the *Project Manager*, which approval will not unreasonably be withheld by the *Project Manager*

#### **4.9 Size/dimensions for product:**

As per Schedule of rates and Product Specifications, available from the various suppliers.

#### **4.10 Other Requirements**

##### **Security requirements:**

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

##### **Standard Specifications:**

HAS-STD-001 Health and Safety Specification  
ENV-STD-001 Standard Environmental Specification  
SANS 1586 and SANS 1227 for application of paint.

#### **4.11 Technical Risk Identified:**

Access to , from and transport on site  
Working at heights  
Exposure to extreme weather elements such as wind and rain.

#### **4.12 Constraints:**

- Access – Transport to, from and on the Island has to be allowed for by the contractor when submitting his tender.
- Timing considerations -To be completed within 12 weeks from award.  
Only two houses will be available simultaneously for renovation work as the remainder will be occupied by LNS staff. The contractor may utilize

available areas within the houses under renovation for storage and accommodation.

**4.13 Environmental Impact Assessment (EIA):**

Not required.

**5. TECHNICAL CRITERIA:**

<b>TECHNICAL DESCRIPTION (By Example)</b>	
<b>CATEGORY: TECHNICAL / PRACTICAL (SCORING MATRIX)</b>	
•	Compliance To Specification
•	Fit for Purpose
•	Risk & Environment Compliance
•	Health and Safety Compliance
•	Technical Capacity /Resources
•	Delivery / Schedule

**Are Technical / Supplier Development compliance a pre-requisite and what is the minimum level to be achieved before continuing to the next evaluation stage?**

YES	
NO	

**If affirmative the remaining (other) criteria weights may have to be amended.**

**Are there any Technical disqualifying criteria? (Please tick)**

YES	
NO	

**4.6.1 If affirmative provide details:**

❖ **The measurement of the criteria will be agreed upon with SCS Tactical/Strategic manager.**

**PROJECT DESCRIPTION: Proposed refurbishment of various buildings on Robben Island for LNS**

**6. SIGN-OFF BY REQUESTING DEPARTMENT**

The proposed procurement per the TDR is done in terms of my approved delegation of authority (DOA) as loaded on SAP (budget DOA) and that all declaration of interests (DOI) has been duly declared (attach DOI where applicable)

	NAME & SURNAME	SIGNATURE	DATE	DOA (VALUE)
<b>Requestor</b>	Ivan Jooste			
<b>Project /Technical Manager</b>	Ivan Jooste			
<b>Executive Manager</b>				
<b>General Manager</b>				